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9754	Advanced parametric study of three-pinned steel arches	Advanced Analysis of Steel and Steel-Concrete Composite Structures	Matheus Miranda de Oliveira / / Dept. of Civil Engineering, Federal University of Ouro Preto; Jackson da Silva Rocha Segundo / / Dept. of Civil Engineering, Federal University of Ouro Preto; Iara Santana de Azevedo / / Dept. of Civil Engineering, Federal University of Ouro Preto; Ricardo Azoubel da Mota Silveira / / Dept. of Civil Engineering, Federal University of Ouro Preto; Andrea Regina Dias da Silva / / Dept. of Civil Engineering, Federal University of Ouro Preto; Arlene Maria Cunha Sarmanho / / Dept. of Civil Engineering, Federal University of Ouro Preto;
9369	ALGORITMO GENÉTICO IMPLEMENTADO EM PROGRAMA BIM PARA OTIMIZAÇÃO DE TRELIÇA DE AÇO	Advanced Analysis of Steel and Steel-Concrete Composite Structures	Alexanndre L. Bitencourt / / Universidade Federal do Rio de Janeiro; Juarez M. S. Franco / / Departamento de Estruturas, Universidade Federal do Rio de Janeiro; Silvia Corbani / / Departamento de Estruturas, Universidade Federal do Rio de Janeiro;
9070	ANALYSIS OF COLD-FORMED STEEL TRUSS AND PREFABRICATED CONCRETE SLAB COMPOSITE FLOOR SYSTEM	Advanced Analysis of Steel and Steel-Concrete Composite Structures	Odivaldo Barbosa Dias / / Universidade Federal do Rio de Janeiro; Eduardo de Miranda Batista / / Universidade Federal do Rio de Janeiro; Juarez Moara Santos Franco / / Universidade Federal Rural do Rio de Janeiro;
9742	APPLICATION OF AN INCOMPLETE SIMILARITY APROACH IN THE ANALYSIS OF IMPACT PROBLEMS	Advanced Analysis of Steel and Steel-Concrete Composite Structures	Mateus C. Redin / / Dept. of Mechanical Engineering, Federal University of Rio Grande do Sul; Ignacio Iturrioz / / Dept. of Mechanical Engineering, Federal University of Rio Grande do Sul; Alexsandro Sordi / / Marcolopo S.A.;
9129	ASSESSMENT OF THE HUMAN COMFORT OF FLOORS BASED ON THE USE OF BIODYNAMIC MODELS	Advanced Analysis of Steel and Steel-Concrete Composite Structures	Jefferson Viana Aguiar / / Civil Engineering Postgraduate Program (PGECIV/FEN/UERJ). Faculty of Engineering (FEN). State University of Rio de Janeiro (UERJ).; Bárbara Elisa Ferreira / / Federal University of Minas Gerais (UFMG); Hermes Carvalho / / Federal University of Minas Gerais (UFMG); José Guilherme Santos da Silva / / Civil Engineering Postgraduate Program (PGECIV/FEN/UERJ). Faculty of Engineering (FEN). State University of Rio de Janeiro (UERJ).;
9359	BASIC FUNDAMENTAL APPROACH OF 2ND ORDER GEOMETRIC NONLINEAR ANALYSIS: CONCEPTS AND COMPUTATIONAL IMPLEMENTATION	Advanced Analysis of Steel and Steel-Concrete Composite Structures	Sara de J. Bulhosa / / Civil Engineering Department, Federal University of Espírito Santo; Lais De B. Lecchi / / Civil Engineering Department, Federal University of Ouro Preto; Karina de O. Nascimento / / Civil Engineering Department, Federal University of Espírito Santo; Yargo P. Souza / / Civil Engineering Department, Federal University of Espírito Santo; Walnório G. Ferreira / / Civil Engineering Department, Federal University of Espírito Santo;

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9123	BUCKLING ANALYSIS OF STORAGE TANKS BASED ON THE USE OF GEOMETRIC IMPERFECTIONS MEASURED BY LASER SCAN DIMENSIONAL INSPECTION TECHNIQUES	Advanced Analysis of Steel and Steel-Concrete Composite Structures	José Guilherme Santos da Silva / / Civil and Mechanical Engineering Postgraduate Program (PGECIV/PPGEM/FEN/UERJ). Faculty of Engineering (FEN). State University of Rio de Janeiro (UERJ).; Matheus Abreu Lopes / / Mechanical Engineering Postgraduate Program (PPGEM/FEN/UERJ). Faculty of Engineering (FEN). State University of Rio de Janeiro (UERJ).; Francisco José da Cunha Pires Soeiro / / Civil and Mechanical Engineering Postgraduate Program (PGECIV/PPGEM/FEN/UERJ). Faculty of Engineering (FEN). State University of Rio de Janeiro (UERJ).;
9161	COMPARATIVE STUDY BETWEEN STRUCTURAL SYSTEMS IN PRESTRESSED CONCRETE	Advanced Analysis of Steel and Steel-Concrete Composite Structures	Cristiano Talhas / / Departamento de Engenharia de Estruturas, Universidade Federal de Minas Gerais; Leandro Lopes da Silva / / Departamento de Engenharia de Estruturas, Universidade Federal de Minas Gerais;
9078	COMPUTATIONAL STUDY OF CONCRETE-FILLED STEEL TUBE COLUMNS PRODUCED WITH AGGREGATES FROM CONSTRUCTION AND DEMOLITION WASTE	Advanced Analysis of Steel and Steel-Concrete Composite Structures	Athila V. Lima / / Dept. of Structural Engineering and Construction, Federal University of Ceará; Mario Sergio O. Cesar Filho / / Dept. of Structural Engineering and Construction, Federal University of Ceará; Alexandre M. Mont´Alverne / / Dept. of Academic and Technological Integration, Federal University of Ceará; Leonardo M. Bezerra / / Dept. of Structural Engineering and Construction, Federal University of Ceará;
9568	Determination of composite slabs resistance by the partial shear connection method considering friction at the support	Advanced Analysis of Steel and Steel-Concrete Composite Structures	Giovanni Morais Mercuri de Figueiredo / / Dept .of Construction and Structures, Federal University of Bahia; Rodrigo Sernizon Costa / / Dept .of Construction and Structures, Federal University of Bahia; Mariana Velloso Barbosa / / Dept .of Construction and Structures, Federal University of Bahia; Armando Cesar Campos Lavall / / Dept. of Structural Engineering, Federal University of Minas Gerais; Renata Gomes Lanna da Silva / / Dept. of Civil Engineering, Federal Center for Technological Education of Minas Gerais; Harley Francisco Viana / / Dept. of Civil Engineering, Federal Center for Technological Education of Minas Gerais; Mayara Lago de Matos Pereira / / Dept .of Construction and Structures, Federal University of Bahia; Delmário dos Santos Gomes Galvão / / Dept .of Construction and Structures, Federal University of Bahia;
9104	DYNAMIC STRUCTURAL BEHAVIOUR OF STEEL-CONCRETE COMPOSITE FLOORS SUBJECTED TO RHYTHMIC HUMAN ACTIVITIES	Advanced Analysis of Steel and Steel-Concrete Composite Structures	Felipe Almeida de Souza / / Civil Engineering Postgraduate Program (PGECIV/FEN/UERJ). Faculty of Engineering (FEN). State University of Rio de Janeiro (UERJ).; Nathália de Almeida Castelo Branco / / Civil Engineering Postgraduate Program (PGECIV/FEN/UERJ). Faculty of Engineering (FEN). State University of Rio de Janeiro (UERJ).; José Guilherme Santos da Silva / / Civil Engineering Postgraduate Program (PGECIV/FEN/UERJ). Faculty of Engineering (FEN). State University of Rio de Janeiro (UERJ).;

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9354	EDUCATIONAL TOOL FOR ANALYSIS OF STEEL FRAMES WITH SEMI-RIGID CONNECTIONS	Advanced Analysis of Steel and Steel-Concrete Composite Structures	Christian Leite Dias / / Department of Civil and Environmental Engineering, Pontifical Catholic University of Rio de Janeiro; Rafael Lopez Rangel / / International Center for Numerical Methods in Engineering (CIMNE), Universitat Politècnica de Catalunya; Luiz Fernando Martha / / Department of Civil and Environmental Engineering, Pontifical Catholic University of Rio de Janeiro;
9127	FATIGUE ASSESSMENT OF STEEL-CONCRETE COMPOSITE HIGHWAY BRIDGES CONSIDERING A PROGRESSIVE PAVEMENT DETERIORATION MODEL	Advanced Analysis of Steel and Steel-Concrete Composite Structures	Ana Célia Soares da Silva / / Civil Engineering Postgraduate Program (PGECIV/FEN/UERJ). Faculty of Engineering (FEN). State University of Rio de Janeiro (UERJ).; Vencislau Manuel Quissanga / / Civil Engineering Postgraduate Program (PGECIV/FEN/UERJ). Faculty of Engineering (FEN). State University of Rio de Janeiro (UERJ).; Guilherme Santana Alencar / / Civil Engineering Postgraduate Program (PGECIV/FEN/UERJ). Faculty of Engineering (FEN). State University of Rio de Janeiro (UERJ).; José Guilherme Santos da Silva / / Civil Engineering Postgraduate Program (PGECIV/FEN/UERJ). Faculty of Engineering (FEN). State University of Rio de Janeiro (UERJ).;
9340	FE VALIDATION OF PUSH-OUT TEST USING WELDED BOLTS AS SHEAR CONNECTORS	Advanced Analysis of Steel and Steel-Concrete Composite Structures	Marinés Pérez / / Universidad Nacional de Colombia; Omar D. López / / Universidad de los Andes; Tiziano Perea / / Universidad Autónoma Metropolitana; Carlos A. Bermúdez / / Universidad Nacional de Colombia;
9888	INELASTIC-LARGE DISPLAMENT ANALYSIS OF STRUCTURES WITH CONTACT CONSTRAINTS	Advanced Analysis of Steel and Steel-Concrete Composite Structures	Jéssica L. e Silva / / PROPEC/Federal University of Ouro Preto; Paulo B. Gonçalves / / PUC-Rio; Christianne L. Nogeira / / PPGEM/Federal University of Ouro Preto; Ígor J. M. Lemes / / UFLA; Ricardo A. M. Silveira / / PROPEC/Federal University of Ouro Preto;
9128	NON DETERMINISTIC DYNAMIC ANALYSIS AND FATIGUE ASSESSMENT OF WIND TURBINE TOWERS	Advanced Analysis of Steel and Steel-Concrete Composite Structures	Rodrigo Guedes Simões / / Civil Engineering Postgraduate Program (PGECIV/FEN/UERJ). Faculty of Engineering (FEN). State University of Rio de Janeiro (UERJ).; Leandro Rocha Machado de Oliveira / / Civil Engineering Postgraduate Program (PGECIV/FEN/UERJ). Faculty of Engineering (FEN). State University of Rio de Janeiro (UERJ).; José Guilherme Santos da Silva / / Civil Engineering Postgraduate Program (PGECIV/FEN/UERJ). Faculty of Engineering (FEN). State University of Rio de Janeiro (UERJ).;
9296	NONLINEAR DYNAMIC ANALYSIS OF TALL BUILDINGS CONSIDERING NONDETERMINISTIC WIND LOADS	Advanced Analysis of Steel and Steel-Concrete Composite Structures	Jean Carlos Mota Silva / / Civil Engineering Postgraduate Program (PGECIV/FEN/UERJ). Faculty of Engineering (FEN). State University of Rio de Janeiro (UERJ).; Leonardo de Souza Bastos / / Civil Engineering Postgraduate Program (PGECIV/FEN/UERJ). Faculty of Engineering (FEN). State University of Rio de Janeiro (UERJ).; José Guilherme Santos da Silva / / Civil Engineering Postgraduate Program (PGECIV/FEN/UERJ). Faculty of Engineering (FEN). State University of Rio de Janeiro (UERJ).;

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9499	Numerical modeling of cold-formed steel-concrete columns	Advanced Analysis of Steel and Steel-Concrete Composite Structures	Lays R A da Costa / / Departamento de Engenharia Civil e Ambiental, Universidade Federal da Paraíba; Hidelbrando J F Diógenes / / Departamento de Engenharia Civil e Ambiental, Universidade Federal da Paraíba; Maria I B Valente / / Civil Engineering Department, Institute for Sustainability and Innovation in Structural Engineering University of Minho- ISISE;
9431	NUMERICAL STUDY OF CHS-SHS T-JOINTS WITH CHORD FACE FAILURE	Advanced Analysis of Steel and Steel-Concrete Composite Structures	Luiza G. V. Alves / / Federal University of Ouro Preto; João B. S. Neto / / Federal University of Ouro Preto; Daniel J. R. Pereira / / Federal University of Ouro Preto; Matheus M. Oliveira / / Federal University of Ouro Preto; Arlene M. C. Sarmanho / / Federal University of Ouro Preto; Messias J. L. Guerra / / Federal Institute of Minas Gerais - Santa Luiza Campus;
9883	NUMERICAL STUDY OF STEEL TRUSSES IN FIRE CONDITIONS	Advanced Analysis of Steel and Steel-Concrete Composite Structures	Gustavo Henrique Correia Ferreira / / Departamento de Engenharia Civil, Universidade Federal de Ouro Preto; Jackson da Silva Rocha Segundo / / Departamento de Engenharia Civil, Universidade Federal de Ouro Preto; Rafael Cesário Barros / / Departamento de Engenharia Civil, Universidade Federal de Ouro Preto; Ricardo Azoubel da Mota Silveira / / Departamento de Engenharia Civil, Universidade Federal de Ouro Preto;
9125	PROJECT AND CONSTRUCTION OF A DIDACTIC WIND TUNNEL FOR THE VIBRATION ANALYSIS OF BUILDINGS EXPERIMENTAL MODELS	Advanced Analysis of Steel and Steel-Concrete Composite Structures	Leonardo Ferreira de Miranda / / Civil Engineering Postgraduate Program (PGECIV/FEN/UERJ). Faculty of Engineering (FEN). State University of Rio de Janeiro (UERJ).; Leonardo de Souza Bastos / / Civil Engineering Postgraduate Program (PGECIV/FEN/UERJ). Faculty of Engineering (FEN). State University of Rio de Janeiro (UERJ).; Jean Carlos Mota Silva / / Civil Engineering Postgraduate Program (PGECIV/FEN/UERJ). Faculty of Engineering (FEN). State University of Rio de Janeiro (UERJ).; José Guilherme Santos da Silva / / Civil Engineering Postgraduate Program (PGECIV/FEN/UERJ). Faculty of Engineering (FEN). State University of Rio de Janeiro (UERJ).;
9525	RELIABILITY ANALYSIS OF COLD-FORMED STEEL BEAMS SUSCEPTIBLE TO DISTORTIONAL BUCKLING USING NUMERICAL ANALYSIS DATA INCORPORATED INTO THE PROFESSIONAL FACTOR VARIABLE	Advanced Analysis of Steel and Steel-Concrete Composite Structures	Márcio M. da Silva / / Programa de Pós-Graduação em Engenharia Civil, Universidade Federal de Ouro Preto, Departamento de Engenharia Civil, Escola de Minas, Campus Universitário Morro do Cruzeiro, 35400-000, Ouro Preto, Minas Gerais, Brasil.; Washington B. Vieira / / Instituto de Engenharias Integradas, Universidade Federal de Itajubá - Campus de Itabira, Rua Irmã Ivone Drumond, 200, Distrito Industrial, 35903-087, Itabira, Minas Gerais, Brasil.; André L. R. Brandão / / Instituto de Engenharias Integradas, Universidade Federal de Itajubá - Campus de Itabira, Rua Irmã Ivone Drumond, 200, Distrito Industrial, 35903-087, Itabira, Minas Gerais, Brasil.; Marcílio S. R. Freitas / / Programa de Pós-Graduação em Engenharia Civil, Universidade Federal de Ouro Preto, Departamento de Engenharia Civil, Escola de Minas, Campus Universitário Morro do Cruzeiro, 35400-000, Ouro Preto, Minas Gerais, Brasil.;

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9695	RELIABILITY OF PERFORATED COLD-FORM STEEL CHANNEL-SECTION BEAMS USING FORM METHOD	Advanced Analysis of Steel and Steel-Concrete Composite Structures	Rogério Fonseca Santos / / Programa de Pós-Graduação em Engenharia Civil, Departamento de Engenharia Civil, Escola de Minas, Universidade Federal de Ouro Preto, Campus Universitário Morro do Cruzeiro, 35400-000, Ouro Preto, Minas Gerais, Brasil; André L. R. Brandão / / Instituto de Engenharias Integradas, Universidade Federal de Itajubá - Campus de Itabira Rua Irmã Ivone Drumond, 200, Distrito Industrial, 35903-087, Itabira, Minas Gerais, Brasil.; Marcílio S. R. Freitas / / Programa de Pós-Graduação em Engenharia Civil, Departamento de Engenharia Civil, Escola de Minas, Universidade Federal de Ouro Preto, Campus Universitário Morro do Cruzeiro, 35400-000, Ouro Preto, Minas Gerais, Brasil;
9328	STEEL-CONCRETE COMPOSITE FLOORS SUBJECTED TO MECHANICAL EQUIPMENT LOADS: DYNAMIC ANALYSIS AND FATIGUE ASSESSMENT	Advanced Analysis of Steel and Steel-Concrete Composite Structures	Álvaro Eduardo do Amaral Menezes Junior / / Mechanical Engineering Postgraduate Program (PPGEM/FEN/UERJ). Faculty of Engineering (FEN). State University of Rio de Janeiro (UERJ).; Francisco José da Cunha Pires Soeiro / / Civil and Mechanical Engineering Postgraduate Program (PGECIV/PPGEM/FEN/UERJ). Faculty of Engineering (FEN). State University of Rio de Janeiro (UERJ).; José Guilherme Santos da Silva / / Civil and Mechanical Engineering Postgraduate Program (PGECIV/PPGEM/FEN/UERJ). Faculty of Engineering (FEN). State University of Rio de Janeiro (UERJ).;
9602	STRESS NUMERICAL ANALYSIS OF COLD-FORMED STEEL ANGLES	Advanced Analysis of Steel and Steel-Concrete Composite Structures	Brenda V. C. Fontes / / Dept. Eng. Civil e Ambiental, Universidade de Brasília; Luciano M. Bezerra / / Dept. Eng. Civil e Ambiental, Universidade de Brasília; Valdeir F. de Paula / / Dept. Eng. Civil, Instituto Federal do Goiás;
9293	STRUCTURAL ANALYSIS OF STEEL TOWERS USED IN POWER TRANSMISSION LINES SUBJECTED TO WIND INDUCED DYNAMIC ACTIONS	Advanced Analysis of Steel and Steel-Concrete Composite Structures	Mariana Souza Rechtman / / Civil Engineering Postgraduate Program (PGECIV/FEN/UERJ). Faculty of Engineering (FEN). State University of Rio de Janeiro (UERJ).; José Guilherme Santos da Silva / / Civil Engineering Postgraduate Program (PGECIV/FEN/UERJ). Faculty of Engineering (FEN). State University of Rio de Janeiro (UERJ).;
9498	STRUCTURAL RELIABILITY FOR THE DESIGN OF COLD-FORMED STEEL I-SECTIONS MEMBERS UNDERGOING WEB CRIPPLING UNDER INTERIOR LOADING CONDITIONS	Advanced Analysis of Steel and Steel-Concrete Composite Structures	Nathalia Barbosa de Melo / / Programa de Pós-Graduação em Engenharia Civil, Departamento de Engenharia Civil, Escola de Minas, Universidade Federal de Ouro Preto, Campus Universitário Morro do Cruzeiro, 35400-000, Ouro Preto, Minas Gerais, Brasil; André L. R. Brandão / / Instituto de Engenharias Integradas, Universidade Federal de Itajubá - Campus de Itabira Rua Irmã Ivone Drumond, 200, Distrito Industrial, 35903-087, Itabira, Minas Gerais, Brasil.; Marcílio S. R. Freitas / / Programa de Pós-Graduação em Engenharia Civil, Departamento de Engenharia Civil, Escola de Minas, Universidade Federal de Ouro Preto, Campus Universitário Morro do Cruzeiro, 35400-000, Ouro Preto, Minas Gerais, Brasil;

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9114	THE EFFECT OF ROUNDED CORNERS IN MOMENT RESISTANCE OF STEEL SHUTTERING OF COMPOSITE SLABS	Advanced Analysis of Steel and Steel-Concrete Composite Structures	- / / -; Mayane Cordeiro Loureiro / / Department of Civil Engineering, Federal University of Espírito Santo; Protáze Mageveske / / Department of Civil Engineering, School of Mines, Federal University of Ouro Preto; Élcio Cassimiro Alves / / Department of Civil Engineering, Federal University of Espírito Santo; Adenilcia Fernanda Grobério Calenzani / / Department of Civil Engineering, Federal University of Espírito Santo;
9143	VIBRATION ANALYSIS AND HUMAN COMFORT INVESTIGATION OF FLOORS WHEN SUBJECTED TO RHYTMIC HUMAN ACTIVITIES	Advanced Analysis of Steel and Steel-Concrete Composite Structures	Felipe Almeida de Souza / / Civil Engineering Postgraduate Program (PGECIV/FEN/UERJ). Faculty of Engineering (FEN). State University of Rio de Janeiro (UERJ).; Nathália de Almeida Castelo Branco / / Civil Engineering Postgraduate Program (PGECIV/FEN/UERJ). Faculty of Engineering (FEN). State University of Rio de Janeiro (UERJ).; José Guilherme Santos da Silva / / Civil Engineering Postgraduate Program (PGECIV/FEN/UERJ). Faculty of Engineering (FEN). State University of Rio de Janeiro (UERJ).;
9442	APPLICATION OF SEQUENTIAL EXPLICIT COUPLING OF RESERVOIR, WELL AND SURFACE FACILITIES FOR 3D COMPOSITIONAL SIMULATION	Advanced Computational Workflows and Tools for Characterization of Petroleum Reservoirs	Alireza Bigdeli / / Laboratory of Computation Fluid Dynamics, Block 730, Federal University of Ceará, Fortaleza, Ceará, Brazil; Matheus Lemos Barroso / / Laboratory of Computation Fluid Dynamics, Block 730, Federal University of Ceará, Fortaleza, Ceará, Brazil; Ivens Da Costa Menezes Lima / / Laboratory of Computation Fluid Dynamics, Block 730, Federal University of Ceará, Fortaleza, Ceará, Brazil; Francisco Marcondes / / Department of Metallurgical Engineering and Material Science, Block 729 Federal University of Ceará, Av. Humberto Monte, s/n, 60455-900, Fortaleza, Ceará, Brazil; Kamy Sepehrnoori / / Hildebrand Department of Petroleum and Geosystems Engineering, The University of Texas at Austin, Austin, Texas, USA;
9722	CHARACTERIZATION OF PERMEABILITY ANISOTROPY IN A CARBONATE ROCK: A DIGITAL ROCK STUDY	Advanced Computational Workflows and Tools for Characterization of Petroleum Reservoirs	Rafael March / / Halliburton; Santiago Drexler / / Halliburton; Jonas Toelke / / Halliburton;
9321	COMPARISON OF DIFFERENT EXPERIMENTAL DATA INPUTS IN HISTORY MATCHING PROCEDURE FOR RELATIVE PERMEABILITY AND CAPILLARY PRESSURE DETERMINATION	Advanced Computational Workflows and Tools for Characterization of Petroleum Reservoirs	Tarcísio Fischer / / Engineering Simulation And Scientific Software (ESSS); Felipe Moreira Eler / / Enhanced Oil Recovery Laboratory (LRAP); Edson Tadeu Monteiro Manoel / / Engineering Simulation And Scientific Software (ESSS); Sofia Pamplona Bittencourt / / Engineering Simulation And Scientific Software (ESSS); Vinicius Girardi Silva / / Engineering Simulation And Scientific Software (ESSS);

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9979	INTEGRATING MULTIPLE LOG MEASUREMENTS FOR UNCERTAINTY REDUCTION IN RESERVOIR EVALUATION	Advanced Computational Workflows and Tools for Characterization of Petroleum Reservoirs	Vanessa Simoes / / Schlumberger; Patrick Machado / / Schlumberger; Marianna Dantas / / Schlumberger; Frances Abbots / / Shell Brasil Petróleo Ltda.; Manu Singhal / / Shell Brasil Petróleo Ltda.; Aloke Saha / / Shell Brasil Petróleo Ltda.; - / / -;
9576	NUMERICAL MODELING OF DAMAGE ZONES IN ROCKS AT RESERVOIR SCALE USING FEM	Advanced Computational Workflows and Tools for Characterization of Petroleum Reservoirs	Thiago Juvêncio de Andrade / / Tecgraf Institute, PUC-Rio; Civil Engineering Department, PUC-Rio; Roberto Quevedo / / Tecgraf Institute, PUC-Rio; Bruno R.B.M. Carvalho / / Petrobras Research Center; Deane Roehl / / Tecgraf Institute, PUC-Rio; Civil Engineering Department, PUC-Rio;
9145	Random Walk simulation of Nuclear Magnetic Resonance for characterization of reservoir rocks using micro-CT data	Advanced Computational Workflows and Tools for Characterization of Petroleum Reservoirs	A. Zuniga / / Civil Engineering Program, COPPE/UFRJ; A. Boyd / / LRAP, COPPE/UFRJ; E. Rios / / LRAP, COPPE/UFRJ; M. Lima / / LRAP, COPPE/UFRJ; T. Lipovetsky / / LRAP, COPPE/UFRJ; P. Couto / / LRAP, COPPE/UFRJ; J. Drummond / / UFF; A. Souza / / LRAP, COPPE/UFRJ;
9492	Three-dimensional geological mapping based on cross sections restoration	Advanced Computational Workflows and Tools for Characterization of Petroleum Reservoirs	Vinicius S. C. Almada / / Tecgraf Institute of Technical-Scientific Software Development of PUC-Rio; Luiz Fernando Martha / / Tecgraf Institute of Technical-Scientific Software Development of PUC-Rio; André Luís Müller / / Tecgraf Institute of Technical-Scientific Software Development of PUC-Rio; Márcio R. de Santi / / Tecgraf Institute of Technical-Scientific Software Development of PUC-Rio;
9781	A Computational Tool for the Geometric Modeling of Naturally Fractured Carbonate (Karst) Petroleum Reservoirs	Advanced Gridding and Discretization Techniques for Petroleum Reservoir Simulation	Filipe A. C. S. Alves / / Center for Computer Science, Universidade Federal de Pernambuco; Artur C. R. de Souza / / Dept. of Civil Engineering, Universidade Federal de Pernambuco; Darlan K. E. de Carvalho / / Dept. of Mechanical Engineering, Universidade Federal de Pernambuco; Paulo R. M. Lyra / / Dept. of Mechanical Engineering, Universidade Federal de Pernambuco;

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9815	NUMERICAL SIMULATION OF OIL AND WATER DISPLACEMENTS IN PETROLEUM RESERVOIRS USING A NON-LINEAR TWO-POINT FLUX APPROXIMATION METHOD COUPLED TO A MODIFIED FLOW ORIENTED FORMULATION USING A SEQUENTIAL IMPLICIT PROCEDURE	Advanced Gridding and Discretization Techniques for Petroleum Reservoir Simulation	Gustavo Lenin Souza Santos Pacheco / / Dept. of Mechanical Engineering, Federal University of Pernambuco; Paulo Roberto Maciel Lyra / / Dept. of Mechanical Engineering, Federal University of Pernambuco; Phillipe Caetano Gomes da Silva / / Dept. of Civil Engineering, Federal University of Pernambuco; Fernando Raul Licapa Contreras / / Dept. of Mechanical Engineering, Federal University of Pernambuco; Márcio Rodrigo de Araújo Souza / / Dept. of Renewable Energy Engineering, Federal University of Paraiba; Túlio de Moura Cavalcante / / Dept. of Civil Engineering, Federal University of Pernambuco; Darlan Karlo Elisiário de Carvalho / / Dept. of Mechanical Engineering, Federal University of Pernambuco;
9813	SINGLE-PHASE FLOW SIMULATION IN 3-D NATURALLY FRACTURED RESERVOIRS USING A LOCALLY CONSERVATIVE FORMULATION, AN EMBEDDED DISCRETE FRACTURE MODEL AND UNSTRUCTURED TETRAHEDRAL MESHES	Advanced Gridding and Discretization Techniques for Petroleum Reservoir Simulation	Túlio de M. Cavalcante / / Department of Civil Engineering, UFPE; Darlan K. E. de Carvalho / / Department of Mechanical Engineering, UFPE; Paulo R. M. Lyra / / Department of Mechanical Engineering, UFPE;
9927	A FINITE DIFFERENCE ENERGY METHOD TO ARBITRARY GRIDS APPLIED THE PLATE BENDING PROBLEMS	Advances and Applications of Meshless Methods and Novel Discretization Strategies	Paulo Henrique Silva dos Santos / / Departamento de Tecnologia, Universidade Estadual de Feira de Santana; Geraldo José Belmonte dos Santos / / Departamento de Tecnologia, Universidade Estadual de Feira de Santana; José Mário Feitosa Lima / / Departamento de Tecnologia, Universidade Estadual de Feira de Santana;
9262	A MESHFREE APPROACH FOR THE TIMOSHENKO BEAM	Advances and Applications of Meshless Methods and Novel Discretization Strategies	Felipe P. dos Santos / / Dept. of Structural Engineering, Federal University of Minas Gerais; Enzo Marino / / Dept. of Civil and Environmental Engineering, University of Florence; Lapo Gori / / Dept. of Structural Engineering, Federal University of Minas Gerais;
9106	A PERIDYNAMIC APPROACH TO CALCULATE THE ELASTOPLASTIC STRESS AND STRAIN FIELDS	Advances and Applications of Meshless Methods and Novel Discretization Strategies	Átila Lupim Cruz / / Mechanics Division, Institute of Aeronautics and Space; Mauricio Vicente Donadon / / Aeronautical and Aerospace Engineering Division, Technological Institute of Aeronautics;
9857	A projection technique for nonlinear adaptive analyses exploring the Generalized Finite Element Method	Advances and Applications of Meshless Methods and Novel Discretization Strategies	Bruno Rammon Silva Souza / / Department of Structural Engineering, São Carlos School of Engineering, University of São Paulo; Murilo Henrique Campana Bento / / Department of Structural Engineering, São Carlos School of Engineering, University of São Paulo; Sergio Persival Baroncini Proença / / Department of Structural Engineering, São Carlos School of Engineering, University of São Paulo;
9176	AN SPIM-FEM COUPLING STRATEGY FOR DAMAGE MODELLING	Advances and Applications of Meshless Methods and Novel Discretization Strategies	Samir Silva Saliba / / Department of Structural Engineering, Federal University of Minas Gerais; Roque Luiz da Silva Pitangueira / / Department of Structural Engineering, Federal University of Minas Gerais; Lapo Gori / / Department of Structural Engineering, Federal University of Minas Gerais;

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9634	COMPARING MESHLESS METHODS WITH THE FINITE ELEMENT METHOD FOR APPLICATION OF A BIO-INSPIRED REMODELLING ALGORITHM INTENDED TO DESIGN BONE SCAFFOLD	Advances and Applications of Meshless Methods and Novel Discretization Strategies	Ana Pais / / INEGI, Institute of Science and Innovation in Mechanical and Industrial Engineering; Jorge Lino Alves / / INEGI, Institute of Science and Innovation in Mechanical and Industrial Engineering; Jorge Belinha / / ISEP, Department of Mechanical Engineering, School of Engineering, Polytechnic of Porto;
9652	eXtended Isogeometric Analysis - a numerical investigation of simulation of two-dimensional elastic fracture.	Advances and Applications of Meshless Methods and Novel Discretization Strategies	Karla Fernanda dos Santos / / Dept. of Structural Engineering of University of Minas Gerais; Felício Bruzzi Barros / / Dept. of Structural Engineering of University of Minas Gerais;
9322	POINT INTERPOLATION METHODS FOR PHASE-FIELD MODELLING OF BRITTLE FRACTURE	Advances and Applications of Meshless Methods and Novel Discretization Strategies	Larissa Novelli / / Structural Engineering Graduate Course, Federal University of Minas Gerais; Lapo Gori / / Department of Structural Engineering, Federal University of Minas Gerais; Roque Luiz da Silva Pitangueira / / Department of Structural Engineering, Federal University of Minas Gerais;
9267	A VEM-BASED CONCURRENT MULTISCALE METHOD FOR MESO-HETEROGENEOUS MATERIALS	Advances in Mechanical Modeling of Composite Materials and Metamaterials	Gabriel Chacon / / Faculty of engineering, Universidad de Beuenos Aires; Felipe Lopez Rivarola / / Faculty of engineering, Universidad de Beuenos Aires; Daniel van Huyssteen / / Institute of Applied Mechanics, Friedrich-Alexander-Universität; Paul Steinmann / / Institute of Applied Mechanics, Friedrich-Alexander-Universität; Guillermo Etse / / Department of constructions and structures, Universidad de Beuenos Aires;
9295	ANALYSIS OF HIGH ORDER MULTILAYERED AND FUNCTIONALLY GRADED COMPOSITE BEAMS: A NUMERICAL APPROACH	Advances in Mechanical Modeling of Composite Materials and Metamaterials	Rodrigo Souza de Melo / / Dept. of Civil Engineering, Federal University of Sergipe; Fabio Carlos da Rocha / / Dept. of Civil Engineering, Federal University of Sergipe;
9379	Crack analysis of mesoscale concrete by FEM using an alternative mesh overlay to represent mortar and coarse aggregate	Advances in Mechanical Modeling of Composite Materials and Metamaterials	Welington Hilário Vieira / / São Carlos School of Engineering, University of São Paulo; Rodrigo Ribeiro Paccola / / São Carlos School of Engineering, University of São Paulo; Humberto Breves Coda / / São Carlos School of Engineering, University of São Paulo;
9470	PERFORMANCE OF ACOUSTIC METAMATERIAL BASED ON A DOUBLE LAYER MICROPERFORATED PANEL	Advances in Mechanical Modeling of Composite Materials and Metamaterials	Linconl C. B. Farias / / Graduate Program in Mechanical Engineering, Laboratory of Vibration and Acoustics, Federal University of Santa Catarina, Florianópolis, Brazil.; Gildean do N. Almeida / / Graduate Program in Mechanical Engineering, Laboratory of Vibration and Acoustics, Federal University of Santa Catarina, Florianópolis, Brazil.; Erasmo F. Vergara / / Graduate Program in Mechanical Engineering, Laboratory of Vibration and Acoustics, Federal University of Santa Catarina, Florianópolis, Brazil.; Leandro R. Barbosa / / Graduate Program in Mechanical Engineering, Laboratory of Vibration and Acoustics, Federal University of Santa Catarina, Florianópolis, Brazil.; Robson Z. Mikulski / / Graduate Program in Mechanical Engineering, Laboratory of Vibration and Acoustics, Federal University of Santa Catarina, Florianópolis, Brazil.;

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9734	IMPROVING HAWT BLADE DESIGN WITH MULTIPHASE BEM APPLICATION AND GA-BASED AIRFOILS FOR LOW REYNOLDS CONDITIONS	Advances in Modelling and Simulation of Wind Energy Systems	Christiano Pagung Neto / / Dept. of Mechanical Engineering, Federal University of Minas Gerais;
9073	NUMERICAL SIMULATION OF THE FLOW AROUND WIND TURBINES USING THE IMMERSED BOUNDARY METHOD	Advances in Modelling and Simulation of Wind Energy Systems	João E. F. Martini / / Fluid Mechanics Laboratory - MFLab, Federal University of Uberlândia; Rafael R. S. Melo / / Department of Thermal and Fluid Sciences - DCTEF, Federal University of São João del-Rei; Aristeu da Silveira Neto / / Fluid Mechanics Laboratory - MFLab, Federal University of Uberlândia;
9493	TMD'S CONTROL EFFECT ON THE NONLINEAR DYNAMIC RESPONSE OF A BARGE FWOT	Advances in Modelling and Simulation of Wind Energy Systems	Elvidio Gavassoni Neto / / Dept of Civil Engineering, UFPR; Paulo Zwierzikowski / / PPGEC, UFPR;
9089	A CO-ROTATIONAL MODEL FOR ELASTOPLASTIC ANALYSIS OF PLANAR FRAMES	Advances in Solid and Structural Mechanics	Rafael I. Tasinaffo / / Instituto Tecnológico de Aeronáutica (ITA); Sérgio G. F. Cordeiro / / Departamento de Estruturas, Instituto Tecnológico de Aeronáutica (ITA); Francisco A. C. Monteiro / / Departamento de Estruturas, Instituto Tecnológico de Aeronáutica (ITA);
9367	A COLLABORATIVE WEB COMPUTER-AIDED DESIGN APPLICATION	Advances in Solid and Structural Mechanics	Rodrigo L. Soares / / Dept. of Civil and Evironmental Engineering, Pontifical Catholic University of Rio de Janeiro; Danilo S. Bomfim / / Dept. of Civil and Evironmental Engineering, Pontifical Catholic University of Rio de Janeiro; Luiz F. Bez / / Institute of Computing, Fluminense Federal University; Pedro C. F. Lopes / / Institute of Computing, Fluminense Federal University; André M. B. Pereira / / Institute of Computing, Fluminense Federal University; Luiz F. Martha / / Dept. of Civil and Evironmental Engineering, Pontifical Catholic University of Rio de Janeiro;
9182	A FINITE STRAIN ELASTOPLASTIC MODEL BASED ON FLORY'S DECOMPOSITION	Advances in Solid and Structural Mechanics	Vitor H. Kishino / / Dept. os Structural Engineering, University of São Paulo; Renato T. Kishino / / Dept. os Structural Engineering, University of São Paulo; Rodrigo R. Paccola / / Dept. os Structural Engineering, University of São Paulo; Humberto B. Coda / / Dept. os Structural Engineering, University of São Paulo;
9731	A LARGE STRAIN THERMODYNAMICALLY-BASED VISCOELASTIC-VISCOPLASTIC MODEL APPLIED TO TWO-DIMENSIONAL FINITE ELEMENT ANALYSIS OF SOLIDS	Advances in Solid and Structural Mechanics	Péricles R. P. Carvalho / / Dept. of Structural Engineering, São Carlos School of Engineering, University of São Paulo; Humberto B. Coda / / Dept. of Structural Engineering, São Carlos School of Engineering, University of São Paulo; Rodolfo A. K. Sanches / / Dept. of Structural Engineering, São Carlos School of Engineering, University of São Paulo;
9183	A SIMPLE FORMULATION APPLIED TO FINITE STRAIN VISCOELASTIC SOLIDS AND COMPRESSIVE FLOWS	Advances in Solid and Structural Mechanics	Renato T. Kishino / / Dept. os Structural Engineering, University of São Paulo; Vitor H. Kishino / / Dept. os Structural Engineering, University of São Paulo; Rdolfo A. K. Sanches / / Dept. os Structural Engineering, University of São Paulo; Humberto B. Coda / / Dept. os Structural Engineering, University of São Paulo;

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9352	Analysis of the calibration of the constants of the Modified Wöhler Curve	Advances in Solid and Structural Mechanics	Simelia Dos Santos / / University of Brasília, Campus Gama; Jorge Luiz de Almeida Fereira / / University of Brasília, Campus Darcy Ribeiro;
9486	ANALYSIS OF THE PLASTICITY REGIONS IN ELASTOPLASTIC TORSION PROBLEM USING MIXED COMPLEMENTARITY ALGORITHM	Advances in Solid and Structural Mechanics	Tatiana Danelon de Assis / / Department of Mathematics, Federal University of Juiz de Fora; Sandro Rodrigues Mazorche / / Department of Mathematics, Federal University of Juiz de Fora;
9617	APPLYING BEAM SIZING CONCEPTS ALONG WITH TOPOLOGY OPTIMIZATION ON THE DESIGN OF CONTINUUM STRUCTURES	Advances in Solid and Structural Mechanics	Tarcísio Ladeia de Oliveira / / Department of Mechanical Engineering, Sao Carlos School of Engineering, University of Sao Paulo; Jonas de Carvalho / / Department of Mechanical Engineering, Sao Carlos School of Engineering, University of Sao Paulo;
9148	BOUNDARY LAYER PHENOMENON IN THE LIMIT ANALYSIS OF REISSNER-MINDLIN PLATES	Advances in Solid and Structural Mechanics	Eric L. B. Cavalcante / / Núcleo de Tratamentos de Dados e Informações, Tribunal de Contas da União; Paulo T.M.L. Soares / / Centro de Estudos e Projetos de Engenharia da Aeronáutica, Comando da Aeronáutica; Eliseu Lucena Neto / / Divisão de Engenharia Civil, Instituto Tecnológico de Aeronáutica;
9285	CFD APPLIED TO THE SIMULATION OF THE VIBRATION PHENOMENON DUE TO THE CADENCED SHEDDING OF VORTICES IN A CIRCULAR CYLINDER.	Advances in Solid and Structural Mechanics	Alexandre Miguel Silva Araújo / / Post Graduate Program in Civil Engineering, Federal University of Juiz de Fora; Juliema Fronczak / / Post Graduate Program in Civil Engineering, Federal University of Juiz de Fora; Mariana Reis Pereira / / Graduate in Civil Engineering, Federal University of Juiz de Fora; Karin Kauss / / Post Graduate Program in Civil Engineering, Federal University of Juiz de Fora; Marcelo Caetano Monteiro / / Post Graduate Program in Civil Engineering, Federal University of Juiz de Fora; Bruno Giudice Batista de Araujo Porto / / Post Graduate Program in Civil Engineering, Federal University of Juiz de Fora; Gabriel Antonio Mendes das Flores / / Post Graduate Program in Civil Engineering, Federal University of Juiz de Fora; Patricia Habib Hallak / / Department of Computational and Applied Mechanics, Federal University of Juiz de Fora;
9578	Comparison of Analytical and Numerical Solutions to the Stresses Problem in a Cylindrical Shell with a Circular Hole	Advances in Solid and Structural Mechanics	Stanislava Kashtanova / / Institute for Problems in Mechanical Engineering of the Russian Academy of Sciences; Alexey Rzhonsnitskiy / / Saint-Petersburg State Institute of Technology;

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9402	CONSISTENCY ASSESSMENT OF PLATE BENDING THEORIES FOR THE IMPLEMENTATION OF EFFICIENT HYBRID FINITE ELEMENTS IN LINEAR STATICS AND DYNAMICS	Advances in Solid and Structural Mechanics	Ney Augusto Dumont / / Dept. of Civil and Environmental Engineering, PUC-Rio; Renan Costa Sales / / Dept. of Civil and Environmental Engineering, PUC-Rio;
9368	DEVELOPMENT OF A PYTHON APPLICATION AIMING AT THE TEACHING-LEARNING PROCESS OF THE HALF-EDGE DATA STRUCTURE	Advances in Solid and Structural Mechanics	Danilo S. Bomfim / / Dept. of Civil and Evironmental Engineering, Pontifical Catholic University of Rio de Janeiro; Rodrigo L. Soares / / Dept. of Civil and Evironmental Engineering, Pontifical Catholic University of Rio de Janeiro; Luiz F. Bez / / Institute of Computing, Fluminense Federal University; Pedro C. F. Lopes / / Institute of Computing, Fluminense Federal University; André M. B. Pereira / / Institute of Computing, Fluminense Federal University; Luiz F. Martha / / Dept. of Civil and Evironmental Engineering, Pontifical Catholic University of Rio de Janeiro;
9876	EQUIVALENT STRAIN MEASURES FOR MICROMORPHIC CONTINUUM DAMAGE MODELS	Advances in Solid and Structural Mechanics	Pamela Daniela Nogueira Reges / / Dept. of Structural Engineering, Federal University of Minas Gerais; Roque Luiz da Silva Pitangueira / / Dept. of Structural Engineering, Federal University of Minas Gerais; Leandro Lopes da Silva / / Dept. of Structural Engineering, Federal University of Minas Gerais;
9108	Fracture mechanics of aircraft structures with riveted and adhesive stiffeners	Advances in Solid and Structural Mechanics	Vitor L. Mesquita / / Dept. of Civil and Environmental Engineering, Pontifical Catholic University of Rio de Janeiro; Luiz C. Wrobel / / Dept. of Civil and Environmental Engineering, Pontifical Catholic University of Rio de Janeiro;
9196	INITIAL CONDITIONS TO ACCOUNT FOR MOVING LOADS IN TRUNCATED DOMAINS AND IDENTI□CATIONS OF THE PARAMETERS OF A RANDOMLY- UCTUATING CONTINUOUS MODEL OF A BALLASTED TRACK	Advances in Solid and Structural Mechanics	Patryk Dec / / Aix-Marseille Univ., CNRS, Centrale Marseille, LMA; Régis Cottereau / / Aix-Marseille Univ., CNRS, Centrale Marseille, LMA; Baldrik Faure / / SNCF, Innovation and Research Department, France;
9506	MECHANICAL RESPONSE OF BILAYER GRAPHENE UNDER DIFFERENT LOADING MODES	Advances in Solid and Structural Mechanics	Euclides Mesquita / / Department of Computational Mechanics FEM - Unicamp; Daniela A. Damasceno / / University of São Paulo, Research Center for Gas Innovation; Otavio Tovo / / Department of Computational Mechanics FEM - Unicamp;

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9079	ON A KINEMATICALLY EXACT ROD MODEL FOR THIN-WALLED OPEN SECTION MEMBERS	Advances in Solid and Structural Mechanics	Marcos Pires Kassab / / Dept. of Structural and Geotechnical Engineering, University of São Paulo; Eduardo de Morais Barreto Campello / / Dept. of Structural and Geotechnical Engineering, University of São Paulo;
9903	PORO-MECHANICAL COUPLING STRATEGIES FOR LARGE STRAIN COMPRESSION OF SOFT BIOLOGICAL TISSUES	Advances in Solid and Structural Mechanics	José Luís Medeiros Thiesen / / GRANTE - Department of Mechanical Engineering, Federal University of Santa Catarina; Bruno Klahr / / GRANTE - Department of Mechanical Engineering, Federal University of Santa Catarina; Thiago André Carniel / / ACEA – Area of Exact and Environmental Sciences, Community University of Chapecó Region; Eduardo Alberto Fancello / / GRANTE - Department of Mechanical Engineering, Federal University of Santa Catarina;
9683	SOUND TRANSMISSION LOSS FOR DOUBLE PANELS USING THE WAVE FINITE ELEMENT METHOD	Advances in Solid and Structural Mechanics	Giovanna Pisicchio Zanoni / / School of Mechanical Engineering, University of Campinas; Alberto Luiz Serpa / / School of Mechanical Engineering, University of Campinas;
9391	STEEL BEAM CRACK PROPAGATION SIMULATION AND EXPERIMENTAL VERIFICATION	Advances in Solid and Structural Mechanics	Sebastián Moya Lazo / / Escuela de Ingenieria Civil en Obras Civiles, Faculty of Engineering, Universidad de Talca; Mauricio Jara Ortiz / / Escuela de Ingeniería Civil de Minas, Faculty of Engineering, Universidad de Talca; Ignacio Fuenzalida Henriquez / / Doctorado en Sistemas de Ingeniería, Universidad de Talca. Engineering Building and Management Department, Faculty of Engineering, Universidad de Talca.;
9090	The Schwarz Alternating Method for Multi-Scale Coupling and Contact in Solid Mechanics	Advances in Solid and Structural Mechanics	Irina Tezaur / / Quantitative Modeling & Analysis Department, Sandia National Laboratories;
9630	ANALYSIS OF RELEVANT PARAMETERS OF AN EXTERNAL FLOW OVER A SQUARE CYLINDER BY CFD FOR TWO DISTINCT TURBULENCE MODELS	Analysis and Design of Offshore Systems	Rodolfo Alves Carvalho / / Department of Civil and Environmental Engineering, University of Brasília; Lineu José Pedroso / / Department of Civil and Environmental Engineering, University of Brasília;
9378	ANALYTICAL-NUMERICAL STUDY OF NATURAL FREQUENCIES AND MODE SHAPES OF INTERCONNECTED ACOUSTIC CAVITIES DUE TO THE INFLUENCE OF SEVERAL SIGNIFICANT PARAMETERS	Analysis and Design of Offshore Systems	Roger Otávio Pires Montes / / Federal Institute of Education, Science and Technology of Goiás, Federal Institute of Goiás; Lineu José Pedroso / / Department of Civil and Environmental Engineering, University of Brasilia;
9526	Design of a Floating Offshore Structure by a Deep Neural Network	Analysis and Design of Offshore Systems	Fillipe R. L. Esteves / / Dept. of Naval Architecture and Ocean Engineering, University of São Paulo; Bernardo L. R. Andrade / / Dept. of Naval Architecture and Ocean Engineering, University of São Paulo; Kazuo Nishimoto / / Dept. of Naval Architecture and Ocean Engineering, University of São Paulo;

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9469	Structural Analyses of Fixed Offshore Wind Turbine Jacket-Type Support Structure	Analysis and Design of Offshore Systems	Érica Martinho de Mendonça / / Department of Civil Engineering, Federal University of Rio de Janeiro; Gabriel Nogueira / / Department of Civil Engineering, Federal University of Rio de Janeiro; Gilberto Bruno Ellwanger / / Department of Civil Engineering, Federal University of Rio de Janeiro; José Renato Mendes de Sousa / / Department of Civil Engineering, Federal University of Rio de Janeiro;
9169	Study of the parametric excitation phenomenon of a slender riser using finite element method and a reduced order model	Analysis and Design of Offshore Systems	Guilherme Rocha Martins / / Department of Structural and Geotechnical Engineering, Polytechnic School at the University of São Paulo; Paulo Akira Figuti Enabe / / Department of Structural and Geotechnical Engineering, Polytechnic School at the University of São Paulo; Rodrigo Provasi / / Department of Structural and Geotechnical Engineering, Polytechnic School at the University of São Paulo; Alfredo Gay Neto / / Department of Structural and Geotechnical Engineering, Polytechnic School at the University of São Paulo;
9276	STUDY ON GENETIC ALGORITHMS AND CONSTRAINT HANDLING TECHNIQUES APPLIED TO THE OPTIMIZATION OF JACKET STRUCTURES FOR OFFSHORE WIND TURBINES	Analysis and Design of Offshore Systems	Rodrigo Oliveira Cruz / / Civil Engineering Program, Federal University of Rio de Janeiro – UFRJ; Grasiele Regina Duarte / / Civil Engineering Program, Federal University of Rio de Janeiro – UFRJ; Beatriz Souza Leite Pires de Lima / / Civil Engineering Program, Federal University of Rio de Janeiro – UFRJ;

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9092	COMPARISON AMONG NUMERICAL APPROXIMATIONS IN THE SIMULATION OF THE GRAIN MASS AERATION PROCESS	Applications of Computational Thermo Fluid-Dynamics	Daniel Rigoni / / Graduate Program in Numerical Methods in Engineering, Federal University of Paraná; Marcio A. V. Pinto / / Department of Mechanical Engineering, Federal University of Paraná; Jotair E. Kwiatkowski Jr. / / Department of Computer Science, State University of Centro-Oeste;
9786	COMPARISON BETWEEN THE GLOBAL FLOW STABILITY OF ISOTHERMAL AND ADIABATIC GAPS IN A BOUNDARY LAYER	Applications of Computational Thermo Fluid-Dynamics	Marlon Sproesser Mathias / / São Carlos School of Engineering, University of São Paulo; Marcello A F Medeiros / / São Carlos School of Engineering, University of São Paulo;
9273	CONJUGATE HEAT TRANSFER WITH VARIABLE THERMAL PROPERTIES VIA A DUAL IMMERSED BOUNDARY METHOD	Applications of Computational Thermo Fluid-Dynamics	Gabriel F. Narváez / / Hydraulic Research Institute (IPH), Federal University of Rio Grande do Sul; Eric Lamballais / / PPRIME Institute, Incompressible Turbulence and Control Group - Université de Poitiers;
9641	COUPLED CFD AND ELECTROMAGNETIC ANALYSIS OF AN ONAN DISTRIBUTION TRANSFORMER COOLED WITH MINERAL OIL AND BIODEGRADABLE ESTERS	Applications of Computational Thermo Fluid-Dynamics	Luciano Garelli / / Centro de Investigación de Métodos Computacionales, CIMEC (UNL - CONICET); Guatavo A. Ríos Rodriguez / / Centro de Investigación de Métodos Computacionales, CIMEC (UNL - CONICET); Krzysztof Kubiczek / / Dept. of Measurement Science, Electronics and Control, Faculty of Electrical Engineering, Silesian University of Technology; Mariusz Stepien / / Dept. of Power Electronics, Electrical Drives and Robotics, Faculty of Electrical Engineering, Silesian University of Technology; Pawel Lasek / / Dept. of Power Electronics, Electrical Drives and Robotics, Faculty of Electrical Engineering, Silesian University of Technology; Michal Stebel / / Institute of Thermal Technology, Faculty of Energy and Environmental Engineering, Silesian University of Technology; Bartolomiej Melka / / Institute of Thermal Technology, Faculty of Energy and Environmental Engineering, Silesian University of Technology; Jackub Bodys / / Institute of Thermal Technology, Faculty of Energy and Environmental Engineering, Silesian University of Technology; Michal Haida / / Institute of Thermal Technology, Faculty of Energy and Environmental Engineering, Silesian University of Technology; Michal Palacz / / Institute of Thermal

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9071	EXPERIMENTAL AND NUMERICAL STUDY OF 3D-PRINTED PARTS FOR A PULMONARY VENTILATOR CIRCUIT	Applications of Computational Thermo Fluid-Dynamics	Lara E. P. Santos / / Faculdade do Gama, Universidade de Brasília; Daniel F. A. Fontes / / Faculdade do Gama, Universidade de Brasília; Julia R. Felipe / / Faculdade do Gama, Universidade de Brasília; Mateus A. M. Santos / / Faculdade do Gama, Universidade de Brasília; Olexiy Shynkarenko / / Laboratório de Propulsão Química, Faculdade do Gama, Universidade de Brasília;
9642	HEAT TRANSFER ENHANCEMENT USING DELTA-WING STREAMWISE VORTEX GENERATORS	Applications of Computational Thermo Fluid-Dynamics	Luciano Garelli / / Centro de Investigación de Métodos Computacionales, CIMEC (UNL - CONICET); Gustavo A. Ríos Rodriguez / / Centro de Investigación de Métodos Computacionales, CIMEC (UNL - CONICET); Mario A. Storti / / Centro de Investigación de Métodos Computacionales, CIMEC (UNL - CONICET);
9995	IMPROVED WELL DRILLING SIMULATION WITH TRANSIENT THERMAL MODEL FOR PREDICTING WELLBORE TEMPERATURES	Applications of Computational Thermo Fluid-Dynamics	Mostafa Abdelhafz / / DSC / TU Clausthal, Celle - Germany and Future University in Egypt, Cairo - Egypt; Joachim F. Oppelt / / DSC / TU Clausthal, Celle - Germany; Luiz A Hegele Jr / / Santa Catarina State University, UDESC, Balnário Camboriú - Brazil;
9077	NUMERICAL SIMULATION OF A CONNECTED PIPE TEST RAMJET MOTOR	Applications of Computational Thermo Fluid-Dynamics	Douglas C. Cerbino / / Aerospace Engineering Department - Chemical Propulsion Laboratory, Faculty UnB Gama - FGA, University of Brasilia.; Olexiy Shynkarenko / / Aerospace Engineering Department - Chemical Propulsion Laboratory, Faculty UnB Gama - FGA, University of Brasilia.;
9985	NUMERICAL SIMULATION OF TORNADO FLOWS USING ANISOTROPIC MESH ADAPTATION	Applications of Computational Thermo Fluid-Dynamics	Miguel A. Aguirre / / Centro de Mecânica Aplicada e Computacional (CEMACOM), Programa de Pós-Graduação em Engenharia Civil (PPGEC), Universidade Federal do Rio Grande do Sul (UFRGS); Renato V. Linn / / Centro de Mecânica Aplicada e Computacional (CEMACOM), Programa de Pós-Graduação em Engenharia Civil (PPGEC), Universidade Federal do Rio Grande do Sul (UFRGS); Alexandre L. Braun / / Centro de Mecânica Aplicada e Computacional (CEMACOM), Programa de Pós-Graduação em Engenharia Civil (PPGEC), Universidade Federal do Rio Grande do Sul (UFRGS);
9382	NUMERICAL SIMULATION OF TURBULENT FLOWS USING THE FINITE ELEMENT METHOD AND GPU-CUDA PARALLELIZATION	Applications of Computational Thermo Fluid-Dynamics	Guilherme W. Alminhana / / Graduate Program in Civil Engineering (PPGEC), Federal University of Rio Grande do Sul (UFRGS); Alexandre L. Braun / / Graduate Program in Civil Engineering (PPGEC), Federal University of Rio Grande do Sul (UFRGS);
9412	NUMERICAL STUDY OF THE AIRFLOW THROUGH AN ELEVATED WATER TANK AS A WIND TOWER FOR IMPROVEMENT OF THERMAL COMFORT IN HOT CLIMATES	Applications of Computational Thermo Fluid-Dynamics	Rafael Marulanda Marenco / / Departamento de Ingeniería Mecánica, Universidad de los Andes; Omar López Mejía / / Departamento de Ingeniería Mecánica, Universidad de los Andes;

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9064	A 3D IBEM-FEM COUPLING MODEL FOR TIME-HARMONIC SOIL-STRUCTURE INTERACTION ANALYSIS	Boundary Element and Mesh-Reduced Methods	Iago Cavalcante / / School of Mechanical Engineering, University of Campinas; Josué Labaki / / School of Mechanical Engineering, University of Campinas;
8914	AN IBEM-FEM MODEL OF THE RAYLEIGH WAVE-SCATTERING FUNCTION OF LONG WALLS	Boundary Element and Mesh-Reduced Methods	David Carneiro / / School of Mechanical Engineering, University of Campinas; Josué Labaki / / School of Mechanical Engineering, University of Campinas; Pérsio L A Barros / / School of Civil Engineering, Architecture and Urbanism, University of Campinas;
9798	AN IMPROVEMENT TO THE FREQUENCY RESPONSE IN NON HOMGENEOUS HELMHOTZ PROBLEM USING A DOUBLE FICTITIOUS BACKGROUND MEDIA FORMULATION	Boundary Element and Mesh-Reduced Methods	Markcilei Lima Dan / / Department of Mechanical Engineering, Federal Institute of Espírito Santo.; Webe João Mansur / / Department of Civil Engineering, Federal University of Rio de Janeiro.; Carlos Friedrich Loeffler / / Department of Mechanical Engineering, Federal University of Espírito Santo.;
9315	AN ISOGEOMETRIC BOUNDARY ELEMENT FORMULATION FOR SOLIDS CONTAINING TRIMMED SURFACES	Boundary Element and Mesh-Reduced Methods	Matheus Rocha / / Dept. of Structural Engineering, São Carlos School of Engineering, São Paulo; Edson D. Leonel / / Dept. of Structural Engineering, São Carlos School of Engineering, São Paulo;
9204	ANALYSIS OF CENTRIFUGAL BODY FORCE PROBLEMS IN ANISOTROPIC MATERIALS USING THE BOUNDARY ELEMENT METHOD	Boundary Element and Mesh-Reduced Methods	Leonardo B. Silva / / Faculty of Technology, University of Brasilia; Éder L. de Albuquerque / / Faculty of Technology, University of Brasilia; Lucas C. Silveira / / Technological Center, Federal University of Espírito Santo;
9407	ANALYTICAL EVALUATION OF ALL TERMS REQUIRED IN 3D POTENTIAL AND ELASTOSTATICS BOUNDARY ELEMENT IMPLEMENTATIONS USING LINEAR TRIANGLE ELEMENTS	Boundary Element and Mesh-Reduced Methods	Ney Augusto Dumont / / Dept. of Civil and Environmental Engineering, PUC-Rio; Tatiana Galvão Kurz / / Dept. of Civil and Environmental Engineering, PUC-Rio;
9386	APPLICATION OF THE DIRECT INTERPOLATION BOUNDARY ELEMENT TECHNIQUE WITH SELF-ADAPTIVE INTEGRATION TO BIDIMENSIONAL DIFFUSIVE-ADVECTIVE PROBLEMS	Boundary Element and Mesh-Reduced Methods	Aquila de Jesus dos Santos / / Post-Graduate Program in Mechanical Engineering - PPGEM, Federal University of Espírito Santo; Carlos Friedrich Loeffler / / Post-Graduate Program in Mechanical Engineering - PPGEM, Federal University of Espírito Santo; Vitor Pancieri Pinheiro / / Post-Graduate Program in Mechanical Engineering - PPGEM, Federal University of Espírito Santo; Lucca Dalvi Vargas Melo / / Post-Graduate Program in Mechanical Engineering - PPGEM, Federal University of Espírito Santo;
9541	BOUNDARY ELEMENT ANALYSIS OF 3D LINEAR POTENTIAL PROBLEMS COMBINING FAST MULTIPOLE EXPANSION AND MACHINE-PRECISION NUMERICAL EVALUATIONS	Boundary Element and Mesh-Reduced Methods	Ney Augusto Dumont / / Dept. of Civil and Environmental Engineering, PUC-Rio; Hilton Marques Souza Santana / / Dept. of Civil and Environmental Engineering, PUC-Rio; Alexander Rubenil Florez Ttito / / Dept. of Civil and Environmental Engineering, PUC-Rio; Hélvio de Farias Costa Peixoto / / Laboratório de Computação Científica e Visualização - LCCV/UFAL;

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9144	COMPARISON OF TWO OPEN-SOURCE CODES OF THE BOUNDARY ELEMENT METHOD FOR ACOUSTIC PROBLEMS	Boundary Element and Mesh-Reduced Methods	Fernando Barreto Soares / / University of Brasília; Álvaro Campos Ferreira / / University of Brasília; Eder Lima de Albuquerque / / University of Brasília;
9080	COMPUTATION OF MOMENTS IN QUADRATIC DISCONTINUOUS ANISOTROPIC PLANE ELASTICITY FAST MULTIPOLE FORMULATION	Boundary Element and Mesh-Reduced Methods	Jailson França dos Santos / / Federal University of West Bahia and Faculty of Technology, University of Brasilia; Lucas Silveira Campos / / Federal University of Espírito Santo; Afonso Barros Dias Júnior / / Institute Federal of Brasilia, Campus Estrutural; Danilo Diego Chaves Mateus / / Faculty of Technology, University of Brasilia; Eder Lima de Albuquerque / / Faculty of Technology, University of Brasilia;
9611	CONSISTENT BOUNDARY ELEMENT METHOD FOR CRACK PROPAGATION PROBLEMS	Boundary Element and Mesh-Reduced Methods	Guilherme O. Rabelo / / Civil and Environmental Engineering Department, Pontifical Catholic University of Rio de Janeiro; Luiz C. Wrobel / / Civil and Environmental Engineering Department, Pontifical Catholic University of Rio de Janeiro; Ney A. Dumont / / Civil and Environmental Engineering Department, Pontifical Catholic University of Rio de Janeiro;
9507	DIRECT TRANSIENT RESPONSE OF COUPLED STRUCTURES - SOIL SYSTEMS MODELLED BY MATRIX METHODS AND GREEN'S FUNCTIONS APPROACH	Boundary Element and Mesh-Reduced Methods	Amauri Ferraz / / Department of Computational Mechanics FEM - Unicamp; Euclides Mesquita / / Department of Computational Mechanics FEM - Unicamp; Luis Felipe do Vale Lima / / Department of Computational Mechanics FEM - Unicamp; Josué Labaki / / Department of Integrated Systems FEM - UNICAMP;
9992	EQUAÇÃO DE DIFUSÃO ANÔMALA MODELADA PELO USO CONJUNTO DO MÉTODO DE ELEMENTO DE FRONTEIRA DE DOMÍNIO E SOLUÇÃO DERIVADA ANALÍTICA BASEADA NA EQUAÇÃO VERDE	Boundary Element and Mesh-Reduced Methods	Kymie Karina Silva Saito / / Universidade Federal do Rio de Janeiro; Otto R Correa Filho / / Universidade Federal do Rio de Janeiro; Webe J Mansur / / Universidade Federal do Rio de Janeiro; J Carrer / / Universidade Federal do Paraná;
9075	IBEM-FEM MODEL OF THE VIBRATORY RESPONSE OF A BURIED, ELASTIC STRIP FOOTING	Boundary Element and Mesh-Reduced Methods	Aldemar P. Siqueira Neto / / School of Mechanical Engineering, University of Campinas; Pérsio Leister de Almeida Barros / / School of Mechanical Engineering, University of Campinas; Josué Labaki / / School of Mechanical Engineering, University of Campinas;
9537	MACHINE-PRECISION FRACTURE MECHANICS EVALUATIONS WITH THE CONSISTENT BOUNDARY ELEMENT METHOD	Boundary Element and Mesh-Reduced Methods	Ney Augusto Dumont / / Dept. of Civil and Environmental Engineering, PUC-Rio; Osmar Alexandre do Amaral Neto / / Dept. of Civil and Environmental Engineering, PUC-Rio;

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9067	NON-SINGULAR GREEN'S FUNCTIONS FOR QUADRATIC-ORDER INDIRECT-BEM DISCRETIZATIONS: IMPLEMENTATION AND NUMERICAL RESULTS	Boundary Element and Mesh-Reduced Methods	Iago Cavalcante / / School of Mechanical Engineering, University of Campinas; Edivaldo Romanini / / Federal University of South Mato Grosso; Josué Labaki / / School of Mechanical Engineering, University of Campinas; Euclides Mesquita / / School of Mechanical Engineering, University of Campinas;
9065	NUMERICAL INTEGRATION METHOD FOR VERY HIGH FREQUENCIES IN THE EVALUATION OF GREEN'S FUNCTIONS FOR LAYERED MEDIA: TRANSIENT WAVE PROPAGATION PHENOMENA	Boundary Element and Mesh-Reduced Methods	Iago Cavalcante / / School of Mechanical Engineering, University of Campinas; Josué Labaki / / School of Mechanical Engineering, University of Campinas;
9175	PERFORMANCE COMPARISON BETWEEN THE MULTIPLE RECIPROCITY AND DIRECT INTERPOLATION BOUNDARY ELEMENT METHOD IN PROBLEMS GOVERNED BY THE HELMHOLTZ EQUATION	Boundary Element and Mesh-Reduced Methods	Thiago Galdino Balista / / Dept. de Pós Graduação, Universidade Federal do Espírito Santo - UFES; Carlos Friedrich Loeffler / / Dept. de Pós Graduação, Universidade Federal do Espírito Santo - UFES; Luciano de Oliveira Castro Lara / / Dept. de Pós Graduação, Universidade Federal do Espírito Santo - UFES;
9877	Recalculation of internal directional derivatives using the integral equation of the Boundary Element Method in Poisson problems previously solved by the Finite Element Method	Boundary Element and Mesh-Reduced Methods	Hercules de M. Barcelos / / Instituto Nacional de Metrologia, Qualidade e Tecnologia; Carlos F. Loeffler / / Universidade Federal do Espírito Santo; Luciano de O. C. Lara / / Universidade Federal do Espírito Santo;
9229	SECONDARY TORSION MOMENT DEFORMATION EFFECT (STMDE) BY BOUNDARY ELEMENT METHOD IN COMPOSITE BARS WITH VARIABLE CROSS SECTIONS	Boundary Element and Mesh-Reduced Methods	Maicon J. Hillesheim / / Universidade do Estado do Mato Grosso, Ph.D. student at Universidade Federal de Ouro Preto, maicon@unemat-net.br; Francisco C. de Araújo / / Universidade Federal de Ouro Preto, dearaujofc@gmail.com;
9377	THREE-DIMENSIONAL FAILURE ANALYSIS BY BEM USING CELLS WITH EMBEDDED DISCONTINUITY ACTIVATED DURING THE NON LINEAR LOADING PROCESS	Boundary Element and Mesh-Reduced Methods	Alisson Pinto Chaves / / Universidade Federal de Minas Gerais; Rodrigo Guerra Peixoto / / Universidade Federal de Minas Gerais; Ramon Pereira da Silva / / Universidade Federal de Minas Gerais;
9659	A NUMERICAL PARAMETRIC STUDY ON THE EFFECTIVENESS OF FASTENER DELAMINATION ARREST MECHANISM IN COMPOSITE LAMINATES UNDER MODE I LOADING	Composite Materials and Structures	Rodolfo F. V. de Melo / / Aeronautics and Aerospace Division, Instituto Tecnológico de Aeronáutica-ITA, São José dos Campos-SP, Brazil and EMBRAER S.A., São José dos Campos-SP, Brazil; Maurício V. Donadon / / Aeronautics and Aerospace Division, Instituto Tecnológico de Aeronáutica-ITA, São José dos Campos-SP, Brazil; Amauri Gavazzi / / EMBRAER S.A., São José dos Campos-SP, Brazil;
9784	An algorithm for distribution of short fibers in multiscale numerical analysis	Composite Materials and Structures	André Peres da Silva / / Department of Structural and Geotechnical Engineering, Polytechnic School at the University of Sao Paulo; Luís A. G. Bitencourt Jr. / / Department of Structural and Geotechnical Engineering, Polytechnic School at the University of Sao Paulo;

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9131	COMPOSITE SHELL FORMULATIONS: COMPARISON OF TWO GEOMETRICALLY NONLINEAR IMPLEMENTATIONS	Composite Materials and Structures	Isadora Toledo de Almeida / / Department of Structural and Geotechnical Engineering – Polytechnic School at University of São Paulo, Brazil; Celso Jaco Faccio Júnior / / Department of Structural and Geotechnical Engineering – Polytechnic School at University of São Paulo, Brazil; Alfredo Gay Neto / / Department of Structural and Geotechnical Engineering – Polytechnic School at University of São Paulo, Brazil; Sergio Frascino Muller de Almeida / / Department of Mechatronic and Mechanical Systems – Polytechnic School at University of São Paulo, Brazil;
9189	CONTRIBUTION OF SHEAR STRENGTH MECHANISMS OF REINFORCED CONCRETE BEAMS WITHOUT AND WITH STEEL FIBERS	Composite Materials and Structures	Thomás Lima de Resende / / Department of Civil and Environmental Engineering, Pontifical Catholic University of Rio de Janeiro (PUC-Rio) and Institute of Science, Engineering and Technology, Federal University of Jequitinhonha and Mucuri Valleys (UFVJM); Daniel Carlos Taissum Cardoso / / Department of Civil and Environmental Engineering, Pontifical Catholic University of Rio de Janeiro (PUC-Rio); Lidia da Conceição Domingues Shehata / / Department of Civil and Environmental Engineering, Pontifical Catholic University of Rio de Janeiro (PUC-Rio);
9137	DEVELOPMENT AND CHARACTERIZATION OF GREEN COMPOSITES FOR SOCIAL HOUSING	Composite Materials and Structures	Natália Victoria dos Santos / / Department of Civil and Environmental Engineering - Pontifical Catholic University of Rio de Janeiro (PUC-Rio); Daniel Carlos Taissum Cardoso / / Department of Civil and Environmental Engineering - Pontifical Catholic University of Rio de Janeiro (PUC-Rio); Glauco José de Oliveira Rodrigues / / Department of Civil and Environmental Engineering - Pontifical Catholic University of Rio de Janeiro (PUC-Rio);
9619	DEVELOPMENT OF AN OPTIMIZED MOMENT-CONNECTION JOINT FOR PULTRUDED PROFILES	Composite Materials and Structures	Jessé Henrique Nascimento Beserra / / Departamento de Engenharia Civil e Meio Ambiente, PUC-Rio; Daniel Carlos Taissum Cardoso / / Departamento de Engenharia Civil e Meio Ambiente, PUC-Rio; Jorge Lopes Santos / / Departamento de Design, PUC-Rio;
9600	DYNAMIC ANALYSIS OF A TELECOMMUNICATIONS TOWER OF COMPOSITE MATERIAL UNDER WIND LOADS	Composite Materials and Structures	João Paulo Dias de Souto Pereira / / Civil Engineering Department, Universidade Federal Fluminense; Eliane Maria Lopes Carvalho / / Civil Engineering Department, Universidade Federal Fluminense; Wendell Diniz Varela / / PEC/COPPE, Universidade Federal do Rio de Janeiro (UFRJ); Janine Domingos Vieira / / Civil Engineering Department, Universidade Federal Fluminense;

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9967	EQUIVALENT LEFM R-CURVE AND OPTIMISATION ALGORITHMS FOR SIMULATING MODE I DELAMINATION	Composite Materials and Structures	Luis Torres / / Mag. Cs. Ing. c/m Ingeniería Mecánica, Facultad de Ingeniería, Universidad de Talca, Campus Curicó,Chile.; Karin Saavedra / / Depto. de Tecnologías Industriales, Universidad de Talca, Campus Curicó, Chile.; Gonzalo Pincheira / / Depto. de Tecnologías Industriales, Universidad de Talca, Campus Curicó, Chile.; Juan Carlos Pina / / Universidad de Santiago de Chile (USACH), Facultad de Ingeniería, Departamento de Ingeniería en Obras Civiles, Chile.;
9956	EXPERIMENTAL ANALYSIS OF ASPHALT-CONCRETE COMPOSITE BEAMS SUBJECTED TO FOUR-POINT BENDING TEST	Composite Materials and Structures	Nicolas Jorge Vianna / / Master student in Urban Infrastructure Systems, Pontifical Catholic University of Campinas; Adilson Nunes Ruiz / / Dept. of Civil Engineering, Pontifical Catholic University of Campinas;
9423	EXPERIMENTAL STUDY OF POLYVINYL ALCOHOL (PVA) FIBER REINFORCED CONCRETE UNDER CYCLIC LOADING	Composite Materials and Structures	Felipe Rodrigues de Souza / / Department of Civil and Environmental Engineering, Pontifícia Universidade Católica do Rio de Janeiro (PUC-Rio); Victor Nogueira Lima / / Department of Civil and Environmental Engineering, Pontifícia Universidade Católica do Rio de Janeiro (PUC-Rio); Daniel Carlos Taissum Cardoso / / Department of Civil and Environmental Engineering, Pontifícia Universidade Católica do Rio de Janeiro (PUC-Rio); Flávio de Andrade Silva / / Department of Civil and Environmental Engineering, Pontifícia Universidade Católica do Rio de Janeiro (PUC-Rio);
9173	FLEXURAL BEHAVIOR OF CONCRETE BEAMS REINFORCED WITH BFRP BARS – EXPERIMENTAL AND NUMERICAL ANALYSIS	Composite Materials and Structures	Gean Marcos Baldessar Warmling / / Universidade Federal do Paraná; Roberto Dalledone Machado / / Universidade Federal do Paraná; Ricardo Pieralisi / / Universidade Federal do Paraná; Mauro Lacerda Santos Filho / / Universidade Federal do Paraná;
9307	Flexural response of polypropylene fiber reinforced concrete using the fiber composite model	Composite Materials and Structures	Luís Felipe Ribeiro / / Pontifical Catholic University of Rio de Janeiro / Tecgraf Institute; Marcello Congro / / Pontifical Catholic University of Rio de Janeiro / Tecgraf Institute; Cristian Mejía / / Tecgraf Institute; Deane Roehl / / Pontifical Catholic University of Rio de Janeiro / Tecgraf Institute;
9201	MAGNETIC ORIENTATION OF SISAL AND STEEL FIBERS IN CEMENTITIOUS MATRICES: EXPERIENCES OF SÃO JUDAS TADEU UNIVERSITY	Composite Materials and Structures	Dimas Strauss Rambo / / Department of Civil Engineering, São Judas Tadeu University; Sandro Martini / / Department of Civil Engineering, São Judas Tadeu University; Marcos Fabrízio de Menezes Freitas / / Department of Civil Engineering, São Judas Tadeu University; Igor da Silva Brito / / Department of Civil Engineering, São Judas Tadeu University; Renan Pícolo Salvador / / Department of Civil Engineering, São Judas Tadeu University; Guilherme Henrique Nascimento de Barros / / Department of Civil Engineering, São Judas Tadeu University;

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9181	MECHANICAL BEHAVIOR OF STRAIN HARDENING CEMENTITIOUS COMPOSITES (SHCC) FOR STRUCTURAL REPAIR	Composite Materials and Structures	Matheus P. Tinoco / / Pontifical Catholic University of Rio de Janeiro; Flávio A. Silva / / Pontifical Catholic University of Rio de Janeiro;
9141	Numerical analysis on the buckling behavior of pultruded GFRP members: a Systematic Review	Composite Materials and Structures	Anne Caroline Monteiro Diniz / / Department of Structural Engineering, São Carlos School of Engineering - University of São Paulo; Maximiliano Malite / / Department of Structural Engineering, São Carlos School of Engineering - University of São Paulo;
9140	Numerical analysis on the compression behavior of pGFRP angle sections with bolted connections	Composite Materials and Structures	Anne Caroline Monteiro Diniz / / Department of Structural Engineering, São Carlos School of Engineering - University of São Paulo; Maximiliano Malite / / Department of Structural Engineering, São Carlos School of Engineering - University of São Paulo;
9192	OVERALL EFFECTIVE ELASTIC PROPERTIES OF COMPOSITES BY COMPUTATIONAL HOMOGENIZATION	Composite Materials and Structures	Wanderson F. dos Santos / / Department of Structural Engineering, São Carlos School of Engineering, University of São Paulo; Ayrton R. Ferreira / / Department of Structural Engineering, São Carlos School of Engineering, University of São Paulo; Sergio P. B. Proença / / Department of Structural Engineering, São Carlos School of Engineering, University of São Paulo;
9969	SIMULATION OF ROLLING SHEAR FAILURE OF CROSS-LAMINATED TIMBER STRUCTURES USING A DOMAIN DECOMPOSITION METHOD	Composite Materials and Structures	J Fernandez / / DSI, Universidad de Talca, Campus Curicó, Chile & LMT, ENS Paris-Saclay/UMR 8535 CNRS/Université Paris-Saclay - 4, avenue des Sciences, 91190 Gif-sur-Yvette, France; K. Saavedra / / Depto. de Tecnologías Industriales, Universidad de Talca, Campus Curicó, Chile; O. Allix / / LMT, ENS Paris-Saclay/UMR 8535 CNRS/Université Paris-Saclay - 4, avenue des Sciences, 91190 Gif-sur-Yvette, France; P. Gosselet / / Univ. Lille, CNRS, Centrale Lille, UMR 9013 - LaMcube - Laboratoire de Mécanique, Multiphysique, Multiéchelle, F-59000 Lille, France;
9231	STABILITY ANALYSIS OF CARBON/EPOXY PLATE WITH THE USE OF FINITE ELEMENTS METHOD	Composite Materials and Structures	HELIO DE ASSIS PEGADO / / MECHANICAL DEPARTMENT, FEDERAL UNIVERSITY OF MINAS GERAIS; BRUNA MARA ALVES DA SILVA / / MECHANICAL DEPARTMENT, FEDERAL UNIVERSITY OF MINAS GERAIS;
9234	STRUCTURAL ANALYSIS OF A MICROSSATELLITE LAUNCHER VEHICLE SUBMITTED TO EXTERNAL PRESSURE	Composite Materials and Structures	Robert R. A. Oliveira / / Materials and Structures Mechanics Group (GMEC), Federal University of Santa Maria (UFSM); Giovani L. Zabot / / Laboratory of Agroindustrial Processes Engineering (LAPE), Federal University of Santa Maria (UFSM); Maikson L. P. Tonatto / / Materials and Structures Mechanics Group (GMEC), Federal University of Santa Maria (UFSM);

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9277	Wave propagation analyses considering an enhanced fully adaptive explicit time-marching formulation	Computational Geophysics	Lucas Ruffo Pinto / / COPPE/Federal University of Rio de Janeiro; Delfim Soares Jr. / / Structural Engineering Department, Federal University of Juiz de Fora; Webe João Mansur / / COPPE/Federal University of Rio de Janeiro;
9560	A SIMPLE PARTICLE PACK GENERATION METHOD WITH PREDEFINED GRAIN SIZE DISTRIBUTION AND POROSITY USING THE DISCRETE ELEMENT METHOD	Computational Geotechnics	Kamila R. Cassares Seko / / Engineering School, Mackenzie Presbyterian University / Dept. Structural and Geotechnical Engineering, Polytechnic School, University of São Paulo; Eduardo M. B. Campello / / Dept. Structural and Geotechnical Engineering, Polytechnic School, University of São Paulo;
9471	An elastic-viscoplastic load-transfer method for a single pile and pile groups	Computational Geotechnics	Victória F. R. da Costa / / Dept. of Civil Engineering, UFPE; Ézio da R. Araújo / / Dept. of Civil Engineering, UFPE;
9334	ANALYSIS OF ARAQUARI SAND BEHAVIOR THOUGHT NUMERICAL MODELING OF TRIAXIAL TESTS	Computational Geotechnics	Kauê William Pacheco / / Federal University of Santa Catarina; Bruna Carvalho Matheus / / Federal University of Santa Catarina; Luccas Menoncin Pacheco / / Federal University of Santa Catarina; Geraldo Caetano de Almeida Neto / / Federal University of Santa Catarina; Naloan Coutinho Sampa / / Federal University of Santa Catarina; Gracieli Dienstmann / / Federal University of Santa Catarina;
9118	Characterization of gold mine tailings variability and its influence in the study of drainage conditions in the CPTu test	Computational Geotechnics	Letícia Perini / / Universidade Federal de Santa Catarina; Gracieli Dienstmann / / Universidade Federal de Santa Catarina; Natália Ziesmann / / Universidade Federal de Santa Catarina;
9973	Dynamic analysis by FEM of blast-induced ground vibrations	Computational Geotechnics	Christianne de L. Nogueira / / Programa de Pós Graduação em Engenharia Mineral, Dept. de Engenharia de Minas, Escola de Minas, Universidade Federal de Ouro Preto; Caroline B. Zorzal / / Programa de Pós Graduação em Engenharia Mineral, Dept. de Engenharia de Minas, Escola de Minas, Universidade Federal de Ouro Preto;
9150	ENERGY EXCHANGE BETWEEN PILED STRUCTURES THROUGH THE SOIL	Computational Geotechnics	Amanda M. Oliveira / / School of Mechanical Engineering, University of Campinas; Josué Labaki / / School of Mechanical Engineering, University of Campinas;

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9789	Modeling of vertical oil well drilled on salt rocks using equivalent subdomains	Computational Geotechnics	Gleide K. M. Lins / / LCCV, Center of Technology, Federal University of Alagoas; Ricardo A. Fernandes / / LCCV, Center of Technology, Federal University of Alagoas; Catarina N. A. Fernandes / / LCCV, Center of Technology, Federal University of Alagoas; William W. M. Lira / / LCCV, Center of Technology, Federal University of Alagoas; Eduardo N. Lages / / LCCV, Center of Technology, Federal University of Alagoas; Emilio C. C. M. Silva / / CENPES/PDIDP/EPOCOS/PERF;
9680	Numerical Analysis of Laterally Loaded Piles: Foundation of Tracker Systems	Computational Geotechnics	Naloan C. Sampa / / Dept. of Civil Engineering, Federal University of Santa Catarina.; Gabryel G. Soares / / Dept. of Civil Engineering, Federal University of Santa Catarina.; Gracieli Dienstmann / / Dept. of Civil Engineering, Federal University of Santa Catarina.;
9323	NUMERICAL INVESTIGATION OF GEOSYNTHETIC REINFORCED SOIL MASS WITH BLOCK FACING AND CLOSELY-SPACED REINFORCEMENTS	Computational Geotechnics	Bianca Alencar Vieira / / PÓS-GRADUANDA EM ENGENHARIA CIVIL, UNIVERSIDADE FEDERAL DO RIO GRANDE DO NORTE; Carina Maia Lins Costa / / PROFESSORA ASSOCIADA DO DEPARTAMENTO DE ENGENHARIA CIVIL, UNIVERSIDADE FEDERAL DO RIO GRANDE DO NORTE; Yuri Daniel Jatoba Costa / / PROFESSOR ASSOCIADO DO DEPARTAMENTO DE ENGENHARIA CIVIL, UNIVERSIDADE FEDERAL DO RIO GRANDE DO NORTE; Silvia Cristina Justo Fernandes / / University of Manitoba; Ellen Fernanda Serpa de Azevedo / / GRADUANDA EM ENGENHARIA CIVIL, UNIVERSIDADE FEDERAL DO RIO GRANDE DO NORTE;
9392	NUMERICAL LIMIT ANALYSIS OF AXISYMMETRIC PROBLEMS IN GEOTECHNICAL ENGINEERING	Computational Geotechnics	David Sebastian Calpa Juajinoy / / Departamento de Engenharia Civil e Ambiental PUC-RIO; Raquel Quadros Velloso / / Departamento de Engenharia Civil e Ambiental PUC-RIO; Eurípides do Amaral Vargas Junior / / Departamento de Engenharia Civil e Ambiental PUC-RIO; Fabricio Fernández / / Departamento de Engenharia Civil e Ambiental PUC-RIO;

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9430	NUMERICAL MODELING OF TRIAXIAL TESTS ON SALT ROCKS USING A CREEP LAW WITH DAMAGE-INDUCED FLOW	Computational Geotechnics	Otávio B. A. Rodrigues / / Laboratory of Scientific Computing and Visualization, Federal University of Alagoas; Catarina N. A. Fernandes / / Laboratory of Scientific Computing and Visualization, Federal University of Alagoas; William W. M. Lira / / Laboratory of Scientific Computing and Visualization, Federal University of Alagoas;
9679	Numerical Simulation and Parametric Analysis of Laterally Loaded Piles: Foundation of the Tracker Systems	Computational Geotechnics	Naloan C. Sampa / / Dept. of Civil Engineering, Federal University of Santa Catarina.; Gracieli Dienstmann / / Dept. of Civil Engineering, Federal University of Santa Catarina.; Gabryel G. Soares / / Dept. of Civil Engineering, Federal University of Santa Catarina.;
9330	PERFORMANCE ANALYSIS OF AN EMBANKMENT OVER A SOFT SOIL DEPOSIT THROUGH INSTRUMENTATION AND NUMERICAL SIMULATION	Computational Geotechnics	Rafael F. Cordeiro / / Federal University of Santa Catarina; Miryan Yumi Sakamoto / / Federal University of Santa Catarina; Gracieli Dienstmann / / Federal University of Santa Catarina;
9866	PRINCIPAL COMPONENT ANALYSIS FOR THE OPENING OF UNDERGROUND CAVES IN SALINE ROCKS UNDER DIFFERENT TEMPERATURES	Computational Geotechnics	Rayra A. Silva / / Dept. of Civil Engineering, Federal University of Pernambuco; Oscar S. M. Cisneros / / Dept. of Civil Engineering, Federal University of Pernambuco; Leonardo do N. Guimarães / / Dept. of Civil Engineering, Federal University of Pernambuco;
9699	SEISMIC HAZARD ANALYSIS APPLIED TO THE SOUTHEAST REGION OF BRAZIL	Computational Geotechnics	Tania Bustamante / / Independent Consultant; Celso Romanel / / Civil Engineering Department, Pontifical Catholic University of Rio de Janeiro; Maria Cascao / / Civil Engineering Department, Federal University of Rio de Janeiro;
9536	SHORT-CIRCUITING, STABILITY, AND HETEROGENEITY IN ENHANCED GEOTHERMAL SYSTEMS	Computational Geotechnics	Bruna C. Campos / / Dept. of Civil and Environmental Engineering, University of Waterloo; Bruce Gee / / Dept. of Civil and Environmental Engineering, University of Waterloo; Robert Gracie / / Dept. of Civil and Environmental Engineering, University of Waterloo;
9237	USE OF ML TECHNIQUES FOR PREDICTING BEARING CAPACITY OF PILES AND ITS RELATIVE ERRORS	Computational Geotechnics	Yago F. Gomes / / Dept. of Civil Engineering, Instituto Tecnológico de Aeronáutica; Dimas B. Ribeiro / / Dept. of Civil Engineering, Instituto Tecnológico de Aeronáutica;
9151	VIBRATORY RESPONSE OF A WIND TOWER CONSIDERING SOIL-STRUCTURE INTERACTION	Computational Geotechnics	Amanda M. Oliveira / / School of Mechanical Engineering, University of Campinas; Josué Labaki / / School of Mechanical Engineering, University of Campinas;
9260	A COMPUTATIONAL APPROACH TO PREDICT THE BOND STRENG OF THIN STEEL REBARS IN CONCRETE BY MEANS OF SUPPORT VECTOR MACHINE	Computational Intelligence Techniques for Optimization and Data Modeling	Priscila F. S. Silva / / Cefet-MG; Gray F. Moita / / Cefet-MG; Eliene P. Carvalho / / Cefet-MG; Vanderci F. Arruda / / Cefet-MG;

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9631	ARTIFICIAL NEURAL NETWORKS BASED ON COMMITTEE MACHINE TO PREDICT THE AMOUNT OF SULFUR AND PHOSPHORUS IN THE HOT METAL OF A BLAST FURNACE	Computational Intelligence Techniques for Optimization and Data Modeling	Wandercleiton Cardoso / / University of Genoa; Renzo di Felice / / University of Genoa; Raphael Colombo Baptista / / Instituto Federal do Espirito Santo;
9313	COMPARISON OF SUPERVISED AND SELF SUPERVISED APPROACHES FOR MICRO-CT LITHOLOGY CLASSIFICATION OF CARBONATE ROCK SAMPLES	Computational Intelligence Techniques for Optimization and Data Modeling	Carlos Eduardo Menezes dos Anjos / / COPPE, Universidade Federal do Rio de Janeiro; Júlio de Castro Vargas Fernandes / / COPPE, Universidade Federal do Rio de Janeiro; Manuel Ramón Vargas Avila / / COPPE, Universidade Federal do Rio de Janeiro; Alexandre Gonçalves Evsukoff / / COPPE, Universidade Federal do Rio de Janeiro; Nelson Francisco Favilla Ebecken / / COPPE, Universidade Federal do Rio de Janeiro; Rodrigo Surmas / / Petrobras; Thais Fernandes de Matos / / Petrobras;
10010	Deep learning for mapping rainwater drainage networks using RemoteSensing Data	Computational Intelligence Techniques for Optimization and Data Modeling	Júlia Potratz / / Pontifical University Catholic of Rio de Janeiro; Smith Arauco Canchumuni / / Pontifical University Catholic of Rio de Janeiro; Cristian Enrique Muñoz Villalobos / / Pontifical University Catholic of Rio de Janeiro; Marco Aurélio C. Pacheco / / Pontifical University Catholic of Rio de Janeiro;
9755	Error Pattern-based Similarity Analysis of task performance in a virtual training environment: a meta graph clustering approach	Computational Intelligence Techniques for Optimization and Data Modeling	Alexandre Pereira de Faria / / PPGMNE, Universidade Federal do Paraná; Klaus de Geus / / PPGMNE, Universidade Federal do Paraná; Sérgio Scheer / / PPGMNE, Universidade Federal do Paraná;
9704	IDENTIFICATION SYSTEM BASED ON FUZZY LOGIC FOR EPIDEMIOLOGICAL CONTROL OF DENGUE IN THE METROPOLITAN REGION OF SÃO LUÍS / MA	Computational Intelligence Techniques for Optimization and Data Modeling	Hyngrid H. de C. Coelho / / Departamento de Eletroeletrônica, Instituto Federal do Maranhão; Danúbia S. Pires / / Departamento de Eletroeletrônica, Instituto Federal do Maranhão; Orlando D. R. Filho / / Departamento de Eletroeletrônica, Instituto Federal do Maranhão; Matheus S. Pestana / / Departamento de Eletroeletrônica, Instituto Federal do Maranhão;
9776	Impact of COVID-19 pandemic in the Brazilian Air Transportation Multiplex Network	Computational Intelligence Techniques for Optimization and Data Modeling	Fernanda Silva Toledo / / Dept. of Civil Engineering, Federal University of Rio de Janeiro; Nelson Francisco Favilla Ebecken / / Dept. of Civil Engineering, Federal University of Rio de Janeiro;
9708	MATHEMATICAL MODELING FOR CRYOGENIC UPGRADING OF BIOGAS AND CARBON CAPTURE	Computational Intelligence Techniques for Optimization and Data Modeling	Wandercleiton Cardoso / / University of Genoa; Renzo di Felice / / University of Genoa; Raphael Colombo Baptista / / Instituto Federal do Espirito Santo;
9558	OPTIMIZATION OF FPU MOORING SYSTEMS WITH A SURROGATE-ASSISTED DIFFERENTIAL EVOLUTION ALGORITHM	Computational Intelligence Techniques for Optimization and Data Modeling	Vinicius Garcia do Prado / / Petrobras; Bruno da Fonseca Monteiro / / LAMCSO - COPPE/UFRJ; Beatriz Souza Leite Pires de Lima / / LAMCSO - COPPE/UFRJ; Breno Pinheiro Jacob / / LAMCSO - COPPE/UFRJ;

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9884	Syncnet network application for identification of electrical charges	Computational Intelligence Techniques for Optimization and Data Modeling	Jorge J. F. Filho / / Ifes Serra; Cassius Z. Resende / / Ifes Serra; Marconi J. H. Magnani / / Ifes Serra; Thiago R. Souza / / Ifes Serra; Daniel C. Cavalieri / / Ifes Serra;
9553	Systematic review of computational methods for oil & gas exploration and production risk indicators	Computational Intelligence Techniques for Optimization and Data Modeling	Rafael Augusto do Couto Albuquerque / / State University of Rio de Janeiro (UERJ); Cristiane Oliveira de Faria / / State University of Rio de Janeiro (UERJ); Igor Machado Coelho / / Fluminense Federal University (UFF);
9629	THE USE OF AN ARTIFICIAL NEURAL NETWORK IN THE PREDICTION OF COMPRESSIVE STRENGTH OF CONCRETE	Computational Intelligence Techniques for Optimization and Data Modeling	Vanderci F. Arruda / / PROGRAMA DE PÓS-GRADUAÇÃO EM MODELAGEM MATEMÁTICA E COMPUTACIONAL, CENTRO FEDERAL DE EDUCAÇÃO TECNOLÓGICA DE MINAS GERAIS; Gray F. Moita / / PROGRAMA DE PÓS-GRADUAÇÃO EM MODELAGEM MATEMÁTICA E COMPUTACIONAL, CENTRO FEDERAL DE EDUCAÇÃO TECNOLÓGICA DE MINAS GERAIS; Eliene P. Carvalho / / DEPARTAMENTO DE ENGENHARIA PRODUÇÃO CIVIL, CENTRO FEDERAL DE EDUCAÇÃO TECNOLÓGICA DE MINAS GERAIS; Priscila F. S. Silva / / PROGRAMA DE PÓS-GRADUAÇÃO EM MODELAGEM MATEMÁTICA E COMPUTACIONAL, CENTRO FEDERAL DE EDUCAÇÃO TECNOLÓGICA DE MINAS GERAIS;
9529	A CNN-BASED KEYLOGGER USING ACCELERATION SPECTROGRAMS	Computational Methods for Image Processing and Analysis	Cassiano Sergio Noventa Correa Bueno / / State University of Campinas; Josué Labaki / / State University of Campinas; Bruno Eduardo Santos de Oliveira / / State University of Campinas;
9385	ANALYSIS OF MACHINE LEARNING TECHNIQUES APPLIED TO COFFEE BEAN CLASSIFICATION	Computational Methods for Image Processing and Analysis	Igor G. Lube / / Departamento de Engenharia de Controle e Automação, Instituto Federal do Espirito Santo; Gustavo M. de Almeida / / Departamento de Engenharia de Controle e Automação, Instituto Federal do Espirito Santo;
9081	APPLICATION OF DEEP CONVOLUTIONAL NEURAL NETWORKS FOR ANALYSIS OF APPARENT DENSITY AND POROSITY OF IRON ORE PELLETS	Computational Methods for Image Processing and Analysis	Rafael Mofati Campos / / Dept. Engenharia de Controle e Automação, IFES Serra; Gustavo Maia de Almeida / / Dept. Engenharia de Controle e Automação, IFES Serra;

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9366	DETECTION AND SEGMENTATION OF IRON ORE GREEN PELLETS USING COMPUTATIONAL VISION	Computational Methods for Image Processing and Analysis	Caio Mario Carletti Vilela Santos / / Engenharia de Controle e Automação, IFES - Serra; Gustavo Maia de Almeida / / Engenharia de Controle e Automação, IFES - Serra; Marco Antônio de Souza Leite Cuadros / / Engenharia de Controle e Automação, IFES - Serra; Raphael Mendonça Sepulcri / / Engenharia de Controle e Automação, IFES - Serra; Ricardo Olympio de Freitas / / Engenharia de Controle e Automação, IFES - Serra; Bruno Meschiatti Vasconcellos / / Engenharia de Controle e Automação, IFES - Serra; Ramyson de Araujo Nascimento / / Engenharia de Controle e Automação, IFES - Serra;
9830	DEVELOPMENT AND EVALUATION OF A ROS PACKAGE TO PUBLISH STEREO VISION SENSING DATA AS A LIDAR TYPE MESSAGE	Computational Methods for Image Processing and Analysis	Samir Ehlert da Silva / / PROPECAUT, Instituto Federal do Espírito Santo; Rafael Peixoto Derenzi Vivacqua / / PROPECAUT, Instituto Federal do Espírito Santo; Marco Antonio de Souza Leite Cuadros / / PROPECAUT, Instituto Federal do Espírito Santo;
9971	IMAGE EDGE DETECTION USING SVM REGRESSION MODEL FOR UAV AUTONOMOUS NAVIGATION	Computational Methods for Image Processing and Analysis	Gracieth C. Batista / / Dept. of Electronic Devices and Systems, Technologic Institute of Aeronautics (ITA); Osamu Saotome / / Dept. of Electronic Devices and Systems, Technologic Institute of Aeronautics (ITA); Osamu Saotome / / Dept. of Aerospace Science and Technology (DCTA), Institute for Advanced Studies (IEAv); Wanessa da Silva / / National Institute for Space Research (INPE); Haroldo Fraga de Campos Velho / / National Institute for Space Research (INPE);
9292	MONITORING OF SOYBEAN RUST THROUGH IMAGES	Computational Methods for Image Processing and Analysis	Aguinaldo Soares de Oliveira / / Mechanical Engineering, UFMT/UFR; Alexandra de Oliveira França Hayama / / UFR;
9214	PAVEMENT SURFACE TYPE CLASSIFICATION BASED ON DEEP LEARNING TO THE AUTOMATIC PAVEMENT EVALUATION SYSTEM	Computational Methods for Image Processing and Analysis	Aline Calheiros Espindola / / Programa de Pós-graduação em Engenharia de Transportes, Universidade Federal do Ceará; Ernesto Ferreira Nobre Júnior / / Programa de Pós-graduação em Engenharia de Transportes, Universidade Federal do Ceará; Elias Teodoro da Silva Junior / / Programa de Pós-Graduação em Ciência da Computação, Instituto Federal do Ceará;
9350	POTHOLE AND PATCH DETECTION ON ASPHALT PAVEMENT USING DEEP CONVOLUTIONAL NEURAL NETWORK	Computational Methods for Image Processing and Analysis	Aline Calheiros Espindola / / Programa de Pós-graduação em Engenharia de Transportes, Universidade Federal do Ceará; Gabriel Tavares de Melo Freitas / / Programa de Pós-graduação em Engenharia de Transportes, Universidade Federal do Ceará; Ernesto Ferreira Nobre Júnior / / Programa de Pós-graduação em Engenharia de Transportes, Universidade Federal do Ceará;

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9821	TWO NEURAL METHODS FOR ASTRONOMICAL IMAGE RESTORATION	Computational Methods for Image Processing and Analysis	Vinicius S. Monego / / National Institute for Space Research; Ana Paula A. C. Shiguemori / / Federal Institute for Education, Science and Technology of São Paulo; Alice J. Kozakevicius / / Federal University of Santa Maria; Haroldo F. C. Velho / / National Institute for Space Research;
9804	A COMPARISON AMONG VANKA, UZAWA AND FIXED-STRESS SMOOTHERS FOR THE ONE-DIMENSIONAL POROELASTICITY PROBLEM USING MULTIGRID TIME-STEPPING	Computational Modeling of Flow in Porous Media	Vanessa Terezinha Ales / / Graduate Program in Numerical Methods in Engineering, Federal University of Paraná - UFPR, Curitiba, PR; Marcio Augusto Villela Pinto / / Department of Mechanical Engineering, Federal University of Paraná - UFPR, Curitiba, PR; Sebastião Romero Franco / / Department of Mathematics, State University of Centro-Oeste - UNICENTRO, Irati, PR; Simone de Fátima Tomazzoni Gonçalves / / Department of Mechanical Engineering, Federal University of Paraná - UFPR, Curitiba, PR;
9752	Analysis of solution by traveling waves for an in situ combustion model	Computational Modeling of Flow in Porous Media	Jhonatan Jesús Ecos Sánchez / / Faculty of Sciences, National University of Engineering; Ángel Ramírez Gutiérrez / / Faculty of Sciences, National University of Engineering; Grigori Chapiro / / Dept. of Mathematics, Federal University of Juiz de Fora;
9738	BUCKLEY-LEVERETT THEORY APPLIED IN LOW-SALINITY WATER FLOODING DISPLACEMENT	Computational Modeling of Flow in Porous Media	João Victor Correia Lopes / / Santa Catarina State University; Luis Fernando Lamas / / Dept. of Petroleum Engineering, Santa Catarina State University; Damianni Sebrão / / Dept. of Petroleum Engineering, Santa Catarina State University;
9232	COMPOSITIONAL PORE-NETWORK MODELING OF GAS FLOODING IN GAS-CONDENSATE RESERVOIRS	Computational Modeling of Flow in Porous Media	Paula K. P. Reis / / Department of Mechanical Engineering , PUC-Rio; Marcio S. Carvalho / / Department of Mechanical Engineering , PUC-Rio;
9947	MODELING AND SIMULATION OF A CO2 CAPTURE SYSTEM USING A COUPLE OF HOLLOW FIBER MEMBRANE CONTACTORS (HFMC)	Computational Modeling of Flow in Porous Media	WANDERSON FELIPE ARAUJO DOS PASSOS / / Dept. of Chemical Engineering, Federal Univesity of Paraíba; Arioston Araújo de Morais Júnior / / Dept. of Chemical Engineering, Federal Univesity of Paraíba; ANTONIO FERREIRA DA SILVA NETTO / / Dept. of Chemical Engineering, Federal Univesity of Paraíba; LUCAS LUCENA DE MORAIS PEREIRA / / Dept. of Chemical Engineering, Federal Univesity of Paraíba;
9646	NUMERICAL MODELING OF HYDRAULIC FRACTURE PROPAGATION USING FEA IN SHALE RESERVOIRS	Computational Modeling of Flow in Porous Media	E.g.: Eng. Pablo Alberto Medina / / Mechanical Computational Department, Buenos Aires Institute of Technology; PhD. Marcelo Frydman / / Geomechanics Advisor; PhD. Sebastian D'hers / / Mechanical Computational Department, Buenos Aires Institute of Technology; Joaquin Eiff / / Mechanical Computational Department, Buenos Aires Institute of Technology; Maria Moine / / Mechanical Computational Department, Buenos Aires Institute of Technology;
9648	NUMERICAL SIMULATION OF ENGINEERED WATER INJECTION: EFFECT OF OIL COMPOSITION AND ROCK CHARGE DISTRIBUTION	Computational Modeling of Flow in Porous Media	Mateus de Souza Neto / / Universidade do Estado de Santa Catarina; Thalía Soares Fragoso / / Universidade do Estado de Santa Catarina; Damianni Sebrão / / Universidade do Estado de Santa Catarina; Luis Fernando Lamas de Oliveira / / Universidade do Estado de Santa Catarina;

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9482	OPTIMIZATIONS IN A NUMERICAL METHOD CODE FOR TWO-PHASE FLUIDS FLOW IN POROUS MEDIA USING TH SDUMONT SUPERCOMPUTER	Computational Modeling of Flow in Porous Media	Thiago Daniel Quimas Simões Teixeira / / National Scientific Computing Laboratory (LNCC).; Sanderson L. Gonzaga de Oliveira / / Federal University of Lavras.; Carla Osthoff / / National Scientific Computing Laboratory (LNCC).; 0 / / 0; Stiw Harrison Herrera Taipe / / National Scientific Computing Laboratory (LNCC).; Matheus da Silva Serpa / / Institute of Informatics of the Federal University of Rio Grande do Sul.; Weber Guilherme Dias Ribeiro / / National Scientific Computing Laboratory (LNCC).; Frederico Luis Cabral / / National Scientific Computing Laboratory (LNCC).; Marcio Borges / / National Scientific Computing Laboratory (LNCC).; Philippe Olivier Alexandre Navaux / / Institute of Informatics of the Federal University of Rio Grande do Sul.; André Ramos Carneiro / / National Scientific Computing Laboratory (LNCC).;
9298	PORE-FILLING EVENTS IN ONE SINGLE SQUARE PORE DURING TWO-PHASE FLOW	Computational Modeling of Flow in Porous Media	Lifei Yan / / Utrecht University; Rasoul Soufi / / Utrecht University; Tycho van Noorden / / COMSOL BV; Amir Raoof / / Utrecht University;
9570	Validation of a new finite element formulation for unsaturated flow in porous stiff solids.	Computational Modeling of Flow in Porous Media	Talita Scussiato / / Division of Civil Engineering, Aeronautics Institute of Technology, Brazil; Paulo Ivo Braga de Queiroz / / Division of Civil Engineering, Aeronautics Institute of Technology, Brazil;
9153	ANALYSIS OF THE SOIL DOMAIN SIZE FOR SIMULATIONS OF SOIL-AIR HEAT EXCHANGERS	Computational Thermal Sciences	LUIZ HENRIQUE NORONHA MAIA / / Federal University of Technology – Paraná – UTFPR, Department of Mechanical Engineering - DAMEC; GERSON HENRIQUE DOS SANTOS / / Federal University of Technology – Paraná – UTFPR, Mechanical Engineering Graduate Program – PPGEM-PG; CARLOS HENRIQUE DIEDRICH / / Federal University of Technology – Paraná – UTFPR, Mechanical Engineering Graduate Program – PPGEM-PG; THIAGO ANTONINI ALVES / / Federal University of Technology – Paraná – UTFPR, Mechanical Engineering Graduate Program – PPGEM-PG; DOUGLAS PEREIRA VASCONCELLOS / / Pontifical Catholic University of Paraná - PUCPR, Mechanical Engineering Graduate Program – PPGEM;
9520	EVALUATION OF SINGLE-PHASE AND TWO-PHASE PROPANE RELEASE VIA CFD SIMULATION APPLIED TO THE HAZARDOUS AREA CLASSIFICATION	Computational Thermal Sciences	Natalya A. B. de Almeida / / Dept. of Chemical Engineering, Federal University of Campina Grande; Claudemi A. Nascimento / / Dept. of Chemical Engineering, Federal University of Campina Grande; José J. N. Alves / / Dept. of Chemical Engineering, Federal University of Campina Grande;

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9889	FLUID FLOW AND THERMAL ANALYSIS OF AL2O3–WATER NANOFLUID IN MULTI-MICROCHANNEL HEAT SINKS	Computational Thermal Sciences	Isabelle Guimarães da Silva / / UNESP – São Paulo State University, Campus of São João da Boa Vista, São João da Boa Vista, SP, Brazil; Elaine Maria Cardoso / / UNESP – São Paulo State University, School of Engineering, Graduate Program in Mechanical Engineering, Av. Brasil, 56, 15385-000, Ilha Solteira, SP, Brazil ; São Paulo State University, Campus of São João da Boa Vista, São João da Boa Vista, SP, Brazil; João Batista Campos Silva / / UNESP – São Paulo State University, School of Engineering, Graduate Program in Mechanical Engineering, Av. Brasil, 56, 15385-000, Ilha Solteira, SP, Brazil;
9508	IMPACT OF THE ANGLE OF ATTACK OF LONGITUDINAL VORTEX GENERATOR ON ENHANCEMENT HEAT TRANSFER FOR A WAVY-FIN COMPACT HEAT EXCHANGER WITH CIRCULAR AND ELLIPTICAL TUBES	Computational Thermal Sciences	Laís Stocco Bandini / / Dept. of Mechanical Engineering, Thermal Science Area, São Paulo State University - Ilha Solteira/ São Paulo, Brasil; Leandro Oliveira Salviano / / Dept. of Mechanical Engineering, Thermal Science Area, São Paulo State University - Ilha Solteira/ São Paulo, Brasil;
9675	IMPACT OF WAVE INCLINATION ON ENHANCEMENT HEAT TRANSFER FOR A WAVY-FIN COMPACT HEAT EXCHANGER WITH CIRCULAR AND ELLIPTICAL TUBES FOR STAGGERED TUBE ARRANGEMENT	Computational Thermal Sciences	Rafael S. Eller / / Dept. of Mechanical Engineering, Thermal Science Area, São Paulo State University Brasil Sul Avenue - 56, 15385-000, Ilha Solteira/ São Paulo, Brasil; Leandro O. Salviano / / Dept. of Mechanical Engineering, Thermal Science Area, São Paulo State University Brasil Sul Avenue - 56, 15385-000, Ilha Solteira/ São Paulo, Brasil;
9253	NUMERICAL ANALYSIS OF THE FLOW BEHAVIOR PAST AN AHMED BODY WITH VARYING FRONT RADIUS CURVATURE AND ITS IMPLICATIONS IN THE AERODYNAMIC FORCES.	Computational Thermal Sciences	Raul Victor Teixeira Rosseto / / Universidade Federal da Grande Dourados; Augusto Salomão Bornschlegell / / Universidade Federal da Grande Dourados;
9788	NUMERICAL STUDY OF A COMPACT SOLAR COLLECTOR PROTOTYPE ASSISTED BY THERMOSYPHONS	Computational Thermal Sciences	Samuel Heusi Moreira / / UTFPR/Ponta Grossa; Giovane Nogueira Rossi / / UTFPR/Ponta Grossa; Gabriel Nunes Maia Junior / / UTFPR/Ponta Grossa; Paulo Henrique Dias dos Santos / / UTFPR/Curitiba; Thiago Antonini Alves / / UTFPR/Ponta Grossa; Pedro Leineker Ochoski Machado / / UTFPR/Ponta Grossa;

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9325	Development of a stall sensor for low weight aircrafts	Data Processing and Analysis	Izaias Alves Dos Santos Junior / / Departamento de Engenharia Mecatrônica; Thiago Magela Rodrigues Dias / / Departamento de Engenharia Mecatrônica; Alan Mendes Marotta / / Departamento de Engenharia Mecatrônica;
9208	Development of an Intelligent Virtual Assistant to Activate Devices in a Home by Voice Commands	Data Processing and Analysis	Mestrando: Leonardo Vinicius de Brito Reis / / Instituto Federal de Educação, Ciência e Tecnologia do Espírito Santo - Campus Serra; Orientador: Prof. Dr. Leonardo Azevedo Scardua / / Instituto Federal de Educação, Ciência e Tecnologia do Espírito Santo - Campus Serra; Coorientador: Prof. Dr. Gustavo Maia de Almeida / / Instituto Federal de Educação, Ciência e Tecnologia do Espírito Santo - Campus Serra;
9514	OIL-PRICE FORECASTING BASED ON ARIMA, EXPONENTIAL SMOOTHING, AND AUTOREGRESSIVE NEURAL NETWORK MODELS	Data Processing and Analysis	Felipe Bezerra Pimentel Araújo / / Dept. of Electrical Engineering, Federal University of Maranhão; José Artur Lima Cabral Marques / / Dept. of Electrical Engineering, Federal University of Maranhão; Allan Kardec Barros Duailibe Filho / / Dept. of Electrical Engineering, Federal University of Maranhão;
9147	ON THE INVESTIGATION OF FLOW RATE MEASUREMENTS USING TAP NOISE AND VARIATIONAL MODE DECOMPOSITION	Data Processing and Analysis	Cleber L. Torres / / Department of Mechanical Engineering, UNESP-FEB, Bauru, São Paulo, 17033-360, Brazil; Fabricio C. L. de Almeida / / Faculty of Science and Engineering, UNESP-FCE, Tupã, São Paulo, 17602-496, Brazil; Oscar Scussel / / Faculty of Engineering , UNESP-FEIS, Ilha Solteira, São Paulo, 15385-000, Brazil; José E. Gonçalves / / Department of Mechanical Engineering, UNESP-FEB, Bauru, São Paulo, 17033-360, Brazil;
9794	OPEN ACCESS PUBLICATIONS IN ENGINEERING: A QUANTITATIVE ANALYSIS	Data Processing and Analysis	Thiago M. R. Dias / / CEFET-MG; Gray F. Moita / / CEFET-MG; Patrícia M. Dias / / CEFET-MG;
9945	SUPPORT SYSTEM FOR APNEA DIAGNOSIS USING STATISTICAL ANALYSIS OF ECG SIGNALS	Data Processing and Analysis	Ludmila Barros Meireles / / Universidade Ceuma; Derick Carneiro de Jesus / / Universidade Ceuma; Caio Vieira Barreto / / Universidade Ceuma; Lucas Silva Cantanhêde / / Universidade Ceuma; Jonathan Araujo Queiroz / / Universidade Ceuma;
9706	A POSITIONAL ISOGEOMETRIC FORMULATION FOR TWO-DIMENSIONAL ANALYSIS OF ELASTO-PLASTIC SOLIDS	Developments and Applications of Special Enrichment Methods and Innovative Discretization Techniques - Meshfree, Pou Methods and Gfem/Xfem, Isogeometric Analysis	Rosicley J. R. Rosa / / Department of Structural Engineering, São Carlos School of Engineering, University of São Paulo; Rodolfo A. K. Sanches / / Department of Structural Engineering, São Carlos School of Engineering, University of São Paulo;

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9856	A QUADRATIC GFEM FORMULATION FOR FRACTURE MECHANICS PROBLEMS	Developments and Applications of Special Enrichment Methods and Innovative Discretization Techniques - Meshfree, Pou Methods and Gfem/Xfem, Isogeometric Analysis	Murilo Henrique Campana Bento / / Department of Structural Engineering, São Carlos School of Engineering, University of São Paulo; Caio Silva Ramos / / Department of Structural Engineering, São Carlos School of Engineering, University of São Paulo; Sergio Persival Baroncini Proença / / Department of Structural Engineering, São Carlos School of Engineering, University of São Paulo; Carlos Armando Duarte / / Department of Civil and Environmental Engineering, University of Illinois Urbana-Champaign;
9357	ANALYSIS OF SUSPENDED CABLES BY THE GENERALIZED FINITE ELEMENT METHOD USING TRIGONOMETRIC ENRICHMENT FUNCTIONS	Developments and Applications of Special Enrichment Methods and Innovative Discretization Techniques - Meshfree, Pou Methods and Gfem/Xfem, Isogeometric Analysis	Leonardo A. C. Basso / / Programa de Pós-Graduação em Engenharia Civil, Universidade Federal do Paraná; Marcos Arndt / / Programa de Pós-Graduação em Engenharia Civil, Universidade Federal do Paraná;
9753	Application of polynomial and discontinuous SGFEM for analysis of structures in damage process under mixed-mode fracture	Developments and Applications of Special Enrichment Methods and Innovative Discretization Techniques - Meshfree, Pou Methods and Gfem/Xfem, Isogeometric Analysis	Guilherme Olivera Ferraz de Paiva / / Instituto Federal de Ciência e Tecnologia do Piauí - IFPI; Francisco Evangelista Junior / / Universidade de Brasília - UnB - Programa de Pós Graduação em Estruturas e Construção Civil;
9149	ENRICHED MODIFIED LOCAL GREEN'S FUNCTION METHOD FOR SINGULAR POISSON PROBLEM	Developments and Applications of Special Enrichment Methods and Innovative Discretization Techniques - Meshfree, Pou Methods and Gfem/Xfem, Isogeometric Analysis	Ramon Macedo Corrêa / / Graduate Program in Numerical Methods in Engineering, Federal University of Paraná; Marcos Arndt / / Graduate Program in Numerical Methods in Engineering, Federal University of Paraná; Roberto Dalledone Machado / / Graduate Program in Numerical Methods in Engineering, Federal University of Paraná;
9687	MIXED DIMENSIONAL COUPLING IN GFEM GLOBAL-LOCAL	Developments and Applications of Special Enrichment Methods and Innovative Discretization Techniques - Meshfree, Pou Methods and Gfem/Xfem, Isogeometric Analysis	Lorena Leocádio Gomes / / Dept. of Structural Engineering, Federal University of Minas Gerais; Felício Bruzzi Barros / / Dept. of Structural Engineering, Federal University of Minas Gerais;
9777	MODELING MULTI-STAGE HYDRAULIC FRACTURING FROM A BOREHOLE WITHIN A GFEM FRAMEWORK	Developments and Applications of Special Enrichment Methods and Innovative Discretization Techniques - Meshfree, Pou Methods and Gfem/Xfem, Isogeometric Analysis	Nathan Shauer / / University of Illinois at Urbana-Champaign; Carlos Armando Duarte / / University of Illinois at Urbana-Champaign;
9740	ON THE IMPOSITION OF THE LOCAL BOUNDARY CONDITIONS IN THE G/XFEM-GL ANALYSIS	Developments and Applications of Special Enrichment Methods and Innovative Discretization Techniques - Meshfree, Pou Methods and Gfem/Xfem, Isogeometric Analysis	Túlio Roberto Eládio Marques / / Dept. of Structural Engineering, Federal University of Minas Gerais; Gabriela Marinho Fonseca / / Dept. of Structural Engineering, Federal University of Minas Gerais; Felício Bruzzi Barros / / Dept. of Structural Engineering, Federal University of Minas Gerais;
9248	POST-PROCESSING OF ANISOTROPIC LAMINATES IN DYNAMIC PROBLEMS MODELED USING GENERALIZED FINITE ELEMENT METHOD	Developments and Applications of Special Enrichment Methods and Innovative Discretization Techniques - Meshfree, Pou Methods and Gfem/Xfem, Isogeometric Analysis	Diego Pavani Guimarães / / Dept. of Mechanical Engineering , Federal University of Santa Catarina; Paulo de Tarso Rocha Mendonça / / Dept. of Mechanical Engineering , Federal University of Santa Catarina; Wellington Rhoden de Lemos / / -;

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9219	SOLVING THE POISSON EQUATION USING VIRTUAL ELEMENT METHOD AND ARTIFICIAL NEURAL NETWORKS	Developments and Applications of Special Enrichment Methods and Innovative Discretization Techniques - Meshfree, Pou Methods and Gfem/Xfem, Isogeometric Analysis	Paulo Akira Figuti Enabe / / Dept. of Structural and Geotechnical Engineering, Polytechnic School, University of São Paulo; Rodrigo Provasi / / Dept. of Structural and Geotechnical Engineering, Polytechnic School, University of São Paulo;
9142	A COUPLING MODEL FOR FLUID-STRUCTURE INTERACTION APPLICATIONS WITH FREE-SURFACE FLOWS AND RIGID-BODIES	Free-surface and moving interfaces flow analyses	Mateus Guimarães Tonin / / Programa de Pós-Graduação em Engenharia Civil, Universidade Federal do Rio Grande do Sul; Alexandre Luis Braun / / Programa de Pós-Graduação em Engenharia Civil, Universidade Federal do Rio Grande do Sul;
9918	Computation of dynamic loads exerted by regular water waves on a vertical cylinder with application to offshore wind turbine	Free-surface and moving interfaces flow analyses	Gustavo A. Ríos Rodríguez / / Centro de Investigación de Métodos Computacionales en Ingeniería (CONICET - Universidad Nacional del Litoral) - Argentina; Laura Battaglia / / Centro de Investigación de Métodos Computacionales en Ingeniería (CONICET - Universidad Nacional del Litoral) & Universidad Tecnológica Nacional - Facultad Regional Santa Fe - Argentina; Sissy Morawietz / / Technische Universität Braunschweig, Institut für Statik, Braunschweig, Germany; Marco Schauer / / Technische Universität Braunschweig, Institut für Statik, Braunschweig, Germany;
9233	EFFECT OF INTERFACE VISCOSITY ON THE BREAKUP OF LIQUID SHEETS	Free-surface and moving interfaces flow analyses	Vitor Heitor C. Cunha / / Dept. of Mechanical Engineering, Pontifical Catholic University of Rio de Janeiro; Sergio S. Ribeiro / / Dept. of Mechanical Engineering, Pontifical Catholic University of Rio de Janeiro; Marcio S. Carvalho / / Dept. of Mechanical Engineering, Pontifical Catholic University of Rio de Janeiro;
9203	NUMERICAL ANALYSIS OF THE MITIGATION OF AERODYNAMIC LOADS IN LOW BUILDINSING SPOILERS WITH PID CONTROL	Free-surface and moving interfaces flow analyses	Gabriela P. Bianchin / / Programa de Pós-Graduação em Engenharia Civil, Universidade Federal do Rio Grande do Sul; Alexandre L. Braun / / Programa de Pós-Graduação em Engenharia Civil, Universidade Federal do Rio Grande do Sul;
9987	NUMERICAL STRATEGIES FOR VISCOUS INCOMPRESSIBLE SLOSHING: A CASE STUDY	Free-surface and moving interfaces flow analyses	Laura Battaglia / / Centro de Investigación de Métodos Computacionales CIMEC (CONICET/UNL) - UTN Facultad Regional Santa Fe - Argentina; Marcela Cruchaga / / Departamento de Ing. Mecánica - Universidad de Santiago de Chile (USACH) - Chile; Mario Storti / / Centro de Investigación de Métodos Computacionales CIMEC (CONICET/UNL) - Argentina;

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9694	A METHODOLOGY FOR DEVELOPMENT OF A DIGITAL TWIN SHIP	Health Monitoring and Numerical Modeling of Structures	NEVES, K. L. S. / / Department of Structural and Geotechnical Engineering, Polytechnic School at the University of São Paulo; BITENCOURT , L. A. G. / / Department of Structural and Geotechnical Engineering, Polytechnic School at the University of São Paulo; FRANZINI, G. R. / / Department of Structural and Geotechnical Engineering, Polytechnic School at the University of São Paulo; NETO, A.G. / / Department of Structural and Geotechnical Engineering, Polytechnic School at the University of São Paulo; AMARAL, G. A. / / Department of Structural and Geotechnical Engineering, Polytechnic School at the University of São Paulo; RANGEL, G. M. / / Department of Structural and Geotechnical Engineering, Polytechnic School at the University of São Paulo; MARTINS, G. R. / / Department of Structural and Geotechnical Engineering, Polytechnic School at the University of São Paulo; MALTA, E. B. / / Technomar Engenharia; DOTTA, R. / / Technomar Engenharia; VIDEIRO, P. M. / / Federal University of Rio de Janeiro;
9504	A New Strategy for Real-Time Structural Health Monitoring Based on Symbolic Data Objects	Health Monitoring and Numerical Modeling of Structures	Daniel de Almeida Cardoso Soares / / Programa de Pós-Graduação em Engenharia Civil, Universidade Federal de Juiz de Fora; Rharã de Almeida Cardoso / / Universidade Federal de Juiz de Fora; Flávio de Souza Barbosa / / Programa de Pós-Graduação em Engenharia Civil, Universidade Federal de Juiz de Fora; Alexandre Abrahão Cury / / Programa de Pós-Graduação em Engenharia Civil, Universidade Federal de Juiz de Fora;
9635	DEEP LEARNING FOR INTERFACIAL DAMAGE ESTIMATION IN AN INVERSE ULTRASOUND SCATTERING ANALYSIS	Health Monitoring and Numerical Modeling of Structures	Bernardo Feijó Junqueira / / Dept. of Mechanical Engineering, Universidade Federal do Rio de Janeiro; Daniel Castello / / Dept. of Mechanical Engineering, Universidade Federal do Rio de Janeiro; Ricardo Leiderman / / Computer Science Department, Universidade Federal Fluminense;
9094	PROPAGATION OF BONE MICRO FRACTURING: A NUMERICAL APPROACH	Health Monitoring and Numerical Modeling of Structures	Ícaro C. A. Almeida / / Department of Civil and Environmental Engineering, Pontifical Catholic University of Rio de Janeiro; Felipe A. Bacelar / / Department of Civil and Environmental Engineering, Pontifical Catholic University of Rio de Janeiro; Luiz C. Wrobel / / Department of Civil and Environmental Engineering, Pontifical Catholic University of Rio de Janeiro;

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9372	PROPAGATION OF GUIDED WAVES IN COATED TUBES USED IN OFFSHORE OIL INDUSTRY	Health Monitoring and Numerical Modeling of Structures	Boris Nahuel Rojo Tanzi / / Department of Mechanical Engineering, Federal University of Rio Grande do Sul (UFRGS), Porto Alegre/RS Brazil; Guilherme Schumacher da Silva / / Department of Mechanical Engineering, Federal University of Rio Grande do Sul (UFRGS), Porto Alegre/RS Brazil; Kelly Robert-Svendsen Rassier / / Department of Mechanical Engineering, Federal University of Rio Grande do Sul (UFRGS), Porto Alegre/RS Brazil; Ignacio Iturrioz / / Department of Mechanical Engineering, Federal University of Rio Grande do Sul (UFRGS), Porto Alegre/RS Brazil; Mario R. Sobczyk / / Department of Mechanical Engineering, Federal University of Rio Grande do Sul (UFRGS), Porto Alegre/RS Brazil;
8892	REFLECTION OF NONLINEAR WAVES IN REID'S HYSTERETIC MATERIAL: A NUMERICAL PERSPECTIVE	Health Monitoring and Numerical Modeling of Structures	Pravinkumar Ghodake / / Dept. of Mechanical Engineering, Indian Institute of Technology Bombay, Mumbai, India;
9727	USING MEASUREMENT FRF SET FROM A PLATE TO IDENTIFY A DAMAGED SITE WITHOUT EMPLOYING REFERENCE DATA	Health Monitoring and Numerical Modeling of Structures	Horacio V Duarte / / Depto Eng Mecânica da Escola de Engenharia da Universidade Federal de Minas Gerais; Lázaro Valentim Donadon / / Depto Eng Mecânica da Escola de Engenharia da Universidade Federal de Minas Gerais;
9890	BAYESIAN PHYSICS-INFORMED NEURAL NETWORKS FOR INVERSE UNCERTAINTY QUANTIFICATION PROBLEMS IN CARDIAC ELECTROPHYSIOLOGY	Machine Learning for Biological Modelling and Simulation	Andrea Manzoni / / MOX-Department of Mathematics, Politecnico di Milano; Stefano Pagani / / MOX-Department of Mathematics, Politecnico di Milano; Daniele Ceccarelli / / Department of Mathematics, Politecnico di Milano;
9332	COMPUTATIONAL MODELLING OF SUBEPICARDIAL MECHANICS IN DESMOPLAKIN CARDIOMYOPATHY	Machine Learning for Biological Modelling and Simulation	Javiera Jilberto / / Department of Biomedical Engineering, University of Michigan, Ann Arbor, USA; Marc Hirschvogel / / School of Biomedical Engineering and Imaging Sciences, King's College London, London, UK; Renee Miller / / School of Biomedical Engineering and Imaging Sciences, King's College London, London, UK; Adam Helms / / Department of Internal Medicine, Division of Cardiovascular Medicine, University of Michigan, Ann Arbor, USA; David Nordsletten / / Department of Biomedical Engineering, University of Michigan, Ann Arbor, USA. and School of Biomedical Engineering and Imaging Sciences, King's College London, London, UK.;
9942	CONSTITUTIVE MODELING OF HYPERELASTIC MATERIALS WITH NEURAL ODES	Machine Learning for Biological Modelling and Simulation	Vahidullah Tac / / School of Mechanical Engineering, Purdue University; Francisco Sahli Costabal / / Department of Mechanical Engineering, Pontifica Universidad Catolica de Chile; Adrian Buganza Tepole / / School of Mechanical Engineering, Purdue University;

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9424	FAST CHARACTERIZATION OF INDUCIBLE REGIONS OF ATRIAL FIBRILLATION MODELS WITH MULTI-FIDELITY GAUSSIAN PROCESS	Machine Learning for Biological Modelling and Simulation	Lia Gander / / Center for Computational Medicine in Cardiology, Euler Institute, Università della Svizzera italiana; Simone Pezzuto / / Center for Computational Medicine in Cardiology, Euler Institute, Università della Svizzera italiana; Ali Gharaviri / / Center for Computational Medicine in Cardiology, Euler Institute, Università della Svizzera italiana; Rolf Krause / / Center for Computational Medicine in Cardiology, Euler Institute, Università della Svizzera italiana; Paris Perdikaris / / Department of Mechanical Engineering and Applied Mechanics, University of Pennsylvania; Francisco Sahli Costabal / / Institute for Biological and Medical Engineering, Schools of Engineering, Medicine and Biological Sciences, Pontificia Universidad Católica de Chile, Santiago, Chile;
9509	MACHINE LEARNING ENHANCED CARDIAC MODELS FOR COMPUTATIONALLY EFFICIENT MULTISCALE SIMULATIONS, SENSITIVITY ANALYSIS AND PARAMETER ESTIMATION	Machine Learning for Biological Modelling and Simulation	Francesco Regazzoni / / MOX - Mathematics Dept., Politecnico di Milano, Italy; Matteo Salvador / / MOX - Mathematics Dept., Politecnico di Milano, Italy; Stefano Pagani / / MOX - Mathematics Dept., Politecnico di Milano, Italy; Luca Dede` / / MOX - Mathematics Dept., Politecnico di Milano, Italy; Alfio Quarteroni / / MOX - Mathematics Dept., Politecnico di Milano, Italy; Mathematics Institute, École Polytechnique Fédérale de Lausanne, Switzerland (Professor Emeritus);
9513	MACHINE LEARNING TO PREDICT PRESSURE LOSSES OVER JUNCTIONS IN CARDIOVASCULAR LUMPED PARAMETER MODELS	Machine Learning for Biological Modelling and Simulation	Natalia L. Rubio / / Dept. of Mechanical Engineering, Stanford University; Martin R. Pfaller / / Dept. of Pediatrics (Cardiology), Stanford University; Eric F. Darve / / Dept. of Mechanical Engineering, Stanford University; Alison L. Marsden / / Dept. of Pediatrics (Cardiology), Dept. of Bioengineering, Stanford University;
9398	NON-INVASIVE ASSESSMENT OF THE CARDIAC FUNCTION: A PATIENT-SPECIFIC MODELING PERSPECTIVE	Machine Learning for Biological Modelling and Simulation	Simone Pezzuto / / Center for Computational Medicine in Cardiology, Università della Svizzera italiana;
9668	On the Discretization Methods for Single-Cell RNA-Sequencing Data when Inferring Gene Regulatory Networks via Cartesian Genetic Programming	Machine Learning for Biological Modelling and Simulation	José Eduardo Henriques da Silva / / Department of Computer Science, Federal University of Juiz de Fora; Heder Soares Bernardino / / Department of Computer Science, Federal University of Juiz de Fora; Itamar Leite de Oliveira / / Department of Computer Science, Federal University of Juiz de Fora; Alex Borges Vieira / / Department of Computer Science, Federal University of Juiz de Fora; Hélio José Corrêa Barbosa / / Department of Computer Science, Federal University of Juiz de Fora and Laboratório Nacional de Computação Científica;

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9239	PHYSICS-INFORMED NEURAL NETWORKS FOR CARDIAC ACTIVATION MAPPING	Machine Learning for Biological Modelling and Simulation	Francisco Sahli Costabal / / Department of Mechanical and Metallurgical Engineering, Pontificia Universidad Católica de Chile; Yibo Yang / / Department of Mechanical Engineering and Applied Mechanics, University of Pennsylvania; Paris Perdikaris / / Department of Mechanical Engineering and Applied Mechanics, University of Pennsylvania; Daniel E. Hurtado / / Department of Structural and Geotechnical Engineering, Pontificia Universidad Católica de Chile; Ellen Kuhl / / Department of Mechanical Engineering, Stanford University;
9623	UNFOLDING THE CORTEX VIA A PHYSICS-INFORMED GRAPH NEURAL NETWORK	Machine Learning for Biological Modelling and Simulation	Shuolun Wang / / Department of Aerospace and Mechanical Engineering, University of Notre Dame; Nagehan Demirci / / Bioengineering Graduate Program, University of Notre Dame; Vicente Castro Solar / / Department of Mechanical and Metallurgical Engineering, School of Engineering Institute for Biological and Medical Engineering, School of Engineering Medicine and Biological Sciences, Pontificia Universidad Católica de Chile; Francisco Sahli Costabal / / Department of Mechanical and Metallurgical Engineering, School of Engineering Institute for Biological and Medical Engineering, School of Engineering Medicine and Biological Sciences, Pontificia Universidad Católica de Chile; Maria A. Holland / / Department of Aerospace and Mechanical Engineering , Bioengineering Graduate Program, University of Notre Dame;
9540	ALTERNATIVES FOR THE SIMULATION OF THE LYSOZYME PROTEIN STRUCTURE	Mathematical Modeling and Numerical Simulation in Life Sciences.	João Marcos Regauer / / Dept. of Mechanical Engeneering, Federal University of Rio Grande do Sul; Ignacio Iturrioz / / Applied Mechanical Group GMAP, Engineering School, Federal University of Rio Grande do Sul; Gustavo Giordani / / Applied Mechanical Group GMAP, Engineering School, Federal University of Rio Grande do Sul;
9875	COMPUTATIONAL MODELLING OF THE VASCULAR SYSTEM	Mathematical Modeling and Numerical Simulation in Life Sciences.	Jorge Tiago / / Dept. of Mathematics, Instituto Superior Técnico, ULisboa; Iolanda Velho / / CEMAT, Instituto Superior Técnico, ULisboa; Adélia Sequeira / / Dept. of Mathematics, Instituto Superior Técnico, ULisboa;
9597	FINITE DIFFERENCE ANALYSIS AND NUMERICAL SIMULATION OF A LIGHT-TRIGGERED DRUG DELIVERY MODEL	Mathematical Modeling and Numerical Simulation in Life Sciences.	José Augusto Ferreira / / University of Coimbra; Hugo Peña / / University of Coimbra; Luis Pinto / / University of Coimbra;

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9949	Mesh construction and computational analysis of the biomechanics of an endovascular intervention in cerebral aneurysms using Kirchhoff–Love shells	Mathematical Modeling and Numerical Simulation in Life Sciences.	Nicolás Muzi / / National Scientific and Technical Research Council (CONICET) - School of Industry-Applied Sciences, National University of Cuyo (UNCuyo); Francesco Camussoni / / Balseiro Institute, National University of Cuyo.; Luis G. Moyano / / National Scientific and Technical Research Council (CONICET) - Balseiro Institute, National University of Cuyo - Interdisciplinary and Statistics Physics Group, Bariloche Atomic Center, CNEA; Daniel Millán / / National Scientific and Technical Research Council (CONICET) - School of Industry-Applied Sciences, National University of Cuyo (UNCuyo);
9676	MODELING THE CRYPT FISSION AND DEFORMATIONS IN THE COLON TISSUE	Mathematical Modeling and Numerical Simulation in Life Sciences.	Giuseppe Romanazzi / / Department of Applied Mathematics, Institute of Mathematics,;
9761	NUMERICAL ANALYSIS FOR ELLIPTIC-PARABOLIC PROBLEMS APPLIED IN THE CELL DYNAMICS DURING THE FORMATION OF COLORECTAL CANCER	Mathematical Modeling and Numerical Simulation in Life Sciences.	Geovan Carlos Mendonça Campos / / Institute of Mathematics, Statistics and Scientific Computing, State University of Campinas; Giuseppe Romanazzi / / Institute of Mathematics, Statistics and Scientific Computing, State University of Campinas; José Augusto Ferreira / / Department of Mathematics, University of Coimbra;
9933	NUMERICAL MODELING OF DRUG RELEASE FROM VISCOELASTIC POLYMERS	Mathematical Modeling and Numerical Simulation in Life Sciences.	Júlia Silva Silveira Borges / / CCN, Federal University of São Carlos; Giuseppe Romanazzi / / Institute of Mathematics, Statistics and Scientific Computing, State University of Campinas;
9886	NUMERICAL SIMULATION OF VISCOELASTIC FLUID FLOWS WITH FREE SURFACES	Mathematical Modeling and Numerical Simulation in Life Sciences.	Hugo L França / / Instituto de Ciências Matemáticas e de Computação, Universidade de São Paulo; Cassio M. Oishi / / Departamento de Matemática e Computação, Universidade Estadual Paulista 'Julio de Mesquita Filho'; José A, Cuminato / / Instituto de Ciências Matemáticas e de Computação, Universidade de São Paulo;
9873	POROUS-ELASTIC MODEL FOR CONVECTION ENHANCED DRUG DELIVERY	Mathematical Modeling and Numerical Simulation in Life Sciences.	J.A. Ferreira / / University of Coimbra, CMUC, Department of Mathematics, Coimbra, Portugal; L. Pinto / / University of Coimbra, CMUC, Department of Mathematics, Coimbra, Portugal; R.F. Santos / / CEMAT/IST and Department of Mathematics, University of Algarve, Portugal;
9730	SIMULATION OF CELL PROLIFERATION: A NOVEL ALGORITHM	Mathematical Modeling and Numerical Simulation in Life Sciences.	Maria Inês A. Barbosa / / Institute of Science and Innovation in Mechanical and Industrial Engineering (INEGI), Porto, Portugal; Jorge Belinha / / Mechanical Engineering Department, School of Engineering, Polytechnic of Porto (ISEP), Porto, Portugal; Renato N. Jorge / / Mechanical Engineering Department, Faculty of Engineering of the University of Porto (FEUP), Porto, Portugal; Ana X. Carvalho / / Cytoskeletal Dynamics Department, Institute for Research and Innovation in Health (I3S), Porto, Portugal;
9327	STATE OF THE ART EXPERIMENTAL MODELS FOR PERFUSION STUDIES ON MYOCARDIAL ISCHEMIA	Mathematical Modeling and Numerical Simulation in Life Sciences.	Sumesh Sasidharan / / Bernal Institute, University of Limerick, Ireland; Peter H. M. Bovendeerd / / Eindhoven University of Technology, The Netherlands; Jacques M. Huyghe / / Bernal Institute, University of Limerick, Ireland , Eindhoven University of Technology, The Netherlands;

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9614	THE ANALYSE OF THE FUNCTIONAL AND EMOTIONAL LEVELS OF DEVELOPMENT OF DIR/FLOORTIME MODEL: A FUZZY SYSTEM APPROACH	Mathematical Modeling and Numerical Simulation in Life Sciences.	Ben-Hur Matthews Moreno Montel / / Departament of Eletro Eletronics, Federal Institute of Maranhão; Danubia Soares Pires / / Departament of Eletro Eletronics, Federal Institute of Maranhão; Orlando Donato Rocha Filho / / Departament of Eletro Eletronics, Federal Institute of Maranhão; Bruna Soares Pires / / Psychologist of Singular Clinic;
9058	A NEW MULTI-OBJECTIVE OPTIMIZATION ALGORITHM INSPIRED BY LICHTENBERG FIGURES APPLIED TO CONSTRAINED MECHANICAL ENGINEERING PROBLEMS	Metaheuristic Optimization in Structural Engineering	João Luiz Junho Pereira / / Instituto de Engenharia Mecânica, Universidade Federal de Itajubá; Matheus Brendon Francisco / / Instituto de Engenharia Mecânica, Universidade Federal de Itajubá; Sebastião Simões da Cunha Jr / / Instituto de Engenharia Mecânica, Universidade Federal de Itajubá; Guilherme Ferreira Gomes / / Instituto de Engenharia Mecânica, Universidade Federal de Itajubá;
9908	A STRATEGY FOR THE OPTIMAL DESIGN OF STEEL PORTAL FRAMES	Metaheuristic Optimization in Structural Engineering	Giovanni Silveira Brasil / / Postgraduate Program in Civil Engineering (PPGEC), Federal University of Rio Grande do Sul (UFRGS); Felipe Schaedler de Almeida / / Department of Civil Engineering (DECIV), Federal University of Rio Grande do Sul (UFRGS); Herbert Martins Gomes / / Department of Mechanical Engineering (DEMEC), Federal University of Rio Grande do Sul (UFRGS);
9757	A VON MISES STRESS-BASED TOPOLOGY OPTIMIZATION OF CONTINUUM ELASTIC STRUCTURES THROUGH THE PROGRESSIVE DIRECTIONAL SELECTION METHOD	Metaheuristic Optimization in Structural Engineering	Luiz C. L. Véras / / Center of Technology, Federal University of Alagoas; Márcio A. A. Cavalcante / / Campus of Engineering and Agricultural Sciences, Federal University of Alagoas;
9228	ANALYSIS OF TWO VARIANTS OF THE GENERALIZED DIFFERENTIAL EVOLUTION ALGORITHM WITH ORDERED MUTATION FOR REAL WORLD ENGINEERING MULTI-OBJECTIVE OPTIMIZATION PROBLEMS	Metaheuristic Optimization in Structural Engineering	Rafael de Paula Garcia / / Dept. of Architecture and Urbanism, Federal University of Viçosa; Dênis E. C. Vargas / / Dept. of Mathematics, Federal Center for Technological Education of Minas Gerais; Afonso C. C. Lemonge / / Dept. of Applied and Computational Mechanics, Federal University of Juiz de Fora;
9572	COMPARISON OF MULTI-OBJECTIVE PARTICLE SWARM ALGORITHMS FOR TRUSS DESIGN OPTIMIZATION	Metaheuristic Optimization in Structural Engineering	Érica C.R. Carvalho / / Graduate Program of Computational Modeling, Federal University of Juiz de Fora; Afonso C. C. Lemonge / / Dept. of Applied and Computational Mechanics, Federal University of Juiz de Fora; Jose Pedro G. Carvalho / / Civil Engineering Program, COPPE/Federal University of Rio de Janeiro; Patrícia H. Hallak / / Dept. of Applied and Computational Mechanics, Federal University of Juiz de Fora;
9437	Environmental Impact and Cost Analysis on the Optimum Design of Composite Frame System	Metaheuristic Optimization in Structural Engineering	Paulo Augusto T. Arpini / / Universidade Federal do Espírito Santo; Elcio C Alves / / Universidade Federal do Espírito Santo;
9190	Modified Improved Harmony Search Applied to Reinforced Concrete Beams	Metaheuristic Optimization in Structural Engineering	Fernando Luiz Tres Junior / / Universidade de Passo Fundo; Moacir Krikpa / / Universidade de Passo Fundo;

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9280	MULTI-OBJECTIVE OPTIMIZATION OF SPATIAL STEEL FRAMES CONSIDERING DIFFERENT BRACING SYSTEM CONFIGURATIONS	Metaheuristic Optimization in Structural Engineering	Claudio H. B. Resende / / Post Graduation in Civil Engineering, Pontifical University of Rio de Janeiro; Afonso C.C. Lemonge / / Dept. of Computational and Applied Mechanics, Federal University of Juiz de Fora; Patrícia H. Hallak / / Dept. of Computational and Applied Mechanics, Federal University of Juiz de Fora; José P.G. Carvalho / / Post Graduation in Civil Engineering, Federal University of Rio de Janeiro; Júlia C. Motta / / Post Graduation in Civil Engineering, Federal University of Juiz de Fora; Luis F. Martha / / Dept. of Civil and Evironmental Engineering, Pontifical University of Rio de Janeiro;
9297	Optimal Design of Composite Cellular Beams with Partial Interaction and its Environmental Impacts	Metaheuristic Optimization in Structural Engineering	Gabriel Erlacher / / Universidade Federal do Espírito Santo; Elcio Cassimiro Alves / / Universidade Federal do Espírito Santo;
9303	OPTIMAL ORIENTATION OF CROSS-SECTIONS OF COLUMNS OF 3D STEEL FRAMES IN A SINGLE AND MULTI-OBJECTIVE OPTIMIZATION	Metaheuristic Optimization in Structural Engineering	Júlia C. Motta / / Postgraduate Program of Civil Engineering - Federal University of Juiz de Fora; Cláudio H.B. Resende / / Postgraduate Program of Civil Engineering - Pontifical Catholic University of Rio de Janeiro; Afonso C.C. Lemonge / / Department of Applied and computational mechanics - Federal University of Juiz de Fora; Patrícia H. Hallak / / Department of Applied and computational mechanics - Federal University of Juiz de Fora; José P.G. Carvalho / / Postgraduate Program of Civil Engineering - Federal University of Rio de Janeiro;
9068	Optimized design of composite steel and concrete trusses to minimize cost and environmental impact	Metaheuristic Optimization in Structural Engineering	Elcio C Alves / / Universidade Federal do Espírito Santo; Diego Klein / / Universidade Federal do Espírito Santo; ADRYANNE F. NARDOTO / / Universidade Federal do Espírito Santo; MARIA CAROLINA D. PETERLE / / Universidade Federal do Espírito Santo; Adenílcia Fernanda Grobério Calenzani / / Universidade Federal do Espírito Santo;
9441	OPTIMUM POSITIONING OF OUTRIGGERS IN HIGH-RISING BUILDINGS SUBJECTED TO WIND LOADS	Metaheuristic Optimization in Structural Engineering	Felipe M. B. Parfitt / / Master's Degree Student, Federal University of Rio Grande do Sul; Inácio B. Morsch / / Dept. of Civil Engineering, Federal University of Rio Grande do Sul; Herbert M. Gomes / / Dept. of Mechanical Engineering, Federal University of Rio Grande do Sul;
9257	SPACE TRUSSES OPTIMIZATION USING METAHEURISTIC METHODS: A REVIEW	Metaheuristic Optimization in Structural Engineering	Mateus P. Pauletto / / Programa de Graduação em Engenharia Civil, Universidade de Passo Fundo; Moacir Kripka / / Programa de Pós-Graduação em Engenharia, Universidade de Passo Fundo;

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8944	A TIME DOMAIN FATIGUE PROBLEM TAYLORED INTO FREQUENCY DOMAIN THROUGH AN OPTIMIZATION APPROACH	Modeling, Simulation and Control of yhe Dynamical Behavior of Aerospace Structures	Raphael Paulino Gonçalves / / School of Engineering, Modeling and Applied Social Sciences – UFABC; Cicero Ribeiro de Lima / / School of Engineering, Modeling and Applied Social Sciences – UFABC;
9156	ACOUSTIC VIBRATION ENVIRONMENT PREDICTION FOR AMAZONIA 1 SATELLITE USING SEA METHOD .	Modeling, Simulation and Control of yhe Dynamical Behavior of Aerospace Structures	Bruno de Castro Braz / / Space Systems Division, National Institute of Space Research; Carlos D'Andrade Souto / / Acoustic Testing Laboratory, Division of Integration and Tests, Institute of Aeronautics and Space;
9443	AIRCRAFT ANTI-SKID SYSTEM MODELING AND SIMULATION DURING LANDING RUNWAY PATH USING SIMCENTER AMESIM® AND BOND GRAPHS FOR FAILURE CONDITION PERFORMANCE EVALUATION	Modeling, Simulation and Control of yhe Dynamical Behavior of Aerospace Structures	João P. F. Amorim / / Instituto Tecnológico de Aeronáutica; Alessandra B. F. Fernandes / / Instituto Tecnológico de Aeronáutica; Daniel B. Trindade / / Instituto Tecnológico de Aeronáutica; Gabriel M. Silva / / Instituto Tecnológico de Aeronáutica; Luiz C. S. Góes / / Instituto Tecnológico de Aeronáutica;
9349	COMPUTATIONAL AEROELASTIC ANALYSIS OF A COMPETITION CARGO UAV OF BOX WING TYPE	Modeling, Simulation and Control of yhe Dynamical Behavior of Aerospace Structures	Geraldo Majella Nunes Junior / / Federal University of ABC; Cesar Monzu Freire / / Federal University of ABC;
9663	DETERMINATION OF THE FIRST NATURAL FREQUENCY OF VIBRATION OF A STEEL POLE, UNDER THE EFFECT OF GEOMETRIC NONLINEARITY, USING OPTIMIZATION TECHNIQUES	Modeling, Simulation and Control of yhe Dynamical Behavior of Aerospace Structures	Paulo Henrique dos Santos Matos / / Programa de Educação continuada da Escola Politécnica da USP de São paulo; Marcelo Araujo da Silva / / Universidade Federal do ABC;
9719	INTEGRATIVE BACKSTEPPING FOR ONE LINK MANIPULATOR QUADROTOR TRAJECTORY TRACKING	Modeling, Simulation and Control of yhe Dynamical Behavior of Aerospace Structures	Reginaldo Cardoso / / Dynamics and Control (LDC), Dept. of Mechanical Engineering, University of São Paulo (USP),; Rodrigo Mardegam Morais / / Dept. of Mechanical Engineering, University of São Paulo (USP),; Éverton L. De Oliveira / / Dynamics and Control (LDC), Dept. of Mechanical Engineering, University of São Paulo (USP),; Décio C. Donha / / Dynamics and Control (LDC), Dept. of Mechanical Engineering, University of São Paulo (USP),;
9294	Modeling and simulation of an aircraft's hydraulic distribution system based on a LMS Amesim® Model and a Bond Graph support	Modeling, Simulation and Control of yhe Dynamical Behavior of Aerospace Structures	Marcos P. Caldas / / Dept. of Aeronautical Engineering, Instituto Tecnológico de Aeronáutica; Thiago R. da Costa / / Dept. of Aeronautical Engineering, Instituto Tecnológico de Aeronáutica; Pedro R. P. Guimarães / / Dept. of Aeronautical Engineering, Instituto Tecnológico de Aeronáutica; Georginelly F. Inácio / / Dept. of Aeronautical Engineering, Instituto Tecnológico de Aeronáutica; Luiz C. S. Góes / / Dept. of Mechanical Engineering, Instituto Tecnológico de Aeronáutica;

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9582	ORIGAMI-BASED METAMATERIAL TO ATTENUATE THE IMPACT LOAD IN A LANDING GEAR FOR THE RECOVERY OF THE MICROSATELLITES LAUNCH VEHICLE FIRST STAGE	Modeling, Simulation and Control of yhe Dynamical Behavior of Aerospace Structures	Luís A. Silva / / Prodmec Eletromecânica Ltda; Jesús A. G. Sánchez / / Institute of Mechanical Engineering, Federal University of Itajubá; Hernani C. Dionísio / / Institute of Mechanical Engineering, Federal University of Itajubá;
9556	SÃO PAULO AIRPLANE MODEL AND EVALUATION	Modeling, Simulation and Control of yhe Dynamical Behavior of Aerospace Structures	Júlia da Silva Maschietto / / Eng. Aeroespacial, UFABC; João Batista de Aguiar / / Eng. Aeroespacial, UFABC; José Manuel de Aguiar / / FATEC-SP;
9523	STRUCTURAL AND MODAL ANALYSIS OF THE L75 ROCKET ENGINE TURBINE DISK AT OPERATING CONDITIONS	Modeling, Simulation and Control of yhe Dynamical Behavior of Aerospace Structures	Daniel Bourdon / / Institute of Aeronautics and Space, DCTA; Carlos d'Andrade Souto / / Institute of Aeronautics and Space, DCTA; Ronaldo Chaves Reis / / Institute of Aeronautics and Space, DCTA; Daniel Fraga Sias / / Wikki Brasil Consultoria em Engenharia LTDA;
9782	TUNNED MASS DAMPER PASSIVE CONTROL OF AIRCRAFT WINGS VIBRATIONS	Modeling, Simulation and Control of yhe Dynamical Behavior of Aerospace Structures	Alexandre M. Wahrhaftig / / Department of Construction and Structures, Federal University of Bahia; Reyolando M. L. R. F. Brasil / / Center for Engineering, Modeling and Applied Social Sciences, Federal University of ABC; Kaique M. M. Magalhães / / Department of Structure and Geotechnics, University of São Paulo; Thierre Victor B. Andrade / / Department of Construction and Structures, Federal University of Bahia;
9574	VIBRATION MODES LOCALIZATION IN AIRCRAFT ENGINES TUBINE BLADES	Modeling, Simulation and Control of yhe Dynamical Behavior of Aerospace Structures	Reyolando M.L.R.F. Brasil / / CECS - UFABC;
9288	A REVIEW OF ACOUSTIC METAMATERIALS APPLIED TO NOISE CONTROL IN CIVIL ENGINEERING	Modelling, Design and Additive Manufacturing on Vibro-Acoustic Metamaterials and Phononic Crystals	Caio Zanin / / Instituto de Recursos Naturais, Universidade Federal de Itajubá; Jaime Guilherme Leal Guimarães Alves / / Instituto de Recursos Naturais, Universidade Federal de Itajubá; Jesus Antonio Garcia Sanchez / / Instituto de Engenharia Mecânica, Universidade Federal de Itajubá; Paulo César Gonçalves / / Instituto de Recursos Naturais, Universidade Federal de Itajubá; Noé Geraldo Rocha de Melo Filho / / Autonomous Researcher;
9488	ACOUSTIC METAMATERIAL MODELING USING SPACE-COILING RESONATORS	Modelling, Design and Additive Manufacturing on Vibro-Acoustic Metamaterials and Phononic Crystals	Luciano S. Oliveira / / Computational Mechanics Department, University of Campinas; Victor. G. R. C. Dos Santos / / Computational Mechanics Department, University of Campinas; Edson J. P. Miranda Jr. / / Federal Institute of Maranhão; Jose Maria C. Dos Santos / / Computational Mechanics Department, University of Campinas;

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9580	Attenuation of Vibration and Mass Reduction using a Finite Hollow Periodic Rod	Modelling, Design and Additive Manufacturing on Vibro-Acoustic Metamaterials and Phononic Crystals	Jean P. Carneiro Junior / / School of Engineering of Ilha Solteira, State University of São Paulo; Vinicius G. Cleante / / School of Engineering of Ilha Solteira, State University of São Paulo; Paulo J. P. Gonçalves / / School of Engineering of Bauru, State University of São Paulo; Michael J. Brennan / / School of Engineering of Ilha Solteira, State University of São Paulo; / / ;
9162	BANDGAP AND MODAL INTERACTION ANALYSIS OF METASTRUCTURES WITH HIGH-STATIC-LOW-DYNAMIC STIFFNESS WITH MULTIPLE SCALES	Modelling, Design and Additive Manufacturing on Vibro-Acoustic Metamaterials and Phononic Crystals	Diego Pereira Vasconcellos / / Dept. of mechanical engineering, State University of São Paulo (UNESP); Marcos Silveira / / Dept. of mechanical engineering, State University of São Paulo (UNESP);
9596	DESIGN OF TUNABLE SHUNT RAINBOW TRAP SMART BEAM FOR MULTI-FREQUENCY VIBRATION ATTENUATION	Modelling, Design and Additive Manufacturing on Vibro-Acoustic Metamaterials and Phononic Crystals	Matheus C. R. Borges / / Department of Mechanical Engineering, University of Brasília, Brasília.; Braion B. de Moura / / Department of Mechanical Engineering, University of Brasília, Brasília; Marcela R. Machado / / Department of Mechanical Engineering, University of Brasília, Brasília;
9121	DISPERSION RELATION OF FLEXURAL WAVES IN METAMATERIAL PLATES WITH PERIODIC SHUNTED PIEZO-PATCHES	Modelling, Design and Additive Manufacturing on Vibro-Acoustic Metamaterials and Phononic Crystals	Edson J. P. de Miranda Jr. / / Federal Institute of Maranhão, IFMA-EIB-DE, Rua Afonso Pena, 174, CEP 65010-030, São Luís, MA, Brazil / Federal Institute of Maranhão, IFMA-PPGEM, Avenida Getúlio Vargas, 4, CEP 65030-005, São Luís, MA, Brazil / University of Campinas, UNICAMP-FEM-DMC; José M. C. Dos Santos / / University of Campinas, UNICAMP-FEM-DMC, Rua Mendeleyev, 200, CEP 13083-970, Campinas, SP, Brazil;
9724	INFLUENCE OF PARAMETRIC VARIATION IN BANDGAPS FOR ONE-DIMENSIONAL STRUCTURES	Modelling, Design and Additive Manufacturing on Vibro-Acoustic Metamaterials and Phononic Crystals	Wanderson Vinícius de O. Monteiro / / Coordination of the Mechanical Engineering Course, Federal University of Maranhão; Cássio Bruno F. Gomes / / Coordination of the Mechanical Engineering Course, Federal University of Maranhão; Edilson D. Nóbrega / / Coordination of the Mechanical Engineering Course, Federal University of Maranhão;
9613	MODELING AND ANALYSIS OF PERIODIC AND QUASI-PERIODIC SANDWICH STRUCTURES WITH INTERNAL RESONATORS	Modelling, Design and Additive Manufacturing on Vibro-Acoustic Metamaterials and Phononic Crystals	Marcelo A. Trindade / / Department of Mechanical Engineering, São Carlos School of Engineering, University of São Paulo, São Carlos, SP, Brazil; Julian J. Rimoli / / School of Aerospace Engineering, Georgia Institute of Technology, Atlanta, GA, USA; Massimo Ruzzene / / Department of Mechanical Engineering, University of Colorado Boulder, Boulder, CO, USA;
9603	NOISE CONTROL IN DUCTS USING LOCAL RESONATOR ACOUSTIC METAMATERIAL ARRAYS.	Modelling, Design and Additive Manufacturing on Vibro-Acoustic Metamaterials and Phononic Crystals	José Maria C. Dos Santos / / FEM - University of Campinas - UNICAMP; Higor G. Pozza / / FEM - University of Campinas - UNICAMP;

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9414	PERIODIC STRUCTURES WITH EXPONENTIALLY VARYING CROSS-SECTION AREAS	Modelling, Design and Additive Manufacturing on Vibro-Acoustic Metamaterials and Phononic Crystals	Camila Albertin Xavier da Silva / / Dept. of Mechanical Engineering, São Paulo State University (UNESP), College of Engineering, Campus Bauru; Paulo José Paupitz Golçalves / / Dept. of Mechanical Engineering, São Paulo State University (UNESP), College of Engineering, Campus Bauru;
9316	VIBRATION ATTEUATION IN A GRADED METAMATERIAL ROD	Modelling, Design and Additive Manufacturing on Vibro-Acoustic Metamaterials and Phononic Crystals	Fábio C. M. Oliveira / / Dept. of Mechanial Engineering, UNICAMP; José M. C. dos Santos / / Dept. of Mechanial Engineering, UNICAMP;
9584	A MULTISCALE RECURSIVE NUMERICAL METHOD FOR SEMILINEAR PARABOLIC PROBLEMS	Multiscale modelling of conservation laws : efficiency, error estimate and preconditioning	Eduardo Abreu / / Department of Applied Mathematics, University of Campinas - UNICAMP; Paola Ferraz / / CNPEM - Brazilian Center for Research in Energy and Materials Scientific Computing Group; Larissa Macul / / Department of Applied Mathematics, University of Campinas - UNICAMP;
9717	A POSTERIORI ERROR ESTIMATES FOR PRIMAL HYBRID FINITE ELEMENT METHODS	Multiscale modelling of conservation laws : efficiency, error estimate and preconditioning	Victor; B. Oliari / / State University of Campinas (UNICAMP); Paulo Rafael; Bösing / / Federal University of Fronteira Sul (UFFS); Denise; de Siqueira / / Federal University of Technology – Paraná; Philippe R. B.;Devloo / / State University of Campinas (UNICAMP);
9775	ADAPTIVE MULTISCALE HYBRID MIXED METHOD BASED ON A POSTERIORI ERROR ESTIMATION	Multiscale modelling of conservation laws : efficiency, error estimate and preconditioning	Denise de Siqueira / / Federal University of Technology – Paraná (UTFPR); Gustavo Alcalá Batistela / / State University of Campinas (UNICAMP); Phillipe R. B. Devloo / / State University of Campinas (UNICAMP); Sônia Maria Gomes / / State University of Campinas (UNICAMP);
9735	An assessment of interface spaces for the accurate simulation of two-phase flows in high-contrast formations	Multiscale modelling of conservation laws : efficiency, error estimate and preconditioning	Rafael T. Guiraldello / / Piri Technologies, LLC; Franciane F. Rocha / / Instituto de Ciências Matemáticas e de Computação, Universidade de São Paulo; Fabricio S. Sousa / / Instituto de Ciências Matemáticas e de Computação, Universidade de São Paulo; Roberto F. Ausas / / Instituto de Ciências Matemáticas e de Computação, Universidade de São Paulo; Gustavo C. Buscaglia / / Instituto de Ciências Matemáticas e de Computação, Universidade de São Paulo; Felipe Pereira / / Department of Mathematical Sciences, The University of Texas at Dallas;
9240	USING THE DE RHAM SEQUENCE FOR ACCELERATING MIXED FINITE ELEMENT COMPUTATIONS	Multiscale modelling of conservation laws : efficiency, error estimate and preconditioning	Sonia M Gomes / / IMECC, UNICAMP; Philippe R B Devloo / / Fac Eng Civil, UNICAMP; Francisco Orlandini / / FEEC, UNICAMP;
9109	A MEMBRANE FINITE ELEMENT BASED ON POSITION APPLIED TO THE CONTACT OF FABRICS WITH RIGID SURFACES	Nonlinear Analysis, Stability and Structural Dynamics	Christian L. Perlin / / Dept. of Structural Engineering, São Carlos School of Engineering, University of São Paulo; Humberto B. Coda / / Dept. of Structural Engineering, São Carlos School of Engineering, University of São Paulo;

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9115	ANALYTICAL STUDY ON SPEED AND ACCELERATION VIBRATION IN SOILS NEAR RAILWAY LINES	Nonlinear Analysis, Stability and Structural Dynamics	BARROSO C. GABRIEL FILHO / / Federal Institute of Science and Technology of Ceará; NOGUEIRA J. DIOGENES / / Federal Institute of Science and Technology of Ceará; BONFIM L. NOGUEIRA ALMEIDA / / Federal Institute of Science and Technology of Ceará;
9132	Bi-modularity representation proposal of quasi-brittle materials through isotropic degradation constitutive model	Nonlinear Analysis, Stability and Structural Dynamics	Guilherme Ribeiro Caetano / / Programa de Pós-Graduação em Engenharia de Estruturas, Universidade Federal de Minas Gerais; Samuel Silva Penna / / Departamento de Engenharia de Estruturas, Universidade Federal de Minas Gerais;
9211	DEVELOPMENT OF A COMPUTATIONAL TOOL FOR IMMEDIATE ASSESSMENT OF THE STRUCTURAL INTEGRITY OF CORRODED PIPELINES	Nonlinear Analysis, Stability and Structural Dynamics	Marco A. F. da S. Cabral / / Dept. of Civil Engineering, Federal University of Pernambuco; Ramiro B. Willmersdorf / / Dept. of Mechanical Engineering, Federal University of Pernambuco; Silvana M. B. A. da Silva / / Dept. of Civil Engineering, Federal University of Pernambuco;
9072	EFFECT OF THE CABLE SYSTEM ON THE STATIC AND DYNAMIC STABILITY OF GUYED TOWERS	Nonlinear Analysis, Stability and Structural Dynamics	Ícaro R. Marques / / Civil and Environmental Engineering Department of Pontifical Catholic University of Rio de Janeiro; Paulo B. Gonçalves / / Civil and Environmental Engineering Department of Pontifical Catholic University of Rio de Janeiro; Deane M. Roehl / / Civil and Environmental Engineering Department of Pontifical Catholic University of Rio de Janeiro;
9439	EVALUATION OF COMPOSITE LAMINATES STRENGTH WITH DIFFERENT FIBER DIRECTION SUBJECTED TO IMPACT LOAD FROM THE IMPLICIT AND EXPLICIT DYNAMIC ANALYSIS	Nonlinear Analysis, Stability and Structural Dynamics	Rodrigo Evangelista Aguiar de Souza / / Dept. of Engineering, University of Brasília; Maura Angelica Milfont Shzu / / Dept. of Engineering, University of Brasília;
8898	GENETIC ALGORITHM APPLIED ON THE OPTIMIZATION PROBLEM OF THE SYNTHESIS OF A WALKING MECHANISM	Nonlinear Analysis, Stability and Structural Dynamics	KELVIN R. F. SANTOS / / Dept de Engenharia Mecânica, UNIVERSIDADE FEDERAL DE MINAS GERAIS; MARCO T. C. de FARIA / / Dept de Engenharia Mecânica, UNIVERSIDADE FEDERAL DE MINAS GERAIS;
9110	GEOMETRIC NONLINEAR ANALYSIS OF TENSIONED MEMBRANES USING THE POSITIONAL FINITE ELEMENT METHOD	Nonlinear Analysis, Stability and Structural Dynamics	Christian L. Perlin / / Dept. of Structural Engineering, São Carlos School of Engineering, University of São Paulo; Humberto B. Coda / / Dept. of Structural Engineering, São Carlos School of Engineering, University of São Paulo;
9199	HUMAN STRUCTURE INTERACTION: APPROACHES TO CONSIDER CROWD EFFECTS	Nonlinear Analysis, Stability and Structural Dynamics	Igor Braz N. Gonzaga / / PEC/COPPE, Universidade Federal do Rio de Janeiro; Michèle Schubert Pfeil / / POLI/PEC/COPPE, Universidade Federal do Rio de Janeiro; Wendell Diniz Varela / / FAU/PEC/COPPE, Universidade Federal do Rio de Janeiro;

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9612	MODELLING OF THE P-δ EFFECT USING INTERPOLATING FUNCTIONS	Nonlinear Analysis, Stability and Structural Dynamics	Rodrigo Bird Burgos / / UERJ; Luiz Fernando Martha / / PUC-Rio; Marcos Antonio Campos Rodrigues / / UFES; Rafael Lopez Rangel / / Universitat Politècnica de Catalunya;
9235	NONLINEAR ANALYSIS OF SNAPPING HYPERELASTIC PRESTRESSED ARCHES	Nonlinear Analysis, Stability and Structural Dynamics	Filipe Fonseca / / Department of Civil and Environmental Engineering, Pontifical Catholic University; Paulo Batista Gonçalves / / Department of Civil and Environmental Engineering, Pontifical Catholic University;
9158	NONLINEAR VIBRATIONS OF A FG CYLINDRICAL SHELL ON A CIRCUMFERENTIAL DISCONTINUOUS ELASTIC FOUNDATION	Nonlinear Analysis, Stability and Structural Dynamics	Jonathas K. A. Pereira / / Escola de Engenharia Civil e Ambiental, Universidade Federal de Goiás; Renata M. Soares / / Escola de Engenharia Civil e Ambiental, Universidade Federal de Goiás; Frederico M. A. Silva / / Escola de Engenharia Civil e Ambiental, Universidade Federal de Goiás;
9336	NUMERICAL ANALYSIS OF SOIL-PILE INTERACTION PROBLEMS USING 8-NODE HEXAHEDRAL FINITE AND INFINITE ELEMENTS	Nonlinear Analysis, Stability and Structural Dynamics	Michael R. M. Visintainer / / Programa de Pós-Graduação em Engenharia Civil, Universidade Federal do Rio Grande do Sul; Alexandre L. Braun / / Programa de Pós-Graduação em Engenharia Civil, Universidade Federal do Rio Grande do Sul;
9076	Numerical and Analytical Study of the Torsional Stiffness of a Flexible Disks Coupling	Nonlinear Analysis, Stability and Structural Dynamics	Leonardo N. de Carvalho / / Institute of mechanical engineering, Federal University of Itajubá; Thiago R. B. Ribeiro / / Institute of mechanical engineering, Federal University of Itajubá; Janaina C. V. Albuquerque / / Institute of mechanical engineering, Federal University of Itajubá; Ramiro G. R. Camacho / / Institute of mechanical engineering, Federal University of Itajubá;
9197	NUMERICAL SIMULATION OF THE HYDRODYNAMIC INTERACTION OF TWO CYLINDERS VIBRATING IN A VISCOUS FLUID	Nonlinear Analysis, Stability and Structural Dynamics	Maria Adela PUSCAS / / CEA-Saclay, CEA/DES/ISAS/DM2S/STMF/LMSF, Université de Paris-Saclay; Romain Lagrange / / CEA-Saclay, CEA/DES/ISAS/DM2S/SEMT/DYN, Université de Paris-Saclay;
9601	PARAMETRIC STUDY ON THE DETERMINATION OF THE DAMPING RATIO INDUCED BY PERSON-STRUCTURE INTERACTION ON FOOTBRIDGE MADE OF COMPOSITE MATERIAL	Nonlinear Analysis, Stability and Structural Dynamics	João M. Ribeiro / / Civil Engineering Department, Universidade Federal Fluminense; Eliane M. L. Carvalho / / Civil Engineering Department, Universidade Federal Fluminense; Janine D. Vieira / / Civil Engineering Department, Universidade Federal Fluminense; Wendell D. Varela / / PEC/COPPE, Universidade Federal do Rio de Janeiro (UFRJ);
9117	PHYSICAL AND GEOMETRIC NON-LINEAR ANALYSIS OF RECTANGULAR PLATES	Nonlinear Analysis, Stability and Structural Dynamics	Daniella Maria Oliveira Aguiar / / Universidade Federal de Goiás; Renata Machado Soares / / Universidade Federal de Goiás; João Pedro Xavier Freitas / / Universidade Federal de Goiás;

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8938	SPECTRAL MODAL SEISMIC ANALYSIS OF A STRUCTURE IN THE REPUBLIC OF ECUADOR	Nonlinear Analysis, Stability and Structural Dynamics	Gallardy Nery Zambrano Intriago / / Civil Engineering, Federal University of Latin American Integration (UNILA); Scarlet Karina Montilla Barrios / / Civil Engineering, Federal University of Latin American Integration (UNILA); Ulises Bobadilla Guadalupe / / Civil Engineering, Federal University of Latin American Integration (UNILA);
9806	STABILITY OF STEADY FRICTIONAL SLIDING AT AN INTERFACE BETWEEN TWO ELASTIC LAYERS	Nonlinear Analysis, Stability and Structural Dynamics	Avinash gupta / / PhD Student, Dept. of Physics, Mahindra University; Kunnath Ranjith / / Professor, Dept. of Mechanical Engineering, Mahindra University;
9116	STATIC AND DYNAMIC NONLINEAR BEHAVIOR OF A MULTISTABLE STRUCTURAL SYSTEM	Nonlinear Analysis, Stability and Structural Dynamics	Carlos H. L. de Castro / / Department of Civil and Environmental Engineering, Pontifical Catholic University of Rio de Janeiro; Rafael J. Pantaleão / / Department of Civil and Environmental Engineering, Pontifical Catholic University of Rio de Janeiro; Diego Orlando / / Department of Mechanics and Energy – FAT, State University of Rio de Janeiro; Paulo B. Gonçalves / / Department of Civil and Environmental Engineering, Pontifical Catholic University of Rio de Janeiro;
9657	STRUCTURAL OPTIMIZATION OF TRUSSES CONSIDERING DIFFERENT BUCKLING MODELS	Nonlinear Analysis, Stability and Structural Dynamics	Marcela Alejandra Juliani / / Center for Optimization and Reliability in Engineering (CORE), Department of Civil Engineering, Federal University of Santa Catarina; Wellison José de Santana Gomes / / Center for Optimization and Reliability in Engineering (CORE), Department of Civil Engineering, Federal University of Santa Catarina;
9160	STRUCTURAL VERIFICATION OF AN OIL CUTTING TANK AFFECTED BY CORROSION AND DIFFERENTIAL SETTLEMENTS	Nonlinear Analysis, Stability and Structural Dynamics	Cindy G. Wozniuk / / Departamento de Ingeniería Civil, Facultad de Ingeniería, Universidad Nacional del Comahue, Buenos Aires 1400, 8300 Neuquén, Argentina; Rossana C. Jaca / / Departamento de Ingeniería Civil, Facultad de Ingeniería, Universidad Nacional del Comahue, Buenos Aires 1400, 8300 Neuquén, Argentina; Mónica Zalazar / / Departamento de Mecánica Aplicada, Facultad de Ingeniería, Universidad Nacional del Comahue, Buenos Aires 1400, 8300 Neuquén, Argentina; Eduardo M. Sosa / / Department of Mechanical and Aerospace Engineering, West Virginia University, Morgantown, WV, 26506, United States;
9272	THE EFFECT OF GEOMETRY ON THE DYNAMIC INSTABILITY OF CLAMPED-FREE CYLINDRICAL SHELLS	Nonlinear Analysis, Stability and Structural Dynamics	Zenon Jose Guzman Nunez del Prado / / School of Civil Engineering, Federal University of Goias; Tairine Roquete Alves Carneiro / / School of Civil Engineering, Federal University of Goias;

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9172	THEORETICAL ANALYSIS OF THE ACTIVE HUMAN-STRUCTURE INTERACTION ON CLAMPED RECTANGULAR PLATES	Nonlinear Analysis, Stability and Structural Dynamics	Phablo Veríssimo I. Dias / / School of Civil and Enviromental Engineering, Federal University of Goias; Zenón J. Guzmán N. del Prado / / School of Civil and Enviromental Engineering, Federal University of Goias;
9744	THERMAL BUCKLING OF FUNCTIONALLY GRADED PLATES	Nonlinear Analysis, Stability and Structural Dynamics	Thamires Ximenes Cavalcante / / Departamento de Engenharia Estrutural e Construção Civil, Universidade Federal do Ceará; Evandro Parente Júnior / / Departamento de Engenharia Estrutural e Construção Civil, Universidade Federal do Ceará; Marcelo Silva Medeiros Júnior / / Departamento de Engenharia Estrutural e Construção Civil, Universidade Federal do Ceará;
9465	MODELING OF A BROADBAND DOUBLE-BEAM PIEZOLECTRIC ENERGY HARVESTING SYSTEM	Nonlinear Dynamic Analysis and Control of Vibration Systems on Macro and MEMS Scales and its Applications to Engineering	Vinícius C. Smarzaro / / Universidade Federal do Paraná; Bruno F. de A. Prado / / Universidade Federal do Paraná; Carlos A. Bavastri / / Universidade Federal do Paraná; Mariano Febbo / / Universidad Nacional del Sur;
9159	MULTIPLE SCALE ANALYSIS OF ENERGY HARVESTING IN AEROELASTIC SYSTEM IN FLUTTER CONDITION.	Nonlinear Dynamic Analysis and Control of Vibration Systems on Macro and MEMS Scales and its Applications to Engineering	Ana C. G. Amaral / / Dept. of Mechanical Engineering, State University of São Paulo; Marcos Silveira / / Dept. of Mechanical Engineering, State University of São Paulo;
9718	Remarks on nonlinear dynamics of a suspension bridge model	Nonlinear Dynamic Analysis and Control of Vibration Systems on Macro and MEMS Scales and its Applications to Engineering	Felipe Lima de Abreu / / Federal University of Grande dourados; Marcus Varanis / / Federal University of Grande dourados; Pedro Augusto beck / / Federal University of Grande dourados; Clivaldo de Oliveira / / Federal University of Grande dourados; José Manoel Balthazar / / Federal University Technology of Paraná;
9721	Some Comments on Signal Processing Analysis in Nonlinear Dynamics and Chaos	Nonlinear Dynamic Analysis and Control of Vibration Systems on Macro and MEMS Scales and its Applications to Engineering	Marcus Varanis / / Federal University of Grande Dourados; Géder Gabriel Louback Cunha / / Federal University of Grande Dourados; Murilo Cesar Filipus / / Federal University of Grande Dourados; Clivaldo de Oliveira / / Federal University of Grande Dourados; Angelo Marcelo Tusset / / Federal University Technology of Paraná; José Manoel Balthazar / / Federal University Technology of Paraná;
9404	A STRAIN-RATE DEPENDENT MATERIAL MODEL FOR ADIPOSE TISSUE UNDER BLUNT IMPACT CONSIDERING MICROSTRUCTURAL ASPECTS	Nonlinear Response of Mechanical Systems Subjected to Contact Nonlinearities	Felicitas Lanzl / / (1) School of Engineering and Design, Technical University of Munich TUM, Germany, (2) Biomechanics and Accident Analysis, University of Munich LMU, Germany; Marcilio Alves / / Group of Solid Mechanics and Structural Impact, University of São Paulo, Brasil; Steffen Peldschus / / Biomechanics and Accident Analysis, University of Munich LMU, Germany; Fabian Duddeck / / School of Engineering and Design, Technical University of Munich TUM, Germany;

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9911	NUMERICAL STUDY ON THE LUBRICATION EFFECTS ON MECHANICAL CONFORMATION BY THE BARREL COMPRESSION PROCESS	Nonlinear Response of Mechanical Systems Subjected to Contact Nonlinearities	Lucas Guimarães Corrêa / / Departamento de Engenharia Mecânica, Instituto Militar de Engenharia; Fellipe Moreira Egito / / Departamento de Engenharia Mecânica, Instituto Militar de Engenharia; Lucas Gomes do Amaral / / Departamento de Engenharia Mecânica, Instituto Militar de Engenharia; Elias Dias Rossi Lopes / / Departamento de Engenharia Mecânica, Instituto Militar de Engenharia; Gustavo Simão Rodrigues / / Departamento de Engenharia Mecânica, Instituto Militar de Engenharia;
9186	STRESS DISTRIBUTION ANALYSIS OF SINGLE OVERLAP BONDED JOINTS - AN ANALYTICAL AND NUMERICAL STUDY	Nonlinear Response of Mechanical Systems Subjected to Contact Nonlinearities	Vinícius D. Brandão / / Department of Mechanical Engineering, Federal University of Santa Maria; René Q. Rodríguez / / Department. of Mechanical Engineering, Federal University of Santa Maria;
9091	SWITCHING BETWEEN IMPACTING AND NON-IMPACTING CO-EXISTING ATTRACTORS VIA INTERMITTENT CONTROL	Nonlinear Response of Mechanical Systems Subjected to Contact Nonlinearities	Dimitri D. A. Costa / / Departament of Mechanical Engineering, Universidade Federal do Rio de Janeiro; Vahid Vaziri / / School of Engineering, University of Aberdeen; Marcelo A. Savi / / Departament of Mechanical Engineering, Universidade Federal do Rio de Janeiro; Marian Wiercigroch / / School of Engineering, University of Aberdeen;
9809	THE INFLUENCE OF TIME INTEGRATOR ON CONTACT/IMPACT PROBLEMS USING THE POSITIONAL FINITE ELEMENT METHOD	Nonlinear Response of Mechanical Systems Subjected to Contact Nonlinearities	Darcy Hannah Falcão Rangel Moreira / / Structural Engineering Department, São Carlos School of Engineering, University of São Paulo.; Péricles Rafael Pavão Carvalho / / Structural Engineering Department, São Carlos School of Engineering, University of São Paulo.; Rodolfo André Kuche Sanches / / Structural Engineering Department, São Carlos School of Engineering, University of São Paulo.;
9210	AERODYNAMIC AND STRUCTURAL ANALYSIS USING COMPUTATIONAL FLUID DYNAMICS AND FINITE ELEMENT METHODS APPLIED TO AN ARCHED BAMBOO GREENHOUSE	Numerical Methods Applied to Structural Design of Civil Construction	/ / ; Felipe Frizon / / Dept. of Mechanical Engineering, Federal Technological University of Paraná; Dr. Diego Rizzotto Rossetto / / Dept. of Mechanical Engineering, Federal Technological University of Paraná;
9440	ANALYSIS OF STRUCTURAL RELIABILITY IN REINFORCED CONCRETE SECTIONS IN THE LIMIT STATE DESIGN	Numerical Methods Applied to Structural Design of Civil Construction	Daiane Della Libera Leite / / Master`s student, UFRGS; Herbert Martins Gomes / / Mechanical Engineering Department, UFRGS; 0 / / 0;
9913	ANÁLISE NUMÉRICA DO DESENHO ESTRUTURAL DO MUSEU DA CIDADE – BRASÍLIA-DF	Numerical Methods Applied to Structural Design of Civil Construction	Leonardo da S. P. Inojosa / / Departamento de Engenharia Civil e Ambiental, Faculdade de Tecnologia, Universidade de Brasília; Márcio A. R. Buzar / / Programa de Pós Graduação em Arquitetura e Urbanismo, Universidade de Brasília;

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9264	COMPARATIVE ANALYSIS OF A SUSTAINABLE BAMBOO BRIDGE AND A STEEL BRIDGE	Numerical Methods Applied to Structural Design of Civil Construction	E. g. Fernando F. de Oliveira / / IESB University Center, Department of Civil Engineering; DSC. Tiago S. Oliveira / / IESB University Center, Department of Civil Engineering;
9941	FINITE ELEMENT SIMULATION OF CROSS-LAMINATED TIMBER PANELS UNDER COMPRESSION PERPENDICULAR TO PLANE	Numerical Methods Applied to Structural Design of Civil Construction	Rodrigo Adolfo Benitez Mendes / / Universidade Federal do Rio Grande do Sul; Matheus Erpen Benincá / / Universidade Federal do Rio Grande do Sul; Inácio Benvegnu Morsch / / Programa de Pós-Graduação em Engenharia Civil, Universidade Federal do Rio Grande do Sul;
9481	FINITE ELEMENT SOLUTION OF AN ELASTICALLY CONNECTED DOUBLE BERNOULLI-EULER BEAM SYSTEM ON WINKLER-KERR FOUNDATION	Numerical Methods Applied to Structural Design of Civil Construction	Welky K. F. Brito / / Dept. of Civil and Environmental Engineering, Federal University of Paraíba; Arthur C. A. Pereira / / Dept. of Civil and Environmental Engineering, Federal University of Paraíba; Ângelo V. Mendonça / / Dept. of Civil and Environmental Engineering, Federal University of Paraíba;
9283	MODELS FOR REPRESENTATION OF CRACKS IN ONE-DIMENSIONAL FINITE ELEMENT METHOD	Numerical Methods Applied to Structural Design of Civil Construction	Filipe Guedes Sanches / / Graduate Program in Civil Construction Engineering, Federal University of Paraná; Marcos Arndt / / Graduate Program in Civil Construction Engineering, Federal University of Paraná; Elisabeth Penner / / Technological Federal University of Paraná;
9265	NUMERICAL ANALYSIS OF A SUSTAINABLE BAMBOO WAREHOUSE	Numerical Methods Applied to Structural Design of Civil Construction	E. g. Fernando F. de Oliveira / / Dept. of Civil Engineering, IESB University Center; E. g. Layza G. Alves / / Dept. of Civil Engineering, IESB University Center; DSC. Tiago S. Oliveira / / Dept. of Civil Engineering, IESB University Center;
9361	Numerical Modeling of Dencrocalamus Asper Densified Bamboo under Flexure	Numerical Methods Applied to Structural Design of Civil Construction	Ícaro B. de M. Carvalho / / Bueno & Bruno Arquitetura e Engenharia; Tiago da S. Oliveira / / Centro Universitário IESB;
9217	RELIABILITY-BASED PLASTIC LIMIT ANALYSIS OF PLANE FRAMES	Numerical Methods Applied to Structural Design of Civil Construction	Diogo Ledermann Firmino Pinto / / Undergraduate in Environmental Engineering, Universidade Federal Fluminense; Andre Maues Brabo Pereira / / Institute of Computing, Universidade Federal Fluminense;
9495	SIMPLIFIED ANALYTICAL-NUMERICAL STUDY OF THE STATIC BEHAVIOR OF THE HEMISPHERICAL DOME OF THE ROMAN PANTHEON	Numerical Methods Applied to Structural Design of Civil Construction	Fillipe Marinho Faria / / Postgraduate Program in Structures and Civil Construction (PECC), University of Brasilia (UnB); Davidson de Oliveira França Júnior / / Postgraduate Program in Structures and Civil Construction (PECC), University of Brasilia (UnB); Lineu José Pedroso / / Postgraduate Program in Structures and Civil Construction (PECC), University of Brasilia (UnB);
9247	THE USE OF THE ANSYS COMPUTATIONAL TOOL IN THE INITIAL STUDY OF THE FATIGUE PHENOMENON	Numerical Methods Applied to Structural Design of Civil Construction	Mila Fernanda Esper / / University of Brasilia; Maura A. Milfont Shzu / / University of Brasilia;

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9287	COMPUTATIONAL ASPECTS IN THE EVALUATION AN EXISTING STRUCTURE BY THE GLOBAL SAFETY METHOD	Numerical modeling of concrete structures	Claudia Interlandi / / PhD by PUC-Rio; Luiz Fernando Martha / / Dept. of Structures, PUC-Rio; Sérgio Hampshire de C. santos / / Dept. of Structures, UFRJ; Luis Oliveira Santos / / senior Research Officer, LNEC;
9835	COMPUTATIONAL MODELING FOR SIMULATION OF POST-COOLING SYSTEMS IN MASS CONCRETE STRUCTURES	Numerical modeling of concrete structures	Igor A. Fraga / / Universidade Federal do Rio de Janeiro; Ana B. C. G. Silva / / Universidade Federal do Rio de Janeiro; Eduardo M. R. Fairbairn / / Universidade Federal do Rio de Janeiro;
9205	Discrete crack model based on nodal duplication for nonlinear analysis of concrete structures	Numerical modeling of concrete structures	Natália de Oliveira Assis / / Dept. of Structural Engineering, Federal University of Minas Gerais; Samuel Silva Penna / / Dept. of Structural Engineering, Federal University of Minas Gerais;
9477	FINITE ELEMENT ANALYSES OF MESH-OBJECTIVITY FOR SMEARED, DAMAGE AND DISCRETE MODELS APPLIED TO CONCRETE CRACKING	Numerical modeling of concrete structures	Gustavo Luz Xavier da Costa / / Civil Engineering Graduate Program, Federal University of Rio de Janeiro; Carlos Alberto Caldeira Brant / / Civil Engineering Graduate Program, Federal University of Rio de Janeiro; Rodolfo Giacomim Mendes de Andrade / / Civil Engineering and Buildings Department, Federal Institute of Espírito Santo; Eduardo de Moraes Rego Fairbairn / / Civil Engineering Graduate Program, Federal University of Rio de Janeiro;
9480	FINITE ELEMENT MODELLING OF CRACKING IN FIBER-REINFORCED CONCRETE BEAMS	Numerical modeling of concrete structures	Carlos AC Brant / / Universidade Federal do Rio de Janeiro; Gustavo LX da Costa / / Universidade Federal do Rio de Janeiro; Rodolfo GM de Andrade / / Federal Institute of Espírito Santo, Campus Vitória; Eduardo RM Fairbairn / / Universidade Federal do Rio de Janeiro;
9588	MECHANICAL PERFORMANCE ANALYSIS OF REINFORCED CONCRETE CONTINUOUS BEAMS	Numerical modeling of concrete structures	Edmilson Lira Madureira / / Departamento de Engenharia Civil - UFRN; Gabriel de Bessa Spinola / / Departamento de Engenharia Civil – UFRN; Eduardo Morais de Medeiros / / UFCG; , Iago Vieira Duarte / / UFRN;
9461	MODELING OF A PUMPED HYDROPOWER STORAGE WALL IN 3D PRINTING USING THE SOFTWARE DIANA FEA	Numerical modeling of concrete structures	Larissa D. Fonseca / / COPPE/UFRJ, Civil Engineering Department, Post-Graduate Institute of the Federal University of Rio de Janeiro; Eduardo M. R. Fairbairn / / COPPE/UFRJ, Civil Engineering Department, Post-Graduate Institute of the Federal University of Rio de Janeiro; Oscar A. M. Reales / / COPPE/UFRJ, Civil Engineering Department, Post-Graduate Institute of the Federal University of Rio de Janeiro;
9763	NUMERICAL ANALYSIS OF A PRE-STRESSED BRIDGE CONSIDERING CONSTRUCTION PROCESSES	Numerical modeling of concrete structures	MSc. Marcela Palhares Miranda / / Dept. of Civil Engineering, Federal University of Rio Grande do Sul; Dr. Jorge Palomino Tamayo / / Dept. of Civil Engineering, Federal University of Rio Grande do Sul; Dr. Inácio Benvegnu Morsch / / Dept. of Civil Engineering, Federal University of Rio Grande do Sul;

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9817	NUMERICAL ANALYSIS OF DAMAGED CONCRETE MICROSTRUCTURES	Numerical modeling of concrete structures	Dannilo Carvalho Borges / / Universidade Federal de Catalão, Instituto Federal de Goiás; José Júlio de Cerqueira Pituba / / Universidade Federal de Catalão;
9896	NUMERICAL ANALYSIS OF UNBONDED PRESTRESSED CONCRETE BEAMS UNDER LONG TERM SERVICE LOADS BY FINITE ELEMENT METHOD	Numerical modeling of concrete structures	Leonardo do Nascimento Cunha / / Laboratory of Computational Mechanics and Visualization, Federal University of Ceara; João Batista Marques de Sousa Junior / / Department of Structural Engineering and Civil Construction , Federal University of Ceara; Evandro Parente Junior / / Department of Structural Engineering and Civil Construction , Federal University of Ceara; Pedro Luiz Ribeiro Rocha / / Laboratory of Computational Mechanics and Visualization, Federal University of Ceara;
9764	NUMERICAL MODELING OF 3D-PRINTED CONCRETE DAMS DESIGNED FOR PUMPED-STORAGE HYDROPOWER	Numerical modeling of concrete structures	Marina B. de Farias / / Civil Engineering Department, Federal University of Rio de Janeiro (UFRJ), COPPE, Brazil; Eduardo M. R. Fairbairn / / Civil Engineering Department, Federal University of Rio de Janeiro (UFRJ), COPPE, Brazil; Oscar A. M. Reales / / Civil Engineering Department, Federal University of Rio de Janeiro (UFRJ), COPPE, Brazil;
9867	NUMERICAL SIMULATION OF FOUR-POINT BEAM BENDING TEST USING A MACROSCOPIC PROBABILISTIC MODEL	Numerical modeling of concrete structures	Mariane R. Rita / / Programa de Engenharia Civil - Universidade Federal do Rio de Janeiro; Henrique C. C. de Andrade / / Programa de Engenharia Civil - Universidade Federal do Rio de Janeiro; Magno T. Mota / / Programa de Engenharia Civil - Universidade Federal do Rio de Janeiro; Eduardo de M. R. Fairbairn / / Programa de Engenharia Civil - Universidade Federal do Rio de Janeiro; Fernando L. B. Ribeiro / / Programa de Engenharia Civil - Universidade Federal do Rio de Janeiro; Jean-Louis Tailhan / / Departamento de Materiais e Estruturas - Université Gustave Eiffel; Pierre Rossi / / Departamento de Materiais e Estruturas - Université Gustave Eiffel;
9690	PROGRESSIVE COLLAPSE OF A FLAT SLAB BUILDING	Numerical modeling of concrete structures	Guilherme Sales Soares de Azevedo Melo / / Departamento de Engenharia Civil e Ambiental da Universidade de Brasília; Bernardo Cruz Pereira Galdino / / Departamento de Engenharia Civil e Ambiental da Universidade de Brasília;
9849	PROPOSED MULTI-STRUT MACRO MODELS FOR STRUCTURAL ANALYSIS OF RC INFILLED FRAMES UNDER LATERAL LOADS	Numerical modeling of concrete structures	Alessandro Onofre Rigão / / Technology Center, Federal University of Santa Maria; Gerson Moacyr Sisniegas Alva / / Center for Exact Sciences and Technology, Federal University of Uberlândia; João Kaminski Junior / / Technology Center, Federal University of Santa Maria; Marco Antonio Silva Pinheiro / / Technology Center, Federal University of Santa Maria;

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9802	STUDY OF CONSTITUTIVE MODELS OF DIANA FEA FOR LONG-TERM ANALYSIS OF PRESTRESSED BEAMS WITH BONDED TENDONS	Numerical modeling of concrete structures	Luana Andreza Gomes Moura / / Departamento de Engenharia Estrutural e Construção Civil, Universidade Federal do Ceará; Thamires Ximenes Cavalcante / / Departamento de Engenharia Estrutural e Construção Civil, Universidade Federal do Ceará; Marcelo S. Medeiros Júnior / / Departamento de Engenharia Estrutural e Construção Civil, Universidade Federal do Ceará;
9792	STUDY OF THE RELATIONSHIP BETWEEN FRACTURE ENERGY AND CONCRETE HYDRATION DEGREE THROUGH A FINITE ELEMENT MODEL	Numerical modeling of concrete structures	Ítalo Arruda de Carvalho / / PEC-COPPE-UFRJ; Giuseppe Ciaramella Moita / / PEC-COPPE-UFRJ; Rodolfo Giacomim Mendes de Andrade / / IFES; Eduardo de Moraes Rêgo Fairbairn / / PEC-COPPE-UFRJ;
9425	A MULTI-AGENT APPROACH TO SIMULATING CONTAMINATION WITH THE NEW CORONA VIRUS	Numerical modeling of infectious diseases: COVID-19 and beyond	Victor Geraldo Gomes / / Post-graduation Program in Mathematical and Computational Modelling; Gray Farias Moita / / Post-graduation Program in Mathematical and Computational Modelling;
9241	A Nonlinear Dynamical Map for Covid-19	Numerical modeling of infectious diseases: COVID-19 and beyond	Eduardo V. M. dos Reis / / Dept. of Mechanical Engineering, Federal University of Rio de Janeiro; Marcelo A. Savi / / Dept. of Mechanical Engineering, Federal University of Rio de Janeiro;
10013	AN EMBEDDED DISCREPANCY OPERATOR TO IMPROVE EPIDEMIC COMPARTIMENTAL MODELS PREDICTIONS	Numerical modeling of infectious diseases: COVID-19 and beyond	Rebecca E. Morrison / / Rio de Janeiro State University (UERJ); Americo Cunha Jr / / Rio de Janeiro State University (UERJ);
9538	An Object-Oriented Solver for Modeling the Multi-regional COVID-19 Outbreak	Numerical modeling of infectious diseases: COVID-19 and beyond	Yujia Hao / / Department of Mathematics, Emory University, Atlanta (GA) USA; Siwei Xu / / Department of Mathematics, Emory University, Atlanta (GA) USA; Kai Chang / / Department of Mathematics, Emory University, Atlanta (GA) USA; Yuting Hou / / Department of Mathematics, Emory University, Atlanta (GA) USA; Zhen Wu / / Department of Mathematics, Emory University, Atlanta (GA) USA; Alessandro Veneziani / / Department of Mathematics/Department of Computer Science, Emory University, Atlanta (GA) USA;
9112	Analysis and application of a fractional SIR model constructed with Mittag-Leffler distribution	Numerical modeling of infectious diseases: COVID-19 and beyond	Noemi Zeraick Monteiro / / Universidade Federal de Juiz de Fora; Prof. Dr. Sandro Rodrigues Mazorche / / Universidade Federal de Juiz de Fora;
9484	ANALYSIS OF A LOGISTIC MODEL FOR THE WAVES OF COVID-19 IN BRAZIL UNDER THE PRESENCE OF UNCERTAINTIES	Numerical modeling of infectious diseases: COVID-19 and beyond	Michel Tosin / / Instituto de Matemática e Estatística, Universidade do Estado do Rio de Janeiro, RJ; Americo Cunha Jr / / Instituto de Matemática e Estatística, Universidade do Estado do Rio de Janeiro, RJ; Flávio C. Coelho / / Escola de Matemática Aplicada, Fundação Getúlio Vargas, RJ;

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9645	FRAMEWORK FOR ENHANCING THE ESTIMATION OF MODEL PARAMETERS FOR DATA WITH A HIGH LEVEL OF UNCERTAINTY	Numerical modeling of infectious diseases: COVID-19 and beyond	Gustavo B. Libotte / / National Laboratory for Scientific Computing; Lucas dos Anjos / / National Laboratory for Scientific Computing; Regina C. Almeida / / National Laboratory for Scientific Computing; Sandra M. C. Malta / / National Laboratory for Scientific Computing; Renato S. Silva / / National Laboratory for Scientific Computing;
9649	LEAST-SQUARES FINITE ELEMENT METHOD FOR A MESO-SCALE MODEL OF THE SPREAD OF COVID-19	Numerical modeling of infectious diseases: COVID-19 and beyond	Fleurianne Bertrand / / University of Twente;
9463	MODELS OF EVOLUTION BASED ON DATA FOR SPATIO-TEMPORAL ANALYSIS OF COVID-19 IN BRAZILIAN STATES	Numerical modeling of infectious diseases: COVID-19 and beyond	Rachel M. Lucena / / Institute of Mathematics and Statistics, Rio de Janeiro State University; Americo Cunha Jr / / Institute of Mathematics and Statistics, Rio de Janeiro State University;
9397	Parameter calibration and uncertainty quantification in an SEIR-type COVID-19 model using approximate Bayesian computation	Numerical modeling of infectious diseases: COVID-19 and beyond	Thiago G. Ritto / / Universidade Federal do Rio de Janeiro; Americo Cunha Jr / / Universidade do Estado do Rio de Janeiro; David A. W. Barton / / University of Bristol;
9096	STRUCTURAL ANALYSIS OF ANTIVIRAL N95 FILTERING FACEPIECE RESPIRATOR VESTA	Numerical modeling of infectious diseases: COVID-19 and beyond	Caio B. / / Department of Mechanical Engineering, University of Brasília; Léo C. / / Department of Mechanical Engineering, University of Brasília; Matheus A. / / Department of Mechanical Engineering, University of Brasília; Braion B. Moura / / Department of Mechanical Engineering, University of Brasília; M. R. Machado / / Department of Mechanical Engineering, University of Brasília;
9449	UNDERSTANDING THE R_0 OF EPIDEMICS	Numerical modeling of infectious diseases: COVID-19 and beyond	Harisankar Ramaswamy / / Viterbi School of Engineering, University of Southern California; Assad A. Oberai / / Viterbi School of Engineering, University of Southern California; Mitul Luhar / / Viterbi School of Engineering, University of Southern California; Yannis C. Yortsos / / Viterbi School of Engineering, University of Southern California;
9223	USE OF MOBILE PHONE SENSING DATA TO ESTIMATE RESIDENCE TIME IN URBAN PATCHES DURING THE COVID-19 EPIDEMIC: THE CASE OF THE 2020 OUTBREAK IN HERMOSILLO, MEXICO.	Numerical modeling of infectious diseases: COVID-19 and beyond	L. Leticia Ramirez-Ramirez / / Dep Probability and Statistics, Centro de Investigación en Matemáticas; José A. Montoya / / Dep Mathematics, Universidad de Sonora; Tan Bui-Thanh / / Dep Aerospace Eng and Eng Mechanics/Oden Inst for Comp Eng and Sci, UT Austin; Jesus Fierro Espinoza / / Dep Mathematics, Universidad de Sonora;

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9411	COMPUTATIONAL MODELING OF SMALL-SCALE FLOW OF THIXOTROPIC YIELD-STRESS MATERIALS	Numerical modeling of Non-Newtonian fluid flows	Carlos E. Sanchez-Perez / / Department of Mechanical Engineering, LMMP-Group, Pontifical Catholic University of Rio de Janeiro (PUC-Rio); Danmer Maza / / Department of Mechanical Engineering, LMMP-Group, Pontifical Catholic University of Rio de Janeiro (PUC-Rio); Paulo R. de Souza Mendes / / Department of Mechanical Engineering, GReo-Group, Pontifical Catholic University of Rio de Janeiro (PUC-Rio); Marcio S. Carvalho / / Department of Mechanical Engineering, LMMP-Group, Pontifical Catholic University of Rio de Janeiro (PUC-Rio);
10012	DYNAMIC NON-RESIDUAL VMS STABILIZED FORMULATION FOR GENERALIZED NON-NEWTONIAN FLUIDS: ANISOTROPIC SPACE-TIME DISCRETIZATION AND TURBULENT FLOWS	Numerical modeling of Non-Newtonian fluid flows	Amaru González / / Dept. of Mechanical Engineering, University of Santiago de Chile; Ernesto Castillo / / Dept. of Mechanical Engineering, University of Santiago de Chile; Marcela Cruchaga / / Dept. of Mechanical Engineering, University of Santiago de Chile;
9981	INFLUENCE OF THE RATIO OF DRILL BIT SIZE AND CONDUCTOR CASING DIAMETER ON JETTING WITH LATTICE BOLTZMANN METHOD	Numerical modeling of Non-Newtonian fluid flows	Anderson F. de C. Gomes / / Laboratory of Scientific Computing and Visualization, Federal University of Alagoas; Beatriz R. Barboza / / Laboratory of Scientific Computing and Visualization, Federal University of Alagoas; Eduardo M. A. Pacheco / / Center of Technology, Federal University of Alagoas; Joyce K. F. Tenório / / Laboratory of Scientific Computing and Visualization, Federal University of Alagoas; João P. L. Santos / / Center of Technology, Federal University of Alagoas; Fábio S. Cutrim / / Petrobras; Rafael Dias / / Petrobras;
10011	REDUCED ORDER MODELS OF GENERALIZED NEWTONIAN FLUIDS	Numerical modeling of Non-Newtonian fluid flows	R. Reyes / / École Polytechnique Fédérale de Lausanne (EPFL), Switzerland; A. Tello / / Centro de Ingeniería Avanzada, Investigación y Desarrollo (CIAID), Bogotá, Colombia; E. Castillo / / Universidad de Santiago de Chile, Av Libertador Bernando O'Higgins 3363, Santiago, Chile; O. Ruz / / Universidad de Santiago de Chile, Av Libertador Bernando O'Higgins 3363, Santiago, Chile;
9528	A COMPARISON OF OPTIMIZATION ALGORITHMS FOR THE PRE-SIZING OF REINFORCED CONCRETE STRUCTURES	Optimization in Structural and Reservoir Engineering	Danilo Menezes Santos / / Departament of Civil Engineering, Federal University of Sergipe; Jorge Carvalho Costa / / Departament of Civil Engineering, Federal University of Sergipe; Nilma Fontes de Araujo Andrade / / Departament of Civil Engineering, Federal University of Sergipe;

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9444	A MULTI-SCALE MIXED METHOD FOR A TWO-PHASE FLOW IN FRACTURED RESERVOIRS CONSIDERING PASSIVE TRACER	Optimization in Structural and Reservoir Engineering	Omar Duran Triana / / Université Paris-Est; Philippe Remmy Bernard Devloo / / Universidade Estadual de Campinas; Jose Ballardo Villegas Salabarría / / Universidad Estatal de Santa Elena; Pedro Lima e Silva / / Universidade Estadual de Campinas;
9069	Approximated method of nonlinear geometric analysis applied to steel frames designed by Eurocode 3 and optimized with Genetic Algorithm	Optimization in Structural and Reservoir Engineering	Breno Dias Brêda / / Universidade Federal do Espírito Santo; Marcos Antônio Campos Rodrigues / / Universidade Federal do Espírito Santo; Elcio Cassimiro Alves / / Universidade Federal do Espírito Santo;
9418	COMPARISON OF CONSTRAINT-HANDLING METHODS FOR THE SEQUENTIAL APPROXIMATE OPTIMIZATION OF FUNCTIONALLY GRADED PLATES	Optimization in Structural and Reservoir Engineering	Leonardo G. Ribeiro / / Dept. of Structural Engineering, Federal University of Ceará; Evandro Parente Júnior / / Dept. of Structural Engineering, Federal University of Ceará; Antônio M. C. de Melo / / Dept. of Structural Engineering, Federal University of Ceará;
9759	Comparison of different optimization methods applied to steel trusses structures	Optimization in Structural and Reservoir Engineering	Luiz E. G. Mattos / / Dept. of Civil Engineering, Federal Technological University of Parana; Rodolfo K. Tessari / / Dept. of Civil Engineering, Federal Technological University of Parana;
9585	COST ANALYSIS ON THE OPTIMUM DESIGN OF PRESTRESSED DOUBLY-SYMMETRIC STEEL BEAMS	Optimization in Structural and Reservoir Engineering	Protáze Mageveske Netto / / Department of Civil Engineering, School of Mines, Federal University of Ouro Preto; Ilan Ramos Barboza / / Department of Civil Engineering, Federal University of Espírito Santo; Guilherme Gonçalves Moraes Trés / / Department of Civil Engineering, Federal University of Espírito Santo; Adenilcia Fernanda Grobério Calenzani / / Department of Civil Engineering, Federal University of Espírito Santo; Élcio Cassimiro Alves / / Department of Civil Engineering, Federal University of Espírito Santo;
9426	SURROGATE-BASED OPTIMIZATION OF FUNCTIONALLY GRADED PLATES UNDER THERMO-MECHANICAL LOADING	Optimization in Structural and Reservoir Engineering	Igor Lira Passos / / Dept. of Civil Engineering, Federal University of Ceará; Leonardo Gonçalves Ribeiro / / Dept. of Civil Engineering, Federal University of Ceará; Evandro Parente Junior / / Dept. of Civil Engineering, Federal University of Ceará; Antônio Macário Cartaxo de Melo / / Dept. of Civil Engineering, Federal University of Ceará;
9848	WELL RATES AND LOCATION OPTIMIZATION CONSIDERING GENETIC ALGORITHMS AND SURROGATE MODELS	Optimization in Structural and Reservoir Engineering	Eduarda de França Andrade / / Dept. of Civil Engineering, Federal University of Pernambuco; Silvana Maria Bastos Afonso / / Dept. of Civil Engineering, Federal University of Pernambuco; Leonardo Correia Oliveira / / Dept. of Civil Engineering, Federal University of Pernambuco; Jefferson Wellano Oliveira Pinto / / Dept. of Civil Engineering, Federal University of Pernambuco;
9710	A DEM-FEM EXPLORATORY STUDY ON THE MECHANICAL INTERACTION BETWEEN LIPID PARTICLES AND THE ENDOTHELIAL GLYCOCALYX LAYER	Particle-based methods: advances and applications in DEM, PFEM, SPH, MPM, MPS and others	Ricardo A. Andreotti / / Department of Structural and Geotechnical Engineering, University of São Paulo; Eduardo M. B. Campello / / Department of Structural and Geotechnical Engineering, University of São Paulo;
9195	A STRONG COUPLING ISPH METHOD FOR GEOMECHANICS PROBLEMS	Particle-based methods: advances and applications in DEM, PFEM, SPH, MPM, MPS and others	D.S. Morikawa / / Structural Analysis Laboratory, Kyushu University; M. Asai / / Structural Analysis Laboratory, Kyushu University;

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9919	SIMULATION OF A FREE SURFACE LAMINAR FLOW USING THE SPH METHOD	Particle-based methods: advances and applications in DEM, PFEM, SPH, MPM, MPS and others	Willian Teles Pinto / / Graduate Program in Environmental and Sanitation Engineering, Federal University of Goiás; Joel Roberto Guimarães Vasco / / Professor at School of Civil and Environmental Engineering, Federal University of Goiás;
9745	SLOPE STABILITY ANALYSIS USING ELEMENT-FREE GALERKIN METHOD AND A VISCO-PLASTIC APPROACH WITH THE SHEAR STRENGTH REDUCTION TECHNIQUE	Particle-based methods: advances and applications in DEM, PFEM, SPH, MPM, MPS and others	Leandro Hideki Simizu Yorinori / / Departamento de Métodos Numéricos em Engenharia, Universidade Federal do Paraná; Roberto Dalledone Machado / / Departamento de Métodos Numéricos em Engenharia, Universidade Federal do Paraná;
9552	THERMO-MECHANICAL ANALYSIS OF CONTINUOUS AND DISCRETE MEDIA WITH PFEM AND DEM	Particle-based methods: advances and applications in DEM, PFEM, SPH, MPM, MPS and others	Rafael Rangel / / International Center for Numerical Methods in Engineering (CIMNE), Universitat Politècnica de Catalunya (UPC); Alessandro Franci / / International Center for Numerical Methods in Engineering (CIMNE), Universitat Politècnica de Catalunya (UPC); Alejandro Cornejo / / International Center for Numerical Methods in Engineering (CIMNE), Universitat Politècnica de Catalunya (UPC); Eugenio Oñate / / International Center for Numerical Methods in Engineering (CIMNE), Universitat Politècnica de Catalunya (UPC); Francisco Zárate / / International Center for Numerical Methods in Engineering (CIMNE), Universitat Politècnica de Catalunya (UPC);
9874	UNIFIED POSITIONAL PFEM FORMULATION FOR FLUID-STRUCTURE INTERACTION PROBLEMS WITH FREE SURFACE FLOWS	Particle-based methods: advances and applications in DEM, PFEM, SPH, MPM, MPS and others	Giovane Avancini / / University of São Paulo; Sergio R. Idelsohn / / International Centre for Numerical Methods in Engineering; Rodolfo A. K. Sanches / / University of São Paulo;
9497	A BOUND-CONSTRAINED SOLVER FOR PHASE-FIELD MODELLING OF DIFFUSE FRACTURE	Phase-Field Modeling, Discretizations, and Applications	Matheus Moreno Fortes / / Structural Engineering Graduate Course, Federal University of Minas Gerais; Hugo Mouro Leão / / Structural Engineering Graduate Course, Federal University of Minas Gerais; Rafael Gollner Bayão / / Mechanical Engineering Undergraduate Course, Federal University of Minas Gerais; Lapo Gori / / Department of Structural Engineering, Federal University of Minas Gerais; Roque Luiz da Silva Pitangueira / / Department of Structural Engineering, Federal University of Minas Gerais;
10014	A high-order numerical method and improved isotherm reconstructions for the computation of multiphase flows using a phase-field approach	Phase-Field Modeling, Discretizations, and Applications	Abel Martínez / . / .; Luis Ramírez / . / .; Sofiane Khelladi / . / .; Fermín Navarrina / . / .; Xesús Nogueira / . / .;
9268	APPLICATIONS OF A NEW COMPUTATIONAL MODEL OF INTERFACE AND PHASE-FIELD FRACTURE	Phase-Field Modeling, Discretizations, and Applications	Roman Vodička / / Technical University of Košice, Faculty of Civil engineering;

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9304	IMPLEMENTATION OF BOUND-CONSTRAINED SOLVER IN PHASE-FIELD MODELLING OF FRACTURE	Phase-Field Modeling, Discretizations, and Applications	Rafael Gollner Bayao / / Mechanical Engineering Undergraduate Course, Federal University of Minas Gerais; Hugo Moura Leão / / Structural Engineering Graduate Course, Federal University of Minas Gerais; Matheus Moreno Fortes / / Structural Engineering Graduate Course, Federal University of Minas Gerais; Roque Luiz da Silva Pitangueira / / Department of Structural Engineering, Federal University of Minas Gerais; Lapo Gori / / Department of Structural Engineering, Federal University of Minas Gerais;
9271	OOP IMPLEMENTATION OF PHASE-FIELD FEM MODELS	Phase-Field Modeling, Discretizations, and Applications	Hugo Mouro Leão / / Structural Engineering Graduate course, Federal University of Minas Gerais; Matheus Moreno Fortes / / Structural Engineering Graduate course, Federal University of Minas Gerais; Rafael Gollner Bayao / / Mechanical Engineering Undergraduate Course, Federal University of Minas Gerais; Roque Luiz da Silva Pitangueira / / Dept. of Structural Engineering, Federal University of Minas Gerais; Lapo Gori / / Dept. of Structural Engineering, Federal University of Minas Gerais;
9415	PARALLEL SOLUTION OF 3D OHTA-KAWASAKI NONLOCAL PHASE FIELD MODEL IN FENICS	Phase-Field Modeling, Discretizations, and Applications	Gabriel F. Barros / / Civil Engineering, COPPE/Federal University of Rio de Janeiro; Adriano M. A. Côrtes / / NUMPEX-COMP, Federal University of Rio de Janeiro; Alvaro L. G. A. Coutinho / / Civil Engineering, COPPE/Federal University of Rio de Janeiro;
9099	PHASE-FIELD MODELS FOR DUCTILE FRACTURE: A COMPARATIVE STUDY	Phase-Field Modeling, Discretizations, and Applications	Lívia Ramos Santos Pereira / / Dept. of Structural Engineering, Federal University of Minas Gerais; Samuel Silva Penna / / Dept. of Structural Engineering, Federal University of Minas Gerais;
9581	SIMULATION OF GAS BUBBLE DYNAMICS USING A PHASE-FIELD MODEL	Phase-Field Modeling, Discretizations, and Applications	Malú Grave / / Dept. of Civil Engineering, COPPE/Federal University of Rio de Janeiro; Alvaro L.G.A. Coutinho / / Dept. of Civil Engineering, COPPE/Federal University of Rio de Janeiro;
9238	FATIGUE ANALYSIS USING THE FINITE ELEMENT METHOD	Plastic instability and fracture in ductile materials	José P. R. Junior / / Dept. of Mechanical Engineering, Federal University of Piauí; Rene Q. Rodriguez / / Dept. of Mechanical Engineering, Federal University of Santa Maria; Simone dos S. Hoefel / / Dept. of Mechanical Engineering, Federal University of Piauí; José P. R. Junior / / Dept. of Mechanical Engineering, Federal University of Piauí;
9207	STRAIN RATE EFFECTS ON THE MECHANICAL BEHAVIOR OF THICK-WALLED PRESSURIZED CYLINDERS	Plastic instability and fracture in ductile materials	Andrey Brezolin / / Department of Mechanical Engineering, Federal University of Rio Grande do Sul; Tiago dos Santos / / Department of Mechanical Engineering, Federal University of Santa Maria; Rodrigo Rossi / / Department of Mechanical Engineering, Federal University of Rio Grande do Sul; - / / -;
9573	AN EFFICIENT MARKOV CHAIN MONTE CARLO APPROACH FOR PERFORMANCE-BASED DESIGN OPTIMIZATION OF STOCHASTIC DYNAMICAL SYSTEMS	Probabilistic and Non-Traditional Approaches for Uncertainty Quantification and Robust Design	Danko Jerez / / Leibniz University, Hannover, Germany; Hector Jensen / / Federico Santa Maria Technical University, Valparaiso, Chile;

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9152	COPING WITH FUZZY FIELDS IN LINEAR STRUCTURAL MECHANICS: A REDUCED ORDER MODEL APPROACH	Probabilistic and Non-Traditional Approaches for Uncertainty Quantification and Robust Design	Nataly A. Manque / / Faculty of Engineering and Sciences, Universidad Adolfo Ibáñez, Chile; Marcos A. Valdebenito / / Faculty of Engineering and Sciences, Universidad Adolfo Ibáñez, Chile; Matthias G.R. Faes / / KU Leuven, Department of Mechanical Engineering, Belgium;
9703	EFFECT OF THE LOAD FACTOR ON THE CONSTRUCTION OF KRIGING SURROGATE MODELS FOR STRUCTURAL RELIABILITY ANALYSIS OF REDUNDANT SYSTEMS	Probabilistic and Non-Traditional Approaches for Uncertainty Quantification and Robust Design	Mariana O. Milanez / / Dept. of Civil Engineering, Federal University of Santa Catarina; Wellison J. S. Gomes / / Dept. of Civil Engineering, Federal University of Santa Catarina;
9551	ON PHILOSPOHY AND MATHEMATICS OF FAILURE PROBABILITY ESTIMATION	Probabilistic and Non-Traditional Approaches for Uncertainty Quantification and Robust Design	Karl Breitung / / TU Munich;
9146	REINFORCEMENT LEARNING FOR MODEL SELECTION APPLIED TO A NONLINEAR DYNAMICAL SYSTEM	Probabilistic and Non-Traditional Approaches for Uncertainty Quantification and Robust Design	Thiago G. Ritto / / Universidade Federal do Rio de Janeiro; Sandor Beregi / / University of Bristol; David A. W. Barton / / University of Bristol;
9170	RELIABILITY ANALYSIS OF A CLASS OF SERIES SYSTEMS BY MULTIDOMAIN LINE SAMPLING	Probabilistic and Non-Traditional Approaches for Uncertainty Quantification and Robust Design	Marcos A. Valdebenito / / Faculty of Engineering and Sciences, Universidad Adolfo Ibáñez, Chile; Pengfei Wei / / School of Mechanics, Civil Engineering and Architecture, Northwestern Polytechnical University, China; Jingwen Song / / Advanced Research Laboratories, Tokyo City University, Japan; Michael Beer / / Institute for Risk and Reliability, Leibniz University Hannover, Germany; Matteo Broggi / / Institute for Risk and Reliability, Leibniz University Hannover, Germany;
9791	RISK OPTIMIZATION OF RC BEAM UNDER COLUMN LOSS SCENARIO	Probabilistic and Non-Traditional Approaches for Uncertainty Quantification and Robust Design	Lucas da Rosa Ribeiro / / Department of Structural Engineering, University of São Paulo; André Teófilo Beck / / Department of Structural Engineering, University of São Paulo;
9209	ROBUST DESIGN OF PIEZOELECTRIC ENERGY HARVESTING DEVICES USING MULTIOBJECTIVE OPTIMIZATION TECHNIQUES	Probabilistic and Non-Traditional Approaches for Uncertainty Quantification and Robust Design	Paulo H. Martins / / Department of Mechanical Engineering, São Carlos School of Engineering, University of São Paulo; Marcelo A. Trindade / / Department of Mechanical Engineering, São Carlos School of Engineering, University of São Paulo; Paulo S. Varoto / / Department of Mechanical Engineering, São Carlos School of Engineering, University of São Paulo;
9891	ROBUST PROBABILISTIC OPTIMIZATION OF A QUARTER CAR SUSPENSION WITH MULTI-OBJECTIVE FRAMEWORK AND GRADIENT BASED APPROXIMATION	Probabilistic and Non-Traditional Approaches for Uncertainty Quantification and Robust Design	Ewerton Grotti / / Grupo de Mecanica Aplicada (GMAp), Universidade Federal do Rio Grande do Sul; José Gilberto Picoral Filho / / Grupo de Mecanica Aplicada (GMAp), Universidade Federal do Rio Grande do Sul; Herbert Martins Gomes / / Grupo de Mecanica Aplicada (GMAp), Universidade Federal do Rio Grande do Sul;
9587	Time dependent reliability: a time series point of view	Probabilistic and Non-Traditional Approaches for Uncertainty Quantification and Robust Design	Henrique M. Kroetz / / Federal University of Paraná; Eduardo M. de Medeiros / / Federal University of Paraíba; André J. Torii / / Federal University for Latin American Integration;

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9739	TRUSS TOPOLOGY OPTIMIZATION CONSIDERING UNCERTAINTIES IN THE APPLIED LOADS AND PROGRESSIVE COLLAPSE	Probabilistic and Non-Traditional Approaches for Uncertainty Quantification and Robust Design	Lucas Araújo R. da Silva / / Department of Structural Engineering, University of São Paulo; André T. Beck / / Department of Structural Engineering, University of São Paulo;
9825	ULTIMATE STRENGHT OPTIMIZATION OF STIFFENED PANELS BASED ON A META-MODEL FOR PREDICTION BY ARTIFICIAL NEURAL NETWORKS	Probabilistic and Non-Traditional Approaches for Uncertainty Quantification and Robust Design	João P. S. Lima / / Department of Civil Engineering, University of Brasilia; Paula C. Ornelas / / Department of Civil Engineering, University of Brasilia; Francisco Evangelista Junior / / Department of Civil Engineering, University of Brasilia;
9188	UNCERTAINTY AND GLOBAL SENSITIVITY ANALYSIS OF WIND TURBINES POWER PRODUCTION IN NON-IDEAL CONDITIONS	Probabilistic and Non-Traditional Approaches for Uncertainty Quantification and Robust Design	Bruno Mitsuo Mazetto / / Dept. of Mechanical Engineering, Federal University of Rio de Janeiro; Thiago Gamboa Ritto / / Dept. of Mechanical Engineering, Federal University of Rio de Janeiro;
9124	ESTIMATION OF MASS, DAMPING AND STIFFNESS MATRICES FROM COMPLEX FREQUENCY RESPONSE AND REAL FREQUENCY RESPONSE MATRICES	Recent advances in inverse problems	Marco Aurélio Chaves Ferro / / Fluminense Federal University; Webe João Mansur / / COPPE/UFRJ - Civil Engineering Department;
9362	ESTIMATION OF THE MASS, STIFFNESS AND DAMPING MATRICES IN THE FREQUENCY-DOMAIN BY NONLINEAR REGRESSION TECHNIQUES	Recent advances in inverse problems	Marco Aurélio Chaves Ferro / / Fluminense Federal University; Webe João Mansur / / COPPE/Federal University of Rio de Janeiro - Department of Civil Engineering;
9289	INVERSION OF AN EFFECTIVE SEISMIC FORCE AT A DOMAIN REDUCTION METHOD (DRM) BOUNDARY AND RECONSTRUCTION OF WAVE RESPONSES INSIDE THE DRM BOUNDARY	Recent advances in inverse problems	Bruno P. Guidio / / School of Engineering and Technology, Central Michigan University; Chanseok Jeong / / School of Engineering and Technology, Central Michigan University;
9428	RESERVOIR PROPERTIES ESTIMATION BASED ON PRESSURE AND TEMPERATURE DATA USING ES-MDA	Recent advances in inverse problems	Vinicius Mattoso R. Silva / / Dept. of Mechanical Eng, PUC-Rio; Danmer Maza / / Dept. of Mechanical Eng, PUC-Rio; Abelardo Barreto / / Dept. of Mathematics, PUC-Rio; Marcio S. Carvalho / / Dept. of Mechanical Eng, PUC-Rio;
9758	A COUPLED HDG-BIE METHOD FOR A FREE BOUNDARY PROBLEM ARISING IN MAGNETIC PLASMA CONFINEMENT	Recent developments in discontinuous Galerkin methods	Nestor Sánchez / / Department of Mathematical Engineering. University of Concepción, Chile.; Tonatiuh Sánchez-Vizuet / / Department of Mathematics, The University of Arizona, USA.; Manuel Solano / / Department of Mathematical Engineering. University of Concepción, Chile.;
9344	A ERROR ANALYSIS OF AN UNFITTED HDG METHOD FOR SEMI-LINEAR ELLIPTIC PROBLEMS	Recent developments in discontinuous Galerkin methods	Nestor A. Sánchez Goycochea. / / Centro de Investigación en Ingeniería Matemática (CI2MA), Universidad de Concepción; Manuel Solano Palma / / Centro de Investigación en Ingeniería Matemática (CI2MA), Universidad de Concepción; Tonatiuh Sánchez Vizuet / / Department of Mathematics, The University of Arizona, USA.;
9177	A UNIFIED ERROR ANALYSIS OF HDG METHODS FOR THE STATIC MAXWELL`S EQUATIONS	Recent developments in discontinuous Galerkin methods	Shukai Du / / University of Wisconsin-Madison;

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9084	AN ADJOINT-BASED SUPER-CONVERGENT GALERKIN APPROXIMATION OF EIGENVALUES	Recent developments in discontinuous Galerkin methods	Bernardo Cockburn / / University of Minnesota; Shiqiang Xia / / University of Minnesota;
9741	An efficient two-stage form of the Crank-Nicolson scheme with application to an HDG method for poroelasticity	Recent developments in discontinuous Galerkin methods	Ismael S. Ledoino / / Laboratório Nacional de Computação Científica - LNCC; Abimael F. D. Loula / / Laboratório Nacional de Computação Científica - LNCC; Denis D. O. Hoyos / / Laboratório Nacional de Computação Científica - LNCC;
9258	AN HDG METHOD FOR STOKES FLOW ON DISSIMILAR NON-MATCHING MESHES	Recent developments in discontinuous Galerkin methods	Jaime R. Manríquez / / Centre for Mathematical Sciences, Faculty of Engineering, Lund University;
9281	AN HP-HDG SCHEME FOR ANISOTROPIC DIFFUSIVITY	Recent developments in discontinuous Galerkin methods	Geonyeong Lee / / Dept. of Aerospace Engineering and Engineering Mechanics, University of Texas at Austin; Jau-Uei Chen / / Dept. of Aerospace Engineering and Engineering Mechanics, University of Texas at Austin; Tan Bui-Thanh / / Dept. of Aerospace Engineering and Engineering Mechanics, University of Texas at Austin;
9701	HYBRID DISCONTINUOUS GALERKIN METHODS FOR ELLIPTIC PROBLEMS BASED ON A LEAST-SQUARES VARIATIONAL PRINCIPLE	Recent developments in discontinuous Galerkin methods	Diego T. Volpatto / / National Laboratory for Scientific Computing (LNCC/Brazil); Antônio T. A. Gomes / / National Laboratory for Scientific Computing (LNCC/Brazil); Abimael F. D. Loula / / National Laboratory for Scientific Computing (LNCC/Brazil);
9284	PRECONDITIONING FOR HDG DISCRETIZATIONS OF THE STOKES EQUATIONS	Recent developments in discontinuous Galerkin methods	Sander Rhebergen / / Dept. of Applied Mathematics, University of Waterloo; Garth N. Wells / / Dept. of Engineering, University of Cambridge;
9390	SYMPLECTIC HDG METHODS FOR WAVE PROPAGATION	Recent developments in discontinuous Galerkin methods	Manuel Sanchez / / Institute for Mathematical and Computational Engineering, Pontificia Universidad Catolica, Chile; Bernardo Cockburn / / School of Mathematics, University of Minnesota; Ngoc-Cuong Nguyen / / Department of Aeronautics and Astronautics, MIT, USA; Jaime Peraire / / Department of Aeronautics and Astronautics, MIT, USA;
9266	UNIFORM BLOCK DIAGONAL PRECONDITIONERS FOR DIVERGENCE-CONFORMING HDG METHODS FOR THE GENERALIZED STOKES PROBLEM AND LINEAR ELASTICITY	Recent developments in discontinuous Galerkin methods	Guosheng Fu / / Department of Applied and Computational Mathematics and Statistics, University of Notre Dame; Wenzheng Kuang / / Department of Applied and Computational Mathematics and Statistics, University of Notre Dame;
9852	A DESIGNING METHODOLOGY FOR LIGHTWEIGHT BICYCLE FRAMES USING THE TOPOLOGY OPTIMIZATION METHOD	Research Beginners	Daniel Milbrath de Leon / / Dept of Mechanical Engineering, UFRGS; Jakson Manfredini Vassoler / / Dept of Mechanical Engineering, UFRGS; Henrique Gomes Dadda / / Dept of Mechanical Engineering, UFRGS;
9672	A GENERAL PURPOSE LIBRARY FOR SOLVING MULTIPHYSICS PROBLEMS	Research Beginners	Gustavo Paul Exel / / Mechanical Engineering Department, Federal University of Santa Catarina; Hermínio Tasinafo Honório / / Mechanical Engineering Department, Federal University of Santa Catarina; Clovis R. Maliska / / Mechanical Engineering Department, Federal University of Santa Catarina;

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9318	ALGORITHM FOR EXTRACTING POINTS FROM IMAGES: IRREGULAR CONTOURS	Research Beginners	Rafael F. Casamaximo / / Dept. of Computer Science, State University of Londrina; Neyva M. L. Romeiro / / Dept. of Math, State University of Londrina; Pedro Z. da Silva / / Dept. of Computer Science, State University of Londrina; Iury P. de Souza / / Dept. of Computer Science, State University of Londrina; Júllia T. A. da Silva / / Dept. of Computer Science, State University of Londrina;
9936	ANALYSIS OF DYE CONCENTRATION WITH IMAGE ANALYSIS	Research Beginners	Yasmim Meirelles / / Departamento de Engenharia Química , Universidade Federal de São João del Rei; William M. Oliveira / / CELTA - Centro de Estudos em Engenharia Eletrônica e Automação, Universidade Federal de São João del-Rei,; Jorge D. A. Bellido / / Departamento de Engenharia Química, Universidade Federal de São João del Rei; Mario S. J. Cupertino / / CELTA - Centro de Estudos em Engenharia Eletrônica e Automação, Universidade Federal de São João del-Rei,; LIsbeth Z. Melgar / / Departamento de Engenharia Química, Universidade Federal de São João del Rei; Heber Tormentino / / Departamento das Engenharias de Telecomunicações e de Mecatrônica, Universidade Federal de São João del-Rei;
8936	COMPARATIVE ANALYSIS OF THE SEISMIC BEHAVIOR IN LATIN AMERICA COUNTRIES USING RESPONSE SPECTRA	Research Beginners	Juliana Ferreira Novaes / / Civil Engineering, Federal University of Latin American Integration (UNILA); Scarlet Karina Montilla Barrios / / Civil Engineering, Federal University of Latin American Integration (UNILA); Ulises Bobadilla Guadalupe / / Civil Engineering, Federal University of Latin American Integration (UNILA);
9779	COMPARATIVE STUDY FOR EVALUATING THE GRADIENT OF THE FAILURE FUNCTION OF WELLS DRILLED ON SALT ROCKS	Research Beginners	Luiz E. da Silva Filho / / LCCV, Centro de Tecnologia, Universidade Federal de Alagoas; Catarina N. A. Fernandes / / LCCV, Centro de Tecnologia, Universidade Federal de Alagoas; Ricardo A. Fernandes / / LCCV, Centro de Tecnologia, Universidade Federal de Alagoas; William W. M. Lira / / LCCV, Centro de Tecnologia, Universidade Federal de Alagoas; Felipe L. de Oliveira / / CENPES/PDIDP/EPOCOS/PERF, Petróleo Brasileiro;

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9355	COMPUTATIONAL ANALYSIS OF THE MECHANICAL BEHAVIOR OF SOIL-CEMENT MIXTURES APPLIED TO SHALLOW FOUNDATION OF SMALL BUILDING	Research Beginners	Everton A. B. Ferreira / / Federal Institute of Education, Science and Technology of Alagoas - Campus Palmeira dos Índios; Luís E. N. Costa / / Federal Institute of Education, Science and Technology of Alagoas - Campus Palmeira dos Índios; Juliana L. B. de Carvalho / / Federal Institute of Education, Science and Technology of Alagoas - Campus Palmeira dos Índios; Jesimiel P. Cavalcante / / Federal Institute of Education, Science and Technology of Alagoas - Campus Palmeira dos Índios; Eliédson R. de Carvalho / / Federal Institute of Education, Science and Technology of Alagoas - Campus Palmeira dos Índios;
9943	DEVELOPMENT OF A LOW COST DIP-COATING EQUIPMENT	Research Beginners	Freud Attilio / / Departamento das Engenharias de Telecomunicações e de Mecatrônica, Universidade Federal de São João del-Rei; Jorge D. A. Bellido / / Departamento de Engenharia Química , Universidade Federal de São João del Rei; Lisbeth Z. Melgar / / Departamento de Engenharia Química , Universidade Federal de São João del Rei; Heber Tormentino / / Departamento das Engenharias de Telecomunicações e de Mecatrônica, Universidade Federal de São João del-Rei; Mário C. .S. Júnior / / Departamento das Engenharias de Telecomunicações e de Mecatrônica, Universidade Federal de São João del-Rei;
9811	Development of a web tool for analysis of fatigue life of free span pipelines	Research Beginners	Matheus A. Miranda / / LCCV, Center of Technology, Federal University of Alagoas; Renato R. L. Santos / / LCCV, Center of Technology, Federal University of Alagoas; Josué D. Silva Neto / / LCCV, Center of Technology, Federal University of Alagoas; Emerson A. F. Santos / / LCCV, Center of Technology, Federal University of Alagoas; Eduardo S. S. Silveira / / LCCV, Center of Technology, Federal University of Alagoas;
9213	EVALUATION OF ENGINE-INDUCED VIBRATION LEVELS ON A BAJA SAE FRAME: A PILOT COMFORT IMPROVEMENT ASSESSMENT USING THE FINITE ELEMENT METHOD	Research Beginners	João Vítor Ferreira Magalhães Silva / / Dept. of Mechanical Engineering, Federal University of Bahia; Guilherme Ribeiro Begnini / / Dept. of Mechanical Engineering, Federal University of Bahia;

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9599	EVALUATION OF INTERNAL FORCES IN COLD-FORMED STEEL TRUSS EXPOSED TO FIRE	Research Beginners	Fernanda Freitas / / Departamento de Tecnologia em Engenharia Civil, Computação, Automação, Telemática e Humanidades (DTECH), Universidade Federal de São João del-Rei (UFSJ); Dalilah Pires / / Departamento de Tecnologia em Engenharia Civil, Computação, Automação, Telemática e Humanidades (DTECH), Universidade Federal de São João del-Rei (UFSJ); Igor Rodrigues / / Departamento de Tecnologia em Engenharia Civil, Computação, Automação, Telemática e Humanidades (DTECH), Universidade Federal de São João del-Rei (UFSJ); Rafael C. Barros / / Programa de Pós-graduação em Engenharia Civil - PROPEC, Departamento de Engenharia Civil, Escola de Minas, Universidade Federal de Ouro Preto (UFOP); Ricardo A. M. Silveira / / Programa de Pós-graduação em Engenharia Civil - PROPEC, Departamento de Engenharia Civil, Escola de Minas, Universidade Federal de Ouro Preto (UFOP);
9419	EVALUATION OF PATIENT-SPECIFIC SIMULATIONS USING SIMPLIFIED CELL MODELS	Research Beginners	Amanda Ozava Fernandes / / Centro Federal de Educação Tecnológica de Minas Gerais - CEFET-MG Campus Leopoldina; Mariana Machado de Andrade / / Centro Federal de Educação Tecnológica de Minas Gerais - CEFET-MG Campus Leopoldina; Joventino de Oliveira Campos / / Departamento de Computação e Mecânica - CEFET-MG Campus Leopoldina;
9476	EVALUTION OF INTERNAL FORCE IN A PLANE STEEL FRAME UNDER FIRE SITUATION	Research Beginners	Maria Eduarda S. Piccolo / / Departamento de Tecnologia em Engenharia Civil, Computação, Automação, Telemática e Humanidades (DTECH), Universidade Federal de São João del-Rei (UFSJ); Dalilah Pires / / Departamento de Tecnologia em Engenharia Civil, Computação, Automação, Telemática e Humanidades (DTECH), Universidade Federal de São João del-Rei (UFSJ); Rafael C. Barros / / Programa de Pós-graduação em Engenharia Civil - PROPEC, Departamento de Engenharia Civil, Escola de Minas, Universidade Federal de Ouro Preto (UFOP); Ricardo A. M. Silveira / / Programa de Pós-graduação em Engenharia Civil - PROPEC, Departamento de Engenharia Civil, Escola de Minas, Universidade Federal de Ouro Preto (UFOP);
9858	FATIGUE ANALYSIS FOR A STEERING KNUCKLE OF A BAJA SAE VEHICLE	Research Beginners	Gustavo C. Rodrigues / / Dept. of Mechanical Engineering, Federal University of Rio Grande do Sul; Heberton Rodeski / / Dept. of Mechanical Engineering, Federal University of Rio Grande do Sul; Daniel M. de Leon / / Dept. of Mechanical Engineering, Federal University of Rio Grande do Sul; Rogério J. Marczak / / Dept. of Mechanical Engineering, Federal University of Rio Grande do Sul;
9333	GRAPHICAL USER INTERFACE (GUI) APPLICATION TO PERFORM STABILITY ANALYSIS IN ANSYS	Research Beginners	Rafael V. de Oliveira / / Department of Civil Engineering, Universidade Federal Fluminense; Janine D. Vieira / / Department of Civil Engineering, Universidade Federal Fluminense;

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9591	INFLUENCE OF NON-LINEAR DAMPING ON NON-LINEAR STRUCTURES VIBRATIONS	Research Beginners	Thiago Rodrigues Carvalho / / EECA, Universidade Federal de Goiás; Zenón José Guzmán Nuñez Del Prado / / EECA, Universidade Federal de Goiás;
9314	ISOGEOMETRIC ANALYSIS OF FUNCTIONALLY GRADED PLATES USING DIFFERENT MICROMECHANICAL MODELS	Research Beginners	Renan Melo Barros / / Universidade Federal do Ceará; Evandro Parente Junior / / Universidade Federal do Ceará;
9301	KINEMATIC ANALYSIS OF MECHANISMS OF ONE DEGREE OF FREEDOM USING THE SOLIDWORKS AND MATLAB	Research Beginners	Tiago Suede Miranda / / Department of Mechanical engineering, Salvador University; Vladimir Topázio Barbosa / / Department of Mechanical engineering, UFBA (Federal University of Bahia); Paula Frassinetti Cavalcante / / Department of Mechanical engineering, UFBA (Federal University of Bahia);
9743	MACHINE LEARNING STRATEGY IN COMPARISON TO PHYSICS-BASED MODELS TO PREDICT THE RESILIENT MODULUS RESPONSE OF SOIL-POLYMER COMPOSITES UNDER TRIAXIAL AND CYCLIC LOADS	Research Beginners	Ruan de Alencar Carvalho / / Department of Civil and Environmental engineering, University of Brasilia; Francisco Evangelista Jr. / / Department of Civil and Environmental engineering, University of Brasilia;
9976	MODELING BOUNDARY ELEMENT METHOD FOR THE ANALYSIS OF BEAMS COMPOSED OF DIFFERENT MATERIALS	Research Beginners	Eduarda Abreu Vanderlei de Souza Silva / / Civil Engineering-CTEC, Federal University of Alagoas; João Carlos Cordeiro Barbirato / / Technology Center, Federal University of Alagoas; Eduarda Abreu Vanderlei de Souza Silva / / Civil Engineering-CTEC, Federal University of Alagoas;
9975	MODELING OF BEAMS WITH WEB OPENINGS USING THE BOUNDARY ELEMENT METHOD	Research Beginners	MAYLLA GUEDES CABRAL / / Civil Engineering-CTEC, Federal University of Alagoas; Valéria Patrícia da Silva Alcântara / / Civil Engineering-CTEC, Federal University of Alagoas; João Carlos Cordeiro Barbirato / / Technology Center, Federal University of Alagoas;
9832	MODELING STRATEGIES ON THE GEOLOGICAL FORMATION FOR APB CALCULUS IN OIL WELLS.	Research Beginners	Gilberto Lucas Leandro dos Santos / / Laboratório de Computação Científica e Visualização-LCCV, Universidade Federal de Alagoas; João Paulo Lima Santos / / Laboratório de Computação Científica e Visualização-LCCV, Universidade Federal de Alagoas;

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9773	MULTI-OBJECTIVE STRUCTURAL DESIGN OPTIMIZATION OF A WIND TURBINE BLADE	Research Beginners	Lucas de Landa Couto / / Dept. of Mechanical Engineering, Federal University of Juiz de Fora; Nícolas Estanislau Moreira / / Dept. of Computational and Applied Mechanics, Federal University of Juiz de Fora; Afonso Celso de Castro Lemonge / / Dept. of Computational and Applied Mechanics, Federal University of Juiz de Fora; Patrícia Habib Hallak / / Dept. of Computational and Applied Mechanics, Federal University of Juiz de Fora;
9171	NUMERICAL SIMULATION OF WIND EFFECTS ON THE CHURCH OF SAINT FRANCIS OF ASSISI BY OSCAR NIEMEYER	Research Beginners	Guilherme S. Teixeira / / Institute of Exact and Earth Sciences, Federal University of Mato Grosso, Barra do Garças, Mato Grosso, 78607-059, BR.; Marco D. de Campos / / Institute of Exact and Earth Sciences, Federal University of Mato Grosso, Barra do Garças, Mato Grosso, 78607-059, BR.;
9174	NUMERICAL STUDY OF THE WIND EFFECT ON SCALLOP DOMES	Research Beginners	Camila C. Guerra / / Instituto de Ciências Exatas e da Terra, Universidade Federal de Mato Grosso; Marco D. de Campos / / Instituto de Ciências Exatas e da Terra, Universidade Federal de Mato Grosso;
9796	OPTIMIZING THE VOLUME OF REINFORCED CONCRETE FLOORS USING GRID ANALOGY	Research Beginners	João Geraldo Menezes de Oliveira Neto / / Department of Civil Engineering, Federal University of Sergipe; Jorge Carvalho Costa / / Department of Civil Engineering, Federal University of Sergipe;
9801	PARAMETRIC STUDY OF A TUBING STRING BUCKLING MODEL WITH FRICTION IN PETROLEUM WELLS	Research Beginners	Otávio B. A. Rodrigues / / Laboratory of Scientific Computing and Visualization, Federal University of Alagoas; João P. L. Santos / / Laboratory of Scientific Computing and Visualization, Federal University of Alagoas;
9111	PROGRAM FOR FINITE ELEMENT ANALYSIS OF GRILLAGES WITH CIRCUMFERENTIAL ARC-SHAPED AND STRAIGHT ELEMENTS	Research Beginners	Humberto Moura Lima / / Departamento de Construção Civil, Instituto Federal do Maranhão; Luis Fernando Sampaio Soares / / Departamento de Construção Civil, Instituto Federal do Maranhão;
9922	PYTHON ALGORITHM FOR CALCULATING INTERNAL FORCES AND DISPLACEMENTS IN BEAMS USING THE FINITE ELEMENT METHOD	Research Beginners	Diego Reis Figueira / / Superior School of Technology, State University of Amazonas; Maria do Socorro Martins Sampaio / / Superior School of Technology, State University of Amazonas;
9778	SENSITIVITY ANALYSIS OF VISCOUS PROPERTIES OF SALT ROCKS DURING OIL WELL DRILLING	Research Beginners	Luiz E. da Silva Filho / / LCCV, Centro de Tecnologia, Universidade Federal de Alagoas; Catarina N. A. Fernandes / / LCCV, Centro de Tecnologia, Universidade Federal de Alagoas; Ricardo A. Fernandes / / LCCV, Centro de Tecnologia, Universidade Federal de Alagoas; William W. M. Lira / / LCCV, Centro de Tecnologia, Universidade Federal de Alagoas; Felipe L. de Oliveira / / CENPES/PDIDP/EPOCOS/PERF, Petróleo Brasileiro;
9961	SIMULATING SUBMARINE LANDSLIDES COMBINING THE MATERIAL POINT METHOD WITH A SPATIALLY ADAPTIVE SCHEME TO IMPROVE NUMERICAL ACCURACY	Research Beginners	Lucas D. F. Lino / / Undergraduate Student, Center of Technology, Federal University of Alagoas; Tiago P. S. Lôbo / / Researcher, Laboratory of Scientific Computing and Visualization;

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9134	STATIC STOCHASTIC ANALYSIS IN CYLINDRICAL PANNELS' GEOMETRY	Research Beginners	João Pedro Xavier Freitas / / Federal University of Goiás; Renata Machado Soares / / Federal University of Goiás; Frederico Martins Alves da Silva / / Federal University of Goiás;
9655	STATIONARY EVALUATION OF CPTU DATA IN BRAZILIAN MARINE CLAY	Research Beginners	Adlehr G. de C. Oliveira / / Laboratório de Computação Científica e Visualização, Universidade Federal de Alagoas; Christiano A. F. Várady Filho / / Laboratório de Computação Científica e Visualização, Universidade Federal de Alagoas;
9468	STRUCTURAL RELIABILITY FOR THE DESIGN OF RACK COLUMNS USING THE DIRECT STRENGTH METHOD	Research Beginners	Marcílio S. R. Freitas / / Departamento de Engenharia Civil, Escola de Minas, Universidade Federal de Ouro Preto, Campus Universitário Morro do Cruzeiro, 35400-000, Ouro Preto, Minas Gerais, Brasil; Victor A. M. de Faria / / Departamento de Engenharia Civil, Escola de Minas, Universidade Federal de Ouro Preto, Campus Universitário Morro do Cruzeiro, 35400-000, Ouro Preto, Minas Gerais, Brasil;
9838	STUDY OF THE MAXIMUM WIND SPEEDS AND METEOROLOGICAL CHARACTERISTICS IN PARAGUAY IN ORDER TO DIFFERENTIATE SYNOPTIC AND NON-SYNOPTIC EVENTS, FOR A FUTURE UPDATE OF THE NP-196.	Research Beginners	Álvaro J. Martínez / / Facultad de Ingeniería, Universidad Nacional de Asunción; Federico D. Marín / / Facultad de Ingeniería, Universidad Nacional de Asunción; Fulgencio A. Aquino / / Laboratorio de Mecánica Computacional, Facultad de Ingeniería, Universidad Nacional de Asunción; María A. Arévalos / / Laboratorio de Mecánica Computacional, Facultad de Ingeniería, Universidad Nacional de Asunción;
9165	THE STATIC STRUCTURAL ANALYSIS OF A HISTORICAL MASONRY BUILDING AT CURITIBA, PR.	Research Beginners	Fornajeiro, Henrique C. da Silva / / Federal University of Paraná; Gavassoni, Elvidio / / CESEC, Federal University of Paraná;
9478	Thermal Analysis of Steel Cross Section at Different Fire Exposure Conditions and Analysis Methods	Research Beginners	Lavínia L. M. Damasceno / / Departamento de Tecnologia em Engenharia Civil, Computação, Automação, Telemática e Humanidades (DTECH), Universidade Federal de São João del-Rei (UFSJ); Dalilah Pires / / Departamento de Tecnologia em Engenharia Civil, Computação, Automação, Telemática e Humanidades (DTECH), Universidade Federal de São João del-Rei (UFSJ); Rafael C. Barros / / Programa de Pós-graduação em Engenharia Civil - PROPEC, Departamento de Engenharia Civil, Escola de Minas, Universidade Federal de Ouro Preto (UFOP); Ricardo A. M. Silveira / / Programa de Pós-graduação em Engenharia Civil - PROPEC, Departamento de Engenharia Civil, Escola de Minas, Universidade Federal de Ouro Preto (UFOP);

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9837	VALIDATION OF PHOTOVOLTAIC MODEL FOR APPLICATION IN A DISTRIBUTED ENERGY SOURCE USING WEATHER DATA	Research Beginners	Eduardo G. Pignaton / / Mestrado Profissional em Engenharia de Controle e Automação, Instituto Federal do Espírito Santo – Campus Serra; Danilo P. e Silva / / Coordenadoria do Curso de Mecatrônica integrado ao ensino médio, Instituto Federal do Espírito Santo – Campus Serra; Flávio B. B. da Silva / / Coordenadoria do Curso de Mecatrônica integrado ao ensino médio, Instituto Federal do Espírito Santo – Campus Serra; José Leandro F. Salles / / Departamento de Engenharia Elétrica, Universidade Federal do Espírito Santo; Jussara F. Fardin / / Departamento de Engenharia Elétrica, Universidade Federal do Espírito Santo;
9999	A FAST ALGORITHM FOR TRAINING DYNAMICAL NEURAL NETWORKS USING STEADY-STATE PRIOR INFORMATION OF OFFSHORE OIL PLATFORM	Scientific Machine Learning in the Oil & Gas Industry	Leandro Freitas / / Instituto Federal de Educação, Ciência e Tecnologia de Minas Gerais Campus Betim; Bruno H.G. Barbosa / / Universidade Federal de Lavras; Luis A. Aguirrec / / Universidade Federal de Minas Gerais;
9799	A INVESTIGATION OF DATA QUALITY IN RESERVOIR CHARACTERIZATIONS USING MACHINE LEARNING	Scientific Machine Learning in the Oil & Gas Industry	Alesson M. T. Kopp / / PPG CComp - Instituto de Matemática e Estatística, UERJ; Cristiane O. de Faria / / Instituto de Matemática e Estatística, UERJ; Karla T. F. Leite / / Instituto de Matemática e Estatística, UERJ;
9643	ADDRESSING UNCERTAINTY IN SEISMIC IMAGING BY USING DEEP LEARNING SURROGATE MODELS FOR REVERSE TIME MIGRATION	Scientific Machine Learning in the Oil & Gas Industry	Rodolfo da Silva Machado de Freitas / / COPPE, Federal University of Rio de Janeiro, Rio de Janeiro, Rio de Janeiro 21941-598, Brazil; Carlos H. S. Barbosa / / COPPE, Federal University of Rio de Janeiro, Rio de Janeiro, Rio de Janeiro 21941-598, Brazil; Gabriel M. Guerra / / Department of Mechanical Engineering, Federal Fluminense University, Niterói, Brazil; Fernando A. Rochinha / / COPPE, Federal University of Rio de Janeiro, Rio de Janeiro, Rio de Janeiro 21941-598, Brazil; Alvaro L. G. A. Coutinho / / COPPE, Federal University of Rio de Janeiro, Rio de Janeiro, Rio de Janeiro 21941-598, Brazil;
10003	ALINE: A COMPUTATIONAL SYSTEM BASED ON SEISMIC DATA AND MACHINE LEARNING FOR GAS RESERVOIR DETECTION	Scientific Machine Learning in the Oil & Gas Industry	Diogo Michelon / / Eneva; Maria Júlia / / Tecgraf Institute/PUC-Rio; Roberto Quevedo / / Tecgraf Institute/PUC-Rio; Marcelo Gattass / / Tecgraf Institute/PUC-Rio; Felipe Jordão / / Tecgraf Institute/PUC-Rio; Luiz Santos / / Tecgraf Institute/PUC-Rio; Carlos Siedschlag / / Eneva; Roberto Ribeiro / / Eneva; Sebastião Pereira / / Eneva;

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10000	CHARACTERIZATION OF POROSITY PROPERTIES OF CARBONATE ROCKS THROUGH A FAST IMAGE PROCESSING APPROACH	Scientific Machine Learning in the Oil & Gas Industry	Victor Gomes Cardoso / / Centro de Informática, Federal University of Pernambuco; Edna Natividade da Silva Barros / / Centro de Informática, Federal University of Pernambuco; José Antonio Barbosa / / Department of Geology, Federal University of Pernambuco;
10007	Comparing Statistical and Neural Question Answering in Offshore Enginnering	Scientific Machine Learning in the Oil & Gas Industry	Vinicius Cleves de Oliveira Carmo / / Universidade de São Paulo; Vinicius Toquetti de Melo / / Universidade de São Paulo; Flávio Jaime Pol Gonçalves / / Universidade de São Paulo; Rodrigo da Silva Cunha / / Universidade de São Paulo; Ismael H. F. Santos / / Petrobras; Rodrigo Augusto Barreira / / Petrobras; Fabio Gagliardi Cozman / / Universidade de São Paulo; Edson Satoshi Gomi / / Universidade de São Paulo;
9998	Method for Treating Anomalies in Multivariate Time Series	Scientific Machine Learning in the Oil & Gas Industry	Thiago Moeda / / LNCC; Mariza Ferro / / LNCC; Eduardo Ogasawara / / CEFET/RJ; Fabio Porto / / LNCC;
10002	NEURAL NETWORK META-MODEL FOR FPSO ROLL MOTION PREDICTION FROM ENVIRONMENTAL DATA	Scientific Machine Learning in the Oil & Gas Industry	Lucas Pereira Cotrim / / University of São Paulo; Henrique Barros Oliveira / / University of São Paulo; Asdrubal N. Queiroz Filho / / University of São Paulo; Eduardo Aoun Tannuri / / University of São Paulo; Anna Helena Reali Costa / / University of São Paulo; Edson Satoshi Gomi / / University of São Paulo; Ismael H. F. Santos / / Petrobras; Rodrigo Augusto Barreira / / Petrobras;
10004	ONLINE EVENT DETECTION FOR SENSOR DATA	Scientific Machine Learning in the Oil & Gas Industry	Eduardo Ogasawara / / CEFET/RJ; Rebecca Salles / / CEFET/RJ; Luciana Escobar / / CEFET/RJ; Lais Baroni / / CEFET/RJ; Janio Lima / / CEFET/RJ; Fabio Porto / / LNCC;
9345	PINNS FOR PARAMETRIC INCOMPRESSIBLE NEWTONIAN FLOWS	Scientific Machine Learning in the Oil & Gas Industry	Rômulo M. Silva / / Dept. of Civil Engineering, COPPE, Federal University of Rio de Janeiro; Alvaro L. G. A. Coutinho / / Dept. of Civil Engineering, COPPE, Federal University of Rio de Janeiro;
10005	SEISMIC FACIES SEGMENTATION USING ATROUS CONVOLUTIONAL-LSTM NETWORK	Scientific Machine Learning in the Oil & Gas Industry	Maykol Jiampiers Campos Trinidad / / Dept. of Electrical Engineering, PUC-Rio; Smith Arauco Canchumuni / / Dept. of Electrical Engineering, PUC-Rio; Raul Queiroz Feitosa / / Dept. of Electrical Engineering, PUC-Rio; Marco Aurélio Cavalcanti Pacheco / / Dept. of Electrical Engineering, PUC-Rio;

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9637	BIPEDAL MODEL EXPERIMENTALLY ADJUSTED TO SIMULATE HUMAN WALKING FORCES IN VERTICAL DIRECTION	Structural Dynamics and Vibration Control	Dianelys Vega Ruiz / / Dept. of Civil Engineering, Federal University of Rio de Janeiro; Carlos Magluta / / Dept. of Civil Engineering, Federal University of Rio de Janeiro; Ney Roitman / / Dept. of Civil Engineering, Federal University of Rio de Janeiro;
9191	Chaotic behavior analysis of two-bar trusses under inelastic effects through Lyapunov exponents	Structural Dynamics and Vibration Control	Gustavo B. Barbosa / / Department of Structural Engineering, Federal University of Minas Gerais; William L. Fernandes / / Department of Civil Engineering, Pontifical Catholic University of Minas Gerais; Marcelo Greco / / Department of Structural Engineering, Federal University of Minas Gerais;
9963	COUPLING MODEL FOR VISCOELASTIC SANDWICH BEAMS USED FOR VIBRATION CONTROL	Structural Dynamics and Vibration Control	Samuel C. Kluthcovsky / / Postgraduate Program in Mechanical Engineering, Federal University of Paraná, Curitiba, PR, Brazil; Carlos A. Bavastri / / Postgraduate Program in Mechanical Engineering, Federal University of Paraná, Curitiba, PR, Brazil; Jucélio T. Pereira / / Postgraduate Program in Mechanical Engineering, Federal University of Paraná, Curitiba, PR, Brazil;
9543	Didactic bench for the analysis of cantilever beams submitted to harmonic vibrations from a cam-follower system	Structural Dynamics and Vibration Control	Vladimir T. Barbosa / / Dept of Mechanical Engineering - Federal University of Bahia; Paula F. Cavalcante / / Dept of Mechanical Engineering - Federal University of Bahia; Jayann I. L. Almeida / / Dept of Mechanical Engineering - Federal University of Bahia; Thiago S. Miranda / / Dept of Mechanical Engineering - Federal University of Bahia;
9829	DYNAMIC ANALYSIS OF A FOOTBRIDGE SUBJECTED TO HUMAN LOAD	Structural Dynamics and Vibration Control	Alex Koch de Almeida / / Postgraduate Program in Civil Engineering (PPGEC), Federal University of Rio Grande do Sul (UFRGS), Porto Alegre; Giovanni Silveira Brasil / / Postgraduate Program in Civil Engineering (PPGEC), Federal University of Rio Grande do Sul (UFRGS), Porto Alegre; Nilceane Lisboa de Avila / / Postgraduate Program in Civil Engineering (PPGEC), Federal University of Rio Grande do Sul (UFRGS), Porto Alegre; Letícia Fleck Fadel Miguel / / Department of Mechanical Engineering (DEMEC), Postgraduate Program in Civil Engineering (PPGEC), Federal University of Rio Grande do Sul (UFRGS), Porto Alegre;
9305	DYNAMICS OF LAUNCHERS WITH FUEL SLOSH EFFECTS	Structural Dynamics and Vibration Control	Domingos Sávio Aguiar / / Instituto de Aeronáutica e Espaço; Carlos d'Andrade Souto / / Instituto de Aeronáutica e Espaço;

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9335	Influence of First Stage Mass Variation on Satellite-Launch Vehicle Longitudinal Vibrations	Structural Dynamics and Vibration Control	Augusto Molica Silva Guimarães / / PG-CTE, Technological Institute of Aeronautics; Carlos d'Andrade Souto / / Division of Integration and Tests, Institute of Aeronautics and Space;
9539	Influence of Geometrical Dimensions of Reservoir on the Fluid-Structure Coupled Dominant Modes in Concrete Gravity Dams	Structural Dynamics and Vibration Control	Davidson de Oliveira França Júnior / / PostGraduate Program in Structures and Civil Construction (PECC), University of Brasilia; Selênio Feio da Silva / / Department of Civil Engineering, Federal University of Pará; Lineu José Pedroso / / PostGraduate Program in Structures and Civil Construction (PECC), University of Brasilia;
9729	INFLUENCE OF SOIL-STRUCTURE INTERACTION ON THE DYNAMIC BEHAVIOR OF A STRUCTURE SUBJECT TO SEISMIC ACTION	Structural Dynamics and Vibration Control	Patricia Grezelle / / Department of Civil Engineering, Federal University of Technology - Paraná (UTFPR); Francisco Augusto Aparecido Gomes / / Department of Mechanical Engineering, Federal University of Technology - Paraná (UTFPR); Paôla Regina Dalcanal / / Department of Civil Engineering, Federal University of Technology - Paraná (UTFPR); Paulo Rogério Novak / / Department of Mechanical Engineering, Federal University of Technology - Paraná (UTFPR);
9085	Modeling and optimization of multimodal piezoelectric energy harvesters from broadband vibration	Structural Dynamics and Vibration Control	Virgilio Junior Caetano / / Departament of Mechanical Engineering, Universidade Federal do Rio de Janeiro; Marcelo Amorim Savi / / Departament of Mechanical Engineering, Universidade Federal do Rio de Janeiro;
9707	NUMERICAL AND EXPERIMENTAL ANALYSIS OF THE MECHANICAL RESPONSE OF A ROTATORY BALANCING SYSTEM FOR INDUSTRIAL IN-SITU CALIBRATION	Structural Dynamics and Vibration Control	Otavio T. Krey / / Simetriza Manutenções Industriais, Esteio/RS Brazil; Leonel Echer / / Department of Mechanical Engineering, Federal University of Rio Grande do Sul (UFRGS), Porto Alegre/RS Brazil; Boris N. Rojo Tanzi / / Department of Mechanical Engineering, Federal University of Rio Grande do Sul (UFRGS), Porto Alegre/RS Brazil; André Casagrande / / Duo Engenharia Criativa, Porto Alegre/RS Brazil; Matheus Gomes / / Duo Engenharia Criativa, Porto Alegre/RS Brazil; Ignacio Iturrioz / / Department of Mechanical Engineering, Federal University of Rio Grande do Sul (UFRGS), Porto Alegre/RS Brazil;

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9102	Use of a recurrence based fractional derivative model in the analysis of the influence of geometrical parameters in the transient response of viscoelastic beams	Structural Dynamics and Vibration Control	Erivaldo P. Nunes / / School of Mechanical Engineering, Federal University of Uberlândia; Antônio M. G. de Lima / / School of Mechanical Engineering, Federal University of Uberlândia; João P. Sena / / School of Mechanical Engineering, Federal University of Uberlândia;
9066	3D TOPOLOGY OPTIMIZATION OF A TALL TOWER CONSIDERING SOIL FLEXIBILITY	Topology Optimization of Multifunctional Materials, Fluids and Structures	Iago Cavalcante / / School of Mechanical Engineering, University of Campinas; Renato Picelli / / Department of Mining and Petroleum Engineering, University of São Paulo; Josué Labaki / / School of Mechanical Engineering, University of Campinas;
9339	A GEOMETRY TRIMMING APPROACH FOR TOPOLOGY OPTIMIZATION OF ACOUSTIC PROBLEMS	Topology Optimization of Multifunctional Materials, Fluids and Structures	Thais R. de Castro / / Department of Mechanical Engineering, University of São Paulo; Raghavendra Sivapuram / / Structural Engineering Department, University of California San Diego; Marco A. B. Andrade / / Department of Applied Physics Institute of Physics, University of São Paulo; Márcio A. Sampaio / / Department of Mining and Petroleum Engineering, University of São Paulo; Renato Picelli / / Department of Mining and Petroleum Engineering, University of São Paulo;
9770	A MATLAB IMPLEMENTATION FOR TOPOLOGY OPTIMIZATION OF COMPLIANCE MINIMIZATION PROBLEMS BASED ON THE STANDARD FINITE-VOLUME THEORY FOR CONTINUUM ELASTIC STRUCTURES	Topology Optimization of Multifunctional Materials, Fluids and Structures	Marcelo Vitor Oliveira Araujo / / Center of Technology, Federal University of Alagoas; Eduardo Nobre Lages / / Center of Technology, Federal University of Alagoas; Márcio André Araújo Cavalcante / / Campus Delza Gitaí, Federal University of Alagoas;
9433	A PARAMETRIZED LEVEL SET TOPOLOGY OPTIMIZATION STRATEGY USING FENICS AND RADIAL BASIS FUNCTIONS WITH COMPACT SUPPORT	Topology Optimization of Multifunctional Materials, Fluids and Structures	Giovanna Castello de Andrade / / Departamento de Matemática Aplicada, Universidade Estadual de Campinas; Sandra Augusta Santos / / Departamento de Matemática Aplicada, Universidade Estadual de Campinas;
9356	AN EFFICIENT PYTHON CODE FOR MODELLING STRUT-AND-TIE TRIDIMENSIONAL MODELS FOR TOPOLOGICAL OPTIMIZATION USING SESO AND ESO METHODS	Topology Optimization of Multifunctional Materials, Fluids and Structures	Virgil Del Duca Almeida / / Dept. of Control and Automation Engineering, Federal Institute of Minas Gerais (IFMG); Francisco de Assis das Neves / / Dept. of Civil Engineering, Federal University of Ouro Preto (UFOP); Higor Eduardo Vieira Oliveira Prado / / Dept. of Control and Automation Engineering, Federal Institute of Minas Gerais (IFMG); Hélio Luiz Simonetti / / Dept. of Mathematics, Federal Institute of Minas Gerais (IFMG); Aline Renata Mateus Madruga / / Dept. of Control and Automation Engineering, Federal Institute of Minas Gerais (IFMG);

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9590	MULTI-MATERIAL CONTINUUM TOPOLOGY OPTIMIZATION WITH MULTIPLE VOLUME CONSTRAINTS AND MATERIAL NONLINEARITY	Topology Optimization of Multifunctional Materials, Fluids and Structures	Danilo B. Cavalcanti / / School of Civil and Environmental Engineering, Federal University of Goiás; Sylvia R. M. Almeida / / School of Civil and Environmental Engineering, Federal University of Goiás; Daniel L. Araújo / / School of Civil and Environmental Engineering, Federal University of Goiás;
9363	RELIABILITY-BASED TOPOLOGY OPTIMIZATION USING EVOLUTIONARY METHODS FOR THREE-DIMENSIONAL STRUCTURES ANALYSIS	Topology Optimization of Multifunctional Materials, Fluids and Structures	Virgil Del Duca Almeida / / Dept. of Control and Automation Engineering, Federal Institute of Minas Gerais (IFMG); Helio Luiz Simonetti / / Dept. of Mathematics, Federal Institute of Minas Gerais (IFMG); Valério Silva Almeida / / Dept. of Geotechnical and Structural Engineering from the School of Engineering of the University of São Paulo (EPUSP); Higor Eduardo Vieira Oliveira Prado / / Dept. of Control and Automation Engineering, Federal Institute of Minas Gerais (IFMG); Aline Renata Mateus Madruga / / Dept. of Control and Automation Engineering, Federal Institute of Minas Gerais (IFMG);
9952	Stress-based topology optimization with bi-directional evolutionary tools	Topology Optimization of Multifunctional Materials, Fluids and Structures	José Manuel Cuevas Zárate / / Department of Mechanical Engineering, Federal University of Rio Grande do Sul; Fabiano Bortoluzzi / / Department of Mechanical Engineering, Federal University of Rio Grande do Sul; Gustavo Comerlato Rodrigues / / Department of Mechanical Engineering, Federal University of Rio Grande do Sul; Fernanda Bichet Link / / Department of Mechanical Engineering, Federal University of Rio Grande do Sul; Walter Jesus Paucar Casas / / Department of Mechanical Engineering, Federal University of Rio Grande do Sul; Lucas Leal Agne / / Federal University of Santa Maria; Ederval de Souza Lisboa / / Federal University of Santa Maria;
9256	TOPOLOGY OPTIMIZATION APPLIED AN THRESHING SEPARATION ROTOR COMPONENT	Topology Optimization of Multifunctional Materials, Fluids and Structures	Aquiles S. Schauenberg / / Dept. of Mechanics of Materials and Structures (GMEC), Federal University of Santa Maria; Ederval S. Lisboa / / Dept. of Mechanics of Materials and Structures (GMEC), Federal University of Santa Maria; Maikson L. P. Tonatto / / Dept. of Mechanics of Materials and Structures (GMEC), Federal University of Santa Maria;
9290	TOPOLOGY OPTIMIZATION OF BINARY STRUCTURES SUBJECTED TO SELF-WEIGHT LOADS	Topology Optimization of Multifunctional Materials, Fluids and Structures	Lucas Oliveira Siqueira / / Brazilian Northeast Aerospace Network, Federal University of Pernambuco, Recife, Brazil; Raghavendra Sivapuram / / Structural Engineering, University of California, San Diego, USA; Tiago Felipe de Abreu Santos / / Brazilian Northeast Aerospace Network, Federal University of Pernambuco, Recife, Brazil; Department of Mechanical Engineering, Federal University of Pernambuco, Recife, Brazil.; Renato Picelli Sanches / / Department of Mining and Petroleum Engineering, University of São Paulo, Brazil.;

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9685	CONDITION MONITORING OF BALL BEARINGS USING BAYESIAN NEURAL NETWORKS	Uncertainty Quantification and Data-Driven Approaches to Stochastic Systems in Computational Science and Engineering	Matheus de Moraes / / School of Mechanical Engineering, University of Campinas; João Paulo Dias / / Dept. of Civil and Mechanical Engineering, Shippensburg University of Pennsylvania; Helio Fiori de Castro / / School of Mechanical Engineering, University of Campinas;
9661	DYNAMIC ANALYSIS OF A HELICAL GEAR PAIR UNDER UNCERTAIN BEARINGS PROPERTIES	Uncertainty Quantification and Data-Driven Approaches to Stochastic Systems in Computational Science and Engineering	Laís Bittencourt Visnadi / / School of Mechanical Engineering, University of Campinas; Gabriel Yuji Garoli / / School of Mechanical Engineering, University of Campinas; Hélio Fiori de Castro / / School of Mechanical Engineering, University of Campinas;
9396	GENERALIZED PARALLEL TEMPERING ON BAYESIAN INVERSE PROBLEMS	Uncertainty Quantification and Data-Driven Approaches to Stochastic Systems in Computational Science and Engineering	Juan Pablo Madrigal Cianci / / SB-MATH-CSQI, Ecole Polytechnique Federale de Lausanne.; Fabio Nobile / / SB-MATH-CSQI, Ecole Polytechnique Federale de Lausanne.; Jonas Latz / / Department of Applied Mathematics and Theoretical Physics, University of Cambridge.; Raul Tempone / / Computer, Electrical and Mathematical Sciences and Engineering, KAUST, and Alexander von Humboldt professor in Mathematics of Uncertainty Quantification, RWTH Aachen University.;
9644	LEARNING NON-GAUSSIAN PROBABILISTIC GRAPHICAL MODELS	Uncertainty Quantification and Data-Driven Approaches to Stochastic Systems in Computational Science and Engineering	Ricardo Baptista / / Center for Computational Science and Engineering, MIT; Youssef Marzouk / / Center for Computational Science and Engineering, MIT; Rebecca E. Morrison / / Department of Computer Science, University of Colorado Boulder; Olivier Zahm / / Université Grenoble Alpes, Inria, CNRS;
9400	MACHINE LEARNING MODELS FOR CHARACTERIZING MACROSCOPIC PROPERTIES OF DIESEL/BIODIESEL SURROGATE FUELS	Uncertainty Quantification and Data-Driven Approaches to Stochastic Systems in Computational Science and Engineering	Ágatha P. F. Lima / / COPPE, Federal University of Rio de Janeiro, Rio de Janeiro, Rio de Janeiro 21941-598, Brazil; Rodolfo S. M. Freitas / / COPPE, Federal University of Rio de Janeiro, Rio de Janeiro, Rio de Janeiro 21941-598, Brazil; Fernando A. Rochinha / / COPPE, Federal University of Rio de Janeiro, Rio de Janeiro, Rio de Janeiro 21941-598, Brazil;
9417	MUTUAL INFORMATION FOR EXPLAINABLE DEEP LEARNING OF MULTISCALE SYSTEMS	Uncertainty Quantification and Data-Driven Approaches to Stochastic Systems in Computational Science and Engineering	Eric J. Hall / / Mathematics Division, University of Dundee; Søren Taverniers / / Palo Alto Research Center (PARC); Markos A. Katsoulakis / / Dept. of Mathematics and Statistics, University of Massachusetts Amherst; Daniel M. Tartakovsky / / Dept. of Energy Resources Engineering, Stanford University;
9275	OPTIMIZATION OF EXPERIMENTAL DESIGN FOR NON-LINEAR MODELS USING STOCHASTIC GRADIENT DESCENT	Uncertainty Quantification and Data-Driven Approaches to Stochastic Systems in Computational Science and Engineering	André Gustavo Carlon / / King Abdullah University of Science And Technology (KAUST); Ben Mansour Dia / / College of Petroleum Engineering and Geosciences, King Fahd University of Petroleum and Minerals (KFUPM); Luis Espath / / Department of Mathematics, RWTH Aachen University; Rafael Holdorf Lopez / / Department of Civil Engineering, Federal University of Santa Catarina (UFSC); Raúl Tempone / / Alexander von Humboldt Professor in Mathematics for Uncertainty Quantification, RWTH Aachen University;

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9475	SMALL NOISE APPROXIMATION FOR BAYESIAN OPTIMAL EXPERIMENTAL DESIGN WITH NUISANCE UNCERTAINTY	Uncertainty Quantification and Data-Driven Approaches to Stochastic Systems in Computational Science and Engineering	Arved Bartuska / / Lehrstuhl für Mathematics for Uncertainty Quantification, RWTH Aachen University; Luis Espath / / Lehrstuhl für Mathematics for Uncertainty Quantification, RWTH Aachen University; Raúl Tempone / / Lehrstuhl für Mathematics for Uncertainty Quantification, RWTH Aachen University;
9853	SOLAR POWER FORECAST PATHWISE UNCERTAINTY QUANTIFICATION USING ITÔ'S STOCHASTIC DIFFERENTIAL EQUATIONS	Uncertainty Quantification and Data-Driven Approaches to Stochastic Systems in Computational Science and Engineering	Khaoula Ben Chaâbane / / Chair of Mathematics for Uncertainty Quantification, RWTH Aachen University, Germany; Ahmed Kebaier / / LAGA, CNRS, Université Sorbonne Paris Nord, Villetaneuse, France; Marco Scavino / / Instituto de Estadistica, Universidad de la República, Montevideo, Uruguay; Raúl Tempone / / Alexander von Humboldt Professor, RWTH Aachen University, Germany and CEMSE, King Abdullah University of Science and Technology, Saudi Arabia;
9282	ABOUT THE PERFORMANCE OF NONLINEAR TUNED MASS DAMPER ON THE NONLINEAR DYNAMIC CONTROLLED EQUATION	Vibration Control	Zenon J. G. N. del Prado / / School of Civil Engineering, Federal University of Goiás; Marcello G. Marques Filho / / School of Civil Engineering, Federal University of Goiás;
9434	ASSESSING THE SEISMIC PERFORMANCE OF BUILDINGS WITH DUAL SEISMIC ISOLATION	Vibration Control	Oscar Contreras-Bejarano / / Universidad Católica de Colombia. Bogotá, Colombia.; Jesús D. Villalba-Morales / / Department of Civil Engineering, School of Engineering, Pontificia Universidad Javeriana. Bogotá, Colombia.; Diego López-García / / Geotechnical Engineering, Pontificia Universidad Catolica de Chile, Santiago, Chile.;
9732	CONTROL OF VIBRATIONS IN THE FRAME STRUCTURE USING DYNAMIC VIBRATION ABSORBER	Vibration Control	Fabiana da Rosa Sufiatti / / Programa de Pós-Graduação em Engenharia Civil, Universidade Tecnológica Federal do Paraná; Paulo Rogerio Novak / / Programa de Pós-Graduação em Engenharia Civil, Universidade Tecnológica Federal do Paraná; Giovanni Bratti / / Departamento Acadêmico de Mecânica, Universidade Tecnológica Federal do Paraná; Francisco Augusto Aparecido Gomes / / Programa de Pós-Graduação em Engenharia Civil, Universidade Tecnológica Federal do Paraná;
9563	DYNAMIC PERFORMANCE OF CONTROLLED COMPOSITE STRUCTURE OF FOOTBRIDGE	Vibration Control	Pedro Henrique Gama Neiva / / PEC/COPPE - Universidade Federal do Rio de Janeiro; Osmar Paulo Lourinho Geraldo / / PEC/COPPE - Universidade Federal do Rio de Janeiro; Carolina Ribeiro Fernandes / / PEC/COPPE - Universidade Federal do Rio de Janeiro; Wendell Diniz Varela / / PEC/COPPE - Universidade Federal do Rio de Janeiro;

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9242	Hand vibration analysis due to agricultural machine vibration	Vibration Control	Leonardo Pessoa Linhares Oliveira / / Universidade Federal de Minas Gerais; Maria Lúcia Machado Duarte / / Universidade Federal de Minas Gerais; Daniel Borges de Oliveira / / Pontifícia Universidade Católica de Minas Gerais; Bárbara Ferreira Guatimosim / / Faculdade Ciências Médicas de Minas Gerais; Vinícius Samuel Pereira Silva / / Universidade Federal de Minas Gerais;
9202	NONLINEAR SOLUTION OF TUNED LIQUID COLUMN DAMPERS COMPARED TO LINEARIZED ANALYTICAL SOLUTION	Vibration Control	Marcus Vinicius Girão de Morais / / PPG Integridade de Materiais, Universidade de Brasília, Campus Gama, Gama/DF; Suzana Moreira Avila / / PPG Integridade de Materiais, Universidade de Brasília, Campus Gama, Gama/DF; Juliano Ferreira Martins / / Dipart. di Ingegneria Strutturale e Geotecnica, Sapienza Universitá di Roma, Italy; Marcos Wilson Rodrigues de Lima / / PPG Integridade de Materiais, Universidade de Brasília, Campus Gama, Gama/DF;
9780	NUMERICAL STUDY OF INERTER TMD TO IMPROVE PERFORMANCE OF 1/4 VEICULE MODEL: PARALLEL CONFIGURATION	Vibration Control	Marcus V. G. de Morais / / Dept. of Mechanical engineer, University of Brasília; Pedro C. Gomes / / Dept. of Mechanical engineer, University of Brasília;
9180	OPTIMAL DESIGN OF VISCOELASTIC LINKS CONSIDERING TEMPERATURE INFLUENCE IN VIBRATION CONTROL	Vibration Control	Eduardo S. Fantin / / Department of Mechanical Engineering, Federal University of Paraná; Carlos A. Bavastri / / Department of Mechanical Engineering, Federal University of Paraná;