

F Javier Fuenmayor

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/8901929/publications.pdf>

Version: 2024-02-01

72
papers

2,083
citations

218592

26
h-index

254106

43
g-index

73
all docs

73
docs citations

73
times ranked

1310
citing authors

#	ARTICLE	IF	CITATIONS
1	Analytical model of the pantograph-catenary dynamic interaction and comparison with numerical simulations. <i>Vehicle System Dynamics</i> , 2022, 60, 132-155.	2.2	15
2	Hardware-in-the-loop pantograph tests using analytical catenary models. <i>Vehicle System Dynamics</i> , 2022, 60, 3504-3518.	2.2	5
3	Numerical modelling of cancellous bone damage using an orthotropic failure criterion and tissue elastic properties as a function of the mineral content and microporosity. <i>Computer Methods and Programs in Biomedicine</i> , 2022, 219, 106764.	2.6	5
4	Analysis of the overlap section in a high-speed railway catenary by means of numerical simulations. <i>Engineering Structures</i> , 2020, 221, 110963.	2.6	12
5	Stochastic Monte Carlo simulations of the pantograph-catenary dynamic interaction to allow for uncertainties introduced during catenary installation. <i>Vehicle System Dynamics</i> , 2019, 57, 471-492.	2.2	21
6	A modal coordinate catenary model for the real-time simulation of the pantograph-catenary dynamic interaction. <i>Finite Elements in Analysis and Design</i> , 2019, 162, 1-12.	1.7	12
7	Computational performance of analytical methods for the acoustic modelling of automotive exhaust devices incorporating monoliths. <i>Journal of Computational and Applied Mathematics</i> , 2018, 330, 995-1006.	1.1	8
8	An extension of shape sensitivity analysis to an immersed boundary method based on Cartesian grids. <i>Computational Mechanics</i> , 2018, 62, 701-723.	2.2	2
9	An approach to geometric optimisation of railway catenaries. <i>Vehicle System Dynamics</i> , 2018, 56, 1162-1186.	2.2	30
10	Explicit expressions for the estimation of the elastic constants of lamellar bone as a function of the volumetric mineral content using a multi-scale approach. <i>Biomechanics and Modeling in Mechanobiology</i> , 2018, 17, 449-464.	1.4	8
11	On the effect of the contact surface definition in the Cartesian grid finite element method. <i>Advanced Modeling and Simulation in Engineering Sciences</i> , 2018, 5, .	0.7	3
12	Fast simulation of the pantograph-catenary dynamic interaction. <i>Finite Elements in Analysis and Design</i> , 2017, 129, 1-13.	1.7	38
13	Calculation of the critical energy release rate G_c of the cement line in cortical bone combining experimental tests and finite element models. <i>Engineering Fracture Mechanics</i> , 2017, 184, 168-182.	2.2	17
14	Parametric model for the simulation of the railway catenary system static equilibrium problem. <i>Finite Elements in Analysis and Design</i> , 2016, 115, 21-32.	1.7	9
15	A recovery-explicit error estimator in energy norm for linear elasticity. <i>Computer Methods in Applied Mechanics and Engineering</i> , 2015, 287, 172-190.	3.4	9
16	Locally equilibrated stress recovery for goal oriented error estimation in the extended finite element method. <i>Computers and Structures</i> , 2015, 152, 1-10.	2.4	30
17	A separated representation of an error indicator for the mesh refinement process under the proper generalized decomposition framework. <i>Computational Mechanics</i> , 2015, 55, 251-266.	2.2	12
18	PACDIN statement of methods. <i>Vehicle System Dynamics</i> , 2015, 53, 402-411.	2.2	21

#	ARTICLE	IF	CITATIONS
19	Real time parameter identification and solution reconstruction from experimental data using the Proper Generalized Decomposition. <i>Computer Methods in Applied Mechanics and Engineering</i> , 2015, 296, 113-128.	3.4	19
20	Influence of the mineral staggering on the elastic properties of the mineralized collagen fibril in lamellar bone. <i>Journal of the Mechanical Behavior of Biomedical Materials</i> , 2015, 42, 243-256.	1.5	28
21	Numerical modelling of the mechanical behaviour of an osteon with microcracks. <i>Journal of the Mechanical Behavior of Biomedical Materials</i> , 2014, 37, 109-124.	1.5	44
22	Homogenized stiffness matrices for mineralized collagen fibrils and lamellar bone using unit cell finite element models. <i>Biomechanics and Modeling in Mechanobiology</i> , 2014, 13, 437-449.	1.4	38
23	A 3D absolute nodal coordinate finite element model to compute the initial configuration of a railway catenary. <i>Engineering Structures</i> , 2014, 71, 234-243.	2.6	98
24	Mesh adaptivity driven by goal-oriented locally equilibrated superconvergent patch recovery. <i>Computational Mechanics</i> , 2014, 53, 957-976.	2.2	40
25	Direction of crack propagation in a complete contact fretting-fatigue problem. <i>International Journal of Fatigue</i> , 2014, 58, 172-180.	2.8	49
26	Enhanced error estimator based on a nearly equilibrated moving least squares recovery technique for FEM and XFEM. <i>Computational Mechanics</i> , 2013, 52, 321-344.	2.2	17
27	Convergence of domain integrals for stress intensity factor extraction in 2D curved cracks problems with the extended finite element method. <i>International Journal for Numerical Methods in Engineering</i> , 2013, 94, 740-757.	1.5	30
28	A finite element approach for the acoustic modeling of perforated dissipative mufflers with non-homogeneous properties. <i>Mathematical and Computer Modelling</i> , 2013, 57, 1970-1978.	2.0	26
29	The Proper Generalized Decomposition (PGD) as a numerical procedure to solve 3D cracked plates in linear elastic fracture mechanics. <i>International Journal of Solids and Structures</i> , 2013, 50, 1710-1720.	1.3	30
30	Domain integral formulation for 3-D curved and non-planar cracks with the extended finite element method. <i>Computer Methods in Applied Mechanics and Engineering</i> , 2013, 264, 129-144.	3.4	44
31	Efficient Finite Element Methodology Based on Cartesian Grids: Application to Structural Shape Optimization. <i>Abstract and Applied Analysis</i> , 2013, 2013, 1-19.	0.3	45
32	2D contact smooth formulation based on the mortar method. <i>Computer Methods in Applied Mechanics and Engineering</i> , 2012, 247-248, 1-14.	3.4	20
33	Acoustic modelling of exhaust devices with nonconforming finite element meshes and transfer matrices. <i>Applied Acoustics</i> , 2012, 73, 713-722.	1.7	11
34	Calculation of KII in crack face contacts using X-FEM. Application to fretting fatigue. <i>Engineering Fracture Mechanics</i> , 2011, 78, 428-445.	2.0	10
35	Experimental fatigue testing of a fretting complete contact and numerical life correlation using X-FEM. <i>International Journal of Fatigue</i> , 2011, 33, 811-822.	2.8	52
36	Fretting fatigue life prediction using the extended finite element method. <i>International Journal of Mechanical Sciences</i> , 2011, 53, 217-225.	3.6	39

#	ARTICLE	IF	CITATIONS
37	Crack face contact in X-FEM using a segment-to-segment approach. International Journal for Numerical Methods in Engineering, 2010, 82, 1424-1449.	1.5	48
38	Accurate recovery-based upper error bounds for the extended finite element framework. Computer Methods in Applied Mechanics and Engineering, 2010, 199, 2607-2621.	3.4	46
39	Enhanced blending elements for XFEM applied to linear elastic fracture mechanics. International Journal for Numerical Methods in Engineering, 2009, 77, 126-148.	1.5	85
40	An Abaqus implementation of the extended finite element method. Engineering Fracture Mechanics, 2009, 76, 347-368.	2.0	283
41	Numerical modelling of crack-contact interaction in 2D incomplete fretting contacts using X-FEM. Tribology International, 2009, 42, 1269-1275.	3.0	32
42	A mortar-based frictional contact formulation for large deformations using Lagrange multipliers. Computer Methods in Applied Mechanics and Engineering, 2009, 198, 2860-2873.	3.4	100
43	A domain integral for the calculation of generalized stress intensity factors in sliding complete contacts. International Journal of Solids and Structures, 2009, 46, 938-951.	1.3	5
44	A recovery-type error estimator for the extended finite element method based on singular+smooth stress field splitting. International Journal for Numerical Methods in Engineering, 2008, 76, 545-571.	1.5	84
45	Singularity enrichment for complete sliding contact using the partition of unity finite element method. International Journal for Numerical Methods in Engineering, 2008, 76, 1402-1418.	1.5	13
46	Extended finite element method for fretting fatigue crack propagation. International Journal of Solids and Structures, 2008, 45, 5675-5687.	1.3	81
47	Sound attenuation of a circular multi-chamber hybrid muffler. Noise Control Engineering Journal, 2008, 56, 356.	0.2	6
48	Influence of the wheel-rail contact instationary process on contact parameters. Journal of Strain Analysis for Engineering Design, 2007, 42, 377-387.	1.0	6
49	Improvement of the superconvergent patch recovery technique by the use of constraint equations: the SPR-C technique. International Journal for Numerical Methods in Engineering, 2007, 70, 705-727.	1.5	61
50	Acoustic attenuation performance of perforated dissipative mufflers with empty inlet/outlet extensions. Journal of Sound and Vibration, 2007, 302, 1000-1017.	2.1	59
51	A transversal substructuring mode matching method applied to the acoustic analysis of dissipative mufflers. Journal of Sound and Vibration, 2007, 303, 614-631.	2.1	36
52	Crack growth in fretting-fatigue problems using the extended finite element method. , 2006, , 253-253.		0
53	A contour integral method to compute the generalized stress intensity factor in complete contacts under sliding conditions. Tribology International, 2006, 39, 1074-1083.	3.0	3
54	A formulation to define the contact surface in the 2D mortar finite element method. , 2006, , 393-394.		0

#	ARTICLE	IF	CITATIONS
55	Extraction of the generalized stress intensity factor in gross sliding complete contacts using a path-independent integral*. Fatigue and Fracture of Engineering Materials and Structures, 2005, 28, 1071-1085.	1.7	4
56	Ana posteriori error estimator for the p- and hp-versions of the finite element method. International Journal for Numerical Methods in Engineering, 2005, 62, 1-18.	1.5	7
57	Error estimation for the finite element evaluation of and in mixed-mode linear elastic fracture mechanics. Finite Elements in Analysis and Design, 2005, 41, 1079-1104.	1.7	18
58	Complete Elastic Contact Subject to Cyclic Shear in Partial Slip. Journal of Engineering Mechanics - ASCE, 2005, 131, 1146-1156.	1.6	3
59	Analytic approach to obtain shear traction in a cylindrical contact with reverse slip. Journal of Strain Analysis for Engineering Design, 2004, 39, 717-727.	1.0	3
60	An improvement of the EDI method in linear elastic fracture mechanics by means of an a posteriori error estimator in G. International Journal for Numerical Methods in Engineering, 2004, 59, 533-558.	1.5	9
61	A numerical methodology to assess the quality of the design velocity field computation methods in shape sensitivity analysis. International Journal for Numerical Methods in Engineering, 2004, 59, 1725-1747.	1.5	16
62	Frictional shakedown in a complete contact. Journal of Strain Analysis for Engineering Design, 2003, 38, 329-338.	1.0	1
63	On the analysis of singular stress fields Part 2: Application to complete slipping contacts. Journal of Strain Analysis for Engineering Design, 2003, 38, 207-217.	1.0	5
64	On the analysis of singular stress fields Part 1: Finite element formulation and application to notches. Journal of Strain Analysis for Engineering Design, 2002, 37, 437-444.	1.0	13
65	Influence of bulk stress on contact conditions and stresses during fretting fatigue. Journal of Strain Analysis for Engineering Design, 2002, 37, 479-492.	1.0	2
66	H-ADAPTIVE REFINEMENT STRATEGY FOR ACOUSTIC PROBLEMS WITH A SET OF NATURAL FREQUENCIES. Journal of Sound and Vibration, 2002, 255, 457-479.	2.1	5
67	An implementation of the stiffness derivative method as a discrete analytical sensitivity analysis and its application to mixed mode in LEFM. Engineering Fracture Mechanics, 2002, 69, 2051-2071.	2.0	14
68	Error estimation and h-adaptive refinement in the analysis of natural frequencies. Finite Elements in Analysis and Design, 2001, 38, 137-153.	1.7	7
69	ACOUSTIC BEHAVIOUR OF ELLIPTICAL CHAMBER MUFFLERS. Journal of Sound and Vibration, 2001, 241, 401-421.	2.1	59
70	CALCULATION OF THE STRESS INTENSITY FACTOR AND ESTIMATION OF ITS ERROR BY A SHAPE SENSITIVITY ANALYSIS. Fatigue and Fracture of Engineering Materials and Structures, 1997, 20, 813-828.	1.7	11
71	EXTENSION OF THE ZIENKIEWICZ-ZHU ERROR ESTIMATOR TO SHAPE SENSITIVITY ANALYSIS. International Journal for Numerical Methods in Engineering, 1997, 40, 1413-1433.	1.5	17
72	CRITERIA TO ACHIEVE NEARLY OPTIMAL MESHES IN THE h-ADAPTIVE FINITE ELEMENT METHOD. International Journal for Numerical Methods in Engineering, 1996, 39, 4039-4061.	1.5	34