E Nadal

List of Publications by Year
in descending order

38 papers	375 citations	933447 10 h-index	839539 18 g-index
42 all docs	42 docs citations	42 times ranked	370 citing authors

#	Article	IF	Citations
1	Efficient Finite Element Methodology Based on Cartesian Grids: Application to Structural Shape Optimization. Abstract and Applied Analysis, 2013, 2013, 1-19.	0.7	45
2	Mesh adaptivity driven by goal-oriented locally equilibrated superconvergent patch recovery. Computational Mechanics, 2014, 53, 957-976.	4.0	40
3	Fast simulation of the pantograph–catenary dynamic interaction. Finite Elements in Analysis and Design, 2017, 129, 1-13.	3.2	38
4	Locally equilibrated stress recovery for goal oriented error estimation in the extended finite element method. Computers and Structures, 2015, 152, 1-10.	4.4	30
5	An approach to geometric optimisation of railway catenaries. Vehicle System Dynamics, 2018, 56, 1162-1186.	3.7	30
6	Real time parameter identification and solution reconstruction from experimental data using the Proper Generalized Decomposition. Computer Methods in Applied Mechanics and Engineering, 2015, 296, 113-128.	6.6	19
7	Proper generalized decomposition solutions within a domain decomposition strategy. International Journal for Numerical Methods in Engineering, 2018, 113, 1972-1994.	2.8	17
8	Imposing Dirichlet boundary conditions in hierarchical Cartesian meshes by means of stabilized Lagrange multipliers. International Journal for Numerical Methods in Engineering, 2014, 98, 399-417.	2.8	14
9	High-resolution thermal analysis at thermoplastic pre-impregnated acomposite interfaces. Composite Interfaces, 2015, 22, 767-777.	2.3	14
10	A separated representation of an error indicator for the mesh refinement process under the proper generalized decomposition framework. Computational Mechanics, 2015, 55, 251-266.	4.0	12
11	On the physical interpretation of fractional diffusion. Comptes Rendus - Mecanique, 2018, 346, 581-589.	2.1	10
12	Thermal impact of replacing constant voltage by low-frequency sine wave voltage in RF ablation computer modeling. Computer Methods and Programs in Biomedicine, 2020, 195, 105673.	4.7	10
13	A recovery-explicit error estimator in energy norm for linear elasticity. Computer Methods in Applied Mechanics and Engineering, 2015, 287, 172-190.	6.6	9
14	Parametric model for the simulation of the railway catenary system static equilibrium problem. Finite Elements in Analysis and Design, 2016, 115, 21-32.	3.2	9
15	Topology and shape optimization of dissipative and hybrid mufflers. Structural and Multidisciplinary Optimization, 2020, 62, 269-284.	3.5	9
16	Computer modeling of radiofrequency cardiac ablation including heartbeat-induced electrode displacement. Computers in Biology and Medicine, 2022, 144, 105346.	7.0	9
17	Computational performance of analytical methods for the acoustic modelling of automotive exhaust devices incorporating monoliths. Journal of Computational and Applied Mathematics, 2018, 330, 995-1006.	2.0	8
18	A physically-based fractional diffusion model for semi-dilute suspensions of rods in a Newtonian fluid. Applied Mathematical Modelling, 2017, 51, 58-67.	4.2	7

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19	A Path Planning Algorithm for a Dynamic Environment Based on Proper Generalized Decomposition. Mathematics, 2020, 8, 2245.	2.2	7
20	Evaluation of hip fracture risk using a hyper-parametric model based on the Locally Linear Embedding technique. Comptes Rendus - Mecanique, 2019, 347, 856-862.	2.1	5
21	On the use of stabilization techniques in the Cartesian grid finite element method framework for iterative solvers. International Journal for Numerical Methods in Engineering, 2020, 121, 3004-3020.	2.8	5
22	Allying topology and shape optimization through machine learning algorithms. Finite Elements in Analysis and Design, 2022, 204, 103719.	3.2	5
23	Improvement in 3D topology optimization with <i>h</i>â€adaptive refinement using the Cartesian grid Finite Element Method. International Journal for Numerical Methods in Engineering, 2022, 123, 3045-3072.	2.8	4
24	Structural shape optimization using Cartesian grids and automatic h-adaptive mesh projection. Structural and Multidisciplinary Optimization, 2018, 58, 61-81.	3.5	2
25	Real-Time Path Planning Based on Harmonic Functions under a Proper Generalized Decomposition-Based Framework. Sensors, 2021, 21, 3943.	3.8	2
26	SimulaciÃ³n estructural de espumas de aluminio a partir de imÃ¡genes 2D mediante la combinaciÃ³n de tÃ©cnicas de homogeneizaciÃ³n y machine learning. Revista UIS IngenierÃas, 2017, 17, 223-240.	0.2	2
27	3D Topology Optimization with h-adaptive Refinement Using Cartesian Grids Finite Element Method (cgFEM). , 2019, , 778-788.		2
28	Optimized Perforation Schemes in Railway Wheels Toward Acoustic Radiation Mitigation. Journal of Vibration and Acoustics, Transactions of the ASME, 2020, 142, .	1.6	2
29	Accurate Stress Recovery for the Two-Dimensional Fixed Grid Finite Element Method. , 0, , .		2
30	Estimating the Patient-Specific Relative Stiffness Between a Hepatic Lesion and the Liver Parenchyma. Lecture Notes in Computational Vision and Biomechanics, 2018, , 485-494.	0.5	1
31	Highâ€order discontinuous Galerkin method for timeâ€domain electromagnetics on geometryâ€independent Cartesian meshes. International Journal for Numerical Methods in Engineering, 2021, 122, 7632-7663.	2.8	1
32	Towards a Vector Field Based Approach to the Proper Generalized Decomposition (PGD). Mathematics, 2021, 9, 34.	2.2	1
33	Fundaments of Recovery-Based Error Estimation and Bounding. SpringerBriefs in Applied Sciences and Technology, 2016, , 33-57.	0.4	0
34	Estimating the Relative Stiffness between a Hepatic Lesion and the Liver Parenchyma through Biomechanical Simulations of the Breathing Process. Mathematical Problems in Engineering, 2018, 2018, 1-10.	1.1	0
35	ASSESSMENT OF GENERIC COMPETENCES IN MECHANICAL ENGINEERING AND MATERIALS SCIENCE SUBJECTS: A PROPOSAL OF EVALUATION METHODOLOGIES. INTED Proceedings, 2017, , .	0.0	0
36	DiseÃ±o de actividades y uso de la coevaluaciÃ³n para fomentar el desarrollo de competencias transversales en ingenierÃa mecÃ¡nica y de materiales. , 0, , .		0

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37	Stress-Based Femur Fracture Risk Evaluation from Bone Densitometry. Lecture Notes in Computational Vision and Biomechanics, 2018, , 645-649.	0.5	0
38	ASSESSMENT OF THE USE OF TECHNICAL SOFTWARE BY THE STUDENTS IN THE CONTEXT OF MECHANICAL ENGINEERING. , 2020, , .		0