

Jens WackerfuÃ

List of Publications by Year in descending order

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Version: 2024-02-01

32
papers

181
citations

1684188

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1125743

13
g-index

32
all docs

32
docs citations

32
times ranked

112
citing authors

#	ARTICLE	IF	CITATIONS
1	Molecular mechanics in the context of the finite element method. <i>International Journal for Numerical Methods in Engineering</i> , 2009, 77, 969-997.	2.8	62
2	A mixed hybrid finite beam element with an interface to arbitrary three-dimensional material models. <i>Computer Methods in Applied Mechanics and Engineering</i> , 2009, 198, 2053-2066.	6.6	35
3	A nonlinear Hu-Washizu variational formulation and related finite-element implementation for spatial beams with arbitrary moderate thick cross-sections. <i>Computer Methods in Applied Mechanics and Engineering</i> , 2011, 200, 1671-1690.	6.6	33
4	Efficient finite element formulation for the analysis of localized failure in beam structures. <i>International Journal for Numerical Methods in Engineering</i> , 2008, 73, 1217-1250.	2.8	7
5	Algebraic graph theory and its applications for mesh generation. <i>Proceedings in Applied Mathematics and Mechanics</i> , 2012, 12, 663-664.	0.2	5
6	A general approximation of the exponential Cauchy-Born hypothesis to model arbitrarily shaped shell-like nanostructures within continuum mechanics. <i>International Journal for Numerical Methods in Engineering</i> , 2016, 105, 747-780.	2.8	5
7	Introducing the Logarithmic finite element method: a geometrically exact planar Bernoulli beam element. <i>Advanced Modeling and Simulation in Engineering Sciences</i> , 2016, 3, .	1.7	4
8	An efficient semi-analytical simulation framework to analyse laminated prismatic thin-walled beams. <i>Computers and Structures</i> , 2018, 208, 32-50.	4.4	4
9	An advanced finite element formulation for piezoelectric beam structures. <i>Computational Mechanics</i> , 2013, 52, 1331-1349.	4.0	3
10	Polynomial shape functions on the logarithmic space: the LogFE method. <i>Proceedings in Applied Mathematics and Mechanics</i> , 2015, 15, 469-470.	0.2	3
11	Meshing Highly Regular Structures: The Case of Super Carbon Nanotubes of Arbitrary Order. <i>Journal of Nanomaterials</i> , 2015, 2015, 1-26.	2.7	3
12	A Unified and Memory Efficient Framework for Simulating Mechanical Behavior of Carbon Nanotubes. <i>Procedia Computer Science</i> , 2015, 51, 413-422.	2.0	3
13	Isolating low-frequency deformations for efficient multigrid methods: a geometrically exact 2D beam model. <i>Proceedings in Applied Mathematics and Mechanics</i> , 2014, 14, 561-562.	0.2	2
14	Methods to model and simulate super carbon nanotubes of higher order. <i>Concurrency Computation Practice and Experience</i> , 2017, 29, e3872.	2.2	2
15	A direct numerical method to evaluate the geometric stability of arbitrary spatial structures. <i>International Journal of Solids and Structures</i> , 2020, 185-186, 29-45.	2.7	2
16	Exploiting Structural Properties During Carbon Nanotube Simulation. <i>Lecture Notes in Computer Science</i> , 2015, , 339-354.	1.3	2
17	On a concept to avoid electromechanical locking in a piezoelectric finite beam element. <i>Proceedings in Applied Mathematics and Mechanics</i> , 2010, 10, 185-186.	0.2	1
18	High-order time integration methods in molecular dynamics. <i>Proceedings in Applied Mathematics and Mechanics</i> , 2012, 12, 47-48.	0.2	1

#	ARTICLE	IF	CITATIONS
19	A modified approximation of the exponential Cauchy-Born rule for arbitrary shell-like nanostructures. Proceedings in Applied Mathematics and Mechanics, 2014, 14, 565-566.	0.2	1
20	Coupling atomistic and continuum models with nodes having translational and rotational degrees of freedom. Proceedings in Applied Mathematics and Mechanics, 2015, 15, 465-466.	0.2	1
21	An Improved Algorithm for Simulating the Mechanical Behavior of Super Carbon Nanotubes. , 2015, , .		1
22	Using finite element codes as a numerical platform to run molecular dynamics simulations. Computational Mechanics, 2019, 63, 271-300.	4.0	1
23	Structural Analysis on Nanoscale. Proceedings in Applied Mathematics and Mechanics, 2009, 9, 699-700.	0.2	0
24	Computation of the Three-Dimensional Stress State in Composite Shell Structures with Mixed Finite Elements. Proceedings in Applied Mathematics and Mechanics, 2010, 10, 217-218.	0.2	0
25	Compressed symmetric graphs for the simulation of super carbon nanotubes. , 2016, , .		0
26	The Logarithmic finite element method in a multigrid setting. Proceedings in Applied Mathematics and Mechanics, 2016, 16, 549-550.	0.2	0
27	Co-rotational extension of the Logarithmic finite element method. Proceedings in Applied Mathematics and Mechanics, 2017, 17, 345-346.	0.2	0
28	Coupled atomisticâ€continuum simulation of the mechanical properties of singleâ€layered graphene sheets. Proceedings in Applied Mathematics and Mechanics, 2019, 19, e201900115.	0.2	0
29	On the detection, visualization and characterization of spurious kinematic modes in arbitrary plane structures. International Journal of Solids and Structures, 2019, 164, 84-103.	2.7	0
30	Derivation of Analytical, Closedâ€form Formulas for the Calculations of Instantaneous Screw Axes of Arbitrary Rigid 3D Multiâ€Body Systems. Proceedings in Applied Mathematics and Mechanics, 2021, 20, e202000103.	0.2	0
31	Possibilities and drawbacks using arbitrary precision numbers for structural analysis. Proceedings in Applied Mathematics and Mechanics, 2021, 20, e202000079.	0.2	0
32	Methode zur Kopplung von molekular- und kontinuumsmechanischen Modellen im Kontext kohlenstoffbasierter Strukturen. , 2018, , 94-96.		0