

Ali Asghar Atai

List of Publications by Year in descending order

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28
papers

603
citations

687363

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580821

25
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28
all docs

28
docs citations

28
times ranked

530
citing authors

#	ARTICLE	IF	CITATIONS
1	Grenade Explosion Methodâ€”A novel tool for optimization of multimodal functions. Applied Soft Computing Journal, 2010, 10, 1132-1140.	7.2	114
2	Optimal design of four-bar mechanisms using a hybrid multi-objective GA with adaptive local search. Mechanism and Machine Theory, 2011, 46, 1453-1465.	4.5	71
3	On the nonlinear mechanics of discrete networks. Archive of Applied Mechanics, 1997, 67, 303-319.	2.2	52
4	Simultaneous topology, shape and size optimization of truss structures by fully stressed design based on evolution strategy. Engineering Optimization, 2015, 47, 1063-1084.	2.6	47
5	Coupled deformations of elastic curves and surfaces. International Journal of Solids and Structures, 1998, 35, 1915-1952.	2.7	44
6	GEM: A novel evolutionary optimization method with improved neighborhood search. Applied Mathematics and Computation, 2009, 210, 376-386.	2.2	38
7	Fully Stressed Design Evolution Strategy for Shape and Size Optimization of Truss Structures. Computers and Structures, 2013, 123, 58-67.	4.4	30
8	Predictive modeling of creep in polymer/layered silicate nanocomposites. Polymer Testing, 2012, 31, 345-354.	4.8	28
9	Micromechanical characterization of the interphase layer in semiâ€”crystalline polyethylene. Journal of Polymer Science, Part B: Polymer Physics, 2013, 51, 1228-1243.	2.1	21
10	Size dependency in vibration analysis of nano plates; one problem, different answers. European Journal of Mechanics, A/Solids, 2016, 59, 124-139.	3.7	21
11	Application of impulse damper in control of a chaotic friction-induced vibration. Journal of Mechanical Science and Technology, 2011, 25, 279-285.	1.5	19
12	On the limitations of classical benchmark functions for evaluating robustness of evolutionary algorithms. Applied Mathematics and Computation, 2010, 215, 3222-3229.	2.2	16
13	Numerical analysis of wrinkled, anisotropic, nonlinearly elastic membranes. Mechanics Research Communications, 2014, 57, 1-5.	1.8	15
14	Evaluating the Effect of Mechanical Loading on the Electrical Percolation Threshold of Carbon Nanotube Reinforced Polymers: A 3D Monte-Carlo Study. Journal of Computational and Theoretical Nanoscience, 2011, 8, 2087-2099.	0.4	13
15	Analytic solution of effect of electric field on elasto-plastic response of a functionally graded piezoelectric hollow cylinder. International Journal of Pressure Vessels and Piping, 2017, 155, 1-14.	2.6	10
16	Optimal design of 3D architected porous/nonporous microstructures of multifunctional multiphase composites for maximized thermomechanical properties. Computational Mechanics, 2022, 69, 979-996.	4.0	10
17	Equilibrium analysis of elasto-plastic cable nets. Computers and Structures, 1998, 66, 163-171.	4.4	9
18	Static and free vibration analysis of Timoshenko beam based on combined peridynamic-classical theory besides FEM formulation. Computers and Structures, 2019, 213, 72-81.	4.4	9

#	ARTICLE	IF	CITATIONS
19	Modeling and simulation of sutured biomembranes. <i>Mechanics Research Communications</i> , 2012, 46, 34-40.	1.8	8
20	3D-Printable Unit Cell Design for Cubic and Orthotropic Porous Microstructures Using Topology Optimization Based on Optimality Criteria Algorithm. <i>International Journal of Applied Mechanics</i> , 2018, 10, 1850060.	2.2	7
21	Hyperelastic characterization of the interlamellar domain and interphase layer in semicrystalline polyethylene. <i>Journal of Polymer Science, Part B: Polymer Physics</i> , 2013, 51, 1692-1704.	2.1	5
22	Analytic investigation of effect of electric field on elasto-plastic response of a functionally graded piezoelectric hollow sphere. <i>Journal of Mechanical Science and Technology</i> , 2016, 30, 113-119.	1.5	5
23	Limit load analysis of shallow arches made of functionally bi-directional graded materials under mechanical loading. <i>Journal of Mechanical Science and Technology</i> , 2012, 26, 1811-1816.	1.5	4
24	A mixed analytical-numerical investigation of snap-through of low arches with a power-law variable thickness. <i>Journal of Mechanical Science and Technology</i> , 2010, 24, 2247-2252.	1.5	2
25	Online model-based milling process condition monitoring. <i>International Journal of Mechatronics and Manufacturing Systems</i> , 2013, 6, 195.	0.1	2
26	Limit load analysis of a spring-supported shallow arch of variable thickness given by a power-law, exponential, or logarithmic formula. <i>Mechanics of Solids</i> , 2015, 50, 676-686.	0.7	2
27	Transient elastic-viscoplastic dynamics of thin sheets. <i>Journal of Mechanics of Materials and Structures</i> , 2014, 9, 557-574.	0.6	1
28	Multi-objective optimisation of autofrettaged functionally graded thick spheres. <i>International Journal of Design Engineering</i> , 2017, 7, 92.	0.3	0