Masoud Tahani

List of Publications by Year
in descending order

104 papers	1,739 citations	257450 24 h-index	345221 36 g-index
104 all docs	104 docs citations	104 times ranked	1105 citing authors

#	Article	IF	Citations
1	Free edge stress analysis of general cross-ply composite laminates under extension and thermal loading. Composite Structures, 2003, 60, 91-103.	5.8	94
2	Analysis of laminated composite beams using layerwise displacement theories. Composite Structures, 2007, 79, 535-547.	5.8	82
3	An ant colony optimization approach to multi-objective optimal design of symmetric hybrid laminates for maximum fundamental frequency and minimum cost. Structural and Multidisciplinary Optimization, 2009, 37, 367-376.	3.5	74
4	An analytical solution for thermoelastic damping in a micro-beam based on generalized theory of thermoelasticity and modified couple stress theory. Applied Mathematical Modelling, 2016, 40, 3164-3174.	4.2	63
5	Influence of filler particles on deformation and fracture mechanism of isotactic polypropylene. Journal of Materials Processing Technology, 2004, 155-156, 1459-1464.	6.3	56
6	Transient dynamic and free vibration analysis of functionally graded truncated conical shells with non-uniform thickness subjected to mechanical shock loading. Composites Part B: Engineering, 2012, 43, 2161-2171.	12.0	56
7	A more comprehensive modeling of atomic force microscope cantilever. Ultramicroscopy, 2008, 109, 54-60.	1.9	51
8	Modification of fracture toughness of isotactic polypropylene with a combination of EPR and CaCO3 particles. Journal of Materials Processing Technology, 2006, 175, 446-451.	6.3	45
9	Size-dependent dynamic pull-in analysis of beam-type MEMS under mechanical shock based on the modified couple stress theory. Applied Mathematical Modelling, 2015, 39, 934-946.	4.2	45
10	Analytical solution for bending of moderately thick radially functionally graded sector plates with general boundary conditions using multi-term extended Kantorovich method. Composites Part B: Engineering, 2012, 43, 1405-1416.	12.0	40
11	Thermoelastic damping in a nonlocal nano-beam resonator as NEMS based on the type III of Green–Naghdi theory (with energy dissipation). International Journal of Mechanical Sciences, 2015, 92, 304-311.	6.7	40
12	Size-dependent free vibration analysis of electrostatically pre-deformed rectangular micro-plates based on the modified couple stress theory. International Journal of Mechanical Sciences, 2015, 94-95, 185-198.	6.7	39
13	Hybrid layerwise-differential quadrature transient dynamic analysis of functionally graded axisymmetric cylindrical shells subjected to dynamic pressure. Composite Structures, 2011, 93, 2663-2670.	5.8	37
14	Accurate Determination of Interlaminar Stresses in General Cross-Ply Laminates. Mechanics of Advanced Materials and Structures, 2004, 11, 67-92.	2.6	33
15	Transient response of laminated plates with arbitrary laminations and boundary conditions under general dynamic loadings. Archive of Applied Mechanics, 2012, 82, 615-630.	2.2	32
16	Free-edge stress analysis of general rectangular composite laminates under bending, torsion and thermal loads. European Journal of Mechanics, A/Solids, 2013, 42, 229-240.	3.7	31
17	Nonlinear analysis of functionally graded piezoelectric energy harvesters. Composite Structures, 2017, 182, 199-208.	5.8	31
18	Three-dimensional interlaminar stress analysis at free edges of general cross-ply composite laminates. Materials & Design, 2003, 24, 121-130.	5.1	30

#	ARTICLE	IF	CITATIONS
19	Deformation and stress analysis of circumferentially fiber-reinforced composite disks. International Journal of Solids and Structures, 2005, 42, 2741-2754.	2.7	29
20	Analytical solutions for bending analysis of rectangular laminated plates with arbitrary lamination and boundary conditions. Journal of Mechanical Science and Technology, 2009, 23, 2253-2267.	1.5	29
21	Analytical solutions for adhesively bonded composite single-lap joints under mechanical loadings using full layerwise theory. International Journal of Adhesion and Adhesives, 2013, 43, 32-41.	2.9	29
22	Size-dependent dynamic pull-in analysis of geometric non-linear micro-plates based on the modified couple stress theory. Physica E: Low-Dimensional Systems and Nanostructures, 2017, 86, 262-274.	2.7	26
23	Analysis of interlaminar stresses in general cross-ply laminates with distributed piezoelectric actuators. Composite Structures, 2010, 92, 757-768.	5.8	25
24	Interlaminar stresses in thick rectangular laminated plates with arbitrary laminations and boundary conditions under transverse loads. Composite Structures, 2012, 94, 1793-1804.	5.8	25
25	An alternative reduced order model for electrically actuated micro-beams under mechanical shock. Mechanics Research Communications, 2014, 57, 34-39.	1.8	25
26	Edge effects of uniformly loaded cross-ply composite laminates. Materials & Design, 2003, 24, 647-658.	5.1	23
27	Analytical Approach to Free Vibrations of Cracked Timoshenko Beams Made of Functionally Graded Materials. Mechanics of Advanced Materials and Structures, 2010, 17, 353-365.	2.6	22
28	Two-dimensional dynamic analysis of thermal stresses in a finite-length FG thick hollow cylinder subjected to thermal shock loading using an analytical method. Acta Mechanica, 2011, 220, 299-314.	2.1	22
29	Non-linear analysis of functionally graded plates in cylindrical bending under thermomechanical loadings based on a layerwise theory. European Journal of Mechanics, A/Solids, 2009, 28, 248-256.	3.7	21
30	Interlaminar stresses in general thick rectangular laminated plates under in-plane loads. Composites Part B: Engineering, 2013, 47, 58-69.	12.0	20
31	Thermal shock analysis and thermo-elastic stress waves in functionally graded thick hollow cylinders using analytical method. International Journal of Mechanics and Materials in Design, 2011, 7, 167-184.	3.0	19
32	Three-dimensional transient analysis of functionally graded truncated conical shells with variable thickness subjected to an asymmetric dynamic pressure. International Journal of Pressure Vessels and Piping, 2014, 119, 29-38.	2.6	19
33	Stability analysis of electrostatically actuated nano/micro-beams under the effect of van der Waals force, a semi-analytical approach. Communications in Nonlinear Science and Numerical Simulation, 2016, 34, 130-141.	3.3	19
34	Accurate electrostatic and van der Waals pull-in prediction for fully clamped nano/micro-beams using linear universal graphs of pull-in instability. Physica E: Low-Dimensional Systems and Nanostructures, 2014, 63, 151-159.	2.7	18
35	Prediction of Stress Shielding Around Orthopedic Screws: Time-Dependent Bone Remodeling Analysis Using Finite Element Approach. Journal of Medical and Biological Engineering, 2015, 35, 545-554.	1.8	18
36	Vibration analysis of orthotropic circular and elliptical nano-plates embedded in elastic medium based on nonlocal Mindlin plate theory and using Galerkin method. Journal of Mechanical Science and Technology, 2016, 30, 2463-2474.	1.5	18

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37	Bending analysis of laminated sector plates with polar and rectilinear orthotropy. European Journal of Mechanics, A/Solids, 2013, 40, 84-96.	3.7	17
38	Accurate determination of stress distributions in adhesively bonded homogeneous and heterogeneous double-lap joints. European Journal of Mechanics, A/Solids, 2013, 39, 197-208.	3.7	16
39	Non-linear analysis of fiber-reinforced open conical shell panels considering variation of thickness and fiber orientation under thermo-mechanical loadings. Composites Part B: Engineering, 2013, 52, 245-261.	12.0	16
40	Analytical solution of piezolaminated rectangular plates with arbitrary clamped/simply-supported boundary conditions under thermo-electro-mechanical loadings. Applied Mathematical Modelling, 2013, 37, 3228-3241.	4.2	16
41	Graphene-based mass sensors: Chaotic dynamics analysis using the nonlocal strain gradient model. Applied Mathematical Modelling, 2020, 81, 799-817.	4.2	16
42	Displacement time history analysis and radial wave propagation velocity in pressurized multiwall carbon nanotubes. Computational Materials Science, 2010, 49, 283-292.	3.0	15
43	Static and transient analysis of laminated cylindrical shell panels with various boundary conditions and general layâ€ups. ZAMM Zeitschrift Fur Angewandte Mathematik Und Mechanik, 2012, 92, 124-140.	1.6	15
44	Pulling of double-stranded DNA by atomic force microscopy: a simulation in atomistic details. RSC Advances, 2013, 3, 10516.	3.6	15
45	Analytical determination of size-dependent natural frequencies of fully clamped rectangular microplates based on the modified couple stress theory. Journal of Mechanical Science and Technology, 2015, 29, 2135-2145.	1.5	15
46	A frequency criterion for doubly clamped beam-type N/MEMS subjected to the van der Waals attraction. Applied Mathematical Modelling, 2017, 41, 650-666.	4.2	14
47	Relief of edge effects in bi-adhesive composite joints. Composites Part B: Engineering, 2017, 108, 153-163.	12.0	13
48	A comparative study of bone remodeling around hydroxyapatite-coated and novel radial functionally graded dental implants using finite element simulation. Medical Engineering and Physics, 2022, 102, 103775.	1.7	13
49	Accurate determination of coupling effects on free edge interlaminar stresses in piezoelectric laminated plates. Materials & Design, 2009, 30, 2963-2974.	5.1	12
50	Interlaminar stresses in thick cylindrical shell with arbitrary laminations and boundary conditions under transverse loads. Composites Part B: Engineering, 2016, 98, 151-165.	12.0	12
51	An analytical solution for thermal shock analysis of multiwall carbon nanotubes. Computational Materials Science, 2012, 61, 291-297.	3.0	11
52	An analytical investigation on thermomechanical stress analysis of adhesively bonded joints undergoing heat conduction. Archive of Applied Mechanics, 2014, 84, 67-79.	2.2	11
53	On thermomechanical stress analysis of adhesively bonded composite joints in presence of an interfacial void. Composite Structures, 2015, 130, 116-123.	5.8	11
54	Effects of dimensional parameters and various boundary conditions on axisymmetric vibrations of multi-walled carbon nanotubes using a continuum model. Archive of Applied Mechanics, 2011, 81, 1129-1140.	2.2	10

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55	Non‐linear analysis of moderately thick laminated plates and shell panels under thermo‐mechanical loadings. ZAMM Zeitschrift Fur Angewandte Mathematik Und Mechanik, 2012, 92, 652-667.	1.6	10
56	Bending Analysis of Piezolaminated Rectangular Plates under Electromechanical Loadings Using Multi-Term Extended Kantorovich Method. Mechanics of Advanced Materials and Structures, 2013, 20, 415-433.	2.6	10
57	Size-dependent free vibrations of electrostatically predeformed functionally graded micro-cantilevers. IOP Conference Series: Materials Science and Engineering, 2015, 87, 012117.	0.6	10
58	Investigating Nonlinear Vibration of a Fully Clamped Nanobeam in Presence of the van der Waals Attraction. Applied Mechanics and Materials, 2012, 226-228, 181-185.	0.2	9
59	Nanofibrous polycaprolactone/chitosan membranes for preventing postsurgical tendon adhesion. Journal of Biomedical Materials Research - Part B Applied Biomaterials, 2022, 110, 1279-1291.	3.4	9
60	Analytical dynamic modeling of fast trilayer polypyrrole bending actuators. Smart Materials and Structures, 2011, 20, 115020.	3.5	8
61	Analytical solution for bending problem of moderately thick composite annular sector plates with general boundary conditions and loadings using multi-term extended Kantorovich method. Archive of Applied Mechanics, 2013, 83, 969-985.	2.2	8
62	Analytical prediction of Young's modulus of carbon nanotubes using a variational method. Applied Mathematical Modelling, 2017, 45, 1031-1043.	4.2	8
63	Bone fracture healing under external fixator: Investigating impacts of several design parameters using Taguchi and ANOVA. Biocybernetics and Biomedical Engineering, 2020, 40, 1525-1534.	5.9	8
64	MECHANICALLY INDUCED TRABECULAR BONE REMODELING INCLUDING CELLULAR ACCOMMODATION EFFECT: A COMPUTER SIMULATION. Transactions of the Canadian Society for Mechanical Engineering, 2008, 32, 371-382.	0.8	7
65	Higher-order coupled and uncoupled analyses of free edge effect in piezoelectric laminates under mechanical loadings. Materials & Design, 2009, 30, 2473-2482.	5.1	7
66	Response of multiwall carbon nanotubes to impact loading. Applied Mathematical Modelling, 2013, 37, 5359-5370.	4.2	7
67	An investigation into the static response of fiber-reinforced open conical shell panels considering various types of orthotropy. Proceedings of the Institution of Mechanical Engineers, Part C: Journal of Mechanical Engineering Science, 2014, 228, 3-21.	2.1	7
68	Edge effects in adhesively bonded composite joints integrated with piezoelectric patches. Composite Structures, 2018, 200, 187-194.	5.8	7
69	Determination of rigidities, stiffness coefficients and elastic constants of multi-layer graphene sheets by an asymptotic homogenization method. Journal of the Brazilian Society of Mechanical Sciences and Engineering, 2019, 41, 1.	1.6	7
70	A mechanobiological approach to find the optimal thickness for the locking compression plate: Finite element investigations. Proceedings of the Institution of Mechanical Engineers, Part H: Journal of Engineering in Medicine, 2021, 235, 408-418.	1.8	7
71	A Novel Method for Investigating the Casimir Effect on Pull-In Instability of Electrostatically Actuated Fully Clamped Rectangular Nano/Microplates. Journal of Nanoscience, 2015, 2015, 1-9.	2.6	6
72	A glance on the effects of temperature on axisymmetric dynamic behavior of multiwall carbon nanotubes. Acta Mechanica Sinica/Lixue Xuebao, 2012, 28, 720-728.	3.4	5

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73	Molecular dynamics study of DNA oligomers under angled pulling. RSC Advances, 2014, 4, 10751.	3.6	5
74	Equivalent dynamic thermoviscoelastic modeling of ionic polymers. Polymers for Advanced Technologies, 2015, 26, 385-391.	3.2	5
75	Three-dimensional transient analysis of functionally graded cylindrical shells subjected to asymmetric dynamic pressure. Science and Engineering of Composite Materials, 2013, 20, 75-85.	1.4	4
76	Introduction of Maximum Stress Parameter for the Evaluation of Stress Shielding Around Orthopedic Screws in the Presence of Bone Remodeling Process. Journal of Medical and Biological Engineering, 2017, 37, 703-716.	1.8	4
77	Multiscale asymptotic homogenization analysis of epoxy-based composites reinforced with different hexagonal nanosheets. Composite Structures, 2019, 222, 110929.	5.8	4
78	Evaluation of Tension, Bending and Twisting Rigidities of Single-Layer Graphene Sheets by an Analytical Asymptotic Homogenization Model. Mechanika, 2018, 24, .	0.5	4
79	Strain gradient bistability of bimorph piezoelectric curved beam interacting with a curved electrode. Journal of the Brazilian Society of Mechanical Sciences and Engineering, 2022, 44, 1.	1.6	4
80	Transient Analysis of Functionally Graded Thick Hollow Circular Cylinders under Mechanical Loadings. Journal of Solid Mechanics and Materials Engineering, 2010, 4, 1223-1236.	0.5	3
81	Transient and Dynamic Stress Analysis of Functionally Graded Thick Hollow Cylinder Subjected to Thermal Shock Loading Using an Analytical Method. Journal of Solid Mechanics and Materials Engineering, 2010, 4, 1346-1359.	0.5	3
82	Transient heat conduction in multiwall carbon nanotubes. Latin American Journal of Solids and Structures, 2015, 12, 711-729.	1.0	3
83	Size-dependent pull-in instability analysis of electrically actuated packaged FG micro-cantilevers under the effect of mechanical shock. Journal of the Brazilian Society of Mechanical Sciences and Engineering, 2019, 41, 1.	1.6	3
84	Nonlinear Vibration Analysis of Beam Microgyroscopes using Nonlocal Strain Gradient Theory. Sensing and Imaging, 2021, 22, 1.	1.5	3
85	Three-dimensional stress analysis of rotating composite beams due to material discontinuities. Materials & Design, 2006, 27, 976-982.	5.1	2
86	A study on dynamic behaviour of functionally graded thick hollow circular cylinders. Proceedings of the Institution of Mechanical Engineers, Part C: Journal of Mechanical Engineering Science, 2012, 226, 498-513.	2.1	2
87	A Study on Systematic Procedure for Choosing the Best Powertrain Configuration in Hybrid Sedan Cars. Applied Mechanics and Materials, 2013, 390, 360-364.	0.2	2
88	Thermal Bending Analysis of Doubly Curved Composite Laminated Shell Panels with General Boundary Conditions and Laminations. Journal of Thermal Stresses, 2015, 38, 250-270.	2.0	2
89	The Influence of Couple Stress Components and Electrostatic Actuation on Free Vibration Characteristics of Thin Micro-Plates. MATEC Web of Conferences, 2016, 54, 03008.	0.2	2
90	Dynamic Analysis of Rectangular Micro-plates Under Mechanical Shock in Presence of Electrostatic Actuation. Sensing and Imaging, 2018, 19, 1.	1.5	2

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91	Dynamic Pull-In Investigation of a Clamped-Clamped Nanoelectromechanical Beam under Ramp-Input Voltage and the Casimir Force. Shock and Vibration, 2014, 2014, 1-5.	0.6	1
92	Analytical solution for dynamic behavior of multiwall carbon nanotubes subjected to mechanical shock loading. Journal of Mechanical Science and Technology, 2014, 28, 3545-3554.	1.5	1
93	Dynamic response of multiwall boron nitride nanotubes subjected to impact. Bulletin of Materials Science, 2015, 38, 1797-1805.	1.7	1
94	Nonlinear viscoelastic dynamic modeling of high-speed polypyrrole-based trilayer bending plate-like actuators based on first-order shear deformation plate theory. Journal of Intelligent Material Systems and Structures, 2015, 26, 292-308.	2.5	1
95	Failure analysis of fiberglass–vinyl ester composite cylinders subjected to fire and asymmetric transient pressure. Polymer Composites, 2021, 42, 5607.	4.6	1
96	Study of structural, electronic, and mechanical properties of pure and hydrogenated multilayer penta-graphene nano-plates using density functional theory. Materials Today Communications, 2021, 28, 102608.	1.9	1
97	Nonlinear free and forced vibrations of curved single walled carbon nanotube on a Pasternak elastic foundation. Scientia Iranica, 2016, 23, 3087-3098.	0.4	1
98	Nonlinear Bending Analysis of Sector Graphene Sheet Embedded in Elastic Matrix Based on Nonlocal Continuum Mechanics. International Journal of Engineering, Transactions B: Applications, 2015, 28, .	0.7	1
99	Multi-Objective Optimal Design of Sandwich Composite Laminates Using Simulated Annealing and FEM. , 2008, , .		0
100	SEP controlling parameter in design of above knee prosthesis with moving ankle. , 2010, , .		0
101	Optimization of Connecting Rod Design Parameters for External Fixation System: A Biomechanical Study. Journal of Foot and Ankle Surgery, 2021, 60, 1169-1174.	1.0	0
102	Osteosynthesis of diaphyseal tibia fracture with locking compression plates: A numerical investigation using <scp>Taguchi</scp> and <scp>ANOVA</scp>. International Journal for Numerical Methods in Biomedical Engineering, 2021, 37, e3528.	2.1	0
103	Study of Stone-wales Defect on Elastic Properties of Single-layer Graphene Sheets by an Atomistic based Finite Element Model. International Journal of Engineering, Transactions B: Applications, 2018, 31, .	0.7	0
104	A finite element study of a fractured tibia treated with a unilateral external fixator: The effects of the number of pins and cortical thickness. Injury, 2022, 53, 1815-1823.	1.7	0