Roham Rafiee

List of Publications by Year
in descending order

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94 papers	3,748 citations	136740 32 h-index	138251 58 g-index
99 all docs	99 docs citations	99 times ranked	2389 citing authors

#	Article	IF	Citations
1	Determining in-plane material properties of square core cellular materials using computational homogenization technique. Engineering With Computers, 2023, 39, 373-386.	3.5	9
2	Dental composites with strength after aging improved by using anodic nanoporous fillers: experimental results, modeling, and simulations. Engineering With Computers, 2023, 39, 387-398.	3.5	3
3	Estimating the burst pressure of a filament wound composite pressure vessel using two-scale and multi-scale analyses. Mechanics of Advanced Materials and Structures, 2023, 30, 2668-2683.	1.5	9
4	Multi-scale Modeling of Polymeric Composites Including Nanoporous Fillers of Milled Anodic Alumina. Arabian Journal for Science and Engineering, 2022, 47, 8189-8198.	1.7	4
5	Experimental investigation of graphene nanoplatelets effect on the fatigue behavior of basalt/epoxy composite pressure vessels. Thin-Walled Structures, 2022, 171, 108672.	2.7	10
6	A novel recursive multi-scale modeling for predicting the burst pressure of filament wound composite pressure vessels. Applied Physics A: Materials Science and Processing, 2022, 128, 1.	1.1	15
7	Filament wound pipes optimization platform development: A methodological approach. Composite Structures, 2022, 297, 115972.	3.1	3
8	Characterizing delamination toughness of laminated composites containing carbon nanotubes: Experimental study and stochastic multi-scale modeling. Composites Science and Technology, 2021, 201, 108487.	3.8	35
9	Experimental study on the effect of hygrothermal environments combined with the sustained mechanical loads on the strength of composite rings. Composite Structures, 2021, 258, 113397.	3.1	14
10	Failure analysis of a composite wind turbine blade at the adhesive joint of the trailing edge. Engineering Failure Analysis, 2021, 121, 105148.	1.8	19
11	A cohesive zone model for predicting the initiation of Mode II delamination in composites under cyclic loading. Journal of Reinforced Plastics and Composites, 2021, 40, 179-192.	1.6	10
12	Bending Analysis of Molded Composite Grating Panels: Theoretical and Experimental Investigations. Fibers and Polymers, 2021, 22, 1653-1663.	1.1	4
13	Numerical investigation of the effect of moisture and impurity on long-term creep behavior of polymer composite pipes. International Journal of Pressure Vessels and Piping, 2021, 193, 104456.	1.2	8
14	A hysteresis cohesive approach for predicting mixed-mode delamination onset of composite laminates under cyclic loading: Part I, model development. Composite Structures, 2021, 277, 114667.	3.1	2
15	A hysteresis cohesive approach for predicting mixed-mode delamination onset of composite laminates under cyclic loading: Part II, numerical and experimental analyses. Composite Structures, 2021, 277, 114668.	3.1	2
16	Experimental and Theoretical Investigations of Creep on a Composite Pipe under Compressive Transverse Loading. Fibers and Polymers, 2021, 22, 222-230.	1.1	14
17	Analyzing the long-term creep behavior of composite pipes: Developing an alternative scenario of short-term multi-stage loading test. Composite Structures, 2020, 254, 112868.	3.1	18
18	Predicting the strength of carbon nanotube reinforced polymers using stochastic bottom-up modeling. Applied Physics A: Materials Science and Processing, 2020, 126, 1.	1.1	18

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19	Numerical and Experimental Analyses of the Hoop Tensile Strength of Filament-Wound Composite Tubes. Mechanics of Composite Materials, 2020, 56, 423-436.	0.9	25
20	Fatigue analysis of a composite ring: Experimental and theoretical investigations. Journal of Composite Materials, 2020, 54, 4011-4024.	1.2	16
21	Developing a homogenization approach for estimation of in-plan effective elastic moduli of hexagonal honeycombs. Engineering Analysis With Boundary Elements, 2020, 117, 202-211.	2.0	14
22	Investigating the influence of bonded and non-bonded interactions on the interfacial bonding between carbon nanotube and polymer. Composite Structures, 2020, 238, 111996.	3.1	25
23	Predicting Youngâ€™s modulus of agglomerated graphene/polymer using multi-scale modeling. Composite Structures, 2020, 245, 112324.	3.1	29
24	Developing a micro-macromechanical approach for evaluating long-term creep in composite cylinders. Thin-Walled Structures, 2020, 151, 106714.	2.7	32
25	Theoretical study of failure in composite pressure vessels subjected to low-velocity impact and internal pressure. Frontiers of Structural and Civil Engineering, 2020, 14, 1349-1358.	1.2	26
26	Theoretical and numerical analyses of composite cylinders subjected to the low velocity impact. Composite Structures, 2019, 226, 111230.	3.1	36
27	Investigating the influence of delamination on the stiffness of composite pipes under compressive transverse loading using cohesive zone method. Frontiers of Structural and Civil Engineering, 2019, 13, 1316-1323.	1.2	12
28	Stochastic failure analysis of composite pipes subjected to random excitation. Construction and Building Materials, 2019, 224, 950-961.	3.2	17
29	A study on fracture behavior of semi-elliptical 3D crack in clay-polymer nanocomposites considering interfacial debonding. Engineering Fracture Mechanics, 2019, 209, 245-259.	2.0	9
30	3D stress analysis of generally laminated piezoelectric plates with electromechanical coupling effects. Applied Mathematical Modelling, 2019, 74, 258-279.	2.2	9
31	Estimating Young's modulus of graphene/polymer composites using stochastic multi-scale modeling. Composites Part B: Engineering, 2019, 173, 106842.	5.9	49
32	The influence of hygrothermal environments on the stress concentration in unidirectional composite lamina. Mechanics of Materials, 2019, 129, 332-340.	1.7	11
33	Mechanical Properties of Nanoclay and Nanoclay Reinforced Polymers: A Review. Polymer Composites, 2019, 40, 431-445.	2.3	50
34	Investigating structural failure of a filament-wound composite tube subjected to internal pressure: Experimental and theoretical evaluation. Polymer Testing, 2018, 67, 322-330.	2.3	60
35	Predicting mechanical properties of fuzzy fiber reinforced composites: radially grown carbon nanotubes on the carbon fiber. International Journal of Mechanics and Materials in Design, 2018, 14, 37-50.	1.7	30
36	Investigating interaction between CNT and polymer using cohesive zone model. Polymer Composites, 2018, 39, 3903-3911.	2.3	19

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37	Stochastic prediction of burst pressure in composite pressure vessels. Composite Structures, 2018, 185, 573-583.	3.1	98
38	Stochastic Multiscale Modeling of CNT/Polymer. , 2018, , 503-520.		1
39	Stochastic Modeling of CNT-Grown Fibers. , 2018, , 521-540.		2
40	Predicting mechanical properties of nanoclay/polymer composites using stochastic approach. Composites Part B: Engineering, 2018, 152, 31-42.	5.9	41
41	Evaluating mechanical performance of GFRP pipes subjected to transverse loading. Thin-Walled Structures, 2018, 131, 347-359.	2.7	50
42	On The Stiffness Prediction of GFRP Pipes Subjected to Transverse Loading. KSCE Journal of Civil Engineering, 2018, 22, 4564-4572.	0.9	32
43	Carbon Nanotubes Processing. , 2018, , 41-59.		4
44	The influence of fiber-crack angle on the crack tip parameters in orthotropic materials. Proceedings of the Institution of Mechanical Engineers, Part C: Journal of Mechanical Engineering Science, 2017, 231, 418-431.	1.1	14
45	Stochastic multi-scale modeling of randomly grown CNTs on carbon fiber. Mechanics of Materials, 2017, 106, 1-7.	1.7	42
46	Stochastic fatigue analysis of glass fiber reinforced polymer pipes. Composite Structures, 2017, 167, 96-102.	3.1	55
47	Theoretical modeling of fatigue phenomenon in composite pipes. Composite Structures, 2017, 161, 256-263.	3.1	38
48	Comparative study on predicting Young's modulus of graphene sheets using nano-scale continuum mechanics approach. Physica E: Low-Dimensional Systems and Nanostructures, 2017, 90, 42-48.	1.3	28
49	A Study on Equivalent Spherical Structure of Buckyball-C 60 Based on Continuum Shell Model. Latin American Journal of Solids and Structures, 2016, 13, 1016-1029.	0.6	10
50	Advances in Characterization and Modeling of Nanoreinforced Composites. Journal of Nanomaterials, 2016, 2016, 1-1.	1.5	1
51	The influence of material properties on the aeroelastic behavior of a composite wind turbine blade. Journal of Renewable and Sustainable Energy, 2016, 8, .	0.8	14
52	Evaluating long-term performance of Glass Fiber Reinforced Plastic pipes subjected to internal pressure. Construction and Building Materials, 2016, 122, 694-701.	3.2	30
53	A study on nonlinear vibration behavior of CNT-based representative volume element. Aerospace Science and Technology, 2016, 55, 272-281.	2.5	10
54	Molecular dynamics simulation of defected carbon nanotubes. Proceedings of the Institution of Mechanical Engineers, Part L: Journal of Materials: Design and Applications, 2016, 230, 654-662.	0.7	7

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55	Simulation of aeroelastic behavior in a composite wind turbine blade. Journal of Wind Engineering and Industrial Aerodynamics, 2016, 151, 60-69.	1.7	54
56	On the mechanical performance of glass-fibre-reinforced thermosetting-resin pipes: A review. Composite Structures, 2016, 143, 151-164.	3.1	103
57	Characterizing nanotubeâ€“polymer interaction using molecular dynamics simulation. Computational Materials Science, 2016, 112, 356-363.	1.4	46
58	Simulation of the long-term hydrostatic tests on Glass Fiber Reinforced Plastic pipes. Composite Structures, 2016, 136, 56-63.	3.1	48
59	Stochastic analysis of functional failure pressures in glass fiber reinforced polyester pipes. Materials & Design, 2015, 67, 422-427.	5.1	37
60	Modeling creep in polymeric composites: Developing a general integrated procedure. International Journal of Mechanical Sciences, 2015, 99, 112-120.	3.6	34
61	Influence of CNT functionalization on the interphase region between CNT and polymer. Computational Materials Science, 2015, 96, 573-578.	1.4	74
62	Modeling and experimental evaluation of functional failure pressures in glass fiber reinforced polyester pipes. Computational Materials Science, 2015, 96, 579-588.	1.4	64
63	Uncertainty quantification for multiscale modeling of polymer nanocomposites with correlated parameters. Composites Part B: Engineering, 2015, 68, 446-464.	5.9	187
64	The influence of production inconsistencies on the functional failure of GRP pipes. Steel and Composite Structures, 2015, 19, 1369-1379.	1.3	29
65	On the Mechanical Properties of Functionalized CNT Reinforced Polymer. , 2015, , 610-627.		0
66	Evaluating the influence of defects on the young's modulus of carbon nanotubes using stochastic modeling. Materials Research, 2014, 17, 758-766.	0.6	32
67	On the modeling of carbon nanotubes: A critical review. Composites Part B: Engineering, 2014, 56, 435-449.	5.9	194
68	Uncertainties propagation in metamodel-based probabilistic optimization of CNT/polymer composite structure using stochastic multi-scale modeling. Computational Materials Science, 2014, 85, 295-305.	1.4	94
69	Simulation of functional failure in GRP mortar pipes. Composite Structures, 2014, 113, 155-163.	3.1	51
70	The Influence of CNT Contents on the Electrical and Electromagnetic Properties of CNT/Vinylester. Journal of Electronic Materials, 2014, 43, 3477-3485.	1.0	7
71	Multi-scale modeling of carbon nanotube reinforced polymers using irregular tessellation technique. Mechanics of Materials, 2014, 78, 74-84.	1.7	38
72	Prediction of Mechanical Properties of CNT Based Composites Using Multi-Scale Modeling and Stochastic Analysis. Springer Series in Materials Science, 2014, , 201-238.	0.4	4

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73	A modal analysis of carbon-nanotube-reinforced polymer by using a multiscale finite-element method. Mechanics of Composite Materials, 2013, 49, 325-332.	0.9	24
74	Fracture investigation of wood under mixed mode I/II loading based on the maximum shear stress criterion. Strength of Materials, 2013, 45, 378-385.	0.2	20
75	Experimental and theoretical investigations on the failure of filament wound GRP pipes. Composites Part B: Engineering, 2013, 45, 257-267.	5.9	80
76	Influence of carbon nanotube waviness on the stiffness reduction of CNT/polymer composites. Composite Structures, 2013, 97, 304-309.	3.1	88
77	Modeling, Characterization, and Processing of Advanced Composites. Advances in Materials Science and Engineering, 2013, 2013, 1-2.	1.0	0
78	Apparent hoop tensile strength prediction of glass fiber-reinforced polyester pipes. Journal of Composite Materials, 2013, 47, 1377-1386.	1.2	31
79	Transition angle, a novel concept for predicting the failure mode in orthotropic materials. Proceedings of the Institution of Mechanical Engineers, Part C: Journal of Mechanical Engineering Science, 2013, 227, 2157-2164.	1.1	8
80	Challenges of the Modeling Methods for Investigating the Interaction between the CNT and the Surrounding Polymer. Advances in Materials Science and Engineering, 2013, 2013, 1-10.	1.0	27
81	Aeroelastic investigation of a composite wind turbine blade. Wind and Structures, an International Journal, 2013, 17, 671-680.	0.8	7
82	Simulation of impact and post-impact behavior of carbon nanotube reinforced polymer using multi-scale finite element modeling. Computational Materials Science, 2012, 63, 261-268.	1.4	55
83	Influence of non-bonded interphase on crack driving force in carbon nanotube reinforced polymer. Computational Materials Science, 2012, 56, 25-28.	1.4	28
84	Development of a full range multi-scale model to obtain elastic properties of CNT/polymer composites. Iranian Polymer Journal (English Edition), 2012, 21, 397-402.	1.3	26
85	Investigation of chirality and diameter effects on the Youngâ€™s modulus of carbon nanotubes using non-linear potentials. Composite Structures, 2012, 94, 2460-2464.	3.1	41
86	Prediction of mechanical properties of an embedded carbon nanotube in polymer matrix based on developing an equivalent long fiber. Mechanics Research Communications, 2010, 37, 235-240.	1.0	108
87	A review of the mechanical properties of isolated carbon nanotubes and carbon nanotube composites. Mechanics of Composite Materials, 2010, 46, 155-172.	0.9	176
88	Prediction of Youngâ€™s modulus of graphene sheets and carbon nanotubes using nanoscale continuum mechanics approach. Materials & Design, 2010, 31, 790-795.	5.1	246
89	On the tensile behavior of an embedded carbon nanotube in polymer matrix with non-bonded interphase region. Composite Structures, 2010, 92, 647-652.	3.1	165
90	Investigation of nanotube length effect on the reinforcement efficiency in carbon nanotube based composites. Composite Structures, 2010, 92, 2415-2420.	3.1	123

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91	Stochastic multi-scale modeling of CNT/polymer composites. Computational Materials Science, 2010, 50, 437-446.	1.4	75
92	Fatigue life prediction of wind turbine rotor blades manufactured from composites. , 2010, , 505-537.		3
93	Simulation of fatigue failure in a full composite wind turbine blade. Composite Structures, 2006, 74, 332-342.	3.1	176
94	Determination of Stochastic Properties of Carbon Nanotube-Epoxy Composites. , 0, , .		0