

Roham Rafiee

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/3138756/publications.pdf>

Version: 2024-02-01

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	Prediction of Young's modulus of graphene sheets and carbon nanotubes using nanoscale continuum mechanics approach. <i>Materials & Design</i> , 2010, 31, 790-795.	5.1	246
2	On the modeling of carbon nanotubes: A critical review. <i>Composites Part B: Engineering</i> , 2014, 56, 435-449.	5.9	194
3	Uncertainty quantification for multiscale modeling of polymer nanocomposites with correlated parameters. <i>Composites Part B: Engineering</i> , 2015, 68, 446-464.	5.9	187
4	Simulation of fatigue failure in a full composite wind turbine blade. <i>Composite Structures</i> , 2006, 74, 332-342.	3.1	176
5	A review of the mechanical properties of isolated carbon nanotubes and carbon nanotube composites. <i>Mechanics of Composite Materials</i> , 2010, 46, 155-172.	0.9	176
6	On the tensile behavior of an embedded carbon nanotube in polymer matrix with non-bonded interphase region. <i>Composite Structures</i> , 2010, 92, 647-652.	3.1	165
7	Investigation of nanotube length effect on the reinforcement efficiency in carbon nanotube based composites. <i>Composite Structures</i> , 2010, 92, 2415-2420.	3.1	123
8	Prediction of mechanical properties of an embedded carbon nanotube in polymer matrix based on developing an equivalent long fiber. <i>Mechanics Research Communications</i> , 2010, 37, 235-240.	1.0	108
9	On the mechanical performance of glass-fibre-reinforced thermosetting-resin pipes: A review. <i>Composite Structures</i> , 2016, 143, 151-164.	3.1	103
10	Stochastic prediction of burst pressure in composite pressure vessels. <i>Composite Structures</i> , 2018, 185, 573-583.	3.1	98
11	Uncertainties propagation in metamodel-based probabilistic optimization of CNT/polymer composite structure using stochastic multi-scale modeling. <i>Computational Materials Science</i> , 2014, 85, 295-305.	1.4	94
12	Influence of carbon nanotube waviness on the stiffness reduction of CNT/polymer composites. <i>Composite Structures</i> , 2013, 97, 304-309.	3.1	88
13	Experimental and theoretical investigations on the failure of filament wound GRP pipes. <i>Composites Part B: Engineering</i> , 2013, 45, 257-267.	5.9	80
14	Stochastic multi-scale modeling of CNT/polymer composites. <i>Computational Materials Science</i> , 2010, 50, 437-446.	1.4	75
15	Influence of CNT functionalization on the interphase region between CNT and polymer. <i>Computational Materials Science</i> , 2015, 96, 573-578.	1.4	74
16	Modeling and experimental evaluation of functional failure pressures in glass fiber reinforced polyester pipes. <i>Computational Materials Science</i> , 2015, 96, 579-588.	1.4	64
17	Investigating structural failure of a filament-wound composite tube subjected to internal pressure: Experimental and theoretical evaluation. <i>Polymer Testing</i> , 2018, 67, 322-330.	2.3	60
18	Simulation of impact and post-impact behavior of carbon nanotube reinforced polymer using multi-scale finite element modeling. <i>Computational Materials Science</i> , 2012, 63, 261-268.	1.4	55

#	ARTICLE	IF	CITATIONS
19	Stochastic fatigue analysis of glass fiber reinforced polymer pipes. <i>Composite Structures</i> , 2017, 167, 96-102.	3.1	55
20	Simulation of aeroelastic behavior in a composite wind turbine blade. <i>Journal of Wind Engineering and Industrial Aerodynamics</i> , 2016, 151, 60-69.	1.7	54
21	Simulation of functional failure in GRP mortar pipes. <i>Composite Structures</i> , 2014, 113, 155-163.	3.1	51
22	Evaluating mechanical performance of GFRP pipes subjected to transverse loading. <i>Thin-Walled Structures</i> , 2018, 131, 347-359.	2.7	50
23	Mechanical Properties of Nanoclay and Nanoclay Reinforced Polymers: A Review. <i>Polymer Composites</i> , 2019, 40, 431-445.	2.3	50
24	Estimating Young's modulus of graphene/polymer composites using stochastic multi-scale modeling. <i>Composites Part B: Engineering</i> , 2019, 173, 106842.	5.9	49
25	Simulation of the long-term hydrostatic tests on Glass Fiber Reinforced Plastic pipes. <i>Composite Structures</i> , 2016, 136, 56-63.	3.1	48
26	Characterizing nanotube-polymer interaction using molecular dynamics simulation. <i>Computational Materials Science</i> , 2016, 112, 356-363.	1.4	46
27	Stochastic multi-scale modeling of randomly grown CNTs on carbon fiber. <i>Mechanics of Materials</i> , 2017, 106, 1-7.	1.7	42
28	Investigation of chirality and diameter effects on the Young's modulus of carbon nanotubes using non-linear potentials. <i>Composite Structures</i> , 2012, 94, 2460-2464.	3.1	41
29	Predicting mechanical properties of nanoclay/polymer composites using stochastic approach. <i>Composites Part B: Engineering</i> , 2018, 152, 31-42.	5.9	41
30	Multi-scale modeling of carbon nanotube reinforced polymers using irregular tessellation technique. <i>Mechanics of Materials</i> , 2014, 78, 74-84.	1.7	38
31	Theoretical modeling of fatigue phenomenon in composite pipes. <i>Composite Structures</i> , 2017, 161, 256-263.	3.1	38
32	Stochastic analysis of functional failure pressures in glass fiber reinforced polyester pipes. <i>Materials & Design</i> , 2015, 67, 422-427.	5.1	37
33	Theoretical and numerical analyses of composite cylinders subjected to the low velocity impact. <i>Composite Structures</i> , 2019, 226, 111230.	3.1	36
34	Characterizing delamination toughness of laminated composites containing carbon nanotubes: Experimental study and stochastic multi-scale modeling. <i>Composites Science and Technology</i> , 2021, 201, 108487.	3.8	35
35	Modeling creep in polymeric composites: Developing a general integrated procedure. <i>International Journal of Mechanical Sciences</i> , 2015, 99, 112-120.	3.6	34
36	Evaluating the influence of defects on the young's modulus of carbon nanotubes using stochastic modeling. <i>Materials Research</i> , 2014, 17, 758-766.	0.6	32

#	ARTICLE	IF	CITATIONS
37	On The Stiffness Prediction of GFRP Pipes Subjected to Transverse Loading. <i>KSCE Journal of Civil Engineering</i> , 2018, 22, 4564-4572.	0.9	32
38	Developing a micro-macromechanical approach for evaluating long-term creep in composite cylinders. <i>Thin-Walled Structures</i> , 2020, 151, 106714.	2.7	32
39	Apparent hoop tensile strength prediction of glass fiber-reinforced polyester pipes. <i>Journal of Composite Materials</i> , 2013, 47, 1377-1386.	1.2	31
40	Evaluating long-term performance of Glass Fiber Reinforced Plastic pipes subjected to internal pressure. <i>Construction and Building Materials</i> , 2016, 122, 694-701.	3.2	30
41	Predicting mechanical properties of fuzzy fiber reinforced composites: radially grown carbon nanotubes on the carbon fiber. <i>International Journal of Mechanics and Materials in Design</i> , 2018, 14, 37-50.	1.7	30
42	Predicting Young's modulus of agglomerated graphene/polymer using multi-scale modeling. <i>Composite Structures</i> , 2020, 245, 112324.	3.1	29
43	The influence of production inconsistencies on the functional failure of GRP pipes. <i>Steel and Composite Structures</i> , 2015, 19, 1369-1379.	1.3	29
44	Influence of non-bonded interphase on crack driving force in carbon nanotube reinforced polymer. <i>Computational Materials Science</i> , 2012, 56, 25-28.	1.4	28
45	Comparative study on predicting Young's modulus of graphene sheets using nano-scale continuum mechanics approach. <i>Physica E: Low-Dimensional Systems and Nanostructures</i> , 2017, 90, 42-48.	1.3	28
46	Challenges of the Modeling Methods for Investigating the Interaction between the CNT and the Surrounding Polymer. <i>Advances in Materials Science and Engineering</i> , 2013, 2013, 1-10.	1.0	27
47	Development of a full range multi-scale model to obtain elastic properties of CNT/polymer composites. <i>Iranian Polymer Journal (English Edition)</i> , 2012, 21, 397-402.	1.3	26
48	Theoretical study of failure in composite pressure vessels subjected to low-velocity impact and internal pressure. <i>Frontiers of Structural and Civil Engineering</i> , 2020, 14, 1349-1358.	1.2	26
49	Numerical and Experimental Analyses of the Hoop Tensile Strength of Filament-Wound Composite Tubes. <i>Mechanics of Composite Materials</i> , 2020, 56, 423-436.	0.9	25
50	Investigating the influence of bonded and non-bonded interactions on the interfacial bonding between carbon nanotube and polymer. <i>Composite Structures</i> , 2020, 238, 111996.	3.1	25
51	A modal analysis of carbon-nanotube-reinforced polymer by using a multiscale finite-element method. <i>Mechanics of Composite Materials</i> , 2013, 49, 325-332.	0.9	24
52	Fracture investigation of wood under mixed mode I/II loading based on the maximum shear stress criterion. <i>Strength of Materials</i> , 2013, 45, 378-385.	0.2	20
53	Investigating interaction between CNT and polymer using cohesive zone model. <i>Polymer Composites</i> , 2018, 39, 3903-3911.	2.3	19
54	Failure analysis of a composite wind turbine blade at the adhesive joint of the trailing edge. <i>Engineering Failure Analysis</i> , 2021, 121, 105148.	1.8	19

#	ARTICLE	IF	CITATIONS
55	Analyzing the long-term creep behavior of composite pipes: Developing an alternative scenario of short-term multi-stage loading test. <i>Composite Structures</i> , 2020, 254, 112868.	3.1	18
56	Predicting the strength of carbon nanotube reinforced polymers using stochastic bottom-up modeling. <i>Applied Physics A: Materials Science and Processing</i> , 2020, 126, 1.	1.1	18
57	Stochastic failure analysis of composite pipes subjected to random excitation. <i>Construction and Building Materials</i> , 2019, 224, 950-961.	3.2	17
58	Fatigue analysis of a composite ring: Experimental and theoretical investigations. <i>Journal of Composite Materials</i> , 2020, 54, 4011-4024.	1.2	16
59	A novel recursive multi-scale modeling for predicting the burst pressure of filament wound composite pressure vessels. <i>Applied Physics A: Materials Science and Processing</i> , 2022, 128, 1.	1.1	15
60	The influence of material properties on the aeroelastic behavior of a composite wind turbine blade. <i>Journal of Renewable and Sustainable Energy</i> , 2016, 8, .	0.8	14
61	The influence of fiber-crack angle on the crack tip parameters in orthotropic materials. <i>Proceedings of the Institution of Mechanical Engineers, Part C: Journal of Mechanical Engineering Science</i> , 2017, 231, 418-431.	1.1	14
62	Developing a homogenization approach for estimation of in-plan effective elastic moduli of hexagonal honeycombs. <i>Engineering Analysis With Boundary Elements</i> , 2020, 117, 202-211.	2.0	14
63	Experimental study on the effect of hygrothermal environments combined with the sustained mechanical loads on the strength of composite rings. <i>Composite Structures</i> , 2021, 258, 113397.	3.1	14
64	Experimental and Theoretical Investigations of Creep on a Composite Pipe under Compressive Transverse Loading. <i>Fibers and Polymers</i> , 2021, 22, 222-230.	1.1	14
65	Investigating the influence of delamination on the stiffness of composite pipes under compressive transverse loading using cohesive zone method. <i>Frontiers of Structural and Civil Engineering</i> , 2019, 13, 1316-1323.	1.2	12
66	The influence of hygrothermal environments on the stress concentration in unidirectional composite lamina. <i>Mechanics of Materials</i> , 2019, 129, 332-340.	1.7	11
67	A Study on Equivalent Spherical Structure of Buckyball-C 60 Based on Continuum Shell Model. <i>Latin American Journal of Solids and Structures</i> , 2016, 13, 1016-1029.	0.6	10
68	A study on nonlinear vibration behavior of CNT-based representative volume element. <i>Aerospace Science and Technology</i> , 2016, 55, 272-281.	2.5	10
69	A cohesive zone model for predicting the initiation of Mode II delamination in composites under cyclic loading. <i>Journal of Reinforced Plastics and Composites</i> , 2021, 40, 179-192.	1.6	10
70	Experimental investigation of graphene nanoplatelets effect on the fatigue behavior of basalt/epoxy composite pressure vessels. <i>Thin-Walled Structures</i> , 2022, 171, 108672.	2.7	10
71	A study on fracture behavior of semi-elliptical 3D crack in clay-polymer nanocomposites considering interfacial debonding. <i>Engineering Fracture Mechanics</i> , 2019, 209, 245-259.	2.0	9
72	3D stress analysis of generally laminated piezoelectric plates with electromechanical coupling effects. <i>Applied Mathematical Modelling</i> , 2019, 74, 258-279.	2.2	9

#	ARTICLE	IF	CITATIONS
73	Determining in-plane material properties of square core cellular materials using computational homogenization technique. <i>Engineering With Computers</i> , 2023, 39, 373-386.	3.5	9
74	Estimating the burst pressure of a filament wound composite pressure vessel using two-scale and multi-scale analyses. <i>Mechanics of Advanced Materials and Structures</i> , 2023, 30, 2668-2683.	1.5	9
75	Transition angle, a novel concept for predicting the failure mode in orthotropic materials. <i>Proceedings of the Institution of Mechanical Engineers, Part C: Journal of Mechanical Engineering Science</i> , 2013, 227, 2157-2164.	1.1	8
76	Numerical investigation of the effect of moisture and impurity on long-term creep behavior of polymer composite pipes. <i>International Journal of Pressure Vessels and Piping</i> , 2021, 193, 104456.	1.2	8
77	The Influence of CNT Contents on the Electrical and Electromagnetic Properties of CNT/Vinylester. <i>Journal of Electronic Materials</i> , 2014, 43, 3477-3485.	1.0	7
78	Molecular dynamics simulation of defected carbon nanotubes. <i>Proceedings of the Institution of Mechanical Engineers, Part L: Journal of Materials: Design and Applications</i> , 2016, 230, 654-662.	0.7	7
79	Aeroelastic investigation of a composite wind turbine blade. <i>Wind and Structures, an International Journal</i> , 2013, 17, 671-680.	0.8	7
80	Carbon Nanotubes Processing. , 2018, , 41-59.		4
81	Bending Analysis of Molded Composite Grating Panels: Theoretical and Experimental Investigations. <i>Fibers and Polymers</i> , 2021, 22, 1653-1663.	1.1	4
82	Multi-scale Modeling of Polymeric Composites Including Nanoporous Fillers of Milled Anodic Alumina. <i>Arabian Journal for Science and Engineering</i> , 2022, 47, 8189-8198.	1.7	4
83	Prediction of Mechanical Properties of CNT Based Composites Using Multi-Scale Modeling and Stochastic Analysis. <i>Springer Series in Materials Science</i> , 2014, , 201-238.	0.4	4
84	Fatigue life prediction of wind turbine rotor blades manufactured from composites. , 2010, , 505-537.		3
85	Dental composites with strength after aging improved by using anodic nanoporous fillers: experimental results, modeling, and simulations. <i>Engineering With Computers</i> , 2023, 39, 387-398.	3.5	3
86	Filament wound pipes optimization platform development: A methodological approach. <i>Composite Structures</i> , 2022, 297, 115972.	3.1	3
87	Stochastic Modeling of CNT-Grown Fibers. , 2018, , 521-540.		2
88	A hysteresis cohesive approach for predicting mixed-mode delamination onset of composite laminates under cyclic loading: Part I, model development. <i>Composite Structures</i> , 2021, 277, 114667.	3.1	2
89	A hysteresis cohesive approach for predicting mixed-mode delamination onset of composite laminates under cyclic loading: Part II, numerical and experimental analyses. <i>Composite Structures</i> , 2021, 277, 114668.	3.1	2
90	Advances in Characterization and Modeling of Nanoreinforced Composites. <i>Journal of Nanomaterials</i> , 2016, 2016, 1-1.	1.5	1

#	ARTICLE	IF	CITATIONS
91	Stochastic Multiscale Modeling of CNT/Polymer. , 2018, , 503-520.		1
92	Modeling, Characterization, and Processing of Advanced Composites. Advances in Materials Science and Engineering, 2013, 2013, 1-2.	1.0	0
93	On the Mechanical Properties of Functionalized CNT Reinforced Polymer. , 2015, , 610-627.		0
94	Determination of Stochastic Properties of Carbon Nanotube-Epoxy Composites. , 0, , .		0