

Bijan Mohammadi

List of Publications by Year in descending order

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114
papers

1,822
citations

257450

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115
all docs

115
docs citations

115
times ranked

1045
citing authors

#	ARTICLE	IF	CITATIONS
1	A modified classic micromechanics approach to predict effective elastic properties of nanoparticles reinforced polymers. <i>Polymer Composites</i> , 2022, 43, 2129-2138.	4.6	3
2	Prediction of fracture toughness due to delamination in cross-ply composite laminates considering interlaminar and intralaminar cracking and inhomogeneous fiber-matrix modeling. <i>Journal of Composite Materials</i> , 2022, 56, 2399-2410.	2.4	1
3	Experimental and numerical study on micro-blasting process of 3A dental implant titanium alloy: A comparison between finite element method and smoothed particle hydrodynamics. <i>Journal of the Mechanical Behavior of Biomedical Materials</i> , 2022, 132, 105269.	3.1	3
4	The role of applied strain and volume percentage of components on mechanical properties and fracture toughness in multilayered Al/Mg composite fabricated by the accumulative roll bonding process. <i>Materials Research Express</i> , 2021, 8, 026508.	1.6	2
5	Damage-entropy model for fatigue life evaluation of off-axis unidirectional composites. <i>Composite Structures</i> , 2021, 270, 114100.	5.8	20
6	Simulation of energy dissipation mechanisms in evaluating the critical interlaminar strain energy release rate of cross-ply carbon/epoxy laminated composites. <i>Theoretical and Applied Fracture Mechanics</i> , 2021, 114, 103003.	4.7	4
7	Experimental and numerical investigation of stiffener effects on buckling strength of composite laminates with circular cutout. <i>Journal of Composite Materials</i> , 2020, 54, 1141-1160.	2.4	10
8	Representative volume element-based simulation of multiple solid particles erosion of a compressor blade considering temperature effect. <i>Proceedings of the Institution of Mechanical Engineers, Part J: Journal of Engineering Tribology</i> , 2020, 234, 1173-1184.	1.8	10
9	Damage behaviour of laminated composites during fatigue loading. <i>Fatigue and Fracture of Engineering Materials and Structures</i> , 2020, 43, 698-710.	3.4	6
10	Stress and energy based prediction of crack distribution pattern in general cross-ply laminates. <i>Engineering Fracture Mechanics</i> , 2020, 223, 106769.	4.3	6
11	Study of EMI-Based Damage Type Identification in a Cracked Metallic Specimen Repaired by a Composite Patch. <i>Russian Journal of Nondestructive Testing</i> , 2020, 56, 540-548.	0.9	1
12	Investigation of nonlinear post-buckling delamination in curved laminated composite panels via cohesive zone model. <i>Thin-Walled Structures</i> , 2020, 154, 106797.	5.3	14
13	Entropy-damage mechanics for the failure investigation of plain weave fabric composites. <i>Composite Structures</i> , 2020, 250, 112493.	5.8	9
14	A new FE modeling procedure to investigate the effects of toughening mechanisms on the fracture toughness of laminated composites. <i>Theoretical and Applied Fracture Mechanics</i> , 2020, 107, 102507.	4.7	7
15	On the evaluation of damage-entropy model in cross-ply laminated composites. <i>Engineering Fracture Mechanics</i> , 2019, 219, 106626.	4.3	25
16	Photothermal Effect of Modulating Laser Irradiation on the Thermal Diffusivity of Al ₂ O ₃ Nanofluids. <i>Nanoscale Research Letters</i> , 2019, 14, 37.	5.7	1
17	Stiffness degradation of composite laminates due to matrix cracking and induced delamination during tension-tension fatigue. <i>Engineering Fracture Mechanics</i> , 2019, 216, 106489.	4.3	34
18	Finite element and experimental investigation of multiple solid particle erosion on Ti-6Al-4V titanium alloy coated by multilayer wear-resistant coating. <i>Surface and Coatings Technology</i> , 2019, 372, 173-189.	4.8	39

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19	Theoretical-experimental investigation of temperature evolution in laminated composites due to fatigue loading. <i>Composite Structures</i> , 2019, 225, 110972.	5.8	19
20	Development of a finite strip method for efficient prediction of buckling and post-buckling in composite laminates containing a cutout with/without stiffener. <i>Composite Structures</i> , 2019, 210, 538-552.	5.8	19
21	A microscale energy-based fatigue damage model for unidirectional composites under multiaxial loading at different stress ratios. <i>Engineering Fracture Mechanics</i> , 2019, 205, 120-135.	4.3	7
22	Numerical and Experimental Investigation of Erosive Wear of Ti-6Al-4V Alloy. <i>Journal of Tribology</i> , 2019, 141, .	1.9	5
23	Fatigue driven matrix crack propagation in laminated composites. <i>Materials and Design</i> , 2018, 146, 108-115.	7.0	16
24	Developing a new model to predict the fatigue life of cross-ply laminates using coupled CDM-entropy generation approach. <i>Theoretical and Applied Fracture Mechanics</i> , 2018, 95, 18-27.	4.7	36
25	Prediction of outer-ply matrix crack density at saturation in laminates under static and fatigue loading. <i>International Journal of Solids and Structures</i> , 2018, 139-140, 43-54.	2.7	10
26	Progressive matrix cracking master curves of mid and outer off-axis plies in CFRP laminates. <i>Composite Structures</i> , 2018, 188, 497-502.	5.8	5
27	Variational approach development in analysis of matrix cracking and induced delamination of cross-ply composite laminates subjected to in-plane shear loading. <i>Mechanics of Advanced Materials and Structures</i> , 2018, 25, 481-499.	2.6	11
28	Off-axis fatigue behaviour of unidirectional laminates based on a microscale fatigue damage model under different stress ratios. <i>International Journal of Fatigue</i> , 2018, 106, 11-23.	5.7	20
29	Experimental and variational-based analytical investigation of multiple cracked angle-ply laminates. <i>Engineering Fracture Mechanics</i> , 2018, 190, 198-212.	4.3	11
30	Characteristic damage state of symmetric laminates subject to uniaxial monotonic-fatigue loading. <i>Engineering Fracture Mechanics</i> , 2018, 199, 86-100.	4.3	16
31	Thermal Wavelength Measurement of Nanofluid in an Optical-Fiber Thermal Wave Cavity Technique to Determine the Thermal Diffusivity. <i>Scientific World Journal</i> , The, 2018, 2018, 1-9.	2.1	5
32	An Experimental Study of Fracture Toughness for Nano/Ultrafine Grained Al5052/Cu Multilayered Composite Processed by Accumulative Roll Bonding. <i>Journal of Manufacturing Science and Engineering</i> , Transactions of the ASME, 2018, 140, .	2.2	38
33	A generalized plane-strain crack density-based model for evaluating the finite fracture toughness of composite laminates. <i>Mechanics of Advanced Materials and Structures</i> , 2017, 24, 131-141.	2.6	11
34	Experimental observation and energy based analytical investigation of matrix cracking distribution pattern in angle-ply laminates. <i>Theoretical and Applied Fracture Mechanics</i> , 2017, 92, 146-154.	4.7	15
35	Experimental evaluation of the plane stress fracture toughness for ultra-fine grained aluminum specimens prepared by accumulative roll bonding process. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2017, 708, 301-310.	5.6	58
36	Controlling first four moments for robust optimization. <i>Optimization and Engineering</i> , 2017, 18, 561-585.	2.4	0

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37	Experimental validation of an empirical nonlinear shear failure model for laminated composite materials. <i>Journal of Composite Materials</i> , 2017, 51, 2331-2345.	2.4	7
38	Development of a continuum damage model for fatigue life prediction of laminated composites. <i>Composites Part A: Applied Science and Manufacturing</i> , 2017, 93, 163-176.	7.6	42
39	Backward uncertainty propagation in shape optimization. <i>International Journal for Numerical Methods in Fluids</i> , 2016, 80, 285-305.	1.6	3
40	Effective local stress intensity factor criterion for prediction of crack growth trajectory under mixed mode fracture conditions. <i>Theoretical and Applied Fracture Mechanics</i> , 2016, 85, 207-216.	4.7	30
41	Experimental study on the effect of interface fiber orientation and utilized delamination initiation techniques on fracture toughness of glass/epoxy composite laminates. <i>Journal of Reinforced Plastics and Composites</i> , 2016, 35, 1722-1733.	3.1	3
42	Effect of equal channel angular pressing on fracture toughness of Al-7075. <i>Engineering Failure Analysis</i> , 2016, 65, 1-10.	4.0	31
43	On computational modeling of postbuckling behavior of composite laminates containing single and multiple through-the-width delaminations using interface elements with cohesive law. <i>Engineering Fracture Mechanics</i> , 2016, 152, 88-104.	4.3	17
44	Buckling analysis of nanocomposite cut out plate using domain decomposition method and orthogonal polynomials. <i>Steel and Composite Structures</i> , 2016, 22, 691-712.	1.3	5
45	A simplified micromechanics model for predicting the stiffness degradation in symmetric composite laminates. <i>Fatigue and Fracture of Engineering Materials and Structures</i> , 2015, 38, 1334-1346.	3.4	13
46	Intra and damage analysis of laminated composites using coupled continuum damage mechanics with cohesive interface layer. <i>Composite Structures</i> , 2015, 120, 519-530.	5.8	18
47	Loading Analysis of Composite Wind Turbine Blade for Fatigue Life Prediction of Adhesively Bonded Root Joint. <i>Applied Composite Materials</i> , 2015, 22, 269-287.	2.5	25
48	Uncertainty quantification in the numerical solution of coupled systems by involutive completion. <i>ESAIM: Mathematical Modelling and Numerical Analysis</i> , 2015, 49, 1047-1062.	1.9	1
49	In-plane progressive matrix cracking analysis of symmetric cross-ply laminates with holes. <i>Fatigue and Fracture of Engineering Materials and Structures</i> , 2014, 37, 290-305.	3.4	9
50	Thermo-elastic constants of cracked symmetric laminates: A refined variational approach. <i>International Journal of Mechanical Sciences</i> , 2014, 89, 47-57.	6.7	35
51	Experimental and numerical study of oblique transverse cracking in cross-ply laminates under tension. <i>Composites Part A: Applied Science and Manufacturing</i> , 2014, 67, 140-148.	7.6	27
52	An investigation of matrix cracking damage evolution in composite laminates – Development of an advanced numerical tool. <i>Composite Structures</i> , 2014, 108, 937-950.	5.8	22
53	Investigation of delamination and damage due to free edge effects in composite laminates using cohesive interface elements. <i>Engineering Solid Mechanics</i> , 2014, 2, 101-118.	1.2	29
54	Effects of Constrained Groove Pressing (CGP) on the plane stress fracture toughness of pure copper. <i>Structural Engineering and Mechanics</i> , 2014, 52, 957-969.	1.0	16

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55	Mixed-mode crack propagation of stiffened curved panels repaired by composite patch under combined tension and shear cyclic loading. <i>Aerospace Science and Technology</i> , 2013, 28, 344-363.	4.8	12
56	Investigation of effective parameters on composite patch debonding under static and cyclic loading using cohesive elements. <i>Finite Elements in Analysis and Design</i> , 2013, 74, 67-75.	3.2	13
57	Homogenization of diffuse delamination in composite laminates. <i>Composite Structures</i> , 2013, 100, 113-120.	5.8	12
58	Bending, buckling and vibration problems of nonlocal Euler beams using Ritz method. <i>Composite Structures</i> , 2013, 96, 584-589.	5.8	124
59	Development of a Damage Analysis Method in Laminated Composites Using Finite Fracture Toughness of Single Lamina. <i>Mechanics of Advanced Materials and Structures</i> , 2013, 20, 177-188.	2.6	20
60	Fatigue Multi-Cracks Growths in Plates Using J-Integral Approach with a Developed Home FEM Software. <i>Key Engineering Materials</i> , 2013, 560, 61-70.	0.4	0
61	Numerical modeling of diffuse transverse cracks and induced delamination using cohesive elements. <i>Proceedings of the Institution of Mechanical Engineers, Part C: Journal of Mechanical Engineering Science</i> , 2013, 227, 1392-1405.	2.1	10
62	Prediction of through the width delamination growth in post-buckled laminates under fatigue loading using de-cohesive law. <i>Structural Engineering and Mechanics</i> , 2013, 48, 41-56.	1.0	8
63	Composite Repair of Curved Stiffened Aluminum Panels under Combined Tension and Shear Cyclic Loadings. <i>Applied Mechanics and Materials</i> , 2012, 225, 219-224.	0.2	0
64	Multiple Delaminations Growth in Composite Laminates under Compressive Cyclic Loading in Post-Buckling. <i>Applied Mechanics and Materials</i> , 2012, 225, 195-200.	0.2	1
65	Consideration of concurrent transverse cracking and induced delamination propagation using a generalized micro-meso approach and experimental validation. <i>Fatigue and Fracture of Engineering Materials and Structures</i> , 2012, 35, 885-901.	3.4	20
66	Finite element fatigue propagation of induced cracks by stiffeners in repaired panels with composite patches. <i>Composite Structures</i> , 2012, 94, 1771-1780.	5.8	19
67	Implementation of a micro-meso approach for progressive damage analysis of composite laminates. <i>Structural Engineering and Mechanics</i> , 2012, 43, 657-678.	1.0	5
68	Involutive formulation and simulation for electroneutral microfluids. <i>ESAIM: Mathematical Modelling and Numerical Analysis</i> , 2011, 45, 901-913.	1.9	1
69	Fatigue Debonding Analysis of Repaired Aluminium Panels by Composite Patch using Interface Elements. <i>Applied Composite Materials</i> , 2011, 18, 571-584.	2.5	14
70	A generalized micromechanical approach for the analysis of transverse crack and induced delamination in composite laminates. <i>Composite Structures</i> , 2011, 93, 443-455.	5.8	31
71	Analysis of damage events in quasi-isotropic laminates using a generalized micromechanics approach. <i>Procedia Engineering</i> , 2011, 10, 236-241.	1.2	1
72	Energy approach vibration analysis of nonlocal Timoshenko beam theory. <i>Procedia Engineering</i> , 2011, 10, 1766-1771.	1.2	25

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73	Post-buckling delamination propagation analysis using interface element with de-cohesive constitutive law. <i>Procedia Engineering</i> , 2011, 10, 1797-1802.	1.2	4
74	Fatigue propagation of induced cracks by stiffeners in repaired panels with composite patches. <i>Procedia Engineering</i> , 2011, 10, 3285-3290.	1.2	5
75	Buckling and Delamination Growth Analysis of Composite Laminates Containing Embedded Delaminations. <i>Applied Composite Materials</i> , 2010, 17, 95-109.	2.5	24
76	Progressive delamination growth analysis using discontinuous layered element. <i>Composite Structures</i> , 2010, 92, 883-890.	5.8	11
77	Delamination buckling growth in laminated composites using layerwise-interface element. <i>Composite Structures</i> , 2010, 92, 1846-1856.	5.8	44
78	Damage analysis of laminated composites using a new coupled micro-meso approach. <i>Fatigue and Fracture of Engineering Materials and Structures</i> , 2010, 33, 420-435.	3.4	25
79	Coupling of Continuum Damage Mechanics with De-Cohesive Element for Delamination Analysis in Laminated Composites. <i>Advanced Materials Research</i> , 2010, 123-125, 527-530.	0.3	0
80	Progressive Damage Analysis of Laminated Composites Using Element Free Galerkin Method. <i>Advanced Materials Research</i> , 2010, 123-125, 579-582.	0.3	0
81	Buckling Analysis of Micro- and Nano-Rods/Tubes Based on Nonlocal Timoshenko Beam Theory Using Chebyshev Polynomials. <i>Advanced Materials Research</i> , 2010, 123-125, 619-622.	0.3	17
82	Involutive upgrades of Navier-Stokes solvers. <i>International Journal of Computational Fluid Dynamics</i> , 2009, 23, 439-447.	1.2	2
83	Delamination analysis of holed composite laminates using interface elements. <i>Procedia Engineering</i> , 2009, 1, 39-42.	1.2	4
84	Transverse crack density evolution in a single orthotropic lamina under multi-axial stresses using analytical method. <i>Procedia Engineering</i> , 2009, 1, 109-112.	1.2	4
85	Optimization strategies in credit portfolio management. <i>Journal of Global Optimization</i> , 2009, 43, 415-427.	1.8	19
86	Finite element crack propagation of adhesively bonded repaired panels in general mixed-mode conditions. <i>Finite Elements in Analysis and Design</i> , 2009, 45, 94-103.	3.2	19
87	Thermal residual stresses effects on fatigue crack growth of repaired panels bounded with various composite materials. <i>Composite Structures</i> , 2009, 89, 216-223.	5.8	37
88	Mixed-mode numerical and experimental fatigue crack growth analyses of thick aluminium panels repaired with composite patches. <i>Composite Structures</i> , 2009, 91, 1-8.	5.8	19
89	Free-edge effects analysis of angle-ply laminates under transverse loading using layer-wise finite-element method with semi-analytical shear stress calculation. <i>Proceedings of the Institution of Mechanical Engineers, Part C: Journal of Mechanical Engineering Science</i> , 2009, 223, 293-306.	2.1	0
90	Efficiency Improvement of Centrifugal Reverse Pumps. <i>Journal of Fluids Engineering, Transactions of the ASME</i> , 2009, 131, .	1.5	78

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91	Failure analysis of laminates by implementation of continuum damage mechanics in layer-wise finite element theory. <i>Structural Engineering and Mechanics</i> , 2009, 33, 657-674.	1.0	3
92	Mixed-mode 3-D crack propagation of repaired thin aluminum panels using single-side composite patches. <i>International Journal of Fracture</i> , 2008, 153, 105-116.	2.2	9
93	Crack trajectory analysis of single-side repaired thin panels in mixed-mode conditions using glass/epoxy patches. <i>Computers and Structures</i> , 2008, 86, 997-1005.	4.4	15
94	Progressive damage analyses of angle-ply laminates exhibiting free edge effects using continuum damage mechanics with layer-wise finite element method. <i>Fatigue and Fracture of Engineering Materials and Structures</i> , 2008, 31, 549-568.	3.4	13
95	Real 3D Crack-Front and Crack Trajectory Analyses of Single-Side Repaired Thick Aluminium Panels. <i>Advanced Materials Research</i> , 2008, 47-50, 777-780.	0.3	2
96	Theory and practice of optimal shape design. <i>European Journal of Computational Mechanics</i> , 2008, 17, 13-30.	0.6	7
97	Global optimization, level set dynamics, incomplete sensitivity and regularity control. <i>International Journal of Computational Fluid Dynamics</i> , 2007, 21, 61-68.	1.2	6
98	Numerical and experimental fatigue crack growth analysis in mode-I for repaired aluminum panels using composite material. <i>Composites Part A: Applied Science and Manufacturing</i> , 2007, 38, 1141-1148.	7.6	32
99	A simple method to calculate the crack growth life of adhesively repaired aluminum panels. <i>Composite Structures</i> , 2007, 79, 234-241.	5.8	23
100	Mixed-mode fatigue crack growth of thin aluminium panels with single-side repair using experimental and numerical methods. <i>Fatigue and Fracture of Engineering Materials and Structures</i> , 2007, 30, 629-639.	3.4	32
101	Mixed-mode fracture analysis of aluminium repaired panels using composite patches. <i>Composites Science and Technology</i> , 2006, 66, 188-198.	7.8	43
102	Analysis of composite skin/stiffener debonding and failure under uniaxial loading. <i>Composite Structures</i> , 2006, 75, 428-436.	5.8	19
103	Experimental investigations on fatigue crack growth of repaired thick aluminium panels in mixed-mode conditions. <i>Composite Structures</i> , 2006, 75, 437-443.	5.8	10
104	Effective widths of compression-loaded of perforated cross-ply laminated composites. <i>Composite Structures</i> , 2006, 75, 7-13.	5.8	4
105	On the buckling behavior of cross-ply laminated composite plates due to circular/elliptical cutouts. <i>Composite Structures</i> , 2006, 75, 3-6.	5.8	91
106	Semi-deterministic and genetic algorithms for global optimization of microfluidic protein-folding devices. <i>International Journal for Numerical Methods in Engineering</i> , 2006, 66, 319-333.	2.8	29
107	Simplifying numerical solution of constrained PDE systems through involutive completion. <i>ESAIM: Mathematical Modelling and Numerical Analysis</i> , 2005, 39, 909-929.	1.9	8
108	Delamination of Laminates Governed by Free Edge Interlaminar Stresses Using Interface Element. <i>Key Engineering Materials</i> , 0, 385-387, 821-824.	0.4	3

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109	Acoustic Fatigue Crack Growth Prediction in Coupled Air Structures. Key Engineering Materials, 0, 452-453, 293-296.	0.4	0
110	Vibration of Nonlocal Euler Beams Using Chebyshev Polynomials. Key Engineering Materials, 0, 471-472, 1016-1021.	0.4	7
111	Progressive Damage Analyses of Composite Laminates Exhibiting Free Edge Effects Using a New Micro-Meso Approach. Key Engineering Materials, 0, 471-472, 263-267.	0.4	0
112	Fatigue Delamination Analysis of Composite Laminates with a Central Hole Using Interface Elements. Key Engineering Materials, 0, 471-472, 568-571.	0.4	0
113	On the use of digital image correlation for translaminal fracture of off-axis composite. International Journal of Fracture, 0, , .	2.2	2
114	Evaluation of Viability and Cell Proliferation in Bone and Gingival on Dental Implant Fixtures with Active Sandblasted and Sandblasted Surfaces by the Cytotoxicity Test Method. Journal of Biomimetics, Biomaterials and Biomedical Engineering, 0, 56, 165-172.	0.5	3