

Bijan Mohammadi

List of Publications by Year in descending order

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114
papers

1,822
citations

257450

24
h-index

361022

35
g-index

115
all docs

115
docs citations

115
times ranked

1045
citing authors

#	ARTICLE	IF	CITATIONS
1	Bending, buckling and vibration problems of nonlocal Euler beams using Ritz method. <i>Composite Structures</i> , 2013, 96, 584-589.	5.8	124
2	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
3	Efficiency Improvement of Centrifugal Reverse Pumps. <i>Journal of Fluids Engineering, Transactions of the ASME</i> , 2009, 131, .	1.5	78
4	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
5	Delamination buckling growth in laminated composites using layerwise-interface element. <i>Composite Structures</i> , 2010, 92, 1846-1856.	5.8	44
6	Mixed-mode fracture analysis of aluminium repaired panels using composite patches. <i>Composites Science and Technology</i> , 2006, 66, 188-198.	7.8	43
7	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
8	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
9	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, Transactions of the ASME</i> , 2018, 140, .	2.2	38
10	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
11	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
12	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
13	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
14	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
15	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
16	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
17	Effect of equal channel angular pressing on fracture toughness of Al-7075. <i>Engineering Failure Analysis</i> , 2016, 65, 1-10.	4.0	31
18	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

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19	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
20	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
21	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
22	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
23	Energy approach vibration analysis of nonlocal Timoshenko beam theory. <i>Procedia Engineering</i> , 2011, 10, 1766-1771.	1.2	25
24	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
25	On the evaluation of damage-entropy model in cross-ply laminated composites. <i>Engineering Fracture Mechanics</i> , 2019, 219, 106626.	4.3	25
26	Buckling and Delamination Growth Analysis of Composite Laminates Containing Embedded Delaminations. <i>Applied Composite Materials</i> , 2010, 17, 95-109.	2.5	24
27	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
28	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
29	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
30	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
31	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
32	Damage-entropy model for fatigue life evaluation of off-axis unidirectional composites. <i>Composite Structures</i> , 2021, 270, 114100.	5.8	20
33	Analysis of composite skin/stiffener debonding and failure under uniaxial loading. <i>Composite Structures</i> , 2006, 75, 428-436.	5.8	19
34	Optimization strategies in credit portfolio management. <i>Journal of Global Optimization</i> , 2009, 43, 415-427.	1.8	19
35	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
36	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

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37	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
38	Theoretical-experimental investigation of temperature evolution in laminated composites due to fatigue loading. <i>Composite Structures</i> , 2019, 225, 110972.	5.8	19
39	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
40	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
41	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
42	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
43	Fatigue driven matrix crack propagation in laminated composites. <i>Materials and Design</i> , 2018, 146, 108-115.	7.0	16
44	Characteristic damage state of symmetric laminates subject to uniaxial monotonic-fatigue loading. <i>Engineering Fracture Mechanics</i> , 2018, 199, 86-100.	4.3	16
45	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
46	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
47	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
48	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
49	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
50	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
51	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
52	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
53	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
54	Homogenization of diffuse delamination in composite laminates. <i>Composite Structures</i> , 2013, 100, 113-120.	5.8	12

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55	Progressive delamination growth analysis using discontinuous layered element. <i>Composite Structures</i> , 2010, 92, 883-890.	5.8	11
56	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
57	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
58	Experimental and variational-based analytical investigation of multiple cracked angle-ply laminates. <i>Engineering Fracture Mechanics</i> , 2018, 190, 198-212.	4.3	11
59	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
60	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
61	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
62	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
63	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
64	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
65	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
66	Entropy-damage mechanics for the failure investigation of plain weave fabric composites. <i>Composite Structures</i> , 2020, 250, 112493.	5.8	9
67	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
68	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
69	Theory and practice of optimal shape design. <i>European Journal of Computational Mechanics</i> , 2008, 17, 13-30.	0.6	7
70	Vibration of Nonlocal Euler Beams Using Chebyshev Polynomials. <i>Key Engineering Materials</i> , 0, 471-472, 1016-1021.	0.4	7
71	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
72	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

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73	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
74	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
75	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
76	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
77	Fatigue propagation of induced cracks by stiffeners in repaired panels with composite patches. <i>Procedia Engineering</i> , 2011, 10, 3285-3290.	1.2	5
78	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
79	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
80	Numerical and Experimental Investigation of Erosive Wear of Ti-6Al-4V Alloy. <i>Journal of Tribology</i> , 2019, 141, .	1.9	5
81	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
82	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
83	Effective widths of compression-loaded of perforated cross-ply laminated composites. <i>Composite Structures</i> , 2006, 75, 7-13.	5.8	4
84	Delamination analysis of holed composite laminates using interface elements. <i>Procedia Engineering</i> , 2009, 1, 39-42.	1.2	4
85	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
86	Post-buckling delamination propagation analysis using interface element with de-cohesive constitutive law. <i>Procedia Engineering</i> , 2011, 10, 1797-1802.	1.2	4
87	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
88	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
89	Backward uncertainty propagation in shape optimization. <i>International Journal for Numerical Methods in Fluids</i> , 2016, 80, 285-305.	1.6	3
90	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

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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	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
93	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. <i>Journal of Biomimetics, Biomaterials and Biomedical Engineering</i> , 0, 56, 165-172.	0.5	3
94	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
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	Involutive upgrades of Navier-Stokes solvers. <i>International Journal of Computational Fluid Dynamics</i> , 2009, 23, 439-447.	1.2	2
97	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
98	On the use of digital image correlation for translaminal fracture of off-axis composite. <i>International Journal of Fracture</i> , 0, , .	2.2	2
99	Involutive formulation and simulation for electroneutral microfluids. <i>ESAIM: Mathematical Modelling and Numerical Analysis</i> , 2011, 45, 901-913.	1.9	1
100	Analysis of damage events in quasi-isotropic laminates using a generalized micromechanics approach. <i>Procedia Engineering</i> , 2011, 10, 236-241.	1.2	1
101	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
102	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
103	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
104	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
105	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
106	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
107	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
108	Progressive Damage Analysis of Laminated Composites Using Element Free Galerkin Method. <i>Advanced Materials Research</i> , 2010, 123-125, 579-582.	0.3	0

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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	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
111	Fatigue Delamination Analysis of Composite Laminates with a Central Hole Using Interface Elements. Key Engineering Materials, 0, 471-472, 568-571.	0.4	0
112	Composite Repair of Curved Stiffened Aluminum Panels under Combined Tension and Shear Cyclic Loadings. Applied Mechanics and Materials, 2012, 225, 219-224.	0.2	0
113	Fatigue Multi-Cracks Growths in Plates Using J-Integral Approach with a Developed Home FEM Software. Key Engineering Materials, 2013, 560, 61-70.	0.4	0
114	Controlling first four moments for robust optimization. Optimization and Engineering, 2017, 18, 561-585.	2.4	0