M C Ray

List of Publications by Year
in descending order

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72 papers	2,020 citations	236833 25 h-index	276775 41 g-index
72 all docs	72 docs citations	72 times ranked	796 citing authors

#	Article	IF	Citations
1	Exact solutions for static analysis of intelligent structures. AIAA Journal, 1993, 31, 1684-1691.	1.5	160
2	Effective Coefficients of Piezoelectric Fiber-Reinforced Composites. AIAA Journal, 2003, 41, 704-710.	1.5	156
3	Micromechanical analysis of fuzzy fiber reinforced composites. International Journal of Mechanics and Materials in Design, 2011, 7, 149-166.	1.7	88
4	Optimal Control of Laminated Shells Using Piezoelectric Sensor and Actuator Layers. AIAA Journal, 2003, 41, 1151-1157.	1.5	83
5	Finite element model for active control of intelligent structures. AIAA Journal, 1996, 34, 1885-1893.	1.5	82
6	The performance of vertically reinforced 1â€“3 piezoelectric composites in active damping of smart structures. Smart Materials and Structures, 2006, 15, 631-641.	1.8	80
7	On the Use of Vertically Reinforced 1-3 Piezoelectric Composites for Hybrid Damping of Laminated Composite Plates. Mechanics of Advanced Materials and Structures, 2007, 14, 245-261.	1.5	70
8	Finite Element Analysis of Smart Structures Containing Piezoelectric Fiber-Reinforced Composite Actuator. AIAA Journal, 2004, 42, 1398-1405.	1.5	64
9	Optimal control of thin circular cylindrical laminated composite shells using active constrained layer damping treatment. Smart Materials and Structures, 2004, 13, 64-72.	1.8	63
10	Active control of large amplitude vibrations of smart magnetoâ€“electroâ€–elastic doubly curved shells. International Journal of Mechanics and Materials in Design, 2014, 10, 351-378.	1.7	49
11	A single-walled carbon nanotube reinforced 1â€“3 piezoelectric composite for active control of smart structures. Smart Materials and Structures, 2007, 16, 1936-1947.	1.8	45
12	Smart damping of laminated fuzzy fiber reinforced composite shells using 1â€“3 piezoelectric composites. Smart Materials and Structures, 2013, 22, 105001.	1.8	44
13	Exact Solutions for the Functionally Graded Plates Integrated With a Layer of Piezoelectric Fiber-Reinforced Composite. Journal of Applied Mechanics, Transactions ASME, 2006, 73, 622-632.	1.1	43
14	Optimal Control of Laminated Plate with Piezoelectric Sensor and Actuator Layers. AIAA Journal, 1998, 36, 2204-2208.	1.5	42
15	Effective Properties of Carbon Nanotube and Piezoelectric Fiber Reinforced Hybrid Smart Composites. Journal of Applied Mechanics, Transactions ASME, 2009, 76, .	1.1	42
16	Performance of Smart Damping Treatment Using Piezoelectric Fiber-Reinforced Composites. AIAA Journal, 2005, 43, 184-193.	1.5	38
17	Effect of Carbon Nanotube Waviness on the Elastic Properties of the Fuzzy Fiber Reinforced Composites. Journal of Applied Mechanics, Transactions ASME, 2013, 80, .	1.1	38
18	Active control of laminated composite beams using a piezoelectric fiber reinforced composite layer. Smart Materials and Structures, 2004, 13, 146-152.	1.8	36

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19	Zeroth-Order Shear Deformation Theory for Laminated Composite Plates. Journal of Applied Mechanics, Transactions ASME, 2003, 70, 374-380.	1.1	35
20	Exact Solutions for Flexoelectric Response in Nanostructures. Journal of Applied Mechanics, Transactions ASME, 2014, 81, .	1.1	33
21	Active control of geometrically nonlinear transient vibrations of laminated composite cylindrical panels using piezoelectric fiber reinforced composite. Acta Mechanica, 2013, 224, 1-15.	1.1	28
22	Shear Lag Model for Regularly Staggered Short Fuzzy Fiber Reinforced Composite. Journal of Applied Mechanics, Transactions ASME, 2014, 81, .	1.1	28
23	Vertically Reinforced 1-3 Piezoelectric Composites for Active Damping of Functionally Graded Plates. AIAA Journal, 2007, 45, 1779-1784.	1.5	27
24	Smart damping of geometrically nonlinear vibrations of laminated composite beams using vertically reinforced 1â€“3 piezoelectric composites. Smart Materials and Structures, 2010, 19, 075020.	1.8	27
25	Active damping of geometrically nonlinear vibrations of laminated composite plates using vertically reinforced 1-3 piezoelectric composites. Acta Mechanica, 2011, 222, 363-380.	1.1	27
26	Active constrained layer damping of smart laminated composite sandwich plates using 1â€“3 piezoelectric composites. International Journal of Mechanics and Materials in Design, 2012, 8, 197-218.	1.7	27
27	Active constrained layer damping of geometrically nonlinear vibration of rotating composite beams using 1-3 piezoelectric composite. International Journal of Mechanics and Materials in Design, 2013, 9, 83-104.	1.7	27
28	Shear lag analysis of a novel short fuzzy fiber-reinforced composite. Acta Mechanica, 2014, 225, 2621-2643.	1.1	25
29	Active constrained layer damping of geometrically nonlinear vibrations of functionally graded plates using piezoelectric fiber-reinforced composites. Smart Materials and Structures, 2008, 17, 025012.	1.8	24
30	Effective Thermal Conductivities of a Novel Fuzzy Fiber-Reinforced Composite Containing Wavy Carbon Nanotubes. Journal of Heat Transfer, 2015, 137, .	1.2	23
31	Nonlinear analysis of smart functionally graded plates integrated with a layer of piezoelectric fiber reinforced composite. Smart Materials and Structures, 2006, 15, 1595-1604.	1.8	22
32	Analysis of flexoelectric response in nanobeams using nonlocal theory of elasticity. International Journal of Mechanics and Materials in Design, 2017, 13, 453-467.	1.7	21
33	Active constrained layer damping of geometrically nonlinear vibrations of smart laminated composite sandwich plates using 1â€“3 piezoelectric composites. International Journal of Mechanics and Materials in Design, 2012, 8, 359-380.	1.7	20
34	Smart damping of geometrically nonlinear vibrations of functionally graded sandwich plates using 1â€“3 piezoelectric composites. Mechanics of Advanced Materials and Structures, 2016, 23, 652-669.	1.5	20
35	Theoretical and experimental investigations on the active structuralâ€“acoustic control of a thin plate using a vertically reinforced 1-3 piezoelectric composite. Smart Materials and Structures, 2009, 18, 015012.	1.8	19
36	Element-free Galerkin model of nano-beams considering strain gradient elasticity. Acta Mechanica, 2018, 229, 2765-2786.	1.1	19

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37	Smart damping of geometrically nonlinear vibrations of composite shells using fractional order derivative viscoelastic constitutive relations. Mechanics of Advanced Materials and Structures, 2018, 25, 62-78.	1.5	19
38	Nonlinear Analysis of Smart Cross-ply Composite Plates Integrated with a Distributed Piezoelectric Fiber Reinforced Composite Actuator. Mechanics of Advanced Materials and Structures, 2008, 15, 40-52.	1.5	17
39	Effect of Delamination on Active Constrained Layer Damping of Smart Laminated Composite Beams. AIAA Journal, 2004, 42, 1219-1226.	1.5	16
40	Exact Solutions for the Analysis of Piezoelectric Fiber Reinforced Composites as Distributed Actuators for Smart Composite Plates. International Journal of Mechanics and Materials in Design, 2005, 2, 81-97.	1.7	15
41	Thermoelastic Properties of a Novel Fuzzy Fiber-Reinforced Composite. Journal of Applied Mechanics, Transactions ASME, 2013, 80, .	1.1	15
42	Smart control of nonlinear vibrations of doubly curved functionally graded laminated composite shells under a thermal environment using 1â€“3 piezoelectric composites. International Journal of Mechanics and Materials in Design, 2013, 9, 253-280.	1.7	14
43	Active Constrained Layer Damping of Smart Skew Laminated Composite Plates Using 1â€“3 Piezoelectric Composites. Journal of Composites, 2013, 2013, 1-17.	0.8	14
44	Analysis of smart damping of laminated composite beams using mesh free method. International Journal of Mechanics and Materials in Design, 2018, 14, 359-374.	1.7	14
45	Effect of nonlocal elasticity on the performance of a flexoelectric layer as a distributed actuator of nanobeams. International Journal of Mechanics and Materials in Design, 2018, 14, 297-311.	1.7	14
46	The concept of a novel hybrid smart composite reinforced with radially aligned zigzag carbon nanotubes on piezoelectric fibers. Smart Materials and Structures, 2010, 19, 035008.	1.8	13
47	Active damping of geometrically nonlinear vibrations of laminated composite shallow shells using vertically/obliquely reinforced 1-3 piezoelectric composites. International Journal of Mechanics and Materials in Design, 2011, 7, 29-44.	1.7	13
48	Active structural-acoustic control of laminated composite plates using vertically/obliquely reinforced 1â€“3 piezoelectric composite patch. International Journal of Mechanics and Materials in Design, 2009, 5, 123-141.	1.7	12
49	Smart constrained layer damping of functionally graded shells using vertically/obliquely reinforced 1â€“3 piezocomposite under a thermal environment. Smart Materials and Structures, 2008, 17, 055007.	1.8	11
50	Active damping of laminated thin cylindrical composite panels using vertically/obliquely reinforced 1â€“3 piezoelectric composites. Acta Mechanica, 2010, 209, 201-218.	1.1	11
51	A shear lag model of Piezoelectric composite reinforced with carbon nanotubes-coated Piezoelectric fibers. International Journal of Mechanics and Materials in Design, 2010, 6, 147-155.	1.7	11
52	Control of geometrically nonlinear vibrations of skew laminated composite plates using skew or rectangular 1â€“3 piezoelectric patches. International Journal of Mechanics and Materials in Design, 2013, 9, 325-354.	1.7	10
53	Geometrically nonlinear analysis of antisymmetric angle-ply smart composite plates integrated with a layer of piezoelectric fiber reinforced composite. Smart Materials and Structures, 2007, 16, 754-762.	1.8	9
54	Effect of Carbon Nanotube Waviness on the Load Transfer Characteristics of Short Fuzzy Fiber-Reinforced Composite. Journal of Nanomechanics & Micromechanics, 2014, 4, .	1.4	9

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55	Exact solutions for flexoelectric response in elastic dielectric nanobeams considering generalized constitutive gradient theories. International Journal of Mechanics and Materials in Design, 2019, 15, 427-446.	1.7	9
56	Benchmark analysis of piezoelectric bimorph energy harvesters composed of laminated composite beam substrates. International Journal of Mechanics and Materials in Design, 2019, 15, 739-755.	1.7	9
57	Control of Nonlinear Vibrations of Functionally Graded Plates Using 1-3 Piezoelectric Composite. AIAA Journal, 2009, 47, 1421-1434.	1.5	8
58	SMART CONTROL OF NONLINEAR VIBRATIONS OF LAMINATED PLATES USING ACTIVE FIBER COMPOSITES. International Journal of Structural Stability and Dynamics, 2012, 12, 1250050.	1.5	8
59	Active Structural-Acoustic Control of Laminated Composite Truncated Conical Shells Using Smart Damping Treatment. Journal of Vibration and Acoustics, Transactions of the ASME, 2013, 135, .	1.0	8
60	Enhanced magnetoelectric effect in multiferroic composite beams due to flexoelectricity and transverse deformations. International Journal of Mechanics and Materials in Design, 2018, 14, 461-472.	1.7	8
61	Inclusion problem for a generalized strain gradient elastic continuum. Acta Mechanica, 2018, 229, 3813-3831.	1.1	8
62	Performance of skew or rectangular smart patches for active damping of nonlinear vibrations of skew doubly curved laminated composite shells. International Journal of Mechanics and Materials in Design, 2015, 11, 173-202.	1.7	7
63	Finite element analysis for geometrically nonlinear deformations of smart functionally graded plates using vertically reinforced 1-3 piezoelectric composite. International Journal of Mechanics and Materials in Design, 2008, 4, 239-253.	1.7	6
64	Finite element analysis of laminated composite plates using zeroth-order shear deformation theory. International Journal of Mechanics and Materials in Design, 2016, 12, 387-400.	1.7	6
65	Active damping of geometrically nonlinear vibrations of sandwich plates with fuzzy fiber reinforced composite facings. International Journal of Dynamics and Control, 2017, 5, 314-336.	1.5	6
66	Three-dimensional exact elasticity solutions for antisymmetric angle-ply laminated composite plates. International Journal of Mechanics and Materials in Design, 2021, 17, 767-782.	1.7	6
67	Active Damping of Nonlinear Vibrations of Functionally Graded Laminated Composite Plates using Vertically/Obliquely Reinforced 1-3 Piezoelectric Composite. Journal of Vibration and Acoustics, Transactions of the ASME, 2012, 134, .	1.0	5
68	A novel hybrid-Trefftz finite element for symmetric laminated composite plates. International Journal of Mechanics and Materials in Design, 2019, 15, 629-646.	1.7	4
69	Size-Dependent elastic response in functionally graded microbeams considering generalized first strain gradient elasticity. Quarterly Journal of Mechanics and Applied Mathematics, 2019, 72, 273-304.	0.5	3
70	Active Control of Nonlinear Transient Vibration of Laminated Composite Beams Using Triangular SCLD Treatment With Fractional Order Derivative Viscoelastic Model. Journal of Dynamic Systems, Measurement and Control, Transactions of the ASME, 2019, 141, .	0.9	3
71	Meshâ€free models for static analysis of smart laminated composite beams. International Journal for Numerical Methods in Engineering, 2017, 109, 1804-1820.	1.5	2
72	Hybrid-Trefftz finite element model for antisymmetric laminated composite plates using a high order shear deformation theory. International Journal of Mechanics and Materials in Design, 2020, 16, 817-837.	1.7	2