Vinyas M

List of Publications by Year
in descending order

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103	2,540	172207	264894
papers	citations	29	42
		h-index	g-index

106	106	106	776
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	On frequency response of porous functionally graded magneto-electro-elastic circular and annular plates with different electro-magnetic conditions using HSDT. Composite Structures, 2020, 240, 112044.	3.1	91
2	Static studies of stepped functionally graded magneto-electro-elastic beam subjected to different thermal loads. Composite Structures, 2017, 163, 216-237.	3.1	90
3	Static analysis of stepped functionally graded magneto-electro-elastic plates in thermal environment: A finite element study. Composite Structures, 2017, 178, 63-86.	3.1	84
4	Finite element evaluation of free vibration characteristics of magneto-electro-elastic rectangular plates in hygrothermal environment using higher-order shear deformation theory. Composite Structures, 2018, 202, 1339-1352.	3.1	78
5	A higher-order free vibration analysis of carbon nanotube-reinforced magneto-electro-elastic plates using finite element methods. Composites Part B: Engineering, 2019, 158, 286-301.	5.9	75
6	Hygrothermal analysis of magneto-electro-elastic plate using 3D finite element analysis. Composite Structures, 2017, 180, 617-637.	3.1	74
7	Analytical solutions for nonlinear magneto-electro-elastic vibration of smart sandwich plate with carbon nanotube reinforced nanocomposite core in hygrothermal environment. International Journal of Mechanical Sciences, 2020, 186, 105906.	3.6	71
8	On the application of additive manufacturing methods for auxetic structures: a review. Advances in Manufacturing, 2021, 9, 342-368.	3.2	70
9	Vibration control of skew magneto-electro-elastic plates using active constrained layer damping. Composite Structures, 2019, 208, 600-617.	3.1	62
10	Porosity influence on structural behaviour of skew functionally graded magneto-electro-elastic plate. Composite Structures, 2018, 191, 36-77.	3.1	60
11	Computational Analysis of Smart Magneto-Electro-Elastic Materials and Structures: Review and Classification. Archives of Computational Methods in Engineering, 2021, 28, 1205-1248.	6.0	60
12	Developing a novel artificial intelligence model to estimate the capital cost of mining projects using deep neural network-based ant colony optimization algorithm. Resources Policy, 2020, 66, 101604.	4.2	58
13	Influence of interphase on the multi-physics coupled frequency of three-phase smart magneto-electro-elastic composite plates. Composite Structures, 2019, 226, 111254.	3.1	54
14	Numerical analysis of the vibration response of skew magneto-electro-elastic plates based on the higher-order shear deformation theory. Composite Structures, 2019, 214, 132-142.	3.1	51
15	Evaluating and Predicting the Stability of Roadways in Tunnelling and Underground Space Using Artificial Neural Network-Based Particle Swarm Optimization. Tunnelling and Underground Space Technology, 2020, 103, 103517.	3.0	51
16	Influence of coupled fields on free vibration and static behavior of functionally graded magneto-electro-thermo-elastic plate. Journal of Intelligent Material Systems and Structures, 2018, 29, 1430-1455.	1.4	49
17	Nonlinear forced vibration of smart multiscale sandwich composite doubly curved porous shell. Thin-Walled Structures, 2019, 143, 106152.	2.7	48
18	Experimental Investigation using Taguchi Method to Optimize Process Parameters of Fused Deposition Modeling for ABS and Nylon Materials. Materials Today: Proceedings, 2018, 5, 7106-7114.	0.9	47

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19	Vibration and nonlinear dynamic response of imperfect sandwich piezoelectric auxetic plate. Mechanics of Advanced Materials and Structures, 2022, 29, 127-137.	1.5	46
20	Vibration analysis of porous magneto-electro-elastically actuated carbon nanotube-reinforced composite sandwich plate based on a refined plate theory. Engineering With Computers, 2021, 37, 921-936.	3.5	46
21	On nonlinear vibration of sandwiched polymer- CNT/GPL-fiber nanocomposite nanoshells. Thin-Walled Structures, 2020, 146, 106431.	2.7	43
22	Investigation of the effect of BaTiO3/CoFe2O4 particle arrangement on the static response of magneto-electro-thermo-elastic plates. Composite Structures, 2018, 185, 51-64.	3.1	41
23	Influence of active constrained layer damping on the coupled vibration response of functionally graded magneto-electro-elastic plates with skewed edges. Defence Technology, 2020, 16, 1019-1038.	2.1	41
24	On vibration analysis of functionally graded carbon nanotube reinforced magneto-electro-elastic plates with different electro-magnetic conditions using higher order finite element methods. Defence Technology, 2021, 17, 287-303.	2.1	39
25	Nonlinear vibrations of magneto-electro-elastic doubly curved shells reinforced with carbon nanotubes. Composite Structures, 2020, 253, 112749.	3.1	37
26	Investigation on the mechanical properties of additively manufactured <scp>PETG</scp> composites reinforced with <scp>OMMT</scp> nanoclay and carbon fibers. Polymer Composites, 2021, 42, 2380-2395.	2.3	36
27	An experimental study on ballistic impact response of jute reinforced polyethylene glycol and nano silica based shear thickening fluid composite. Defence Technology, 2022, 18, 401-409.	2.1	36
28	Interphase effect on the controlled frequency response of three-phase smart magneto-electro-elastic plates embedded with active constrained layer damping: FE study. Materials Research Express, 2019, 6, 125707.	0.8	33
29	Hygrothermal coupling analysis of magneto-electroelastic beams using finite element methods. Journal of Thermal Stresses, 2018, 41, 1063-1079.	1.1	32
30	Nonlinear vibration of functionally graded magneto-electro-elastic higher order plates reinforced by CNTs using FEM. Engineering With Computers, 2022, 38, 1029-1051.	3.5	32
31	A finite elementâ€“based assessment of free vibration behaviour of circular and annular magneto-electro-elastic plates using higher order shear deformation theory. Journal of Intelligent Material Systems and Structures, 2019, 30, 2478-2501.	1.4	30
32	Effect of BaTiO₃/CoFe₂O₄ micro-topological textures on the coupled static behaviour of magneto-electro-thermo-elastic beams in different thermal environment. Materials Research Express, 2018, 5, 125702.	0.8	29
33	Nonlinear vibration analysis of multiscale doubly curved piezoelectric composite shell in hygrothermal environment. Journal of Intelligent Material Systems and Structures, 2019, 30, 1594-1609.	1.4	29
34	Finite element simulation of controlled frequency response of skew multiphase magneto-electro-elastic plates. Journal of Intelligent Material Systems and Structures, 2019, 30, 1757-1771.	1.4	28
35	Nonlinear free and forced vibration analysis of multiscale composite doubly curved shell embedded in shape-memory alloy fiber under hygrothermal environment. JVC/Journal of Vibration and Control, 2019, 25, 1945-1957.	1.5	28
36	Nonlinear deflection analysis of CNT/magneto-electro-elastic smart shells under multi-physics loading. Mechanics of Advanced Materials and Structures, 2022, 29, 1047-1071.	1.5	28

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37	Experimental evaluation of the mechanical and thermal properties of 3D printed PLA and its composites. Materials Research Express, 2019, 6, 115301.	0.8	25
38	Porosity effect on the nonlinear deflection of functionally graded magneto-electro-elastic smart shells under combined loading. Mechanics of Advanced Materials and Structures, 2022, 29, 2707-2725.	1.5	25
39	Active control of nonlinear coupled transient vibrations of multifunctional sandwich plates with agglomerated FG-CNTs core/magneto-electro-elastic facesheets. Thin-Walled Structures, 2022, 179, 109547.	2.7	25
40	A comprehensive review on analysis of nanocomposites: from manufacturing to properties characterization. Materials Research Express, 2019, 6, 092002.	0.8	24
41	Free Vibration Analysis of Graphene Plateletsâ€“Reinforced Composites Plates in Thermal Environment Based on Higher-Order Shear Deformation Plate Theory. International Journal of Aeronautical and Space Sciences, 2019, 20, 902-912.	1.0	24
42	A higher order coupled frequency characteristics study of smart magneto-electro-elastic composite plates with cut-outs using finite element methods. Defence Technology, 2021, 17, 100-118.	2.1	24
43	Nonlinear free vibration and transient responses of porous functionally graded magneto-electro-elastic plates. Archives of Civil and Mechanical Engineering, 2022, 22, 1.	1.9	24
44	Dynamic analysis of multi-layered composite beams reinforced with graphene platelets resting on two-parameter viscoelastic foundation. European Physical Journal Plus, 2019, 134, 1.	1.2	23
45	Nonlinear deflection of carbon nanotube reinforced multiphase magnetoâ€electroâ€elastic plates in thermal environment considering pyrocoupling effects. Mathematical Methods in the Applied Sciences, 0, , .	1.2	23
46	Two-Stage Structural Damage Assessment by Combining Modal Kinetic Energy Change with Symbiotic Organisms Search. International Journal of Structural Stability and Dynamics, 2019, 19, 1950120.	1.5	22
47	Nonlinear pyrocoupled deflection of viscoelastic sandwich shell with CNT reinforced magneto-electro-elastic facing subjected to electromagnetic loads in thermal environment. European Physical Journal Plus, 2021, 136, 1.	1.2	22
48	Nonlinear damping of auxetic sandwich plates with functionally graded magneto-electro-elastic facings under multiphysics loads and electromagnetic circuits. Composite Structures, 2022, 290, 115523.	3.1	22
49	Analysis and optimal control of smart damping for porous functionally graded magneto-electro-elastic plate using smoothed FEM and metaheuristic algorithm. Engineering Structures, 2022, 259, 114062.	2.6	20
50	Application of Haar wavelet discretization and differential quadrature methods for free vibration of functionally graded micro-beam with porosity using modified couple stress theory. Engineering Analysis With Boundary Elements, 2022, 140, 167-185.	2.0	20
51	Effect of loading rates on the in-plane compressive properties of additively manufactured ABS and PLA-based hexagonal honeycomb structures. Journal of Thermoplastic Composite Materials, 2023, 36, 1113-1134.	2.6	19
52	Postbuckling analysis of piezoelectric multiscale sandwich composite doubly curved porous shallow shells via Homotopy Perturbation Method. Engineering With Computers, 2021, 37, 561-577.	3.5	18
53	Nonlinear free vibration of multifunctional sandwich plates with auxetic core and magneto-electro-elastic facesheets of different micro-topological textures: FE approach. Mechanics of Advanced Materials and Structures, 2022, 29, 6266-6287.	1.5	18
54	Large deflection analysis of functionally graded magneto-electro-elastic porous flat panels. Engineering With Computers, 2022, 38, 1615-1634.	3.5	17

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55	Experimental investigation on the dynamic response of additive manufactured <scp>PETG</scp> composite beams reinforced with organically modified montmorillonite nanoclay and short carbon fiber. Polymer Composites, 2021, 42, 5021-5034.	2.3	17
56	Thermal characterization of organically modified montmorillonite and short carbon fibers reinforced glycolâ€modified polyethylene terephthalate nanocomposite filaments. Polymer Composites, 2021, 42, 4478-4496.	2.3	16
57	Wave dispersion characteristics of fluid-conveying magneto-electro-elastic nanotubes. Engineering With Computers, 2020, 36, 1687-1703.	3.5	15
58	Porosity effect on the energy harvesting behaviour of functionally graded magneto-electro-elastic/fibre-reinforced composite beam. European Physical Journal Plus, 2022, 137, 1.	1.2	15
59	Investigation on the interphase effects on the energy harvesting characteristics of three phase magneto-electro-elastic cantilever beam. Mechanics of Advanced Materials and Structures, 2023, 30, 2735-2747.	1.5	15
60	Chaotic dynamics and forced harmonic vibration analysis of magneto-electro-viscoelastic multiscale composite nanobeam. Engineering With Computers, 2021, 37, 937-950.	3.5	14
61	Wavelet-based techniques for Hygro-Magneto-Thermo vibration of nonlocal strain gradient nanobeam resting on Winkler-Pasternak elastic foundation. Engineering Analysis With Boundary Elements, 2022, 140, 494-506.	2.0	14
62	Computational evaluation of electro-magnetic circuitsâ€™ effect on the coupled response of multifunctional magneto-electro-elastic composites plates exposed to hygrothermal fields. Proceedings of the Institution of Mechanical Engineers, Part C: Journal of Mechanical Engineering Science, 2021, 235, 2832-2850.	1.1	13
63	Influence of Areca Nut Nano Filler on Mechanical and Tribological Properties of Coir Fiber Reinforced Epoxy Based Polymer Composite. Scientia Iranica, 2019, .	0.3	13
64	Investigation of the microstructure and wear behaviour of titanium compounds reinforced aluminium metal matrix composites. Materials Research Express, 2019, 6, 026516.	0.8	11
65	Influence of alkali treatment on physio-mechanical properties of juteâ€“epoxy composite. Advances in Materials and Processing Technologies, 2022, 8, 380-391.	0.8	11
66	Development of Sustainable Jute/Epoxy Composite and Assessing the Effect of Rubber Crumb on Low Velocity Impact Response. Journal of Natural Fibers, 2022, 19, 12268-12279.	1.7	11
67	Physio-mechanical and thermal characterization of jute/rubber crumb hybrid composites and selection of optimal configuration using the MADM approach. Proceedings of the Institution of Mechanical Engineers, Part C: Journal of Mechanical Engineering Science, 2022, 236, 7942-7952.	1.1	11
68	Static responses of magneto-electro-elastic structures in moisture field using stabilized node-based smoothed radial point interpolation method. Composite Structures, 2020, 252, 112696.	3.1	10
69	Nonlinear Damped Transient Vibrations of Carbon Nanotube-Reinforced Magneto-Electro-Elastic Shells with Different Electromagnetic Circuits. Journal of Vibration Engineering and Technologies, 2022, 10, 351-374.	1.3	10
70	Mechanical characterization of the Poly lactic acid (PLA) composites prepared through the Fused Deposition Modelling process. Materials Research Express, 2019, 6, 105359.	0.8	9
71	A novel numerical approach for the stability of nanobeam exposed to hygroâ€thermoâ€magnetic environment embedded in elastic foundation. ZAMM Zeitschrift Fur Angewandte Mathematik Und Mechanik, 2022, 102, e202100380.	0.9	9
72	A numerical investigation on the nonlinear pyrocoupled dynamic response of blast loaded magnetoelectroelastic multiphase porous plates in thermal environment. European Physical Journal Plus, 2022, 137, .	1.2	9

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73	Wave dispersion analysis of magnetic-electrically affected fluid-conveying nanotubes in thermal environment. Proceedings of the Institution of Mechanical Engineers, Part C: Journal of Mechanical Engineering Science, 2019, 233, 7116-7131.	1.1	8
74	Nonlinear damped transient response of sandwich auxetic plates with porous magneto-electro-elastic facesheets. European Physical Journal Plus, 2022, 137, .	1.2	8
75	Mechanical behavior of a sandwich plate with aluminum foam core, using an image-based layerwise model. Mechanics of Advanced Materials and Structures, 2022, 29, 4074-4095.	1.5	7
76	Simulation-based assessment of coupled frequency response of magneto-electro-elastic auxetic multifunctional structures subjected to various electromagnetic circuits. Proceedings of the Institution of Mechanical Engineers, Part L: Journal of Materials: Design and Applications, 0, , 146442072110219.	0.7	7
77	Nonlinear pyrocoupled dynamic response of functionally graded magnetoelectroelastic plates under blast loading in thermal environment. Mechanics Based Design of Structures and Machines, 0, , 1-26.	3.4	7
78	Post-buckling and vibration analysis of randomly distributed CNT reinforced fibre composite plates under localised heating. Mechanics of Advanced Materials and Structures, 2023, 30, 4430-4449.	1.5	7
79	Hygrothermal postbuckling analysis of smart multiscale piezoelectric composite shells. European Physical Journal Plus, 2020, 135, 1.	1.2	6
80	Effect of carbon nanotube-reinforced magneto-electro-elastic facings on the pyrocoupled nonlinear deflection of viscoelastic sandwich skew plates in thermal environment. Proceedings of the Institution of Mechanical Engineers, Part L: Journal of Materials: Design and Applications, 2022, 236, 200-221.	0.7	6
81	Experimental study on two-body and three-body abrasive wear behaviour of jute-natural rubber flexible green composite. Journal of Thermoplastic Composite Materials, 2023, 36, 1422-1436.	2.6	6
82	Vibration-Based Energy Harvesting Characteristics of Functionally Graded Magneto-Electro-Elastic Beam Structures Using Lumped Parameter Model. Journal of Vibration Engineering and Technologies, 2022, 10, 1705-1720.	1.3	6
83	Influence of micro-topological textures of BaTiO3â€“CoFe2O4 composites on the nonlinear pyrocoupled dynamic response of blast loaded magneto-electro-elastic plates in thermal environment. European Physical Journal Plus, 2022, 137, .	1.2	6
84	Ballistic characterization of fiber elastomer metal laminate composites and effect of positioning of fiber reinforced elastomer. Proceedings of the Institution of Mechanical Engineers, Part L: Journal of Materials: Design and Applications, 0, , 146442072110539.	0.7	5
85	Snap-through analysis of multistable laminate using the variational asymptotic method. Mechanics Based Design of Structures and Machines, 2023, 51, 6097-6122.	3.4	5
86	Free vibration of functionally graded beam embedded in Winkler-Pasternak elastic foundation with geometrical uncertainties using symmetric Gaussian fuzzy number. European Physical Journal Plus, 2022, 137, 1.	1.2	5
87	Influence of Coupled Material Properties of BaTiO3 and CoFe2O4 on the Static Behavior of Thermo-Mechanically Loaded Magneto-Electro-Elastic Beam. Materials Today: Proceedings, 2018, 5, 7410-7419.	0.9	4
88	Tribological characterization of sustainable Jute-Epoxy-Rubber crumb hybrid composite. Proceedings of the Institution of Mechanical Engineers, Part C: Journal of Mechanical Engineering Science, 2022, 236, 10281-10289.	1.1	3
89	The study of microstructure and wear behaviour of titanium nitride reinforced aluminium composites. AIP Conference Proceedings, 2020, , .	0.3	2
90	Design Improvement and Structural Analysis of a Carbon Fiber Reinforced Polymer Star Sensor "Baffle".. Advanced Engineering Forum, 0, 15, 92-105.	0.3	1

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91	Effect of low temperature annealing on the properties of nano Niâ€“Ti alloys. Materials Research Express, 2019, 6, 105711.	0.8	1
92	Influence of Ti coated tools on process parameters in turning process of MDN431. AIP Conference Proceedings, 2020, , .	0.3	1
93	Nonlocal and surface effects on the bending analysis of flexoelectrically actuated piezoelectric microbeams in hygrothermal environment. Sadhana - Academy Proceedings in Engineering Sciences, 2021, 46, 1.	0.8	1
94	Effect of low-temperature annealing on the superelastic response and electrochemical corrosion behaviour of equi-atomic Ni-Ti alloy. Advances in Materials and Processing Technologies, 2022, 8, 1113-1125.	0.8	1
95	Physio-Mechanical Characterization of Jute/Kevlar Hybrid Composites Coupled with MADM Approach for Selection of Composites. Journal of Natural Fibers, 2022, 19, 11105-11113.	1.7	1
96	An Optimization Strategy for Customized Radiotherapy Head Immobilization Masks. , 2019, , .		0
97	Hygrothermal response analysis of MEE beam embedded in adaptive wood through FE methods. AIP Conference Proceedings, 2020, , .	0.3	0
98	Metaheuristic optimal design of adaptive composite beams. AIP Conference Proceedings, 2020, , .	0.3	0
99	Design modification and structural behavior study of a CFRP star sensor baffle. Advances in Aircraft and Spacecraft Science, 2016, 3, 427-445.	0.5	0
100	Product design methodology applied in developing a liquid petroleum gas level indicator using android technology. Ingenierie Des Systemes D'Information, 2018, 23, 175-184.	0.5	0
101	Approach to Reduce Throughput Time in Grinding of Gundrills. Journal Europeen Des Systemes Automatises, 2019, 52, 137-142.	0.3	0
102	Geometrically Nonlinear Vibration Attenuation of Functionally Graded Magneto-Electro-Elastic Shells. , 2019, , .		0
103	Structural analysis of graphene-based composites. , 2022, , 91-120.		0