

# Mohamed A Eltaher

## List of Publications by Year in descending order

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96  
papers

4,283  
citations

159585  
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138484  
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117  
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117  
docs citations

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times ranked

1452  
citing authors

#	ARTICLE	IF	CITATIONS
1	Weight optimization of axially functionally graded microbeams under buckling and vibration behaviors. <i>Mechanics Based Design of Structures and Machines</i> , 2023, 51, 213-234.	4.7	19
2	Vibration response of symmetric and sigmoid functionally graded beam rested on elastic foundation under moving point mass. <i>Mechanics Based Design of Structures and Machines</i> , 2023, 51, 2607-2631.	4.7	19
3	Dynamic analysis of FG nanobeam reinforced by carbon nanotubes and resting on elastic foundation under moving load. <i>Mechanics Based Design of Structures and Machines</i> , 2023, 51, 5383-5406.	4.7	22
4	Analytical solution of free vibration of viscoelastic perforated nanobeam. <i>Archive of Applied Mechanics</i> , 2023, 93, 221-243.	2.2	8
5	Dynamics analysis of timoshenko perforated microbeams under moving loads. <i>Engineering With Computers</i> , 2022, 38, 2413-2429.	6.1	21
6	On bending and buckling responses of perforated nanobeams including surface energy for different beams theories. <i>Engineering With Computers</i> , 2022, 38, 2385-2411.	6.1	20
7	Pull-in and freestanding instability of actuated functionally graded nanobeams including surface and stiffening effects. <i>Engineering With Computers</i> , 2022, 38, 255-276.	6.1	30
8	Static bending of perforated nanobeams including surface energy and microstructure effects. <i>Engineering With Computers</i> , 2022, 38, 415-435.	6.1	20
9	Nonlinear dynamics of viscoelastic flexible structural systems by finite element method. <i>Engineering With Computers</i> , 2022, 38, 169-190.	6.1	10
10	Stability buckling and bending of nanobeams including cutouts. <i>Engineering With Computers</i> , 2022, 38, 209-230.	6.1	14
11	Dynamic analysis of viscoelastic functionally graded porous thick beams under pulse load. <i>Engineering With Computers</i> , 2022, 38, 365-377.	6.1	31
12	Free vibration and buckling stability of FG nanobeams exposed to magnetic and thermal fields. <i>Engineering With Computers</i> , 2022, 38, 3463-3482.	6.1	36
13	Analysis of axially temperature-dependent functionally graded carbon nanotube reinforced composite plates. <i>Engineering With Computers</i> , 2022, 38, 2533-2554.	6.1	39
14	Static and dynamic stability responses of multilayer functionally graded carbon nanotubes reinforced composite nanoplates via quasi 3D nonlocal strain gradient theory. <i>Defence Technology</i> , 2022, 18, 1778-1809.	4.2	26
15	Impact and post-impact response of lightweight CFRP/wood sandwich composites. <i>Composite Structures</i> , 2022, 279, 114766.	5.8	27
16	A Dynamic Analysis of Randomly Oriented Functionally Graded Carbon Nanotubes/Fiber-Reinforced Composite Laminated Shells with Different Geometries. <i>Mathematics</i> , 2022, 10, 408.	2.2	17
17	Free Vibration of FG-CNTRCs Nano-Plates/Shells with Temperature-Dependent Properties. <i>Mathematics</i> , 2022, 10, 583.	2.2	21
18	Nonlinear Static Stability of Imperfect Bio-Inspired Helicoidal Composite Beams. <i>Mathematics</i> , 2022, 10, 1084.	2.2	13

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19	Exact Solution of Nonlinear Behaviors of Imperfect Bioinspired Helicoidal Composite Beams Resting on Elastic Foundations. <i>Mathematics</i> , 2022, 10, 887.	2.2	17
20	Elastoplastic Indentation Response of Sigmoid/Power Functionally Graded Ceramics Structures. <i>Polymers</i> , 2022, 14, 1225.	4.5	5
21	Effects of viscoelastic bonding layer on performance of piezoelectric actuator attached to elastic structure. <i>Materials Research Express</i> , 2022, 9, 045701.	1.6	3
22	Bending and Buckling of FG-GRNC Laminated Plates via Quasi-3D Nonlocal Strain Gradient Theory. <i>Mathematics</i> , 2022, 10, 1321.	2.2	20
23	Indentation Response of Power and Sigmoid Functionally Graded PSZ/NiCrAlY Composites. <i>International Journal of Applied Mechanics</i> , 2022, 14, .	2.2	2
24	Buckling and post-buckling behaviors of higher order carbon nanotubes using energy-equivalent model. <i>Engineering With Computers</i> , 2021, 37, 2823-2836.	6.1	42
25	Optimal weight for buckling of FG beam under variable axial load using Pareto optimality. <i>Composite Structures</i> , 2021, 258, 113193.	5.8	23
26	Dynamic analysis of thick beams with functionally graded porous layers and viscoelastic support. <i>JVC/Journal of Vibration and Control</i> , 2021, 27, 1644-1655.	2.6	14
27	Multi-objective shape optimization for axially functionally graded microbeams. <i>Composite Structures</i> , 2021, 258, 113370.	5.8	23
28	A novel nonlocal strain gradient Quasi-3D bending analysis of sigmoid functionally graded sandwich nanoplates. <i>Composite Structures</i> , 2021, 262, 113347.	5.8	48
29	Vibration response of perforated thick beam under moving load. <i>European Physical Journal Plus</i> , 2021, 136, 1.	2.6	12
30	Effective numerical technique applied for Burgers' equation of $(1+\alpha_1)\frac{\partial \phi}{\partial t} + (2+\alpha_2)\frac{\partial \phi}{\partial x}$ dimensional, and coupled forms. <i>Mathematical Methods in the Applied Sciences</i> , 2021, 44, 10135-10153.	2.3	5
31	Buckling Analysis of CNTRC Curved Sandwich Nanobeams in Thermal Environment. <i>Applied Sciences (Switzerland)</i> , 2021, 11, 3250.	2.5	19
32	Dynamic response of nonlocal strain gradient FG nanobeam reinforced by carbon nanotubes under moving point load. <i>European Physical Journal Plus</i> , 2021, 136, 1.	2.6	38
33	Free vibration of a cracked FG microbeam embedded in an elastic matrix and exposed to magnetic field in a thermal environment. <i>Composite Structures</i> , 2021, 261, 113552.	5.8	42
34	Bio-inspired composite laminate design with improved out-of-plane strength and ductility. <i>Composites Part A: Applied Science and Manufacturing</i> , 2021, 144, 106362.	7.6	26
35	Thermo-Mechanical and Delamination Properties in Drilling GFRP Composites by Various Drill Angles. <i>Polymers</i> , 2021, 13, 1884.	4.5	26
36	On vibration of sigmoid/symmetric functionally graded nonlocal strain gradient nanobeams under moving load. <i>International Journal of Mechanics and Materials in Design</i> , 2021, 17, 721-742.	3.0	23

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37	Heat-Affected Zone and Mechanical Analysis of GFRP Composites with Different Thicknesses in Drilling Processes. <i>Polymers</i> , 2021, 13, 2246.	4.5	18
38	The effects of incident solar radiation on the collector efficiency using coolant hybrid nanofluid via simulation of solar tower system with the parallel heat exchangers. <i>Journal of the Taiwan Institute of Chemical Engineers</i> , 2021, 124, 106-115.	5.3	11
39	On the evolution of energy dissipation in dispersed composite laminates under out-of-plane loading. <i>Composites Part B: Engineering</i> , 2021, 216, 108864.	12.0	9
40	Dynamic analysis of nanoscale Timoshenko CNTs based on doublet mechanics under moving load. <i>European Physical Journal Plus</i> , 2021, 136, 1.	2.6	24
41	Annual performance analysis of small scale industrial waste heat assisted solar tower power plant and application of nanofluid. <i>Journal of the Taiwan Institute of Chemical Engineers</i> , 2021, 124, 216-227.	5.3	18
42	Numerical investigation of molten salt/SiO <sub>2</sub> nano-fluid in the solar power plant cycle and examining different arrangements of shell and tube heat exchangers and plate heat exchangers in these cycles. <i>Journal of the Taiwan Institute of Chemical Engineers</i> , 2021, 124, 1-8.	5.3	8
43	Dynamics of perforated nanobeams subject to moving mass using the nonlocal strain gradient theory. <i>Applied Mathematical Modelling</i> , 2021, 96, 215-235.	4.2	45
44	Vibration response of Timoshenko perforated microbeams under accelerating load and thermal environment. <i>Applied Mathematics and Computation</i> , 2021, 407, 126307.	2.2	16
45	A detailed hydrothermal investigation of a helical micro double-tube heat exchanger for a wide range of helix pitch length. <i>Case Studies in Thermal Engineering</i> , 2021, 28, 101413.	5.7	39
46	Implicit Finite Difference Simulation of Prandtl-Eyring Nanofluid over a Flat Plate with Variable Thermal Conductivity: A Tiwari and Das Model. <i>Mathematics</i> , 2021, 9, 3153.	2.2	16
47	Effect of Al <sub>2</sub> O <sub>3</sub> particles on mechanical and tribological properties of Al-Mg dual-matrix nanocomposites. <i>Ceramics International</i> , 2020, 46, 5779-5787.	4.8	56
48	Static stability of a unified composite beams under varying axial loads. <i>Thin-Walled Structures</i> , 2020, 147, 106488.	5.3	31
49	Influence of the perforation configuration on dynamic behaviors of multilayered beam structure. <i>Structures</i> , 2020, 28, 1413-1426.	3.6	22
50	Dynamic Analysis of Layered Functionally Graded Viscoelastic Deep Beams with Different Boundary Conditions Due to a Pulse Load. <i>International Journal of Applied Mechanics</i> , 2020, 12, 2050055.	2.2	9
51	Static stability of higher order functionally graded beam under variable axial load. <i>AEJ - Alexandria Engineering Journal</i> , 2020, 59, 1661-1675.	6.4	33
52	Micromechanical modeling of damage in elasto-plastic nanocomposites using unit cell representative volume element and cohesive zone model. <i>Ceramics International</i> , 2020, 46, 10469-10480.	4.8	15
53	Influence of axial load function and optimization on static stability of sandwich functionally graded beams with porous core. <i>Engineering With Computers</i> , 2020, 36, 1929-1946.	6.1	56
54	Nonlinear stability and vibration of imperfect CNTs by Doublet mechanics. <i>Applied Mathematics and Computation</i> , 2020, 382, 125311.	2.2	33

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55	Predictive model for indentation of elasto-plastic functionally graded composites. Composites Part B: Engineering, 2020, 197, 108129.	12.0	20
56	Experimental and Numerical Investigation on Indentation of Orthotropic Microplates with Finite Thickness. International Polymer Processing, 2020, 35, 314-325.	0.5	6
57	High repetition rate deposition of boron nitride films using femtosecond pulsed laser. Materials Research Express, 2020, 7, 096401.	1.6	5
58	Participation Factor and Vibration of Carbon Nanotube with Vacancies. Journal of Nano Research, 2019, 57, 158-174.	0.8	11
59	Periodic and nonperiodic modes of postbuckling and nonlinear vibration of beams attached to nonlinear foundations. Applied Mathematical Modelling, 2019, 75, 414-445.	4.2	29
60	Improving energy dissipation and damage resistance of CFRP laminates using alumina nanoparticles. Plastics, Rubber and Composites, 2019, 48, 208-217.	2.0	13
61	Modal participation of fixed-fixed single-walled carbon nanotube with vacancies. International Journal of Advanced Structural Engineering, 2019, 11, 151-163.	1.3	16
62	Predictive model for spherical indentation on elastoplastic nanocomposites: Loading and unloading behavior. Ceramics International, 2019, 45, 3088-3100.	4.8	11
63	Experimental and numerical investigation on strengthening mechanisms of nanostructured Al-SiC composites. Journal of Alloys and Compounds, 2019, 774, 1123-1132.	5.5	84
64	Bending and vibrational behaviors of piezoelectric nonlocal nanobeam including surface elasticity. Waves in Random and Complex Media, 2019, 29, 264-280.	2.7	57
65	Numerical analysis of nonlinear free and forced vibrations of buckled curved beams resting on nonlinear elastic foundations. International Journal of Non-Linear Mechanics, 2018, 101, 157-173.	2.6	63
66	Static bending and buckling of perforated nonlocal size-dependent nanobeams. Microsystem Technologies, 2018, 24, 4881-4893.	2.0	32
67	Modified porosity model in analysis of functionally graded porous nanobeams. Journal of the Brazilian Society of Mechanical Sciences and Engineering, 2018, 40, 1.	1.6	50
68	Thermoelastic Crack Analysis in Functionally Graded Pipelines Conveying Natural Gas by an FEM. International Journal of Applied Mechanics, 2018, 10, 1850036.	2.2	14
69	Resonance frequencies of size dependent perforated nonlocal nanobeam. Microsystem Technologies, 2018, 24, 3925-3937.	2.0	30
70	Postbuckling and Free Vibration of Multilayer Imperfect Nanobeams under a Pre-Stress Load. Applied Sciences (Switzerland), 2018, 8, 2238.	2.5	32
71	Buckling and postbuckling of composite beams in hygrothermal environments. Composite Structures, 2016, 152, 665-675.	5.8	74
72	Analysis of size-dependent mechanical properties of CNTs mass sensor using energy equivalent model. Sensors and Actuators A: Physical, 2016, 246, 9-17.	4.1	36

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73	Free vibration of symmetric and sigmoid functionally graded nanobeams. Applied Physics A: Materials Science and Processing, 2016, 122, 1.	2.3	38
74	Nonlinear analysis of size-dependent and material-dependent nonlocal CNTs. Composite Structures, 2016, 153, 902-913.	5.8	40
75	A review on nonlocal elastic models for bending, buckling, vibrations, and wave propagation of nanoscale beams. Applied Mathematical Modelling, 2016, 40, 4109-4128.	4.2	281
76	Vibration of a carbyne nanomechanical mass sensor with surface effect. Applied Physics A: Materials Science and Processing, 2016, 122, 1.	2.3	24
77	Nanobeam sensor for measuring a zeptogram mass. International Journal of Mechanics and Materials in Design, 2016, 12, 211-221.	3.0	47
78	On the static stability of nonlocal nanobeams using higher-order beam theories. Advances in Nano Research, 2016, 4, 51-64.	0.9	14
79	Model for nano-scale bonding wires under thermal loading. , 2014, , .		1
80	Vibration of nonlinear graduation of nano-Timoshenko beam considering the neutral axis position. Applied Mathematics and Computation, 2014, 235, 512-529.	2.2	51
81	Mechanical analysis of higher order gradient nanobeams. Applied Mathematics and Computation, 2014, 229, 260-272.	2.2	47
82	Static and buckling analysis of functionally graded Timoshenko nanobeams. Applied Mathematics and Computation, 2014, 229, 283-295.	2.2	88
83	Surface and thermal load effects on the buckling of curved nanowires. Engineering Science and Technology, an International Journal, 2014, 17, 279-283.	3.2	20
84	Static analysis of nanobeams using nonlocal FEM. Journal of Mechanical Science and Technology, 2013, 27, 2035-2041.	1.5	32
85	Nonlinear size-dependent finite element analysis of functionally graded elastic tiny-bodies. International Journal of Mechanical Sciences, 2013, 77, 356-364.	6.7	20
86	Determination of neutral axis position and its effect on natural frequencies of functionally graded macro/nanobeams. Composite Structures, 2013, 99, 193-201.	5.8	147
87	Coupling effects of nonlocal and surface energy on vibration analysis of nanobeams. Applied Mathematics and Computation, 2013, 224, 760-774.	2.2	114
88	Vibration analysis of Euler-Bernoulli nanobeams by using finite element method. Applied Mathematical Modelling, 2013, 37, 4787-4797.	4.2	192
89	Static and stability analysis of nonlocal functionally graded nanobeams. Composite Structures, 2013, 96, 82-88.	5.8	229
90	Static analysis of nanobeams including surface effects by nonlocal finite element. Journal of Mechanical Science and Technology, 2012, 26, 3555-3563.	1.5	116

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91	Free vibration analysis of functionally graded size-dependent nanobeams. Applied Mathematics and Computation, 2012, 218, 7406-7420.	2.2	305
92	Free vibration characteristics of a functionally graded beam by finite element method. Applied Mathematical Modelling, 2011, 35, 412-425.	4.2	445
93	Behavior of a viscoelastic composite plates under transient load. Journal of Mechanical Science and Technology, 2011, 25, 1129-1140.	1.5	19
94	The response of viscoelastic-frictionless bodies under normal impact. International Journal of Mechanical Sciences, 2010, 52, 446-454.	6.7	10
95	Modeling of viscoelastic contact-impact problems. Applied Mathematical Modelling, 2010, 34, 2336-2352.	4.2	21
96	Postbuckling of Curved Carbon Nanotubes Using Energy Equivalent Model. Journal of Nano Research, 0, 57, 136-157.	0.8	33