

Mohamed A Eltahir

List of Publications by Year in descending order

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1627
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| # | 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. | 3.4 | 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. | 3.4 | 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. | 3.4 | 22 |
| 4 | Analytical solution of free vibration of viscoelastic perforated nanobeam. <i>Archive of Applied Mechanics</i> , 2023, 93, 221-243. | 1.2 | 8 |
| 5 | Dynamics analysis of timoshenko perforated microbeams under moving loads. <i>Engineering With Computers</i> , 2022, 38, 2413-2429. | 3.5 | 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. | 3.5 | 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. | 3.5 | 30 |
| 8 | Static bending of perforated nanobeams including surface energy and microstructure effects. <i>Engineering With Computers</i> , 2022, 38, 415-435. | 3.5 | 20 |
| 9 | Nonlinear dynamics of viscoelastic flexible structural systems by finite element method. <i>Engineering With Computers</i> , 2022, 38, 169-190. | 3.5 | 10 |
| 10 | Stability buckling and bending of nanobeams including cutouts. <i>Engineering With Computers</i> , 2022, 38, 209-230. | 3.5 | 14 |
| 11 | Dynamic analysis of viscoelastic functionally graded porous thick beams under pulse load. <i>Engineering With Computers</i> , 2022, 38, 365-377. | 3.5 | 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. | 3.5 | 36 |
| 13 | Analysis of axially temperature-dependent functionally graded carbon nanotube reinforced composite plates. <i>Engineering With Computers</i> , 2022, 38, 2533-2554. | 3.5 | 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. | 2.1 | 26 |
| 15 | Impact and post-impact response of lightweight CFRP/wood sandwich composites. <i>Composite Structures</i> , 2022, 279, 114766. | 3.1 | 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. | 1.1 | 17 |
| 17 | Free Vibration of FG-CNTRCs Nano-Plates/Shells with Temperature-Dependent Properties. <i>Mathematics</i> , 2022, 10, 583. | 1.1 | 21 |
| 18 | Nonlinear Static Stability of Imperfect Bio-Inspired Helicoidal Composite Beams. <i>Mathematics</i> , 2022, 10, 1084. | 1.1 | 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. | 1.1 | 17 |
| 20 | Elastoplastic Indentation Response of Sigmoid/Power Functionally Graded Ceramics Structures. <i>Polymers</i> , 2022, 14, 1225. | 2.0 | 5 |
| 21 | Effects of viscoelastic bonding layer on performance of piezoelectric actuator attached to elastic structure. <i>Materials Research Express</i> , 2022, 9, 045701. | 0.8 | 3 |
| 22 | Bending and Buckling of FG-GRNC Laminated Plates via Quasi-3D Nonlocal Strain Gradient Theory. <i>Mathematics</i> , 2022, 10, 1321. | 1.1 | 20 |
| 23 | Indentation Response of Power and Sigmoid Functionally Graded PSZ/NiCrAlY Composites. <i>International Journal of Applied Mechanics</i> , 2022, 14, . | 1.3 | 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. | 3.5 | 42 |
| 25 | Optimal weight for buckling of FG beam under variable axial load using Pareto optimality. <i>Composite Structures</i> , 2021, 258, 113193. | 3.1 | 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. | 1.5 | 14 |
| 27 | Multi-objective shape optimization for axially functionally graded microbeams. <i>Composite Structures</i> , 2021, 258, 113370. | 3.1 | 23 |
| 28 | A novel nonlocal strain gradient Quasi-3D bending analysis of sigmoid functionally graded sandwich nanoplates. <i>Composite Structures</i> , 2021, 262, 113347. | 3.1 | 48 |
| 29 | Vibration response of perforated thick beam under moving load. <i>European Physical Journal Plus</i> , 2021, 136, 1. | 1.2 | 12 |
| 30 | Effective numerical technique applied for Burgers' equation of $(1 + \alpha \xi)$, $(2 + \alpha \xi)$ dimensional, and coupled forms. <i>Mathematical Methods in the Applied Sciences</i> , 2021, 44, 10135-10153. | 1.2 | 5 |
| 31 | Buckling Analysis of CNTRC Curved Sandwich Nanobeams in Thermal Environment. <i>Applied Sciences (Switzerland)</i> , 2021, 11, 3250. | 1.3 | 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. | 1.2 | 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. | 3.1 | 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. | 3.8 | 26 |
| 35 | Thermo-Mechanical and Delamination Properties in Drilling GFRP Composites by Various Drill Angles. <i>Polymers</i> , 2021, 13, 1884. | 2.0 | 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. | 1.7 | 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. | 2.0 | 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. | 2.7 | 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. | 5.9 | 9 |
| 40 | Dynamic analysis of nanoscale Timoshenko CNTs based on doublet mechanics under moving load. <i>European Physical Journal Plus</i> , 2021, 136, 1. | 1.2 | 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. | 2.7 | 18 |
| 42 | Numerical investigation of molten salt/SiO ₂ 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. | 2.7 | 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. | 2.2 | 45 |
| 44 | Vibration response of Timoshenko perforated microbeams under accelerating load and thermal environment. <i>Applied Mathematics and Computation</i> , 2021, 407, 126307. | 1.4 | 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. | 2.8 | 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. | 1.1 | 16 |
| 47 | Effect of Al ₂ O ₃ particles on mechanical and tribological properties of Al-Mg dual-matrix nanocomposites. <i>Ceramics International</i> , 2020, 46, 5779-5787. | 2.3 | 56 |
| 48 | Static stability of a unified composite beams under varying axial loads. <i>Thin-Walled Structures</i> , 2020, 147, 106488. | 2.7 | 31 |
| 49 | Influence of the perforation configuration on dynamic behaviors of multilayered beam structure. <i>Structures</i> , 2020, 28, 1413-1426. | 1.7 | 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. | 1.3 | 9 |
| 51 | Static stability of higher order functionally graded beam under variable axial load. <i>AEJ - Alexandria Engineering Journal</i> , 2020, 59, 1661-1675. | 3.4 | 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. | 2.3 | 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. | 3.5 | 56 |
| 54 | Nonlinear stability and vibration of imperfect CNTs by Doublet mechanics. <i>Applied Mathematics and Computation</i> , 2020, 382, 125311. | 1.4 | 33 |

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|----|---|-----|-----------|
| 55 | Predictive model for indentation of elasto-plastic functionally graded composites. <i>Composites Part B: Engineering</i> , 2020, 197, 108129. | 5.9 | 20 |
| 56 | Experimental and Numerical Investigation on Indentation of Orthotropic Microplates with Finite Thickness. <i>International Polymer Processing</i> , 2020, 35, 314-325. | 0.3 | 6 |
| 57 | High repetition rate deposition of boron nitride films using femtosecond pulsed laser. <i>Materials Research Express</i> , 2020, 7, 096401. | 0.8 | 5 |
| 58 | Participation Factor and Vibration of Carbon Nanotube with Vacancies. <i>Journal of Nano Research</i> , 2019, 57, 158-174. | 0.8 | 11 |
| 59 | Periodic and nonperiodic modes of postbuckling and nonlinear vibration of beams attached to nonlinear foundations. <i>Applied Mathematical Modelling</i> , 2019, 75, 414-445. | 2.2 | 29 |
| 60 | Improving energy dissipation and damage resistance of CFRP laminates using alumina nanoparticles. <i>Plastics, Rubber and Composites</i> , 2019, 48, 208-217. | 0.9 | 13 |
| 61 | Modal participation of fixed-fixed single-walled carbon nanotube with vacancies. <i>International Journal of Advanced Structural Engineering</i> , 2019, 11, 151-163. | 1.3 | 16 |
| 62 | Predictive model for spherical indentation on elastoplastic nanocomposites: Loading and unloading behavior. <i>Ceramics International</i> , 2019, 45, 3088-3100. | 2.3 | 11 |
| 63 | Experimental and numerical investigation on strengthening mechanisms of nanostructured Al-SiC composites. <i>Journal of Alloys and Compounds</i> , 2019, 774, 1123-1132. | 2.8 | 84 |
| 64 | Bending and vibrational behaviors of piezoelectric nonlocal nanobeam including surface elasticity. <i>Waves in Random and Complex Media</i> , 2019, 29, 264-280. | 1.6 | 57 |
| 65 | Numerical analysis of nonlinear free and forced vibrations of buckled curved beams resting on nonlinear elastic foundations. <i>International Journal of Non-Linear Mechanics</i> , 2018, 101, 157-173. | 1.4 | 63 |
| 66 | Static bending and buckling of perforated nonlocal size-dependent nanobeams. <i>Microsystem Technologies</i> , 2018, 24, 4881-4893. | 1.2 | 32 |
| 67 | Modified porosity model in analysis of functionally graded porous nanobeams. <i>Journal of the Brazilian Society of Mechanical Sciences and Engineering</i> , 2018, 40, 1. | 0.8 | 50 |
| 68 | Thermoelastic Crack Analysis in Functionally Graded Pipelines Conveying Natural Gas by an FEM. <i>International Journal of Applied Mechanics</i> , 2018, 10, 1850036. | 1.3 | 14 |
| 69 | Resonance frequencies of size dependent perforated nonlocal nanobeam. <i>Microsystem Technologies</i> , 2018, 24, 3925-3937. | 1.2 | 30 |
| 70 | Postbuckling and Free Vibration of Multilayer Imperfect Nanobeams under a Pre-Stress Load. <i>Applied Sciences (Switzerland)</i> , 2018, 8, 2238. | 1.3 | 32 |
| 71 | Buckling and postbuckling of composite beams in hygrothermal environments. <i>Composite Structures</i> , 2016, 152, 665-675. | 3.1 | 74 |
| 72 | Analysis of size-dependent mechanical properties of CNTs mass sensor using energy equivalent model. <i>Sensors and Actuators A: Physical</i> , 2016, 246, 9-17. | 2.0 | 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. | 1.1 | 38 |
| 74 | Nonlinear analysis of size-dependent and material-dependent nonlocal CNTs. Composite Structures, 2016, 153, 902-913. | 3.1 | 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. | 2.2 | 281 |
| 76 | Vibration of a carbyne nanomechanical mass sensor with surface effect. Applied Physics A: Materials Science and Processing, 2016, 122, 1. | 1.1 | 24 |
| 77 | Nanobeam sensor for measuring a zeptogram mass. International Journal of Mechanics and Materials in Design, 2016, 12, 211-221. | 1.7 | 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. | 1.4 | 51 |
| 81 | Mechanical analysis of higher order gradient nanobeams. Applied Mathematics and Computation, 2014, 229, 260-272. | 1.4 | 47 |
| 82 | Static and buckling analysis of functionally graded Timoshenko nanobeams. Applied Mathematics and Computation, 2014, 229, 283-295. | 1.4 | 88 |
| 83 | Surface and thermal load effects on the buckling of curved nanowires. Engineering Science and Technology, an International Journal, 2014, 17, 279-283. | 2.0 | 20 |
| 84 | Static analysis of nanobeams using nonlocal FEM. Journal of Mechanical Science and Technology, 2013, 27, 2035-2041. | 0.7 | 32 |
| 85 | Nonlinear size-dependent finite element analysis of functionally graded elastic tiny-bodies. International Journal of Mechanical Sciences, 2013, 77, 356-364. | 3.6 | 20 |
| 86 | Determination of neutral axis position and its effect on natural frequencies of functionally graded macro/nanobeams. Composite Structures, 2013, 99, 193-201. | 3.1 | 147 |
| 87 | Coupling effects of nonlocal and surface energy on vibration analysis of nanobeams. Applied Mathematics and Computation, 2013, 224, 760-774. | 1.4 | 114 |
| 88 | Vibration analysis of Euler-Bernoulli nanobeams by using finite element method. Applied Mathematical Modelling, 2013, 37, 4787-4797. | 2.2 | 192 |
| 89 | Static and stability analysis of nonlocal functionally graded nanobeams. Composite Structures, 2013, 96, 82-88. | 3.1 | 229 |
| 90 | Static analysis of nanobeams including surface effects by nonlocal finite element. Journal of Mechanical Science and Technology, 2012, 26, 3555-3563. | 0.7 | 116 |

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|----|---|-----|-----------|
| 91 | Free vibration analysis of functionally graded size-dependent nanobeams. Applied Mathematics and Computation, 2012, 218, 7406-7420. | 1.4 | 305 |
| 92 | Free vibration characteristics of a functionally graded beam by finite element method. Applied Mathematical Modelling, 2011, 35, 412-425. | 2.2 | 445 |
| 93 | Behavior of a viscoelastic composite plates under transient load. Journal of Mechanical Science and Technology, 2011, 25, 1129-1140. | 0.7 | 19 |
| 94 | The response of viscoelastic-frictionless bodies under normal impact. International Journal of Mechanical Sciences, 2010, 52, 446-454. | 3.6 | 10 |
| 95 | Modeling of viscoelastic contact-impact problems. Applied Mathematical Modelling, 2010, 34, 2336-2352. | 2.2 | 21 |
| 96 | Postbuckling of Curved Carbon Nanotubes Using Energy Equivalent Model. Journal of Nano Research, 0, 57, 136-157. | 0.8 | 33 |