# Xiao Wei Deng

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/1261338/publications.pdf

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|---|---|---|---|
| 48 papers | 1,725 citations | 257101 24 h-index | 288905 40 g-index |
| 48 all docs | 48 docs citations | 48 times ranked | 1334 citing authors |

| # | Article | IF | Citations |
|---|---|---|---|
| 1 | Review on the research progress of cement-based and geopolymer materials modified by graphene and graphene oxide. Nanotechnology Reviews, 2020, 9, 155-169. | 2.6 | 166 |
| 2 | Wake modeling of wind turbines using machine learning. Applied Energy, 2020, 257, 114025. | 5.1 | 142 |
| 3 | Scaffold Structural Microenvironmental Cues to Guide Tissue Regeneration in Bone Tissue Applications. Nanomaterials, 2018, 8, 960. | 1.9 | 129 |
| 4 | Free vibrations of functionally graded porous rectangular plate with uniform elastic boundary conditions. Composites Part B: Engineering, 2019, 168, 106-120. | 5.9 | 106 |
| 5 | Deployment simulation of foldable origami membrane structures. Aerospace Science and Technology, 2017, 67, 343-353. | 2.5 | 76 |
| 6 | Mechanical properties and microstructures of hypergolic and calcined coal gangue based geopolymer recycled concrete. Construction and Building Materials, 2019, 221, 691-708. | 3.2 | 63 |
| 7 | Application of nanomaterials in ultra-high performance concrete: A review. Nanotechnology Reviews, 2020, 9, 1427-1444. | 2.6 | 62 |
| 8 | A modified series solution for free vibration analyses of moderately thick functionally graded porous (FGP) deep curved and straight beams. Composites Part B: Engineering, 2019, 165, 155-166. | 5.9 | 58 |
| 9 | Artificial Neural Networks based wake model for power prediction of wind farm. Renewable Energy, 2021, 172, 618-631. | 4.3 | 57 |
| 10 | Advance on the dispersion treatment of graphene oxide and the graphene oxide modified cement-based materials. Nanotechnology Reviews, 2021, 10, 34-49. | 2.6 | 53 |
| 11 | The effect of graphene oxide on the mechanical properties, impermeability and corrosion resistance of cement mortar containing mineral admixtures. Construction and Building Materials, 2021, 288, 123059. | 3.2 | 53 |
| 12 | Dynamic response of saddle membrane structure under hail impact. Engineering Structures, 2020, 214, 110597. | 2.6 | 47 |
| 13 | A unified modeling method for dynamic analysis of GPL-reinforced FGP plate resting on Winkler-Pasternak foundation with elastic boundary conditions. Composite Structures, 2020, 244, 112217. | 3.1 | 47 |
| 14 | Geometric design and mechanical behavior of a deployable cylinder with Miura origami. Smart Materials and Structures, 2015, 24, 125031. | 1.8 | 44 |
| 15 | Research progress on mechanical properties of geopolymer recycled aggregate concrete. Reviews on Advanced Materials Science, 2021, 60, 158-172. | 1.4 | 40 |
| 16 | Form-finding method for multi-mode tensegrity structures using extended force density method by grouping elements. Composite Structures, 2018, 187, 1-9. | 3.1 | 36 |
| 17 | New energy harvester with embedded piezoelectric stacks. Composites Part B: Engineering, 2019, 163, 303-313. | 5.9 | 35 |
| 18 | Experimental and numerical investigation on dynamic responses of the umbrella membrane structure excited by heavy rainfall. JVC/Journal of Vibration and Control, 2021, 27, 675-684. | 1.5 | 35 |

| # | Article | IF | Citations |
|---|---|---|---|
| 19 | Geometry and Motion Analysis of Origami-Based Deployable Shelter Structures. Journal of Structural Engineering, 2015, 141, . | 1.7 | 34 |
| 20 | Hailstone-induced dynamic responses of pretensioned umbrella membrane structure. Advances in Structural Engineering, 2021, 24, 3-16. | 1.2 | 34 |
| 21 | Experimental study on seismic behavior of precast concrete column with grouted sleeve connections considering ratios of longitudinal reinforcement and stirrups. Bulletin of Earthquake Engineering, 2018, 16, 6077-6104. | 2.3 | 33 |
| 22 | Studies on mechanical properties and durability of steel fiber reinforced concrete incorporating graphene oxide. Cement and Concrete Composites, 2022, 130, 104508. | 4.6 | 30 |
| 23 | Motion Analysis of a Foldable Barrel Vault Based on Regular and Irregular Yoshimura Origami. Journal of Mechanisms and Robotics, 2016, 8, . | 1.5 | 29 |
| 24 | Numerical Simulations of Two Back-To-Back Horizontal Axis Tidal Stream Turbines in Free-Surface Flows. Journal of Applied Mechanics, Transactions ASME, 2020, 87, . | 1.1 | 29 |
| 25 | Research progress on key problems of nanomaterials-modified geopolymer concrete. Nanotechnology Reviews, 2021, 10, 779-792. | 2.6 | 23 |
| 26 | Nonlinear wind-induced aerodynamic stability of orthotropic saddle membrane structures. Journal of Wind Engineering and Industrial Aerodynamics, 2017, 164, 119-127. | 1.7 | 21 |
| 27 | Experimental study on mechanical properties and microstructures of steel fiber-reinforced fly ash-metakaolin geopolymer-recycled concrete. Reviews on Advanced Materials Science, 2021, 60, 578-590. | 1.4 | 21 |
| 28 | Cooperative yaw control of wind farm using a double-layer machine learning framework. Renewable Energy, 2022, 193, 519-537. | 4.3 | 21 |
| 29 | Impact-induced nonlinear damped vibration of fabric membrane structure: Theory, analysis, experiment and parametric study. Composites Part B: Engineering, 2019, 159, 389-404. | 5.9 | 20 |
| 30 | Wrinkling modelling of space membranes subject to solar radiation pressure. Composites Part B: Engineering, 2019, 157, 266-275. | 5.9 | 19 |
| 31 | Computer Modeling of Wind Turbines: 2. Free-Surface FSI and Fatigue-Damage. Archives of Computational Methods in Engineering, 2019, 26, 1101-1115. | 6.0 | 17 |
| 32 | Layout optimization of offshore wind farm considering spatially inhomogeneous wave loads. Applied Energy, 2022, 306, 117947. | 5.1 | 16 |
| 33 | Integrated design framework of next-generation 85-m wind turbine blade: Modelling, aeroelasticity and optimization. Composites Part B: Engineering, 2019, 159, 53-61. | 5.9 | 14 |
| 34 | Isogeometric analysis based on geometric reconstruction models. Frontiers of Mechanical Engineering, 2021, 16, 782-797. | 2.5 | 12 |
| 35 | Protection of steel tube against corrosion using self-prestressing UHPC prepared with expansive agent and steel fibers. Structures, 2022, 37, 95-108. | 1.7 | 12 |
| 36 | Experimental study on effect of length of service hole on seismic behavior of exterior precast beamâ€“column connections. Structural Concrete, 2019, 20, 85-96. | 1.5 | 11 |

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|---|---|---|---|
| 37 | Constraint Analysis and Redundancy of Planar Closed Loop Double Chain Linkages. Advances in Mechanical Engineering, 2014, 6, 635423. | 0.8 | 10 |
| 38 | Multi-scale response sensitivity analysis based on direct differentiation method for concrete structures. Composites Part B: Engineering, 2019, 157, 295-304. | 5.9 | 10 |
| 39 | Random vibration of composite saddle membrane structure under the impact loading. Composite Structures, 2021, 269, 114020. | 3.1 | 9 |
| 40 | Integrated design framework of 3D printed planar stainless tubular joint: Modelling, optimization, manufacturing, and experiment. Thin-Walled Structures, 2021, 169, 108463. | 2.7 | 9 |
| 41 | Modeling of soil-pile-structure interaction for dynamic response of standalone wind turbines. Renewable Energy, 2022, 186, 394-410. | 4.3 | 9 |
| 42 | Detached eddy simulation of turbulent flow fields over steep hilly terrain. Journal of Wind Engineering and Industrial Aerodynamics, 2022, 221, 104906. | 1.7 | 8 |
| 43 | Numerical Simulation for Vortex-Induced Vibration (VIV) of a High-Rise Building Based on Two-Way Coupled Fluid-Structure Interaction Method. International Journal of Structural Stability and Dynamics, 2022, 22, . | 1.5 | 8 |
| 44 | Tunable origami metamaterial with arbitrary single-curvature configuration. Mechanism and Machine Theory, 2022, 171, 104745. | 2.7 | 7 |
| 45 | Theoretical and Numerical Studies on Damped Nonlinear Vibration of Orthotropic Saddle Membrane Structures Excited by Hailstone Impact Load. Shock and Vibration, 2019, 2019, 1-21. | 0.3 | 3 |
| 46 | Theoretical and experimental study on nonlinear dynamic response of composite umbrella membrane structure under hail impact. Thin-Walled Structures, 2022, 173, 109039. | 2.7 | 3 |
| 47 | Impact of saddle membrane structure by hail with combined particle sizes: Numerical simulation and experimental investigation. Engineering Structures, 2022, 264, 114477. | 2.6 | 3 |
| 48 | Mobility analysis of planar radially foldable bar structures. Proceedings of the Institution of Mechanical Engineers, Part G: Journal of Aerospace Engineering, 2015, 229, 694-702. | 0.7 | 1 |