

# Weibin Wen

## List of Publications by Year in descending order

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43  
papers

1,683  
citations

279798

23  
h-index

289244

40  
g-index

43  
all docs

43  
docs citations

43  
times ranked

1238  
citing authors

#	ARTICLE	IF	CITATIONS
1	Mechanical properties of an improved 3D-printed rhombic dodecahedron stainless steel lattice structure of variable cross section. <i>International Journal of Mechanical Sciences</i> , 2018, 145, 53-63.	6.7	187
2	Effect of Hatch Spacing on Melt Pool and As-built Quality During Selective Laser Melting of Stainless Steel: Modeling and Experimental Approaches. <i>Materials</i> , 2019, 12, 50.	2.9	101
3	Dynamic compressive behavior of a modified additively manufactured rhombic dodecahedron 316L stainless steel lattice structure. <i>Thin-Walled Structures</i> , 2020, 148, 106586.	5.3	96
4	A predictive micropolar continuum model for a novel three-dimensional chiral lattice with size effect and tension-twist coupling behavior. <i>Journal of the Mechanics and Physics of Solids</i> , 2018, 121, 23-46.	4.8	95
5	Three dimensional lightweight lattice structures with large positive, zero and negative thermal expansion. <i>Composite Structures</i> , 2018, 188, 287-296.	5.8	90
6	Mechanical properties and energy absorption of 3D printed square hierarchical honeycombs under in-plane axial compression. <i>Composites Part B: Engineering</i> , 2019, 176, 107219.	12.0	88
7	Enhanced out-of-plane crushing strength and energy absorption of in-plane graded honeycombs. <i>Composites Part B: Engineering</i> , 2017, 118, 33-40.	12.0	83
8	Radar stealth and mechanical properties of a broadband radar absorbing structure. <i>Composites Part B: Engineering</i> , 2017, 123, 19-27.	12.0	79
9	A novel sub-step composite implicit time integration scheme for structural dynamics. <i>Computers and Structures</i> , 2017, 182, 176-186.	4.4	76
10	Enhanced out-of-plane compressive strength and energy absorption of 3D printed square and hexagonal honeycombs with variable-thickness cell edges. <i>Extreme Mechanics Letters</i> , 2018, 18, 9-18.	4.1	68
11	Additively-manufactured anisotropic and isotropic 3D plate-lattice materials for enhanced mechanical performance: Simulations & experiments. <i>Acta Materialia</i> , 2020, 199, 397-412.	7.9	67
12	Design and analysis of integrated thermal protection system based on lightweight C/SiC pyramidal lattice core sandwich panel. <i>Materials and Design</i> , 2016, 111, 435-444.	7.0	57
13	A novel design method for 3D positive and negative Poisson's ratio material based on tension-twist coupling effects. <i>Composite Structures</i> , 2020, 236, 111899.	5.8	57
14	Porous carbon-bonded carbon fiber composites impregnated with SiO <sub>2</sub> -Al <sub>2</sub> O <sub>3</sub> aerogel with enhanced thermal insulation and mechanical properties. <i>Ceramics International</i> , 2018, 44, 3484-3487.	4.8	52
15	Tailorable Thermal Expansion of Lightweight and Robust Dual-Constituent Triangular Lattice Material. <i>Journal of Applied Mechanics, Transactions ASME</i> , 2017, 84, .	2.2	51
16	In Plane Mechanical Properties of Tetrachiral and Antitetrachiral Hybrid Metastructures. <i>Journal of Applied Mechanics, Transactions ASME</i> , 2017, 84, .	2.2	49
17	Experimental and numerical investigation on the crushing behavior of sandwich composite under edgewise compression loading. <i>Composites Part B: Engineering</i> , 2016, 94, 34-44.	12.0	47
18	Mechanical performance of topology-optimized 3D lattice materials manufactured via selective laser sintering. <i>Composite Structures</i> , 2020, 238, 111985.	5.8	41

#	ARTICLE	IF	CITATIONS
19	A comparative study of three composite implicit schemes on structural dynamic and wave propagation analysis. <i>Computers and Structures</i> , 2017, 190, 126-149.	4.4	33
20	Optimization design of built-up thermal protection system based on validation of corrugated core homogenization. <i>Applied Thermal Engineering</i> , 2017, 115, 491-500.	6.0	30
21	Tailoring the frequency-dependent electrical conductivity and dielectric permittivity of CNT-polymer nanocomposites with nanosized particles. <i>International Journal of Engineering Science</i> , 2019, 142, 1-19.	5.0	29
22	Ablation behavior and mechanism of double-layer ZrB <sub>2</sub> -based ceramic coating for lightweight carbon-bonded carbon fiber composites under oxyacetylene flame at elevate temperature. <i>Journal of Alloys and Compounds</i> , 2017, 702, 551-560.	5.5	27
23	A quartic B-spline based explicit time integration scheme for structural dynamics with controllable numerical dissipation. <i>Computational Mechanics</i> , 2017, 59, 403-418.	4.0	24
24	A high-order accurate explicit time integration method based on cubic B-spline interpolation and weighted residual technique for structural dynamics. <i>International Journal for Numerical Methods in Engineering</i> , 2021, 122, 431-454.	2.8	22
25	An improved sub-step time-marching procedure for linear and nonlinear dynamics with high-order accuracy and high-efficient energy conservation. <i>Applied Mathematical Modelling</i> , 2021, 90, 78-100.	4.2	17
26	Further insights of a composite implicit time integration scheme and its performance on linear seismic response analysis. <i>Engineering Structures</i> , 2021, 241, 112490.	5.3	14
27	Out-of-plane crashworthiness of bio-inspired hierarchical diamond honeycombs with variable cell wall thickness. <i>Thin-Walled Structures</i> , 2022, 176, 109347.	5.3	14
28	A quadratic b-spline based isogeometric analysis of transient wave propagation problems with implicit time integration method. <i>Applied Mathematical Modelling</i> , 2018, 59, 115-131.	4.2	12
29	An improved higher-order explicit time integration method with momentum corrector for linear and nonlinear dynamics. <i>Applied Mathematical Modelling</i> , 2021, 98, 287-308.	4.2	10
30	An element-free Galerkin approach for rigid-flexible coupling dynamics in 2D state. <i>Applied Mathematics and Computation</i> , 2017, 310, 149-168.	2.2	8
31	An improved quartic B-spline based explicit time integration algorithm for structural dynamics. <i>European Journal of Mechanics, A/Solids</i> , 2022, 91, 104407.	3.7	8
32	Improved quadratic isogeometric element simulation of one-dimensional elastic wave propagation with central difference method. <i>Applied Mathematics and Mechanics (English Edition)</i> , 2018, 39, 703-716.	3.6	7
33	Porosity-dependent percolation threshold and frequency-dependent electrical properties for highly aligned graphene-polymer nanocomposite foams. <i>Materials Today Communications</i> , 2020, 22, 100853.	1.9	7
34	An improved time integration scheme based on uniform cubic B-splines and its application in structural dynamics. <i>Applied Mathematics and Mechanics (English Edition)</i> , 2017, 38, 889-908.	3.6	6
35	Dispersion and damping analysis of orthotropic composite plate in mid frequency based on symplectic method. <i>Composite Structures</i> , 2017, 178, 426-433.	5.8	6
36	Mechanical response of cortical bone in compression and tension at the mineralized fibrillar level in steroid induced osteoporosis. <i>Composites Part B: Engineering</i> , 2020, 196, 108138.	12.0	6

#	ARTICLE	IF	CITATIONS
37	A novel broadband waterborne acoustic absorber. AIP Advances, 2016, 6, .	1.3	5
38	Global interpolating meshless shape function based on generalized moving least-square for structural dynamic analysis. Applied Mathematics and Mechanics (English Edition), 2016, 37, 1153-1176.	3.6	4
39	Enhanced Ultimate Shear Capacity of Concave Square Frustum-Shaped Wet Joint in Precast Steel-Concrete Composite Bridges. Applied Sciences (Switzerland), 2021, 11, 1915.	2.5	3
40	Performance of a Three-Substep Time Integration Method on Structural Nonlinear Seismic Analysis. Mathematical Problems in Engineering, 2021, 2021, 1-20.	1.1	3
41	Thermal Shock Resistance of Chemical Vapour Deposited Zinc Sulfide at Elevated Temperatures. Transactions of the Indian Ceramic Society, 2016, 75, 215-219.	1.0	2
42	Evaluating the Dynamic Response of the Bridge-Vehicle System considering Random Road Roughness Based on the Moment Method. Advances in Civil Engineering, 2021, 2021, 1-12.	0.7	2
43	Study on the Shear Capacity of the Wet Joint of the Prefabricated Bridge Panel with a Special-Shaped Shear Key. Advances in Civil Engineering, 2021, 2021, 1-15.	0.7	0