

# Z C He

## List of Publications by Year in descending order

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73  
papers

2,352  
citations

186254

28  
h-index

243610

44  
g-index

73  
all docs

73  
docs citations

73  
times ranked

886  
citing authors

#	ARTICLE	IF	CITATIONS
1	Design of single-phase chiral metamaterials for broadband double negativity via shape optimization. <i>Applied Mathematical Modelling</i> , 2021, 91, 335-357.	4.2	9
2	Improve the frontal crashworthiness of vehicle through the design of front rail. <i>Thin-Walled Structures</i> , 2021, 162, 107588.	5.3	48
3	Improved impact responses of a honeycomb sandwich panel structure with internal resonators. <i>Engineering Optimization</i> , 2020, 52, 731-752.	2.6	8
4	A novel method to study the phononic crystals with fluid-structure interaction and hybrid uncertainty. <i>Acta Mechanica</i> , 2020, 231, 321-352.	2.1	13
5	Energy absorption characteristics of three-layered sandwich panels with graded re-entrant hierarchical honeycombs cores. <i>Aerospace Science and Technology</i> , 2020, 106, 106073.	4.8	60
6	Elastic properties and multi-scale design of long carbon fiber nonwoven reinforced plane-based isotropic composite. <i>Composite Structures</i> , 2020, 251, 112657.	5.8	20
7	A lightweight adaptive hybrid laminate metamaterial with higher design freedom for wave attenuation. <i>Composite Structures</i> , 2020, 243, 112230.	5.8	30
8	The feedback artificial tree (FAT) algorithm. <i>Soft Computing</i> , 2020, 24, 13413-13440.	3.6	25
9	Design of resonant structures in resin matrix to mitigate the blast wave with a very wide frequency range. <i>Smart Materials and Structures</i> , 2020, 29, 045042.	3.5	19
10	Random dynamic load identification for stochastic structural-acoustic system using an adaptive regularization parameter and evidence theory. <i>Journal of Sound and Vibration</i> , 2020, 471, 115188.	3.9	30
11	Robust topological design of actuator-coupled structures with hybrid uncertainties. <i>Acta Mechanica</i> , 2020, 231, 1621-1638.	2.1	7
12	Robust concurrent topology optimization of structure and its composite material considering uncertainty with imprecise probability. <i>Computer Methods in Applied Mechanics and Engineering</i> , 2020, 364, 112927.	6.6	36
13	Design multi-stopband laminate acoustic metamaterials for structural-acoustic coupled system. <i>Mechanical Systems and Signal Processing</i> , 2019, 115, 418-433.	8.0	58
14	In-plane crashworthiness of re-entrant hierarchical honeycombs with negative Poisson's ratio. <i>Composite Structures</i> , 2019, 229, 111415.	5.8	120
15	Optimal balance between mass and smoothed stiffness in simulation of acoustic problems. <i>Applied Mathematical Modelling</i> , 2019, 75, 1-22.	4.2	25
16	Dissipative multi-resonator acoustic metamaterials for impact force mitigation and collision energy absorption. <i>Acta Mechanica</i> , 2019, 230, 2905-2935.	2.1	35
17	Analysis on loudness of exhaust noise and improvement of exhaust system based on structure-loudness model. <i>Applied Acoustics</i> , 2019, 150, 104-112.	3.3	8
18	Multi-source random excitation identification for stochastic structures based on matrix perturbation and modified regularization method. <i>Mechanical Systems and Signal Processing</i> , 2019, 119, 266-292.	8.0	35

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19	An efficient algorithm for nonlinear active noise control of impulsive noise. <i>Applied Acoustics</i> , 2019, 148, 366-374.	3.3	22
20	Design of a multi-resonator metamaterial for mitigating impact force. <i>Journal of Applied Physics</i> , 2019, 125, .	2.5	15
21	A non-contact acoustic pressure-based method for load identification in acoustic-structural interaction system with non-probabilistic uncertainty. <i>Applied Acoustics</i> , 2019, 148, 223-237.	3.3	26
22	Topology optimization of structure for dynamic properties considering hybrid uncertain parameters. <i>Structural and Multidisciplinary Optimization</i> , 2018, 57, 625-638.	3.5	25
23	Analysis and optimization of clutch judder based on a hybrid uncertain model with random and interval variables. <i>Engineering Optimization</i> , 2018, 50, 1894-1913.	2.6	9
24	An efficient algorithm to analyze wave propagation in fluid/solid and solid/fluid phononic crystals. <i>Computer Methods in Applied Mechanics and Engineering</i> , 2018, 333, 421-442.	6.6	52
25	Uncertainty analysis and optimization of automotive driveline torsional vibration with a driveline and rear axle coupled model. <i>Engineering Optimization</i> , 2018, 50, 1871-1893.	2.6	10
26	An uncertainty model of acoustic metamaterials with random parameters. <i>Computational Mechanics</i> , 2018, 62, 1023-1036.	4.0	35
27	A Novel Method for Load Bounds Identification for Uncertain Structures in Frequency Domain. <i>International Journal of Computational Methods</i> , 2018, 15, 1850051.	1.3	20
28	Evaluation of the stiffness matrix in static and dynamic elasticity problems. <i>Acta Mechanica</i> , 2018, 229, 363-388.	2.1	4
29	Fundamental study of mechanism of band gap in fluid and solid/fluid phononic crystals. <i>Advances in Engineering Software</i> , 2018, 121, 167-177.	3.8	13
30	Design and optimization of three-resonator locally resonant metamaterial for impact force mitigation. <i>Smart Materials and Structures</i> , 2018, 27, 095015.	3.5	25
31	Large time steps in the explicit formulation of transient heat transfer. <i>International Journal of Heat and Mass Transfer</i> , 2017, 108, 2040-2052.	4.8	7
32	A stochastic perturbation edge-based smoothed finite element method for the analysis of uncertain structural-acoustics problems with random variables. <i>Engineering Analysis With Boundary Elements</i> , 2017, 80, 116-126.	3.7	24
33	Development of a perfect match system in the improvement of eigenfrequencies of free vibration. <i>Applied Mathematical Modelling</i> , 2017, 44, 614-639.	4.2	17
34	Design for structural vibration suppression in laminate acoustic metamaterials. <i>Composites Part B: Engineering</i> , 2017, 131, 237-252.	12.0	58
35	Stability and accuracy improvement for explicit formulation of time domain acoustic problems. <i>Engineering Analysis With Boundary Elements</i> , 2017, 83, 217-228.	3.7	14
36	Comparisons between the dynamic and quasi-static performances of a dissipative dielectric elastomer under pure shear mode. <i>Smart Materials and Structures</i> , 2017, 26, 105044.	3.5	8

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37	An ultra-accurate numerical method in the design of liquid phononic crystals with hard inclusion. <i>Computational Mechanics</i> , 2017, 60, 983-996.	4.0	29
38	The artificial tree (AT) algorithm. <i>Engineering Applications of Artificial Intelligence</i> , 2017, 65, 99-110.	8.1	27
39	Volumetric locking issue with uncertainty in the design of locally resonant acoustic metamaterials. <i>Computer Methods in Applied Mechanics and Engineering</i> , 2017, 324, 128-148.	6.6	50
40	A faster and accurate explicit algorithm for quasi-harmonic dynamic problems. <i>International Journal for Numerical Methods in Engineering</i> , 2016, 108, 839-864.	2.8	10
41	An exact solution to compute the band gap in phononic crystals. <i>Computational Materials Science</i> , 2016, 122, 72-85.	3.0	28
42	Stability analysis of generalized mass formulation in dynamic heat transfer. <i>Numerical Heat Transfer, Part B: Fundamentals</i> , 2016, 69, 287-311.	0.9	12
43	Smoothed finite element method for topology optimization involving incompressible materials. <i>Engineering Optimization</i> , 2016, 48, 2064-2089.	2.6	13
44	A novel hybrid ES-FE-SEA for mid-frequency prediction of Transmission losses in complex acoustic systems. <i>Applied Acoustics</i> , 2016, 111, 198-204.	3.3	25
45	Development of an efficient algorithm to analyze the elastic wave in acoustic metamaterials. <i>Acta Mechanica</i> , 2016, 227, 3015-3030.	2.1	35
46	A mass-redistributed finite element method (MR-FEM) for acoustic problems using triangular mesh. <i>Journal of Computational Physics</i> , 2016, 323, 149-170.	3.8	63
47	3D mass-redistributed finite element method in structural-acoustic interaction problems. <i>Acta Mechanica</i> , 2016, 227, 857-879.	2.1	33
48	A novel hybrid FS-FEM/SEA for the analysis of vibro-acoustic problems. <i>International Journal for Numerical Methods in Engineering</i> , 2015, 102, 1815-1829.	2.8	21
49	A three-dimensional hybrid smoothed finite element method (H-SFEM) for nonlinear solid mechanics problems. <i>Acta Mechanica</i> , 2015, 226, 4223-4245.	2.1	21
50	Acoustic simulation using $\hat{I}$ -FEM with a general approach for reducing dispersion error. <i>Engineering Analysis With Boundary Elements</i> , 2015, 61, 241-253.	3.7	24
51	Numerical investigation of ES-FEM with various mass re-distribution for acoustic problems. <i>Applied Acoustics</i> , 2015, 89, 222-233.	3.3	22
52	Hybrid smoothed finite element method for acoustic problems. <i>Computer Methods in Applied Mechanics and Engineering</i> , 2015, 283, 664-688.	6.6	85
53	An ultra-accurate hybrid smoothed finite element method for piezoelectric problem. <i>Engineering Analysis With Boundary Elements</i> , 2015, 50, 188-197.	3.7	20
54	MID-FREQUENCY ACOUSTIC ANALYSIS USING EDGE-BASED SMOOTHED TETRAHEDRON RADIALPOINT INTERPOLATION METHODS. <i>International Journal of Computational Methods</i> , 2014, 11, 1350103.	1.3	19

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55	A coupled ES-BEM and FM-BEM for structural acoustic problems. <i>Noise Control Engineering Journal</i> , 2014, 62, 196-209.	0.3	9
56	Smoothed finite element method with exact solutions in heat transfer problems. <i>International Journal of Heat and Mass Transfer</i> , 2014, 78, 1219-1231.	4.8	41
57	A new hybrid smoothed FEM for static and free vibration analyses of Reissner-Mindlin Plates. <i>Computational Mechanics</i> , 2014, 54, 865-890.	4.0	32
58	An edge-based smoothed tetrahedron finite element method (ES-T-FEM) for 3D static and dynamic problems. <i>Computational Mechanics</i> , 2013, 52, 221-236.	4.0	83
59	An edge-based smoothed tetrahedron finite element method (ES-T-FEM) for thermomechanical problems. <i>International Journal of Heat and Mass Transfer</i> , 2013, 66, 723-732.	4.8	41
60	An ES-FEM for accurate analysis of 3D mid-frequency acoustics using tetrahedron mesh. <i>Computers and Structures</i> , 2012, 106-107, 125-134.	4.4	77
61	A Novel Alpha Gradient Smoothing Method ( $\hat{\alpha}$ GSM) for Fluid Problems. <i>Numerical Heat Transfer, Part B: Fundamentals</i> , 2012, 61, 204-228.	0.9	10
62	Numerical modeling and simulation of pulsatile blood flow in rigid vessel using gradient smoothing method. <i>Engineering Analysis With Boundary Elements</i> , 2012, 36, 322-334.	3.7	14
63	An efficient adaptive analysis procedure using the edge-based smoothed point interpolation method (ES-PIM) for 2D and 3D problems. <i>Engineering Analysis With Boundary Elements</i> , 2012, 36, 1424-1443.	3.7	20
64	A novel linearly-weighted gradient smoothing method (LWGSM) in the simulation of fluid dynamics problem. <i>Computers and Fluids</i> , 2011, 50, 104-119.	2.5	15
65	A three-dimensional adaptive analysis using the meshfree node-based smoothed point interpolation method (NS-PIM). <i>Engineering Analysis With Boundary Elements</i> , 2011, 35, 1123-1135.	3.7	36
66	Dispersion error reduction for acoustic problems using the edge-based smoothed finite element method (ES-FEM). <i>International Journal for Numerical Methods in Engineering</i> , 2011, 86, 1322-1338.	2.8	63
67	A coupled ES-FEM/BEM method for fluid-structure interaction problems. <i>Engineering Analysis With Boundary Elements</i> , 2011, 35, 140-147.	3.7	64
68	Coupled analysis of 3D structural-acoustic problems using the edge-based smoothed finite element method/finite element method. <i>Finite Elements in Analysis and Design</i> , 2010, 46, 1114-1121.	3.2	51
69	A coupled edge-/face-based smoothed finite element method for structural-acoustic problems. <i>Applied Acoustics</i> , 2010, 71, 955-964.	3.3	49
70	Dispersion free analysis of acoustic problems using the alpha finite element method. <i>Computational Mechanics</i> , 2010, 46, 867-881.	4.0	38
71	Modeling and simulation of bioheat transfer in the human eye using the 3D alpha finite element method ( $\hat{\alpha}$ FEM). <i>International Journal for Numerical Methods in Biomedical Engineering</i> , 2010, 26, 955-976.	2.1	43
72	An efficient algorithm for phase change problem in tumor treatment using $\hat{\alpha}$ FEM. <i>International Journal of Thermal Sciences</i> , 2010, 49, 1954-1967.	4.9	31

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73	An edge-based smoothed finite element method (ES-FEM) for analyzing three-dimensional acoustic problems. <i>Computer Methods in Applied Mechanics and Engineering</i> , 2009, 199, 20-33.	6.6	128