

Fangsen Cui

List of Publications by Year in descending order

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94
papers

1,819
citations

279701

23
h-index

302012

39
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100
all docs

100
docs citations

100
times ranked

1719
citing authors

#	ARTICLE	IF	CITATIONS
1	Sparse wavenumber analysis of guided wave based on hybrid Lasso regression in composite laminates. <i>Structural Health Monitoring</i> , 2022, 21, 1367-1378.	4.3	6
2	Nanoparticles-reinforced poly-l-lactic acid composite materials as bioresorbable scaffold candidates for coronary stents: Insights from mechanical and finite element analysis. <i>Journal of the Mechanical Behavior of Biomedical Materials</i> , 2022, 125, 104977.	1.5	4
3	Measurement of Elastic Constant Matrix of Carbon Fiber Composites With an Ultrasonic 2D-Array Transducer. <i>IEEE Sensors Journal</i> , 2022, 22, 5562-5570.	2.4	7
4	Structural health monitoring of fastener hole using ring-design direct-write piezoelectric ultrasonic transducer. <i>Structural Health Monitoring</i> , 2022, 21, 2657-2669.	4.3	6
5	Defect imaging in carbon fiber composites by acoustic shearography. <i>Composites Science and Technology</i> , 2022, 223, 109417.	3.8	11
6	A novel coating method to reduce membrane infolding through pre-crimping of covered stents – Computational and experimental evaluation. <i>Computers in Biology and Medicine</i> , 2022, 145, 105524.	3.9	2
7	Homography-based measurement of bridge vibration using UAV and DIC method. <i>Measurement: Journal of the International Measurement Confederation</i> , 2021, 170, 108683.	2.5	49
8	Bayesian Estimation of Instantaneous Speed for Rotating Machinery Fault Diagnosis. <i>IEEE Transactions on Industrial Electronics</i> , 2021, 68, 8842-8852.	5.2	14
9	Nonlinear dynamic analysis of ring truss antenna equivalent to the cylindrical shell with thermal excitation. <i>European Journal of Mechanics, A/Solids</i> , 2021, 85, 104109.	2.1	11
10	Mode-mismatching enhanced disbond detection using material nonlinearity in guided waves at low frequency. <i>Journal of Sound and Vibration</i> , 2021, 490, 115733.	2.1	8
11	Piezoelectricity in Structural Adhesives and Application for Monitoring Joint Integrity via Guided Ultrasonic Waves. <i>IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control</i> , 2021, 68, 777-783.	1.7	3
12	Detection and sizing of disbond in multilayer bonded structure using modally selective guided wave. <i>Structural Health Monitoring</i> , 2021, 20, 904-916.	4.3	22
13	Vibration Suppression for Beam-Like Repeating Lattice Structure Based on Equivalent Model by a Nonlinear Energy Sink. <i>Mathematical Problems in Engineering</i> , 2021, 2021, 1-15.	0.6	3
14	Non-anatomical placement adversely affects the functional performance of the meniscal implant: a finite element study. <i>Biomechanics and Modeling in Mechanobiology</i> , 2021, 20, 1167-1185.	1.4	8
15	A Metawindow with Optimised Acoustic and Ventilation Performance. <i>Applied Sciences (Switzerland)</i> , 2021, 11, 3168.	1.3	17
16	Thoracic aorta stent grafts design in terms of biomechanical investigations into flexibility. <i>Mathematical Biosciences and Engineering</i> , 2021, 18, 800-816.	1.0	10
17	A systematic approach to further improve stent-graft performance. <i>Materials and Design</i> , 2021, 211, 110144.	3.3	5
18	Nanoglass-based balloon expandable stents. <i>Journal of Biomedical Materials Research - Part B Applied Biomaterials</i> , 2020, 108, 73-79.	1.6	7

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19	Structural damage detection using convolutional neural networks combining strain energy and dynamic response. <i>Meccanica</i> , 2020, 55, 945-959.	1.2	40
20	Membrane-type acoustic metamaterial with eccentric masses for broadband sound isolation. <i>Applied Acoustics</i> , 2020, 157, 107003.	1.7	57
21	In situ disbond detection in adhesive bonded multi-layer metallic joint using time-of-flight variation of guided wave. <i>Ultrasonics</i> , 2020, 102, 106062.	2.1	23
22	Effect of slurry composition on the microstructure and mechanical properties of SS316L open-cell foam. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2020, 772, 138798.	2.6	8
23	Effect of number of crowns on the crush resistance in open-cell stent design. <i>Journal of Mechanics of Materials and Structures</i> , 2020, 15, 75-86.	0.4	3
24	Development of metacage for noise control and natural ventilation in a window system. <i>Applied Acoustics</i> , 2020, 170, 107510.	1.7	28
25	Nonlinear vibration analysis of composite blade with variable rotating speed using Chebyshev polynomials. <i>European Journal of Mechanics, A/Solids</i> , 2020, 82, 103976.	2.1	14
26	Prostate deformable registration through geometric transformation by finite element method. <i>Meccanica</i> , 2020, 55, 669-680.	1.2	1
27	Structural Damage Features Extracted by Convolutional Neural Networks from Mode Shapes. <i>Applied Sciences (Switzerland)</i> , 2020, 10, 4247.	1.3	18
28	A Validated Finite Element Model of Intertrochanteric Fractures with Inhomogeneous Material Properties Extracted From CT Images. <i>Procedia CIRP</i> , 2020, 89, 194-200.	1.0	0
29	Structural Damage Detection Based on Real-Time Vibration Signal and Convolutional Neural Network. <i>Applied Sciences (Switzerland)</i> , 2020, 10, 4720.	1.3	21
30	Ultrasonic detection and characterization of delamination and rich resin in thick composites with waviness. <i>Composites Science and Technology</i> , 2020, 189, 108016.	3.8	43
31	Measurement of the Luminal Diameter of Peripheral Arterial Vasculature in Yorkshire—Landrace Swine by Using Ultrasonography and Angiography. <i>Journal of the American Association for Laboratory Animal Science</i> , 2020, , .	0.6	1
32	Modal Strain Energy-Based Structural Damage Detection Using Convolutional Neural Networks. <i>Applied Sciences (Switzerland)</i> , 2019, 9, 3376.	1.3	34
33	Optimization of a Novel Preferential Covered Stent through Bench Experiments and in Vitro Platelet Activation Studies. <i>ACS Biomaterials Science and Engineering</i> , 2019, 5, 6216-6230.	2.6	1
34	Hemodynamic analysis of a novel stent graft design with slit perforations in thoracic aortic aneurysm. <i>Journal of Biomechanics</i> , 2019, 85, 210-217.	0.9	18
35	Modelling and simulation of the expansion of a shape memory polymer stent. <i>Engineering Computations</i> , 2019, 36, 2726-2746.	0.7	12
36	Hypervelocity impact induced shock acoustic emission waves for quantitative damage evaluation using in situ miniaturized piezoelectric sensor network. <i>Chinese Journal of Aeronautics</i> , 2019, 32, 1059-1070.	2.8	10

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37	Sound transmission through a periodic acoustic metamaterial grating. <i>Journal of Sound and Vibration</i> , 2019, 449, 140-156.	2.1	39
38	Design and evaluation of the crimping of a hooked self-expandable caval valve stent for the treatment of tricuspid regurgitation. <i>Computer Methods in Biomechanics and Biomedical Engineering</i> , 2019, 22, 533-546.	0.9	1
39	A finite element simulation method to evaluate the crimpability of curved stents. <i>Medical Engineering and Physics</i> , 2019, 74, 162-165.	0.8	4
40	Origami-inspired foldable sound barrier designs. <i>Journal of Sound and Vibration</i> , 2019, 442, 514-526.	2.1	28
41	Pulsatile Flow Investigation in Development of Thoracic Aortic Aneurysm: An In-Vitro Validated Fluid Structure Interaction Analysis. <i>Journal of Applied Fluid Mechanics</i> , 2019, 12, 1855-1872.	0.4	13
42	Predicting integrated thermal and acoustic performance in naturally ventilated high-rise buildings using CFD and FEM simulation. <i>Building Simulation</i> , 2018, 11, 507-518.	3.0	14
43	A Benchmark Study of Modeling Lamb Wave Scattering by a Through Hole Using a Time-Domain Spectral Element Method. <i>Journal of Nondestructive Evaluation, Diagnostics and Prognostics of Engineering Systems</i> , 2018, 1, 021006-021006-8.	0.7	0
44	Transparent piezoelectric film speakers for windows with active noise mitigation function. <i>Applied Acoustics</i> , 2018, 137, 90-97.	1.7	23
45	Microstructure-based experimental and numerical investigations on the sound absorption property of open-cell metallic foams manufactured by a template replication technique. <i>Materials and Design</i> , 2018, 137, 108-116.	3.3	61
46	Directed acoustic shearography for crack detection around fastener holes in aluminum plates. <i>NDT and E International</i> , 2018, 100, 124-131.	1.7	12
47	A Critical Review on Metallic Glasses as Structural Materials for Cardiovascular Stent Applications. <i>Journal of Functional Biomaterials</i> , 2018, 9, 19.	1.8	59
48	Association of Hemodynamic Behavior in the Thoracic Aortic Aneurysm to the Intraluminal Thrombus Prediction: A Two-Way Fluid Structure Coupling Investigation. <i>International Journal of Applied Mechanics</i> , 2018, 10, 1850035.	1.3	8
49	Feasibility of using bulk metallic glass for self-expandable stent applications. , 2017, 105, 1874-1882.		15
50	Simulated Bench Testing to Evaluate the Mechanical Performance of New Carotid Stents. <i>Artificial Organs</i> , 2017, 41, 267-272.	1.0	11
51	On the sound insulation of acoustic metasurface using a sub-structuring approach. <i>Journal of Sound and Vibration</i> , 2017, 401, 190-203.	2.1	44
52	Biomechanical Assessment for Healing Progression of Fractured Long Bones: Numerical Investigations of Bending Stiffness and Resonant Frequency. <i>International Journal of Applied Mechanics</i> , 2017, 09, 1750041.	1.3	1
53	Evaluating the effects of material properties of artificial meniscal implant in the human knee joint using finite element analysis. <i>Scientific Reports</i> , 2017, 7, 6011.	1.6	56
54	A numerical investigation on the sound insulation of ventilation windows. <i>Applied Acoustics</i> , 2017, 117, 113-121.	1.7	54

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55	Vibroacoustic modeling of an acoustic resonator tuned by dielectric elastomer membrane with voltage control. <i>Journal of Sound and Vibration</i> , 2017, 387, 114-126.	2.1	33
56	Tunable acoustic metamaterial with an array of resonators actuated by dielectric elastomer. <i>Extreme Mechanics Letters</i> , 2017, 12, 37-40.	2.0	61
57	Numerical and Experimental Study on the Acoustic Performance of Ni-based Superalloy Open Cell Foam. <i>Procedia Engineering</i> , 2017, 214, 4-8.	1.2	4
58	Fatigue modeling in percutaneous caval valved stents. <i>Procedia Engineering</i> , 2017, 214, 98-106.	1.2	0
59	Characterizing Hypervelocity Impact (HVI)-Induced Pitting Damage Using Active Guided Ultrasonic Waves: From Linear to Nonlinear. <i>Materials</i> , 2017, 10, 547.	1.3	18
60	Interrogation of Lamb wave interaction with changing bonding condition in adhesive bonded joint. <i>Proceedings of Meetings on Acoustics</i> , 2017, , .	0.3	0
61	An Experimental and Computational Study on the Effect of Caval Valved Stent Oversizing. <i>Cardiovascular Engineering and Technology</i> , 2016, 7, 254-269.	0.7	7
62	On the acoustic analysis and optimization of ducted ventilation systems using a sub-structuring approach. <i>Journal of the Acoustical Society of America</i> , 2016, 139, 279-289.	0.5	10
63	Finite element analysis of the dynamic behavior of radially polarized Functionally Graded Piezoelectric (FGP) structures. , 2016, , .		0
64	Stent design parameters and crimpability. <i>International Journal of Cardiology</i> , 2016, 223, 552-553.	0.8	9
65	Deployment of a Bulk Metallic Glass-Based Self-Expandable Stent in a Patient-Specific Descending Aorta. <i>ACS Biomaterials Science and Engineering</i> , 2016, 2, 1951-1958.	2.6	14
66	Biomechanical Assessment for Healing Progression of Fractured Long Bones: Comparisons of Various Methods Using Beam Models. <i>International Journal of Applied Mechanics</i> , 2016, 08, 1650074.	1.3	5
67	A review of vibration control methods for marine offshore structures. <i>Ocean Engineering</i> , 2016, 127, 279-297.	1.9	156
68	Covered Stent Membrane Design for Treatment of Atheroembolic Disease at Carotid Artery Bifurcation and Prevention of Thromboembolic Stroke: An In Vitro Experimental Study. <i>Artificial Organs</i> , 2016, 40, 159-168.	1.0	10
69	Comparisons of node-based and element-based approaches of assigning bone material properties onto subject-specific finite element models. <i>Medical Engineering and Physics</i> , 2015, 37, 808-812.	0.8	15
70	A Novel Method for Impact Testing of Small Specimens - Numerical Simulation and Experiments. <i>Experimental Mechanics</i> , 2015, 55, 1247-1259.	1.1	1
71	Effects of a carotid covered stent with a novel membrane design on the blood flow regime and hemodynamic parameters distribution at the carotid artery bifurcation. <i>Medical and Biological Engineering and Computing</i> , 2015, 53, 165-177.	1.6	18
72	Numerical Modeling of Intraventricular Flow during Diastole after Implantation of BMHV. <i>PLoS ONE</i> , 2015, 10, e0126315.	1.1	17

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73	DESIGN AND DEVELOPMENT OF MEDICAL DEVICES USING MODELING AND SIMULATIONS. , 2015, , 11-12.		0
74	Design considerations and quantitative assessment for the development of percutaneous mitral valve stent. Medical Engineering and Physics, 2014, 36, 882-888.	0.8	17
75	A Novel Carotid Covered Stent Design: In Vitro Evaluation of Performance and Influence on the Blood Flow Regime at the Carotid Artery Bifurcation. Annals of Biomedical Engineering, 2013, 41, 1990-2002.	1.3	23
76	Design and finite element-based fatigue prediction of a new self-expandable percutaneous mitral valve stent. CAD Computer Aided Design, 2013, 45, 1153-1158.	1.4	27
77	FSI Modeling of Prosthetic Mitral Valve Dynamics and Left Ventricular Flow during Diastole. , 2013, , .		0
78	Has Percutaneous Aortic Valve Replacement Taken Center Stage in the Treatment of Aortic Valve Disease?. Critical Reviews in Biomedical Engineering, 2013, 41, 405-424.	0.5	0
79	STRESS ANALYSIS OF CAROTID ARTERY STENT UNDER BENDING AND TORSION. Journal of Biomechanics, 2012, 45, S637.	0.9	1
80	Computational Modeling of a Novel Mitral Valve Stent. , 2012, , .		0
81	ANALYTICAL SOLUTIONS OF POLYMERIC GEL STRUCTURES UNDER BUCKLING AND WRINKLE. International Journal of Applied Mechanics, 2011, 03, 235-257.	1.3	76
82	Comment on "A biomechanical model of artery buckling" published on Journal of Biomechanics (volume 40, issue 16, pages 3672-3678). Journal of Biomechanics, 2010, 43, 801-802.	0.9	4
83	Response to comment on "A biomechanical model of artery buckling" and subsequent comments. Journal of Biomechanics, 2010, 43, 2864.	0.9	0
84	EFFECTS OF BALLOON LENGTH AND COMPLIANCE ON VASCULAR STENT EXPANSION. International Journal of Applied Mechanics, 2010, 02, 681-697.	1.3	17
85	Mechanical Performance Study of Vascular Stent Using Computational Modeling and Simulation. IFMBE Proceedings, 2010, , 1443-1446.	0.2	0
86	A theoretical model for the bending of a laminated beam with SMA fiber embedded layer. Composite Structures, 2009, 90, 458-464.	3.1	30
87	Nonlinear Finite Element Analysis of Balloon Sinuplasty. IFMBE Proceedings, 2009, , 2552-2555.	0.2	0
88	Impact analysis of shoes using the structural intensity technique. IFMBE Proceedings, 2009, , 2081-2084.	0.2	0
89	Nonlinear Finite Element Simulations to Elucidate the Determinants of Perforator Patency in Propeller Flaps. Annals of Plastic Surgery, 2007, 59, 672-678.	0.5	99
90	Dynamic response of tower crane induced by the pendulum motion of the payload. International Journal of Solids and Structures, 2006, 43, 376-389.	1.3	82

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91	The effectiveness of floating slab track system” Part I. Receptance methods. Applied Acoustics, 2000, 61, 441-453.	1.7	75
92	Bifurcation and Chaos in the Duffing Oscillator with a PID Controller. Nonlinear Dynamics, 1997, 12, 251-262.	2.7	18
93	Interrogation of Linear/nonlinear Features of Guided Waves for Characterizing Hypervelocity Impact-induced Pitting Damage in Shielding Structures. , 0, , .		0
94	Characterization of Surface-Breaking Cracks on Tubular Structures Using Ultrasonic Phased Array with Rayleigh Waves. International Journal of Computational Methods, 0, , .	0.8	0