

# Wei-Hsin Liao

## List of Publications by Year in descending order

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316  
papers

10,953  
citations

28274

55  
h-index

40979

93  
g-index

318  
all docs

318  
docs citations

318  
times ranked

7553  
citing authors

#	ARTICLE	IF	CITATIONS
1	Continuous finite-time sliding mode control for synchronization of perturbed bistable electrostatic and piezoelectric transducers with external disturbances. <i>JVC/Journal of Vibration and Control</i> , 2023, 29, 2392-2410.	2.6	1
2	Multistability phenomenon in signal processing, energy harvesting, composite structures, and metamaterials: A review. <i>Mechanical Systems and Signal Processing</i> , 2022, 166, 108419.	8.0	136
3	Lightweight Piezoelectric Bending Beam-Based Energy Harvester for Capturing Energy From Human Knee Motion. <i>IEEE/ASME Transactions on Mechatronics</i> , 2022, 27, 1256-1266.	5.8	15
4	Investigations on magnetic bistable PZT-based absorber for concurrent energy harvesting and vibration mitigation: Numerical and analytical approaches. <i>Energy</i> , 2022, 239, 122376.	8.8	33
5	Severity level diagnosis of Parkinson's disease by ensemble K-nearest neighbor under imbalanced data. <i>Expert Systems With Applications</i> , 2022, 189, 116113.	7.6	23
6	Optimization algorithm-based approach for modeling large deflection of cantilever beam subject to tip load. <i>Mechanism and Machine Theory</i> , 2022, 167, 104522.	4.5	8
7	Design of a high-performance piecewise bi-stable piezoelectric energy harvester. <i>Energy</i> , 2022, 241, 122514.	8.8	8
8	Concurrent energy harvesting and vibration suppression utilizing PZT-based dynamic vibration absorber. <i>Archive of Applied Mechanics</i> , 2022, 92, 363-382.	2.2	5
9	Microstructure and phase transformation of nickel-titanium shape memory alloy fabricated by directed energy deposition with in-situ heat treatment. <i>Journal of Alloys and Compounds</i> , 2022, 898, 162896.	5.5	8
10	Shape optimization of magnetorheological damper piston based on parametric curve for damping force augmentation. <i>Smart Materials and Structures</i> , 2022, 31, 015027.	3.5	8
11	Broadband energy harvester for low-frequency rotations utilizing centrifugal softening piezoelectric beam array. <i>Energy</i> , 2022, 241, 122833.	8.8	20
12	Effective elastic properties of irregular auxetic structures. <i>Composite Structures</i> , 2022, 287, 115269.	5.8	45
13	Design of a quad-stable piezoelectric energy harvester capable of programming the coordinates of equilibrium points. <i>Nonlinear Dynamics</i> , 2022, 108, 857-871.	5.2	10
14	Medical applications of magnetorheological fluid: a systematic review. <i>Smart Materials and Structures</i> , 2022, 31, 043002.	3.5	23
15	Enhancing power output of piezoelectric energy harvesting by gradient auxetic structures. <i>Applied Physics Letters</i> , 2022, 120, .	3.3	15
16	Bistable energy harvesting backpack: Design, modeling, and experiments. <i>Energy Conversion and Management</i> , 2022, 259, 115441.	9.2	30
17	A rotational hybrid energy harvester utilizing bistability for low-frequency applications: Modelling and experimental validation. <i>International Journal of Mechanical Sciences</i> , 2022, 222, 107235.	6.7	17
18	An enhanced nonlinear piezoelectric energy harvester with multiple rotating square unit cells. <i>Mechanical Systems and Signal Processing</i> , 2022, 173, 109065.	8.0	25

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19	Being gradually softened approach for solving large deflection of cantilever beam subjected to distributed and tip loads. Mechanism and Machine Theory, 2022, 174, 104879.	4.5	6
20	Design and optimization of a magnetorheological damper based on B-spline curves. Mechanical Systems and Signal Processing, 2022, 178, 109279.	8.0	14
21	Disturbance rejection and performance enhancement of perturbed tri-stable energy harvesters by adaptive finite-time disturbance observer. Acta Mechanica Sinica/Lixue Xuebao, 2022, 38, .	3.4	4
22	Gait Synergy Analysis and Modeling on Amputees and Stroke Patients for Lower Limb Assistive Devices. Sensors, 2022, 22, 4814.	3.8	6
23	High-Power Density Inertial Energy Harvester Without Additional Proof Mass for Wearables. IEEE Internet of Things Journal, 2021, 8, 297-308.	8.7	20
24	A device capable of customizing nonlinear forces for vibration energy harvesting, vibration isolation, and nonlinear energy sink. Mechanical Systems and Signal Processing, 2021, 147, 107101.	8.0	74
25	Metamaterial and Helmholtz coupled resonator for high-density acoustic energy harvesting. Nano Energy, 2021, 82, 105693.	16.0	56
26	Design of vibration energy harvesters with customized nonlinear forces. Mechanical Systems and Signal Processing, 2021, 153, 107526.	8.0	30
27	Enhanced electromagnetic wrist-worn energy harvester using repulsive magnetic spring. Mechanical Systems and Signal Processing, 2021, 150, 107251.	8.0	38
28	Design, Modeling, and Experiments of Electromagnetic Energy Harvester Embedded in Smart Watch and Wristband as Power Source. IEEE/ASME Transactions on Mechatronics, 2021, 26, 2104-2114.	5.8	22
29	Nano-scale and Atomistic-Scale Modeling of Advanced Materials. , 2021, , 555-577.		0
30	Enhanced modeling of nonlinear restoring force in multi-stable energy harvesters. Journal of Sound and Vibration, 2021, 494, 115890.	3.9	31
31	A knee energy harvester with variable transmission ratio. , 2021, , .		0
32	Slender structure of nickel-titanium shape memory alloy fabricated by continuous directed energy deposition. , 2021, , .		1
33	A nonlinear M-shaped tri-directional piezoelectric energy harvester. Smart Materials and Structures, 2021, 30, 045017.	3.5	33
34	Vibration suppression of a rotating functionally graded beam with enhanced active constrained layer damping treatment in temperature field. Thin-Walled Structures, 2021, 161, 107522.	5.3	13
35	Power enhancement of a monostable energy harvester by orbit jumps. Journal of Intelligent Material Systems and Structures, 2021, 32, 2601-2614.	2.5	7
36	A hybrid piezoelectric device combining a tri-stable energy harvester with an elastic base for low-orbit vibration energy harvesting enhancement. Smart Materials and Structures, 2021, 30, 075028.	3.5	15

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37	Design sensitivity analysis for transient responses of viscoelastically damped systems using model order reduction techniques. <i>Structural and Multidisciplinary Optimization</i> , 2021, 64, 1501-1526.	3.5	3
38	State-space based discretize-then-differentiate adjoint sensitivity method for transient responses of non-viscously damped systems. <i>Computers and Structures</i> , 2021, 250, 106540.	4.4	4
39	Design of a broadband piezoelectric energy harvester with piecewise nonlinearity. <i>Smart Materials and Structures</i> , 2021, 30, 085040.	3.5	8
40	Energy absorption of thin walled tube filled with gradient auxetic structures-theory and simulation. <i>International Journal of Mechanical Sciences</i> , 2021, 201, 106475.	6.7	99
41	Accurate identification of Parkinson's disease by distinctive features and ensemble decision trees. <i>Biomedical Signal Processing and Control</i> , 2021, 69, 102860.	5.7	9
42	Crashworthiness optimization of cylindrical negative Poisson's ratio structures with inner liner tubes. <i>Structural and Multidisciplinary Optimization</i> , 2021, 64, 4271-4286.	3.5	15
43	An auxetic nonlinear piezoelectric energy harvester for enhancing efficiency and bandwidth. <i>Applied Energy</i> , 2021, 298, 117274.	10.1	65
44	Synergy-based knee angle estimation using kinematics of thigh. <i>Gait and Posture</i> , 2021, 89, 25-30.	1.4	11
45	Exploiting bi-stable magneto-piezoelectric absorber for simultaneous energy harvesting and vibration mitigation. <i>International Journal of Mechanical Sciences</i> , 2021, 207, 106618.	6.7	50
46	Molten pool characteristics of a nickel-titanium shape memory alloy for directed energy deposition. <i>Optics and Laser Technology</i> , 2021, 142, 107215.	4.6	23
47	A Bidirectional Energy Conversion Circuit Toward Multifunctional Piezoelectric Energy Harvesting and Vibration Excitation Purposes. <i>IEEE Transactions on Power Electronics</i> , 2021, 36, 12889-12897.	7.9	16
48	Design of a multi-stable piezoelectric energy harvester with programmable equilibrium point configurations. <i>Applied Energy</i> , 2021, 302, 117585.	10.1	21
49	Vibration control of a rotating hub-plate with enhanced active constrained layer damping treatment. <i>Aerospace Science and Technology</i> , 2021, 118, 107081.	4.8	10
50	Spatial characteristics of nickel-titanium shape memory alloy fabricated by continuous directed energy deposition. <i>Journal of Manufacturing Processes</i> , 2021, 71, 417-428.	5.9	14
51	Piezoelectric autoparametric vibration energy harvesting with chaos control feature. <i>Mechanical Systems and Signal Processing</i> , 2021, 161, 107989.	8.0	24
52	Sensitivity and Hessian matrix analysis of power spectrum density function for non-classically damped systems subject to stationary stochastic excitations. <i>Mechanical Systems and Signal Processing</i> , 2021, 161, 107895.	8.0	1
53	A flexible and lead-free BCZT thin film nanogenerator for biocompatible energy harvesting. <i>Materials Chemistry Frontiers</i> , 2021, 5, 4682-4689.	5.9	14
54	Magnetorheological damper with multi-grooves on piston for damping force enhancement. <i>Smart Materials and Structures</i> , 2021, 30, 025007.	3.5	17

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55	Tuned bistable nonlinear energy sink for simultaneously improved vibration suppression and energy harvesting. <i>International Journal of Mechanical Sciences</i> , 2021, 212, 106838.	6.7	62
56	Hybridizing piezoelectric and electromagnetic mechanisms with dynamic bistability for enhancing low-frequency rotational energy harvesting. <i>Applied Physics Letters</i> , 2021, 119, .	3.3	12
57	Lightweight, flexible MXene/polymer film with simultaneously excellent mechanical property and high-performance electromagnetic interference shielding. <i>Composites Part A: Applied Science and Manufacturing</i> , 2020, 130, 105764.	7.6	145
58	Vibration analysis of a free moving thin plate with fully covered active constrained layer damping treatment. <i>Composite Structures</i> , 2020, 235, 111742.	5.8	12
59	Modulated ultrasonic elliptical vibration cutting for ductile-regime texturing of brittle materials with 2-D combined resonant and non-resonant vibrations. <i>International Journal of Mechanical Sciences</i> , 2020, 170, 105347.	6.7	34
60	Characteristics of a tri-stable piezoelectric vibration energy harvester by considering geometric nonlinearity and gravitation effects. <i>Mechanical Systems and Signal Processing</i> , 2020, 138, 106571.	8.0	35
61	Theoretical predictions of dynamic responses of cylindrical sandwich filled with auxetic structures under impact loading. <i>Aerospace Science and Technology</i> , 2020, 107, 106270.	4.8	59
62	Recent Advances in Human Motion Excited Energy Harvesting Systems for Wearables. <i>Energy Technology</i> , 2020, 8, 2000533.	3.8	61
63	Acoustic energy harvesting enhanced by locally resonant metamaterials. <i>Smart Materials and Structures</i> , 2020, 29, 075025.	3.5	39
64	IMU-Based Locomotion Mode Identification for Transtibial Prostheses, Orthoses, and Exoskeletons. <i>IEEE Transactions on Neural Systems and Rehabilitation Engineering</i> , 2020, 28, 1334-1343.	4.9	36
65	Comprehensive theoretical and experimental investigation of the rotational impact energy harvester with the centrifugal softening effect. <i>Nonlinear Dynamics</i> , 2020, 101, 123-152.	5.2	68
66	Self-powered smart watch and wristband enabled by embedded generator. <i>Applied Energy</i> , 2020, 263, 114682.	10.1	55
67	A modified magnetic force model and experimental validation of a tri-stable piezoelectric energy harvester. <i>Journal of Intelligent Material Systems and Structures</i> , 2020, 31, 967-979.	2.5	24
68	A dual-effect solution for broadband piezoelectric energy harvesting. <i>Applied Physics Letters</i> , 2020, 116, .	3.3	15
69	Exploiting the advantages of the centrifugal softening effect in rotational impact energy harvesting. <i>Applied Physics Letters</i> , 2020, 116, .	3.3	82
70	New insight into piezoelectric energy harvesting with mechanical and electrical nonlinearities. <i>Smart Materials and Structures</i> , 2020, 29, 04LT01.	3.5	12
71	On the low-velocity impact responses of auxetic double arrowed honeycomb. <i>Aerospace Science and Technology</i> , 2020, 98, 105698.	4.8	73
72	An analytical model of cylindrical double-arrowed honeycomb with negative Poisson's ratio. <i>International Journal of Mechanical Sciences</i> , 2020, 173, 105400.	6.7	41

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73	On ductile-regime elliptical vibration cutting of silicon with identifying the lower bound of practicable nominal cutting velocity. <i>Journal of Materials Processing Technology</i> , 2020, 283, 116720.	6.3	18
74	Fabrication of structurally colored basso-relievo with modulated elliptical vibration texturing. <i>Precision Engineering</i> , 2020, 64, 113-121.	3.4	14
75	Contact/impact modeling and analysis of 4D printed shape memory polymer beams. <i>Smart Materials and Structures</i> , 2020, 29, 085016.	3.5	19
76	Modulated vibration texturing of hierarchical microchannels with controllable profiles and orientations. <i>CIRP Journal of Manufacturing Science and Technology</i> , 2020, 30, 58-67.	4.5	10
77	Analytical and experimental investigation of the centrifugal softening and stiffening effects in rotational energy harvesting. <i>Journal of Sound and Vibration</i> , 2020, 488, 115643.	3.9	57
78	A centrifugal softening impact energy harvester with the bistability using flexensional transducers for low rotational speeds. <i>Smart Materials and Structures</i> , 2020, 29, 115024.	3.5	11
79	A low-noise three-axis piezoelectric MEMS accelerometer for condition monitoring. , 2020, , .		1
80	Refined Weighted-Permutation Entropy: A Complexity Measure for Human Gait and Physiologic Signals with Outliers and Noise. , 2020, , 223-231.		1
81	A rotational impact energy harvester utilizing the centrifugal softening effect. , 2020, , .		0
82	Implementation and Testing of Ankle-Foot Prosthesis With a New Compensated Controller. <i>IEEE/ASME Transactions on Mechatronics</i> , 2019, 24, 1775-1784.	5.8	18
83	Nonlinear magnetic force and dynamic characteristics of a tri-stable piezoelectric energy harvester. <i>Nonlinear Dynamics</i> , 2019, 97, 2371-2397.	5.2	63
84	Macro fiber composite-based energy harvester for human knee. <i>Applied Physics Letters</i> , 2019, 115, .	3.3	51
85	Asymmetric plucking bistable energy harvester: Modeling and experimental validation. <i>Journal of Sound and Vibration</i> , 2019, 459, 114852.	3.9	49
86	Motion Adaption and Trajectory Generation of Stair Ascent and Descent with a Lower Limb Exoskeleton for Paraplegics. , 2019, , .		2
87	Modeling and experimental validation on the interference of mechanical plucking energy harvesting. <i>Mechanical Systems and Signal Processing</i> , 2019, 134, 106317.	8.0	34
88	A music-box-like extended rotational plucking energy harvester with multiple piezoelectric cantilevers. <i>Applied Physics Letters</i> , 2019, 114, .	3.3	84
89	Dynamic modeling and analysis of rotating beams with partially covered enhanced active constrained layer damping treatment. <i>Journal of Sound and Vibration</i> , 2019, 455, 46-68.	3.9	11
90	Attaining the high-energy orbit of nonlinear energy harvesters by load perturbation. <i>Energy Conversion and Management</i> , 2019, 192, 30-36.	9.2	36

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91	Reference Joint Trajectories Generation of CUHK-EXO Exoskeleton for System Balance in Walking Assistance. IEEE Access, 2019, 7, 33809-33821.	4.2	31
92	4D printed tunable mechanical metamaterials with shape memory operations. Smart Materials and Structures, 2019, 28, 045019.	3.5	93
93	Message from the Conference Co-Chair. , 2019, , .		0
94	Trajectory Tracking for Swing Phase of the Lower Limb Exoskeleton. , 2019, , .		2
95	Kinematics Modeling and Gait Trajectory Tracking for Lower Limb Exoskeleton Robot based on PD Control with Gravity Compensation. , 2019, , .		4
96	Self-Powered Smart Insole for Monitoring Human Gait Signals. Sensors, 2019, 19, 5336.	3.8	24
97	Toward high-performance all-solid-state supercapacitors using facilely fabricated graphite nanosheet-supported CoMoS4 as electrode material. Chemical Engineering Journal, 2019, 355, 891-900.	12.7	50
98	Numerical/experimental assessment of 3D printed shape memory polymeric beams. Journal of Applied Polymer Science, 2019, 136, 47422.	2.6	12
99	Modeling and Analysis of Piezoelectric Energy Harvesting With Dynamic Plucking Mechanism. Journal of Vibration and Acoustics, Transactions of the ASME, 2019, 141, .	1.6	30
100	Large Deformation and Vibration Analysis of Microbeams by Absolute Nodal Coordinate Formulation. International Journal of Structural Stability and Dynamics, 2019, 19, 1950049.	2.4	7
101	A Low-Power Thermoelectric Energy Harvesting System for High Internal Resistance Thermoelectric Generators. Journal of Electronic Materials, 2019, 48, 5375-5389.	2.2	5
102	Knee exoskeletons for gait rehabilitation and human performance augmentation: A state-of-the-art. Mechanism and Machine Theory, 2019, 134, 499-511.	4.5	101
103	Experimentally validated multi-scale modeling of 3D printed hyper-elastic lattices. International Journal of Non-Linear Mechanics, 2019, 108, 87-110.	2.6	15
104	Significantly Enhanced Electrostatic Energy Storage Performance of Flexible Polymer Composites by Introducing Highly Insulating Ferroelectric Microhybrids as Fillers. Advanced Energy Materials, 2019, 9, 1803204.	19.5	250
105	A smart harvester for capturing energy from human ankle dorsiflexion with reduced user effort. Smart Materials and Structures, 2019, 28, 015026.	3.5	41
106	Vibration control and analysis of a rotating flexible FGM beam with a lumped mass in temperature field. Composite Structures, 2019, 208, 244-260.	5.8	20
107	Orbit Jumps of Monostable Energy Harvesters by a Bidirectional Energy Conversion Circuit. , 2019, , .		6
108	Development of a Multi-Directional Metal 3D Printing System Based on Direct Metal Deposition. , 2019, , .		1

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109	Analysis of the interference in typical rotational plucking energy harvester. , 2019, , .		2
110	Modeling and Analysis of Rotary Mechanical Systems Linked Through a U-joint. International Journal of Mechanical Engineering and Robotics Research, 2019, , 459-465.	1.0	0
111	A bidirectional energy conversion circuit for piezoelectric energy harvesting and vibration exciting purposes. , 2019, , .		3
112	A high sensitivity piezoelectric MEMS accelerometer based on aerosol deposition method. , 2019, , .		4
113	Evaluating Fretting Wear on 3D-Printed $\hat{1}^{\pm}$ , $\hat{1}^2$ , $\hat{1}^3$ - Additives Hybridized NiTi Shape Memory Alloy. , 2019, , .		1
114	Dynamic and energetic characteristics of a bistable piezoelectric vibration energy harvester with an elastic magnifier. Mechanical Systems and Signal Processing, 2018, 105, 427-446.	8.0	102
115	Sit-to-stand and stand-to-sit assistance for paraplegic patients with CUHK-EXO exoskeleton. Robotica, 2018, 36, 535-551.	1.9	15
116	Snap buckling of NiTi tubes. International Journal of Solids and Structures, 2018, 146, 29-42.	2.7	13
117	Design of Powered Ankle-Foot Prosthesis With Nonlinear Parallel Spring Mechanism. Journal of Mechanical Design, Transactions of the ASME, 2018, 140, .	2.9	33
118	Tuning dielectric properties and energy density of poly(vinylidene fluoride) nanocomposites by quasi core-shell structured BaTiO <sub>3</sub> @graphene oxide hybrids. Journal of Materials Science: Materials in Electronics, 2018, 29, 1082-1092.	2.2	22
119	Self-powered magnetorheological dampers for motorcycle suspensions. Proceedings of the Institution of Mechanical Engineers, Part D: Journal of Automobile Engineering, 2018, 232, 921-935.	1.9	19
120	Online Adaptive and LSTM-Based Trajectory Generation of Lower Limb Exoskeletons for Stroke Rehabilitation. , 2018, , .		13
121	Lower Limb Exoskeleton Control via Linear Quadratic Regulator and Disturbance Observer. , 2018, , .		8
122	Impulsively-Excited Bistable Energy Harvester Combined With Electromagnetic Mechanism. , 2018, , .		1
123	User-Adaptive Assistance of Assistive Knee Braces for Gait Rehabilitation. IEEE Transactions on Neural Systems and Rehabilitation Engineering, 2018, 26, 1994-2005.	4.9	11
124	Triple shape memory polymers by 4D printing. Smart Materials and Structures, 2018, 27, 065010.	3.5	121
125	Anticorrosive, Ultralight, and Flexible Carbon-Wrapped Metallic Nanowire Hybrid Sponges for Highly Efficient Electromagnetic Interference Shielding. Small, 2018, 14, e1800534.	10.0	310
126	Nondimensional model and parametric studies of impact piezoelectric energy harvesting with dissipation. Journal of Sound and Vibration, 2018, 429, 78-95.	3.9	24



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127	Theoretical modeling and experimental verification of circular Halbach electromagnetic energy harvesters for performance enhancement. <i>Smart Materials and Structures</i> , 2018, 27, 095019.	3.5	18
128	Cam Profile Generation for Cam-Spring Mechanism With Desired Torque. <i>Journal of Mechanisms and Robotics</i> , 2018, 10, .	2.2	10
129	Ankle-foot orthoses for rehabilitation and reducing metabolic cost of walking: Possibilities and challenges. <i>Mechatronics</i> , 2018, 53, 241-250.	3.3	34
130	Triggering the high-energy orbit oscillation of bistable energy harvesters using electrical coupling. , 2018, , .		1
131	Design of smart harvester for capturing energy from human ankle dorsiflexion to reduce user effort. , 2018, , .		0
132	A bistable piezoelectric oscillator with an elastic magnifier for energy harvesting enhancement. <i>Journal of Intelligent Material Systems and Structures</i> , 2017, 28, 392-407.	2.5	32
133	Human Gait Modeling and Analysis Using a Semi-Markov Process With Ground Reaction Forces. <i>IEEE Transactions on Neural Systems and Rehabilitation Engineering</i> , 2017, 25, 597-607.	4.9	45
134	Ultralight, super-elastic and volume-preserving cellulose fiber/graphene aerogel for high-performance electromagnetic interference shielding. <i>Carbon</i> , 2017, 115, 629-639.	10.3	228
135	Barium titanate coated and thermally reduced graphene oxide towards high dielectric constant and low loss of polymeric composites. <i>Composites Science and Technology</i> , 2017, 141, 48-55.	7.8	87
136	Design and testing of a regenerative magnetorheological actuator for assistive knee braces. <i>Smart Materials and Structures</i> , 2017, 26, 035013.	3.5	41
137	Optimal design of a magnetorheological damper used in smart prosthetic knees. <i>Smart Materials and Structures</i> , 2017, 26, 035034.	3.5	69
138	Design and experimental investigation of a low-voltage thermoelectric energy harvesting system for wireless sensor nodes. <i>Energy Conversion and Management</i> , 2017, 138, 30-37.	9.2	93
139	Design of smart prosthetic knee utilizing magnetorheological damper. <i>Proceedings of SPIE</i> , 2017, , .	0.8	1
140	A knee-mounted biomechanical energy harvester with enhanced efficiency and safety. <i>Smart Materials and Structures</i> , 2017, 26, 065027.	3.5	38
141	Graphene paper for exceptional EMI shielding performance using large-sized graphene oxide sheets and doping strategy. <i>Carbon</i> , 2017, 122, 74-81.	10.3	195
142	Large deformations of soft metamaterials fabricated by 3D printing. <i>Materials and Design</i> , 2017, 131, 81-91.	7.0	90
143	A finite-strain constitutive model for anisotropic shape memory alloys. <i>Mechanics of Materials</i> , 2017, 112, 129-142.	3.2	18
144	A wearable exoskeleton suit for motion assistance to paralysed patients. <i>Journal of Orthopaedic Translation</i> , 2017, 11, 7-18.	3.9	67

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145	Construction of a 3D-BaTiO <sub>3</sub> network leading to significantly enhanced dielectric permittivity and energy storage density of polymer composites. Energy and Environmental Science, 2017, 10, 137-144.	30.8	265
146	Increasing dimension of structures by 4D printing shape memory polymers via fused deposition modeling. Smart Materials and Structures, 2017, 26, 125023.	3.5	82
147	Enhanced breakdown strength of polymer composites by low filler loading and its mechanisms. Applied Physics Letters, 2017, 111, .	3.3	47
148	Flexible Integration Points Coupled with Smoothed Strain in Elasticity Problems. International Journal of Applied Mechanics, 2017, 09, 1750079.	2.2	2
149	Adaptive metamaterials by functionally graded 4D printing. Materials and Design, 2017, 135, 26-36.	7.0	209
150	A robust hyper-elastic beam model under bi-axial normal-shear loadings. International Journal of Non-Linear Mechanics, 2017, 95, 287-295.	2.6	7
151	Design and characterization of a magneto-rheological series elastic actuator for a lower extremity exoskeleton. Smart Materials and Structures, 2017, 26, 105008.	3.5	31
152	Shape Adaptive Structures by 4D Printing. , 2017, , .		1
153	Modeling of plucking piezoelectric energy harvesters with contact theory. Proceedings of SPIE, 2017, , .	0.8	2
154	Magnetic-spring based energy harvesting from human motions: Design, modeling and experiments. Energy Conversion and Management, 2017, 132, 189-197.	9.2	226
155	The Cu@SiO <sub>2</sub> core-shell nanoparticles filled polyvinylidene fluoride nanocomposites film: Fabrication, characterization and dielectric property analysis. , 2017, , .		0
156	Dielectric properties of epoxy nanocomposites filled with copper oxides. , 2017, , .		0
157	Motion planning of lower limb exoskeleton with passive ankle for paraplegics. , 2017, , .		2
158	Multivariate Multiscale Symbolic Entropy Analysis of Human Gait Signals. Entropy, 2017, 19, 557.	2.2	18
159	An Efficient Finite Element Algorithm in Elastography. International Journal of Applied Mechanics, 2016, 08, 1650037.	2.2	9
160	A new powered ankle-foot prosthesis with compact parallel spring mechanism. , 2016, , .		9
161	A mechanical energy harvested magnetorheological damper with linear-rotary motion converter. , 2016, , .		6
162	Self-expanding/shrinking structures by 4D printing. Smart Materials and Structures, 2016, 25, 105034.	3.5	147

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163	A High Efficiency Boost Converter with MPPT Scheme for Low Voltage Thermoelectric Energy Harvesting. Journal of Electronic Materials, 2016, 45, 5514-5520.	2.2	10
164	A robust macroscopic model for normal shear coupling, asymmetric and anisotropic behaviors of polycrystalline SMAs. Smart Materials and Structures, 2016, 25, 075019.	3.5	3
165	Tuneable cellular-structured 3D graphene aerogel and its effect on electromagnetic interference shielding performance and mechanical properties of epoxy composites. RSC Advances, 2016, 6, 56589-56598.	3.6	56
166	A dimensionless model of impact piezoelectric energy harvesting with dissipation. Proceedings of SPIE, 2016, , .	0.8	1
167	Covalent polymer functionalization of graphene for improved dielectric properties and thermal stability of epoxy composites. Composites Science and Technology, 2016, 122, 27-35.	7.8	171
168	Recent developments and challenges of lower extremity exoskeletons. Journal of Orthopaedic Translation, 2016, 5, 26-37.	3.9	308
169	Design and analysis of a piezoelectric energy harvester for rotational motion system. Energy Conversion and Management, 2016, 111, 239-244.	9.2	183
170	Modeling and analysis of reversible shape memory adaptive panels. Journal of Intelligent Material Systems and Structures, 2016, 27, 1624-1649.	2.5	3
171	Design of a lower extremity exoskeleton for motion assistance in paralyzed individuals. , 2015, , .		12
172	Enhanced piezoelectric energy harvesting of a bistable oscillator with an elastic magnifier. Proceedings of SPIE, 2015, , .	0.8	0
173	Insole plantar pressure systems in the gait analysis of post-stroke rehabilitation. , 2015, , .		12
174	Design of powered ankle-foot prosthesis driven by parallel elastic actuator. , 2015, , .		11
175	SMA bellows as reversible thermal sensors/actuators. Smart Materials and Structures, 2015, 24, 065013.	3.5	1
176	A Strategy for Magnifying Vibration in High-Energy Orbits of a Bistable Oscillator at Low Excitation Levels. Chinese Physics Letters, 2015, 32, 068503.	3.3	0
177	Micro macro thermo-mechanical analysis of axisymmetric shape memory alloy composite cylinders. Composite Structures, 2015, 131, 1001-1016.	5.8	1
178	Design optimization of a magnetorheological brake in powered knee orthosis. , 2015, , .		3
179	Regenerative magnetorheological dampers for vehicle suspensions. , 2015, , .		5
180	Triple band-notched UWB antenna with tapered microstrip feed line and slot coupling for bandwidth enhancement. , 2015, , .		4

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