Ya Wang

List of Publications by Year
in descending order

44 papers	758 citations	430442 18 h-index	580395 25 g-index
47 all docs	47 docs citations	47 times ranked	604 citing authors

#	Article	IF	Citations
1	Promoting neuroregeneration by applying dynamic magnetic fields to a novel nanomedicine: Superparamagnetic iron oxide (SPIO)-gold nanoparticles bounded with nerve growth factor (NGF). Nanomedicine: Nanotechnology, Biology, and Medicine, 2018, 14, 1337-1347.	1.7	61
2	A Low-Power Electric-Mechanical Driving Approach for True Occupancy Detection Using a Shuttered Passive Infrared Sensor. IEEE Sensors Journal, 2019, 19, 47-57.	2.4	53
3	Piezoelectric stack energy harvesting with a force amplification frame: Modeling and experiment. Journal of Intelligent Material Systems and Structures, 2016, 27, 2324-2332.	1.4	43
4	Infrared–ultrasonic sensor fusion for support vector machine–based fall detection. Journal of Intelligent Material Systems and Structures, 2018, 29, 2027-2039.	1.4	39
5	Occupancy Detection and Localization by Monitoring Nonlinear Energy Flow of a Shuttered Passive Infrared Sensor. IEEE Sensors Journal, 2018, 18, 8656-8666.	2.4	38
6	Unobtrusive Sensor-Based Occupancy Facing Direction Detection and Tracking Using Advanced Machine Learning Algorithms. IEEE Sensors Journal, 2018, 18, 6360-6368.	2.4	36
7	Deformable force amplification frame promoting piezoelectric stack energy harvesting: Parametric model, experiments and energy analysis. Journal of Intelligent Material Systems and Structures, 2017, 28, 827-836.	1.4	31
8	Boosting the efficiency of a footstep piezoelectric-stack energy harvester using the synchronized switch technology. Journal of Intelligent Material Systems and Structures, 2019, 30, 813-822.	1.4	28
9	Systematic parameter study of a nonlinear electromagnetic energy harvester with matched magnetic orientation: Numerical simulation and experimental investigation. Mechanical Systems and Signal Processing, 2017, 85, 591-600.	4.4	25
10	SPIO–Au core–shell nanoparticles for promoting osteogenic differentiation of MC3T3–E1 cells: Concentration–dependence study. Journal of Biomedical Materials Research - Part A, 2017, 105, 3350-3359.	2.1	24
11	Turning a pyroelectric infrared motion sensor into a high-accuracy presence detector by using a narrow semi-transparent chopper. Applied Physics Letters, 2017, 111, .	1.5	23
12	Engineered nanomedicine for neuroregeneration: light emitting diode-mediated superparamagnetic iron oxide-gold core-shell nanoparticles functionalized by nerve growth factor. Nanomedicine: Nanotechnology, Biology, and Medicine, 2019, 21, 102052.	1.7	22
13	Monitoring Insole (MONI): A Low Power Solution Toward Daily Gait Monitoring and Analysis. IEEE Sensors Journal, 2019, 19, 6410-6420.	2.4	22
14	A nonlinear interface integrated lever mechanism for piezoelectric footstep energy harvesting. Applied Physics Letters, 2018, 113, .	1.5	21
15	Superparamagnetic iron oxide-enclosed hollow gold nanostructure with tunable surface plasmon resonances to promote near-infrared photothermal conversion. Advanced Composites and Hybrid Materials, 2022, 5, 2387-2398.	9.9	21
16	Blood-brain barrier crossing using magnetic stimulated nanoparticles. Journal of Controlled Release, 2022, 345, 557-571.	4.8	20
17	Energy Harvesting of Piezoelectric Stack Actuator From a Shock Event. Journal of Vibration and Acoustics, Transactions of the ASME, 2014, 136, .	1.0	19
18	Non-contact magnetically coupled rectilinear-rotary oscillations to exploit low-frequency broadband energy harvesting with frequency up-conversion. Applied Physics Letters, 2016, 109, 133903.	1.5	19

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19	Remote Recognition of In-Bed Postures Using a Thermopile Array Sensor With Machine Learning. IEEE Sensors Journal, 2021, 21, 10428-10436.	2.4	19
20	Personalized dynamic transport of magnetic nanorobots inside the brain vasculature. Nanotechnology, 2020, 31, 495706.	1.3	17
21	Stationary and Moving Occupancy Detection Using the SLEEPIR Sensor Module and Machine Learning. IEEE Sensors Journal, 2021, 21, 14701-14708.	2.4	16
22	A dual electromagnetic array with intrinsic frequency up-conversion for broadband vibrational energy harvesting. Applied Physics Letters, 2019, 114, .	1.5	15
23	Smart insoles review (2008-2021): Applications, potentials, and future. Smart Health, 2022, 25, 100301.	2.0	15
24	SLEEPIR: Synchronized Low-Energy Electronically Chopped PIR Sensor for True Presence Detection. , 2020, 4, 1-4.		14
25	Superparamagnetic iron oxide–gold nanoparticles conjugated with porous coordination cages: Towards controlled drug release for non-invasive neuroregeneration. Nanomedicine: Nanotechnology, Biology, and Medicine, 2021, 35, 102392.	1.7	13
26	Airfoil-based electromagnetic energy harvester containing parallel array motion between moving coil and multi-pole magnets towards enhanced power density. Review of Scientific Instruments, 2016, 87, 114705.	0.6	11
27	A Customized Convolutional Neural Network Model Integrated With Acceleration-Based Smart Insole Toward Personalized Foot Gesture Recognition. , 2020, 4, 1-4.		10
28	Occupancy Detection Using a Temperature-Sensitive Adaptive Algorithm. , 2021, 5, 1-4.		9
29	Thermocouple-tip-exposing temperature assessment technique for evaluating photothermal conversion efficiency of plasmonic nanoparticles at low laser power density. Review of Scientific Instruments, 2019, 90, 094902.	0.6	8
30	Magnetic Fields and Magnetically Stimulated Gold-Coated Superparamagnetic Iron Oxide Nanoparticles Differentially Modulate L-Type Voltage-Gated Calcium Channel Activity in Midbrain Neurons. ACS Applied Nano Materials, 2022, 5, 205-215.	2.4	7
31	A Coarse Fingerprint-Assisted Multiple Target Indoor Device-Free Localization With Visible Light Sensing. IEEE Sensors Journal, 2022, 22, 1461-1473.	2.4	7
32	Compressive Sensing Based Indoor Occupancy Positioning Using a Single Thermopile Point Detector With a Coded Binary Mask. , 2019, 3, 1-4.		6
33	Performance Optimization of the SLEEPIR Sensor Towards Indoor Stationary Occupancy Detection. IEEE Sensors Journal, 2021, 21, 23776-23786.	2.4	6
34	A dual resonant rectilinear-to-rotary oscillation converter for low frequency broadband electromagnetic energy harvesting. Smart Materials and Structures, 2017, 26, 095059.	1.8	5
35	Systematic study of dual resonant rectilinear-to-rotary motion converter for low frequency vibrational energy harvesting. Sensors and Actuators A: Physical, 2018, 284, 66-75.	2.0	5
36	True Presence Detection via Passive Infrared Sensor Network Using Liquid Crystal Infrared Shutters. , 2020, , .		5

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37	Robust Foot Motion Recognition Using Stride Detection and Weak Supervision-Based Fast Labeling. IEEE Sensors Journal, 2021, 21, 16245-16255.	2.4	4
38	Progress, Opportunities, and Challenges of Magneto-Plasmonic Nanoparticles under Remote Magnetic and Light Stimulation for Brain-Tissue and Cellular Regeneration. Nanomaterials, 2022, 12, 2242.	1.9	4
39	Age-Dependent Mobility Decline Analysis Through Sequential Foot Motion Reproduction. , 2021, 5, 1-4.		3
40	Distinguishing Medication ON and OFF for Parkinsonâ€™s Disease Through Repetitive Foot Motion Recognition and Analysis. IEEE Sensors Journal, 2022, 22, 12219-12227.	2.4	3
41	Daily Locomotor Movement Recognition with a Smart Insole and a Pre-defined Route Map: Towards Early Motor Dysfunction Detection*. , 2019, , .		2
42	Insole-Based Falling Risk Evaluation for Patients With Parkinson's Disease Through Walking While Holding a Cup of Water. , 2022, 6, 1-4.		2
43	Toe Tapping Based Falling Risk Evaluation for Patients With Parkinson's Disease Using Monitoring Insoles. , 2022, 6, 1-4.		1
44	All-passive nonlinear electromagnetic metastructure for simultaneous energy harvesting and earthquake mitigation. Europhysics Letters, 2020, 129, 58004.	0.7	0