Yong Qin

List of Publications by Year in descending order

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115 papers	11,303 citations	47 h-index	105 g-index
		47006	28297
117 all docs	117 docs citations	117 times ranked	11426 citing authors

#	Article	IF	Citations
1	Surface engineering and on-site charge neutralization for the regulation of contact electrification. Nano Energy, 2022, 91, 106687.	16.0	6
2	Highly sensitive strain sensors based on piezotronic tunneling junction. Nature Communications, 2022, 13, 778.	12.8	58
3	Multichannel driving triboelectric nanogenerator for enhancing the output charge density. Nano Energy, 2022, 98, 107272.	16.0	10
4	Sandwich as a triboelectric nanogenerator. Nano Energy, 2021, 79, 105411.	16.0	33
5	Enhancing the filtration efficiency and wearing time of disposable surgical masks using TENG technology. Nano Energy, 2021, 79, 105434.	16.0	38
6	Anisotropic wetting properties of oblique nanowires array and their applications on water transportation and fog collection. Surfaces and Interfaces, 2021, 22, 100784.	3.0	11
7	Statistical Piezotronic Effect in Nanocrystal Bulk by Anisotropic Geometry Control. Advanced Functional Materials, 2021, 31, 2010339.	14.9	4
8	A Fully Self-Healing Piezoelectric Nanogenerator for Self-Powered Pressure Sensing Electronic Skin. Research, 2021, 2021, 9793458.	5.7	19
9	Efficient post-treatment of CsPbBr3 film with enhanced photovoltaic performance. Journal of Alloys and Compounds, 2021, 872, 159601.	5.5	3
10	Development and outlook of high output piezoelectric nanogenerators. Nano Energy, 2021, 86, 106080.	16.0	76
11	High performance temperature difference triboelectric nanogenerator. Nature Communications, 2021, 12, 4782.	12.8	69
12	Fiber-Based Electret Nanogenerator with a Semisupported Structure for Wearable Electronics. ACS Applied Materials & Interfaces, 2021, 13, 46840-46847.	8.0	10
13	Performance enhanced triboelectric nanogenerator by taking advantage of water in humid environments. Nano Energy, 2021, 88, 106303.	16.0	36
14	A polymer based self-powered ethanol gas sensor to eliminate the interference of ultraviolet light. Sensors and Actuators A: Physical, 2021, 332, 113173.	4.1	10
15	Theoretical Study of the Stress Transfer Effect on the Output of a Composite Piezoelectric Nanogenerator. , 2021, 3, 1793-1798.		3
16	Gridding Triboelectric Nanogenerator for Raindrop Energy Harvesting. ACS Applied Materials & Interfaces, 2021, 13, 59975-59982.	8.0	18
17	Ultrasensitive Fiber-Based ZnO Nanowire Network Ultraviolet Photodetector Enabled by the Synergism between Interface and Surface Gating Effects. ACS Applied Materials & Interfaces, 2020, 12, 1054-1060.	8.0	25
18	Coaxial double helix structured fiber-based triboelectric nanogenerator for effectively harvesting mechanical energy. Nanoscale Advances, 2020, 2, 4482-4490.	4.6	21

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19	Increasing the output charge quantity of triboelectric nanogenerators via frequency multiplication with a multigap-structured friction layer. Energy and Environmental Science, 2020, 13, 2069-2076.	30.8	23
20	Self-Cleaning and Self-Powered UV Sensors for Highly Reliable Outdoor UV Detection. ACS Applied Electronic Materials, 2020, 2, 1628-1634.	4.3	10
21	Adjustment of oxygen vacancy states in ZnO and its application in ppb-level NO2 gas sensor. Science Bulletin, 2020, 65, 1650-1658.	9.0	52
22	Mechanically Asymmetrical Triboelectric Nanogenerator for Selfâ€Powered Monitoring of In Vivo Microscale Weak Movement. Advanced Energy Materials, 2020, 10, 2000827.	19.5	42
23	Enhancing the Performance of a Self-Standing Si/PCNF Anode by Optimizing the Porous Structure. ACS Applied Materials & Interfaces, 2020, 12, 27219-27225.	8.0	15
24	Flexoelectronics of centrosymmetric semiconductors. Nature Nanotechnology, 2020, 15, 661-667.	31.5	175
25	High rate capacity anode of Si-C composite nanofiber wrapped with Cu foam for lithium-ion batteries. Materials Letters, 2020, 268, 127572.	2.6	5
26	Nanowire templated CVD synthesis and morphological control of MoS₂ nanotubes. Journal of Materials Chemistry C, 2020, 8, 4133-4138.	5.5	12
27	Enhancing the current density of a piezoelectric nanogenerator using a three-dimensional intercalation electrode. Nature Communications, 2020, 11, 1030.	12.8	158
28	Enhancing the Performance of Textile Triboelectric Nanogenerators with Oblique Microrod Arrays for Wearable Energy Harvesting. ACS Applied Materials & Interfaces, 2019, 11, 26824-26829.	8.0	43
29	Flexible Self-Powered ZnO Film UV Sensor with a High Response. ACS Applied Materials & Interfaces, 2019, 11, 26127-26133.	8.0	69
30	Piezotronic Tunneling Junction Gated by Mechanical Stimuli. Advanced Materials, 2019, 31, e1905436.	21.0	14
31	Core-Shell Fiber-Based 2D Woven Triboelectric Nanogenerator for Effective Motion Energy Harvesting. Nanoscale Research Letters, 2019, 14, 311.	5.7	19
32	Green Anti-solvent Processed Efficient Flexible Perovskite Solar Cells. ACS Sustainable Chemistry and Engineering, 2019, 7, 4343-4350.	6.7	24
33	Flexible electronic skins based on piezoelectric nanogenerators and piezotronics. Nano Energy, 2019, 59, 84-90.	16.0	171
34	Mechanism of Sensitivity Enhancement of a ZnO Nanofilm Gas Sensor by UV Light Illumination. ACS Sensors, 2019, 4, 1577-1585.	7.8	51
35	Improving Cycling Performance of Si-Based Lithium Ion Batteries Anode with Se-Loaded Carbon Coating. ACS Applied Energy Materials, 2019, 2, 5124-5132.	5.1	15
36	Hierarchical CoNi2S4 nanosheet/nanotube array structure on carbon fiber cloth for high-performance hybrid supercapacitors. Electrochimica Acta, 2019, 305, 81-89.	5.2	54

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37	Design and application of piezoelectric biomaterials. Journal Physics D: Applied Physics, 2019, 52, 194002.	2.8	44
38	Recent advance in new-generation integrated devices for energy harvesting and storage. Nano Energy, 2019, 60, 600-619.	16.0	190
39	Solution Processed Nb₂O₅ Electrodes for High Efficient Ultraviolet Light Stable Planar Perovskite Solar Cells. ACS Sustainable Chemistry and Engineering, 2019, 7, 7421-7429.	6.7	41
40	2D piezotronics in atomically thin zinc oxide sheets: Interfacing gating and channel width gating. Nano Energy, 2019, 60, 724-733.	16.0	60
41	Piezoelectric nanofiber/polymer composite membrane for noise harvesting and active acoustic wave detection. Nanoscale Advances, 2019, 1, 4909-4914.	4.6	9
42	Data-driven and probabilistic learning of the process-structure-property relationship in solution-grown tellurene for optimized nanomanufacturing of high-performance nanoelectronics. Nano Energy, 2019, 57, 480-491.	16.0	44
43	Fabric-Based Triboelectric Nanogenerators. Research, 2019, 2019, 1091632.	5.7	36
44	Dual C(sp³)â"H Bond Functionalization of Nâ€Heterocycles through Sequential Visibleâ€Light Photocatalyzed Dehydrogenation/[2+2] Cycloaddition Reactions. Angewandte Chemie - International Edition, 2018, 57, 5110-5114.	13.8	79
45	Dual C(sp³)â"H Bond Functionalization of Nâ€Heterocycles through Sequential Visibleâ€Light Photocatalyzed Dehydrogenation/[2+2] Cycloaddition Reactions. Angewandte Chemie, 2018, 130, 5204-5208.	2.0	21
46	Atomic-thick 2D MoS₂/insulator interjection structures for enhancing nanogenerator output. Journal of Materials Chemistry C, 2018, 6, 899-906.	5.5	8
47	Double-Channel Piezotronic Transistors for Highly Sensitive Pressure Sensing. ACS Nano, 2018, 12, 1732-1738.	14.6	33
48	New-generation integrated devices based on dye-sensitized and perovskite solar cells. Energy and Environmental Science, 2018, 11, 476-526.	30.8	364
49	Clarifying the high on/off ratio mechanism of nanowire UV photodetector by characterizing surface barrier height. Nanoscale, 2018, 10, 2242-2248.	5.6	24
50	Ultrathin Piezotronic Transistors with 2 nm Channel Lengths. ACS Nano, 2018, 12, 4903-4908.	14.6	63
51	Decoupling the charge collecting and screening effects in piezotronics-regulated photoelectrochemical systems by using graphene as the charge collector. Nano Energy, 2018, 48, 377-382.	16.0	14
52	Enhancing the performance of room temperature ZnO microwire gas sensor through a combined technology of surface etching and UV illumination. Materials Letters, 2018, 212, 296-298.	2.6	24
53	A self-improving triboelectric nanogenerator with improved charge density and increased charge accumulation speed. Nature Communications, 2018, 9, 3773.	12.8	207
54	High-Performance Triboelectric Nanogenerator with a Rationally Designed Friction Layer Structure. ACS Applied Energy Materials, 2018, 1, 2891-2897.	5.1	51

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55	Transitionâ€Metalâ€Free Selective Câ^'H Benzylation of Tertiary Arylamines by a Dearomatizationâ€Aromatization Sequence. Chemistry - A European Journal, 2018, 24, 13778-13782.	3.3	15
56	A self-powered sensor with super-hydrophobic nanostructure surfaces for synchronous detection and electricity generation. Nano Energy, 2017, 33, 288-292.	16.0	26
57	Ultrasensitive 2D ZnO Piezotronic Transistor Array for High Resolution Tactile Imaging. Advanced Materials, 2017, 29, 1606346.	21.0	79
58	Theoretical study of enhancing the piezoelectric nanogeneratorâ€™s output power by optimizing the external forceâ€™s shape. APL Materials, 2017, 5, .	5.1	17
59	Ultrasensitive Vertical Piezotronic Transistor Based on ZnO Twin Nanoplatelet. ACS Nano, 2017, 11, 4859-4865.	14.6	45
60	A Light Sensitive Nanogenerator for Selfâ€Powered UV Detection with Two Measuring Ranges. Advanced Optical Materials, 2017, 5, 1600623.	7.3	27
61	Flexible piezoelectric nanogenerators based on PVDF-TrFE nanofibers. EPJ Applied Physics, 2017, 80, 30901.	0.7	14
62	Theoretical Study of the BaTiO3 Powderâ€™s Volume Ratioâ€™s Influence on the Output of Composite Piezoelectric Nanogenerator. Nanomaterials, 2017, 7, 143.	4.1	5
63	Type-II hetero-junction dual shell hollow spheres loaded with spatially separated cocatalyst for enhancing visible light hydrogen evolution. Nano Energy, 2017, 38, 518-525.	16.0	78
64	A Transparent Antipeep Piezoelectric Nanogenerator to Harvest Tapping Energy on Screen. Small, 2016, 12, 1315-1321.	10.0	64
65	Synthesis of large monolayer single crystal MoS2 nanosheets with uniform size through a double-tube technology. Applied Physics Letters, 2016, 109, .	3.3	31
66	Dynamic Behavior of the Triboelectric Charges and Structural Optimization of the Friction Layer for a Triboelectric Nanogenerator. ACS Nano, 2016, 10, 6131-6138.	14.6	306
67	A new kind of transparent and self-cleaning film for solar cells. Nanoscale, 2016, 8, 17747-17751.	5.6	41
68	A three-dimensional integrated nanogenerator for effectively harvesting sound energy from the environment. Nanoscale, 2016, 8, 4938-4944.	5.6	70
69	Piezotronic Effect Enhanced Photocatalysis in Strained Anisotropic ZnO/TiO₂ Nanoplatelets via Thermal Stress. ACS Nano, 2016, 10, 2636-2643.	14.6	258
70	A Highâ€Reliability Kevlar Fiberâ€ZnO Nanowires Hybrid Nanogenerator and its Application on Selfâ€Powered UV Detection. Advanced Functional Materials, 2015, 25, 5794-5798.	14.9	85
71	Wireless, power-free and implantable nanosystem for resistance-based biodetection. Nano Energy, 2015, 15, 598-606.	16.0	44
72	Ultralow friction regime from the in situ production of a richer fullerene-like nanostructured carbon in sliding contact. RSC Advances, 2015, 5, 106476-106484.	3.6	20

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73	High performance sound driven triboelectric nanogenerator for harvesting noise energy. Nano Energy, 2015, 15, 321-328.	16.0	138
74	Hierarchical hybrid nanostructures of Sn₃O₄ on N doped TiO₂ nanotubes with enhanced photocatalytic performance. Journal of Materials Chemistry A, 2015, 3, 19129-19136.	10.3	70
75	Packaged triboelectric nanogenerator with high endurability for severe environments. Nanoscale, 2015, 7, 18049-18053.	5.6	45
76	Wearable Triboelectric Generator for Powering the Portable Electronic Devices. ACS Applied Materials & Interfaces, 2015, 7, 18225-18230.	8.0	133
77	Controllable fabrication of ultrafine oblique organic nanowire arrays and their application in energy harvesting. Nanoscale, 2015, 7, 1285-1289.	5.6	23
78	Flexible piezoeletric nanogenerators for in vivo applications. , 2015, , .		0
79	Nanowires for Piezoelectric Nanogenerators. RSC Smart Materials, 2014, , 200-276.	0.1	0
80	An electrospun nanowire-based triboelectric nanogenerator and its application in a fully self-powered UV detector. Nanoscale, 2014, 6, 7842-7846.	5.6	209
81	Enhancing the performance of triboelectric nanogenerator through prior-charge injection and its application on self-powered anticorrosion. Nano Energy, 2014, 10, 37-43.	16.0	119
82	Biocompatible Nanogenerators through High Piezoelectric Coefficient 0.5Ba(Zr_{0.2}Ti_{0.8})O₃â€0.5(Ba_{0.7}Ca_{0.3})TiO₃ Nanowires for Inâ€Vivo Applications. Advanced Materials, 2014, 26, 7432-7437.	8.0	93
83	Electrospinning multi-layered nano-solenoid and reticular micro-tubular structure on a microfiber. Materials Letters, 2013, 98, 153-156.	2.6	5
84	Two dimensional woven nanogenerator. Nano Energy, 2013, 2, 749-753.	16.0	76
85	Flexible Fiber Nanogenerator with 209 V Output Voltage Directly Powers a Light-Emitting Diode. Nano Letters, 2013, 13, 91-94.	9.1	254
86	Electrospinning lead-free 0.5Ba(Zr0.2Ti0.8)O3â€“0.5(Ba0.7Ca0.3)TiO3 nanowires and their application in energy harvesting. Journal of Materials Chemistry A, 2013, 1, 7332.	10.3	102
87	Vibration driven vehicle inspired from grass spike. Scientific Reports, 2013, 3, 1851.	3.3	9
88	Surface Engineering Method to Fabricate a Bendable Self-Cleaning Surface with High Robustness. Science of Advanced Materials, 2013, 5, 933-938.	0.7	4
89	Controllable Fabrication of Patterned Oblique Nanowire Array and Its Application as a Reflection Grating. Science of Advanced Materials, 2013, 5, 1179-1183.	0.7	3
90	Flexible Nanogenerator Based on Single BaTiO₃ Nanowire. Science of Advanced Materials, 2013, 5, 1781-1787.	0.7	43

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91	Lead Zirconate Titanate Nanowire Textile Nanogenerator for Wearable Energy-Harvesting and Self-Powered Devices. ACS Nano, 2012, 6, 6231-6235.	14.6	339
92	Magnetic Force Driven Nanogenerators as a Noncontact Energy Harvester and Sensor. Nano Letters, 2012, 12, 3701-3705.	9.1	79
93	Single crystalline lead zirconate titanate (PZT) nano/micro-wire based self-powered UV sensor. Nano Energy, 2012, 1, 789-795.	16.0	82
94	Directional Transport of Polymer Sheet and a Microsphere by a Rationally Aligned Nanowire Array. Advanced Materials, 2012, 24, 817-821.	21.0	21
95	Synthesis of High Crystallinity ZnO Nanowire Array on Polymer Substrate and Flexible Fiber-Based Sensor. ACS Applied Materials & Interfaces, 2011, 3, 4197-4200.	8.0	79
96	One-dimensional coaxial nanowire solar cell. International Journal of Nanoparticles, 2011, 4, 184.	0.3	0
97	Highâ€Performance Integrated ZnO Nanowire UV Sensors on Rigid and Flexible Substrates. Advanced Functional Materials, 2011, 21, 4464-4469.	14.9	293
98	The architecture assembled from Ni nanocones and its microwave-absorbing properties. Scripta Materialia, 2010, 63, 1145-1148.	5.2	16
99	Lateral nanowire/nanobelt based nanogenerators, piezotronics and piezo-phototronics. Materials Science and Engineering Reports, 2010, 70, 320-329.	31.8	223
100	Self-powered nanowire devices. Nature Nanotechnology, 2010, 5, 366-373.	31.5	1,462
101	Enhanced microwave performance of cobalt nanoflakes with strong shape anisotropy. Applied Physics Letters, 2010, 96, .	3.3	118
102	Increasing UV Photon Response of ZnO Sensor with Nanowires Array. Science of Advanced Materials, 2010, 2, 402-406.	0.7	45
103	Characteristics of output voltage and current of integrated nanogenerators. Applied Physics Letters, 2009, 94, .	3.3	114
104	Power generation with laterally packaged piezoelectric fine wires. Nature Nanotechnology, 2009, 4, 34-39.	31.5	859
105	Converting Biomechanical Energy into Electricity by a Muscle-Movement-Driven Nanogenerator. Nano Letters, 2009, 9, 1201-1205.	9.1	441
106	Microfibreâ€“nanowire hybrid structure for energy scavenging. Nature, 2008, 451, 809-813.	27.8	1,480
107	Growth of Horizonatal ZnO Nanowire Arrays on Any Substrate. Journal of Physical Chemistry C, 2008, 112, 18734-18736.	3.1	122
108	Microwave Permittivity, Permeability, and Absorption of Ni Nanoplatelet Composites. Journal of Nanoscience and Nanotechnology, 2008, 8, 3967-3972.	0.9	9

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109	Magnetic and microwave properties of cobalt nanoplatelets. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2007, 138, 199-204.	3.5	109
110	Microstructure and Magnetic Properties of Fe_{<I>x</I>}Ni_{1â^'<I>x</I>} Alloy Nanoplatelets. Journal of Nanoscience and Nanotechnology, 2005, 5, 1699-1706.	0.9	13
111	The microstructure and magnetic properties of Ni nanoplatelets. Nanotechnology, 2004, 15, 982-986.	2.6	52
112	Structure and magnetic properties of cobalt nanoplatelets. Materials Letters, 2004, 58, 2506-2509.	2.6	22
113	Weak ferromagnetism in Re0.67Ca0.33FeO3 (Re=La, Sm, Gd) nanoparticles. Journal of Magnetism and Magnetic Materials, 2003, 263, 154-160.	2.3	1
114	Structures and magnetic properties of Nd1â^'xCaxFeO3 nanoparticles. Journal of Applied Physics, 2002, 92, 7504-7509.	2.5	12
115	Microstructure and Magnetic Properties of La1?xSrxFeO3 Nanoparticles. Physica Status Solidi A, 2002, 191, 255-259.	1.7	22