

Zhong Lin Wang

List of Publications by Year in descending order

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2,197
papers

340,207
citations

¹
274
h-index

¹³
474
g-index

2237
all docs

2237
docs citations

2237
times ranked

99905
citing authors

#	ARTICLE	IF	CITATIONS
1	Piezoelectric Nanogenerators Based on Zinc Oxide Nanowire Arrays. <i>Science</i> , 2006, 312, 242-246.	6.0	6,691
2	Nanobelts of Semiconducting Oxides. <i>Science</i> , 2001, 291, 1947-1949.	6.0	5,624
3	Flexible triboelectric generator. <i>Nano Energy</i> , 2012, 1, 328-334.	8.2	4,578
4	Shell-isolated nanoparticle-enhanced Raman spectroscopy. <i>Nature</i> , 2010, 464, 392-395.	13.7	3,025
5	Zinc oxide nanostructures: growth, properties and applications. <i>Journal of Physics Condensed Matter</i> , 2004, 16, R829-R858.	0.7	2,924
6	Synthesis of Tetrahedral Platinum Nanocrystals with High-Index Facets and High Electro-Oxidation Activity. <i>Science</i> , 2007, 316, 732-735.	6.0	2,838
7	Shape-Controlled Synthesis of Colloidal Platinum Nanoparticles. <i>Science</i> , 1996, 272, 1924-1925.	6.0	2,285
8	Triboelectric Nanogenerators as New Energy Technology for Self-Powered Systems and as Active Mechanical and Chemical Sensors. <i>ACS Nano</i> , 2013, 7, 9533-9557.	7.3	2,266
9	Direct-Current Nanogenerator Driven by Ultrasonic Waves. <i>Science</i> , 2007, 316, 102-105.	6.0	2,065
10	Transmission Electron Microscopy of Shape-Controlled Nanocrystals and Their Assemblies. <i>Journal of Physical Chemistry B</i> , 2000, 104, 1153-1175.	1.2	1,971
11	Carbon Nanotube Quantum Resistors. <i>Science</i> , 1998, 280, 1744-1746.	6.0	1,904
12	Electrostatic Deflections and Electromechanical Resonances of Carbon Nanotubes. <i>Science</i> , 1999, 283, 1513-1516.	6.0	1,790
13	Piezoelectricity of single-atomic-layer MoS ₂ for energy conversion and piezotronics. <i>Nature</i> , 2014, 514, 470-474.	13.7	1,762
14	Progress in triboelectric nanogenerators as a new energy technology and self-powered sensors. <i>Energy and Environmental Science</i> , 2015, 8, 2250-2282.	15.6	1,723
15	Transparent Triboelectric Nanogenerators and Self-Powered Pressure Sensors Based on Micropatterned Plastic Films. <i>Nano Letters</i> , 2012, 12, 3109-3114.	4.5	1,676
16	Exchange-coupled nanocomposite magnets by nanoparticle self-assembly. <i>Nature</i> , 2002, 420, 395-398.	13.7	1,526
17	Microfibre-nanowire hybrid structure for energy scavenging. <i>Nature</i> , 2008, 451, 809-813.	13.7	1,480
18	Large-Scale Hexagonal-Patterned Growth of Aligned ZnO Nanorods for Nano-optoelectronics and Nanosensor Arrays. <i>Nano Letters</i> , 2004, 4, 423-426.	4.5	1,477

#	ARTICLE	IF	CITATIONS
19	On Maxwell's displacement current for energy and sensors: the origin of nanogenerators. <i>Materials Today</i> , 2017, 20, 74-82.	8.3	1,473
20	Self-powered nanowire devices. <i>Nature Nanotechnology</i> , 2010, 5, 366-373.	15.6	1,462
21	Flexible Nanogenerators for Energy Harvesting and Self-Powered Electronics. <i>Advanced Materials</i> , 2016, 28, 4283-4305.	11.1	1,438
22	Stable and highly sensitive gas sensors based on semiconducting oxide nanobelts. <i>Applied Physics Letters</i> , 2002, 81, 1869-1871.	1.5	1,400
23	Single-Crystal Nanorings Formed by Epitaxial Self-Coiling of Polar Nanobelts. <i>Science</i> , 2004, 303, 1348-1351.	6.0	1,383
24	Theoretical study of contact-mode triboelectric nanogenerators as an effective power source. <i>Energy and Environmental Science</i> , 2013, 6, 3576.	15.6	1,380
25	Alloy Formation of Gold-Silver Nanoparticles and the Dependence of the Plasmon Absorption on Their Composition. <i>Journal of Physical Chemistry B</i> , 1999, 103, 3529-3533.	1.2	1,297
26	Nanostructures of zinc oxide. <i>Materials Today</i> , 2004, 7, 26-33.	8.3	1,259
27	Electrocatalytic oxygen evolution reaction for energy conversion and storage: A comprehensive review. <i>Nano Energy</i> , 2017, 37, 136-157.	8.2	1,257
28	Triboelectric nanogenerators as new energy technology and self-powered sensors – Principles, problems and perspectives. <i>Faraday Discussions</i> , 2014, 176, 447-458.	1.6	1,256
29	One-dimensional ZnO nanostructures: Solution growth and functional properties. <i>Nano Research</i> , 2011, 4, 1013-1098.	5.8	1,201
30	Quantifying the triboelectric series. <i>Nature Communications</i> , 2019, 10, 1427.	5.8	1,107
31	Novel Nanostructures of Functional Oxides Synthesized by Thermal Evaporation. <i>Advanced Functional Materials</i> , 2003, 13, 9-24.	7.8	1,102
32	Triboelectric Nanogenerator: A Foundation of the Energy for the New Era. <i>Advanced Energy Materials</i> , 2019, 9, 1802906.	10.2	1,086
33	Spontaneous Polarization-Induced Nanohelices, Nanosprings, and Nanorings of Piezoelectric Nanobelts. <i>Nano Letters</i> , 2003, 3, 1625-1631.	4.5	1,077
34	Nanoscale Triboelectric-Effect-Enabled Energy Conversion for Sustainably Powering Portable Electronics. <i>Nano Letters</i> , 2012, 12, 6339-6346.	4.5	1,062
35	Field-Effect Transistors Based on Single Semiconducting Oxide Nanobelts. <i>Journal of Physical Chemistry B</i> , 2003, 107, 659-663.	1.2	1,049
36	ZnO nanowire and nanobelt platform for nanotechnology. <i>Materials Science and Engineering Reports</i> , 2009, 64, 33-71.	14.8	1,046

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37	Low-Cost High-Performance Solid-State Asymmetric Supercapacitors Based on MnO ₂ Nanowires and Fe ₂ O ₃ Nanotubes. Nano Letters, 2014, 14, 731-736.	4.5	1,035
38	Skin-inspired highly stretchable and conformable matrix networks for multifunctional sensing. Nature Communications, 2018, 9, 244.	5.8	1,034
39	Nickel-Cobalt Hydroxide Nanosheets Coated on NiCo ₂ O ₄ Nanowires Grown on Carbon Fiber Paper for High-Performance Pseudocapacitors. Nano Letters, 2013, 13, 3135-3139.	4.5	992
40	Piezoelectric Field Effect Transistor and Nanoforce Sensor Based on a Single ZnO Nanowire. Nano Letters, 2006, 6, 2768-2772.	4.5	983
41	Toward Large-Scale Energy Harvesting by a Nanoparticle-Enhanced Triboelectric Nanogenerator. Nano Letters, 2013, 13, 847-853.	4.5	979
42	Flexible Solid-State Supercapacitors Based on Carbon Nanoparticles/MnO ₂ Nanorods Hybrid Structure. ACS Nano, 2012, 6, 656-661.	7.3	961
43	On the origin of contact-electrification. Materials Today, 2019, 30, 34-51.	8.3	958
44	Theoretical systems of triboelectric nanogenerators. Nano Energy, 2015, 14, 161-192.	8.2	955
45	Functional Nanowires. MRS Bulletin, 2007, 32, 99-108.	1.7	952
46	Ultrastretchable, transparent triboelectric nanogenerator as electronic skin for biomechanical energy harvesting and tactile sensing. Science Advances, 2017, 3, e1700015.	4.7	920
47	Toward the blue energy dream by triboelectric nanogenerator networks. Nano Energy, 2017, 39, 9-23.	8.2	913
48	Nanotechnology-Enabled Energy Harvesting for Self-Powered Micro-Nanosystems. Angewandte Chemie - International Edition, 2012, 51, 11700-11721.	7.2	910
49	Micro-cable structured textile for simultaneously harvesting solar and mechanical energy. Nature Energy, 2016, 1, .	19.8	879
50	Triboelectric-Generator-Driven Pulse Electrodeposition for Micropatterning. Nano Letters, 2012, 12, 4960-4965.	4.5	874
51	A droplet-based electricity generator with high instantaneous power density. Nature, 2020, 578, 392-396.	13.7	871
52	Power generation with laterally packaged piezoelectric fine wires. Nature Nanotechnology, 2009, 4, 34-39.	15.6	859
53	Conversion of Zinc Oxide Nanobelts into Superlattice-Structured Nanohelices. Science, 2005, 309, 1700-1704.	6.0	835
54	Fiber/Fabric-Based Piezoelectric and Triboelectric Nanogenerators for Flexible/Stretchable and Wearable Electronics and Artificial Intelligence. Advanced Materials, 2020, 32, e1902549.	11.1	826

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55	High-Sensitivity Humidity Sensor Based on a Single SnO ₂ Nanowire. Journal of the American Chemical Society, 2007, 129, 6070-6071.	6.6	825
56	Taxel-Addressable Matrix of Vertical-Nanowire Piezotronic Transistors for Active and Adaptive Tactile Imaging. Science, 2013, 340, 952-957.	6.0	817
57	Fiber Supercapacitors Made of Nanowire-Fiber Hybrid Structures for Wearable/Flexible Energy Storage. Angewandte Chemie - International Edition, 2011, 50, 1683-1687.	7.2	796
58	Recent Progress in Electronic Skin. Advanced Science, 2015, 2, 1500169.	5.6	789
59	The grand challenges of Science Robotics. Science Robotics, 2018, 3, .	9.9	787
60	Hydrogenated ZnO Core-Shell Nanocables for Flexible Supercapacitors and Self-Powered Systems. ACS Nano, 2013, 7, 2617-2626.	7.3	781
61	Towards Self-Powered Nanosystems: From Nanogenerators to Nanopiezotronics. Advanced Functional Materials, 2008, 18, 3553-3567.	7.8	753
62	Freestanding Triboelectric-Layer-Based Nanogenerators for Harvesting Energy from a Moving Object or Human Motion in Contact and Non-contact Modes. Advanced Materials, 2014, 26, 2818-2824.	11.1	752
63	Reviving Vibration Energy Harvesting and Self-Powered Sensing by a Triboelectric Nanogenerator. Joule, 2017, 1, 480-521.	11.7	748
64	Flexible Piezotronic Strain Sensor. Nano Letters, 2008, 8, 3035-3040.	4.5	742
65	Radial-arrayed rotary electrification for high performance triboelectric generator. Nature Communications, 2014, 5, 3426.	5.8	734
66	Piezopotential gated nanowire devices: Piezotronics and piezo-phototronics. Nano Today, 2010, 5, 540-552.	6.2	731
67	Wearable Self-Charging Power Textile Based on Flexible Yarn Supercapacitors and Fabric Nanogenerators. Advanced Materials, 2016, 28, 98-105.	11.1	723
68	Flexible High-Output Nanogenerator Based on Lateral ZnO Nanowire Array. Nano Letters, 2010, 10, 3151-3155.	4.5	713
69	Piezoelectric BaTiO ₃ Thin Film Nanogenerator on Plastic Substrates. Nano Letters, 2010, 10, 4939-4943.	4.5	711
70	Self-powered textile for wearable electronics by hybridizing fiber-shaped nanogenerators, solar cells, and supercapacitors. Science Advances, 2016, 2, e1600097.	4.7	705
71	Induced Growth of Asymmetric Nanocantilever Arrays on Polar Surfaces. Physical Review Letters, 2003, 91, 185502.	2.9	697
72	Highly-Efficient, Flexible Piezoelectric PZT Thin Film Nanogenerator on Plastic Substrates. Advanced Materials, 2014, 26, 2514-2520.	11.1	690

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73	Multi-quantum-well nanowire heterostructures for wavelength-controlled lasers. <i>Nature Materials</i> , 2008, 7, 701-706.	13.3	679
74	Carbon Nanotube Arrays with Strong Shear Binding-On and Easy Normal Lifting-Off. <i>Science</i> , 2008, 322, 238-242.	6.0	674
75	Triboelectric nanogenerators as self-powered active sensors. <i>Nano Energy</i> , 2015, 11, 436-462.	8.2	674
76	Harmonic Resonator-Based Triboelectric Nanogenerator as a Sustainable Power Source and a Self-Powered Active Vibration Sensor. <i>Advanced Materials</i> , 2013, 25, 6094-6099.	11.1	672
77	Human Skin Based Triboelectric Nanogenerators for Harvesting Biomechanical Energy and as Self-Powered Active Tactile Sensor System. <i>ACS Nano</i> , 2013, 7, 9213-9222.	7.3	667
78	Piezoelectric Characterization of Individual Zinc Oxide Nanobelt Probed by Piezoresponse Force Microscope. <i>Nano Letters</i> , 2004, 4, 587-590.	4.5	649
79	Dissolving Behavior and Stability of ZnO Wires in Biofluids: A Study on Biodegradability and Biocompatibility of ZnO Nanostructures. <i>Advanced Materials</i> , 2006, 18, 2432-2435.	11.1	647
80	A Self-Charging Power Unit by Integration of a Textile Triboelectric Nanogenerator and a Flexible Lithium-Ion Battery for Wearable Electronics. <i>Advanced Materials</i> , 2015, 27, 2472-2478.	11.1	646
81	Standards and figure-of-merits for quantifying the performance of triboelectric nanogenerators. <i>Nature Communications</i> , 2015, 6, 8376.	5.8	644
82	WO ₃ @Au@MnO ₂ Core-Shell Nanowires on Carbon Fabric for High-Performance Flexible Supercapacitors. <i>Advanced Materials</i> , 2012, 24, 938-944.	11.1	641
83	High-resolution electroluminescent imaging of pressure distribution using a piezoelectric nanowire LED array. <i>Nature Photonics</i> , 2013, 7, 752-758.	15.6	641
84	Pyroelectric Nanogenerators for Harvesting Thermoelectric Energy. <i>Nano Letters</i> , 2012, 12, 2833-2838.	4.5	639
85	Sliding-Triboelectric Nanogenerators Based on In-Plane Charge-Separation Mechanism. <i>Nano Letters</i> , 2013, 13, 2226-2233.	4.5	633
86	Harvesting Low-Frequency (≤ 5 Hz) Irregular Mechanical Energy: A Possible Killer Application of Triboelectric Nanogenerator. <i>ACS Nano</i> , 2016, 10, 4797-4805.	7.3	606
87	Flexible Nanocomposite Generator Made of BaTiO ₃ Nanoparticles and Graphitic Carbons. <i>Advanced Materials</i> , 2012, 24, 2999-3004.	11.1	601
88	Self-Powered Nanosensors and Nanosystems. <i>Advanced Materials</i> , 2012, 24, 280-285.	11.1	597
89	Fiber-Based All-Solid-State Flexible Supercapacitors for Self-Powered Systems. <i>ACS Nano</i> , 2012, 6, 9200-9206.	7.3	596
90	A General Approach to Binary and Ternary Hybrid Nanocrystals. <i>Nano Letters</i> , 2006, 6, 875-881.	4.5	593

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91	Harvesting Water Drop Energy by a Sequential Contactâ€”Electrification and Electrostaticâ€”Induction Process. <i>Advanced Materials</i> , 2014, 26, 4690-4696.	11.1	592
92	A breathable, biodegradable, antibacterial, and self-powered electronic skin based on all-nanofiber triboelectric nanogenerators. <i>Science Advances</i> , 2020, 6, eaba9624.	4.7	589
93	Nanobelts, Nanowires, and Nanodiskettes of Semiconducting Oxidesâ€”From Materials to Nanodevices. <i>Advanced Materials</i> , 2003, 15, 432-436.	11.1	587
94	Theory of Slidingâ€”Mode Triboelectric Nanogenerators. <i>Advanced Materials</i> , 2013, 25, 6184-6193.	11.1	581
95	Triboelectric nanogenerators as a new energy technology: From fundamentals, devices, to applications. <i>Nano Energy</i> , 2015, 14, 126-138.	8.2	574
96	A highly sensitive, self-powered triboelectric auditory sensor for social robotics and hearing aids. <i>Science Robotics</i> , 2018, 3, .	9.9	573
97	Converting Ceria Polyhedral Nanoparticles into Single-Crystal Nanospheres. <i>Science</i> , 2006, 312, 1504-1508.	6.0	570
98	Progress in Piezotronics and Piezoâ€”Phototronics. <i>Advanced Materials</i> , 2012, 24, 4632-4646.	11.1	570
99	Largeâ€”Area Allâ€”Textile Pressure Sensors for Monitoring Human Motion and Physiological Signals. <i>Advanced Materials</i> , 2017, 29, 1703700.	11.1	558
100	Electrostatic Potential in a Bent Piezoelectric Nanowire. The Fundamental Theory of Nanogenerator and Nanopiezotronics. <i>Nano Letters</i> , 2007, 7, 2499-2505.	4.5	555
101	A Hybrid Piezoelectric Structure for Wearable Nanogenerators. <i>Advanced Materials</i> , 2012, 24, 1759-1764.	11.1	555
102	Monopod, Bipod, Tripod, and Tetrapod Gold Nanocrystals. <i>Journal of the American Chemical Society</i> , 2003, 125, 16186-16187.	6.6	547
103	Lithiated MoO ₃ Nanobelts with Greatly Improved Performance for Lithium Batteries. <i>Advanced Materials</i> , 2007, 19, 3712-3716.	11.1	545
104	Fiber-Based Generator for Wearable Electronics and Mobile Medication. <i>ACS Nano</i> , 2014, 8, 6273-6280.	7.3	543
105	Integrated Multilayered Triboelectric Nanogenerator for Harvesting Biomechanical Energy from Human Motions. <i>ACS Nano</i> , 2013, 7, 3713-3719.	7.3	538
106	Semiconducting and Piezoelectric Oxide Nanostructures Induced by Polar Surfaces. <i>Advanced Functional Materials</i> , 2004, 14, 943-956.	7.8	537
107	Nanopiezotronics. <i>Advanced Materials</i> , 2007, 19, 889-892.	11.1	536
108	Triboelectric Active Sensor Array for Self-Powered Static and Dynamic Pressure Detection and Tactile Imaging. <i>ACS Nano</i> , 2013, 7, 8266-8274.	7.3	529

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109	A universal self-charging system driven by random biomechanical energy for sustainable operation of mobile electronics. <i>Nature Communications</i> , 2015, 6, 8975.	5.8	526
110	Triboelectric Nanogenerator for Harvesting Wind Energy and as Self-Powered Wind Vector Sensor System. <i>ACS Nano</i> , 2013, 7, 9461-9468.	7.3	524
111	Catch wave power in floating nets. <i>Nature</i> , 2017, 542, 159-160.	13.7	524
112	Single-Electrode-Based Sliding Triboelectric Nanogenerator for Self-Powered Displacement Vector Sensor System. <i>ACS Nano</i> , 2013, 7, 7342-7351.	7.3	523
113	Tin Oxide Nanowires, Nanoribbons, and Nanotubes. <i>Journal of Physical Chemistry B</i> , 2002, 106, 1274-1279.	1.2	517
114	Maximum Surface Charge Density for Triboelectric Nanogenerators Achieved by Ionized Air Injection: Methodology and Theoretical Understanding. <i>Advanced Materials</i> , 2014, 26, 6720-6728.	11.1	517
115	Enhanced photocatalytic degradation and H ₂ /H ₂ O ₂ production performance of S-pCN/WO ₂ .72 S-scheme heterojunction with appropriate surface oxygen vacancies. <i>Nano Energy</i> , 2021, 81, 105671.	8.2	517
116	Bimagnetic Core/Shell FePt/Fe ₃ O ₄ Nanoparticles. <i>Nano Letters</i> , 2004, 4, 187-190.	4.5	515
117	Gigantic enhancement in response and reset time of ZnO UV nanosensor by utilizing Schottky contact and surface functionalization. <i>Applied Physics Letters</i> , 2009, 94, 191103.	1.5	515
118	Theoretical Investigation and Structural Optimization of Single-Electrode Triboelectric Nanogenerators. <i>Advanced Functional Materials</i> , 2014, 24, 3332-3340.	7.8	513
119	Networks of Triboelectric Nanogenerators for Harvesting Water Wave Energy: A Potential Approach toward Blue Energy. <i>ACS Nano</i> , 2015, 9, 3324-3331.	7.3	509
120	Controlled Growth of Large-Area, Uniform, Vertically Aligned Arrays of \pm -Fe ₂ O ₃ Nanobelts and Nanowires. <i>Journal of Physical Chemistry B</i> , 2005, 109, 215-220.	1.2	506
121	Hierarchical Network Architectures of Carbon Fiber Paper Supported Cobalt Oxide Nanonet for High-Capacity Pseudocapacitors. <i>Nano Letters</i> , 2012, 12, 321-325.	4.5	500
122	High-Strain Sensors Based on ZnO Nanowire/Polystyrene Hybridized Flexible Films. <i>Advanced Materials</i> , 2011, 23, 5440-5444.	11.1	497
123	Achieving ultrahigh triboelectric charge density for efficient energy harvesting. <i>Nature Communications</i> , 2017, 8, 88.	5.8	495
124	Eye motion triggered self-powered mechnosensational communication system using triboelectric nanogenerator. <i>Science Advances</i> , 2017, 3, e1700694.	4.7	491
125	Splendid One-Dimensional Nanostructures of Zinc Oxide: A New Nanomaterial Family for Nanotechnology. <i>ACS Nano</i> , 2008, 2, 1987-1992.	7.3	487
126	Eardrum-Inspired Active Sensors for Self-Powered Cardiovascular System Characterization and Throat-Attached Anti-Interference Voice Recognition. <i>Advanced Materials</i> , 2015, 27, 1316-1326.	11.1	487

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127	Sustainably powering wearable electronics solely by biomechanical energy. <i>Nature Communications</i> , 2016, 7, 12744.	5.8	483
128	On the Electronâ€Transfer Mechanism in the Contactâ€Electrification Effect. <i>Advanced Materials</i> , 2018, 30, e1706790.	11.1	483
129	Theoretical Comparison, Equivalent Transformation, and Conjunction Operations of Electromagnetic Induction Generator and Triboelectric Nanogenerator for Harvesting Mechanical Energy. <i>Advanced Materials</i> , 2014, 26, 3580-3591.	11.1	482
130	Self-Assembly of Gold Nanorods. <i>Journal of Physical Chemistry B</i> , 2000, 104, 8635-8640.	1.2	480
131	In Vivo Powering of Pacemaker by Breathingâ€Driven Implanted Triboelectric Nanogenerator. <i>Advanced Materials</i> , 2014, 26, 5851-5856.	11.1	476
132	Controlled Replication of Butterfly Wings for Achieving Tunable Photonic Properties. <i>Nano Letters</i> , 2006, 6, 2325-2331.	4.5	475
133	A durable and safe solid-state lithium battery with a hybrid electrolyte membrane. <i>Nano Energy</i> , 2018, 45, 413-419.	8.2	475
134	Polyhedral Shapes of CeO ₂ Nanoparticles. <i>Journal of Physical Chemistry B</i> , 2003, 107, 13563-13566.	1.2	472
135	Harvesting Water Wave Energy by Asymmetric Screening of Electrostatic Charges on a Nanostructured Hydrophobic Thin-Film Surface. <i>ACS Nano</i> , 2014, 8, 6031-6037.	7.3	471
136	Dynamic Pressure Mapping of Personalized Handwriting by a Flexible Sensor Matrix Based on the Mechanoluminescence Process. <i>Advanced Materials</i> , 2015, 27, 2324-2331.	11.1	468
137	Dual-mode mechanical resonance of individual ZnO nanobelts. <i>Applied Physics Letters</i> , 2003, 82, 4806-4808.	1.5	467
138	Enhancing Sensitivity of a Single ZnO Micro-/Nanowire Photodetector by Piezo-phototronic Effect. <i>ACS Nano</i> , 2010, 4, 6285-6291.	7.3	466
139	Biodegradable triboelectric nanogenerator as a life-time designed implantable power source. <i>Science Advances</i> , 2016, 2, e1501478.	4.7	461
140	Fundamental Theory of Piezotronics. <i>Advanced Materials</i> , 2011, 23, 3004-3013.	11.1	459
141	Stacking Faults in Formation of Silver Nanodisks. <i>Journal of Physical Chemistry B</i> , 2003, 107, 8717-8720.	1.2	456
142	Single-Crystal Hexagonal Disks and Rings of ZnO: Low-Temperature, Large-Scale Synthesis and Growth Mechanism. <i>Angewandte Chemie - International Edition</i> , 2004, 43, 5238-5242.	7.2	455
143	Kinetically Controlled Growth and Shape Formation Mechanism of Platinum Nanoparticles. <i>Journal of Physical Chemistry B</i> , 1998, 102, 3316-3320.	1.2	453
144	Piezoelectric-nanowire-enabled power source for driving wireless microelectronics. <i>Nature Communications</i> , 2010, 1, 93.	5.8	449

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145	Harvesting Energy from the Natural Vibration of Human Walking. ACS Nano, 2013, 7, 11317-11324.	7.3	448
146	Structural Analysis of Self-Assembling Nanocrystal Superlattices. Advanced Materials, 1998, 10, 13-30.	11.1	447
147	FUNCTIONAL OXIDE NANOBELTS: Materials, Properties and Potential Applications in Nanosystems and Biotechnology. Annual Review of Physical Chemistry, 2004, 55, 159-196.	4.8	445
148	Linear-Grating Triboelectric Generator Based on Sliding Electrification. Nano Letters, 2013, 13, 2282-2289.	4.5	442
149	Converting Biomechanical Energy into Electricity by a Muscle-Movement-Driven Nanogenerator. Nano Letters, 2009, 9, 1201-1205.	4.5	441
150	Grating-Structured Freestanding Triboelectric Layer Nanogenerator for Harvesting Mechanical Energy at 85% Total Conversion Efficiency. Advanced Materials, 2014, 26, 6599-6607.	11.1	440
151	Piezotronics and piezo-phototronics for adaptive electronics and optoelectronics. Nature Reviews Materials, 2016, 1, .	23.3	438
152	Segmentally Structured Disk Triboelectric Nanogenerator for Harvesting Rotational Mechanical Energy. Nano Letters, 2013, 13, 2916-2923.	4.5	437
153	Single-Crystal Dendritic Micro-Pines of Magnetic \pm -Fe ₂ O ₃ : Large-Scale Synthesis, Formation Mechanism, and Properties. Angewandte Chemie - International Edition, 2005, 44, 4197-4201.	7.2	433
154	On the first principle theory of nanogenerators from Maxwell's equations. Nano Energy, 2020, 68, 104272.	8.2	431
155	Triboelectric Nanogenerator (TENG) "Sparking an Energy and Sensor Revolution. Advanced Energy Materials, 2020, 10, 2000137.	10.2	430
156	Symbiotic cardiac pacemaker. Nature Communications, 2019, 10, 1821.	5.8	429
157	Enhanced Ferroelectric-Nanocrystal-Based Hybrid Photocatalysis by Ultrasonic-Wave-Generated Piezophototronic Effect. Nano Letters, 2015, 15, 2372-2379.	4.5	428
158	Lead-Free NaNbO ₃ Nanowires for a High Output Piezoelectric Nanogenerator. ACS Nano, 2011, 5, 10041-10046.	7.3	427
159	Liquid-Metal Electrode for High-Performance Triboelectric Nanogenerator at an Instantaneous Energy Conversion Efficiency of 70.6%. Advanced Functional Materials, 2015, 25, 3718-3725.	7.8	427
160	Fabrication of a High-Brightness Blue-Light-Emitting Diode Using a ZnO Nanowire Array Grown on p-GaN Thin Film. Advanced Materials, 2009, 21, 2767-2770.	11.1	425
161	Ultrathin, Rollable, Paper-Based Triboelectric Nanogenerator for Acoustic Energy Harvesting and Self-Powered Sound Recording. ACS Nano, 2015, 9, 4236-4243.	7.3	419
162	A Highly Stretchable and Washable All-Yarn-Based Self-Charging Knitting Power Textile Composed of Fiber Triboelectric Nanogenerators and Supercapacitors. ACS Nano, 2017, 11, 9490-9499.	7.3	419

#	ARTICLE	IF	CITATIONS
163	Progress in nanogenerators for portable electronics. <i>Materials Today</i> , 2012, 15, 532-543.	8.3	417
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