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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

114 papers	7,810 citations	48 h-index	87 g-index
126 ext. papers	9,305 ext. citations	9.5 avg, IF	6.21 L-index

#	Paper	IF	Citations
114	Skin-inspired highly stretchable and conformable matrix networks for multifunctional sensing. <i>Nature Communications</i> , 2018 , 9, 244	17.4	710
113	Ultrastretchable, transparent triboelectric nanogenerator as electronic skin for biomechanical energy harvesting and tactile sensing. <i>Science Advances</i> , 2017 , 3, e1700015	14.3	674
112	Magnetoelectric Laminate Composites: An Overview. <i>Journal of the American Ceramic Society</i> , 2008 , 91, 351-358	3.8	339
111	Near-ideal magnetoelectricity in high-permeability magnetostrictive/piezofiber laminates with a (2-1) connectivity. <i>Applied Physics Letters</i> , 2006 , 89, 252904	3.4	312
110	Detection of pico-Tesla magnetic fields using magneto-electric sensors at room temperature. <i>Applied Physics Letters</i> , 2006 , 88, 062510	3.4	293
109	Self-Powered High-Resolution and Pressure-Sensitive Triboelectric Sensor Matrix for Real-Time Tactile Mapping. <i>Advanced Materials</i> , 2016 , 28, 2896-903	24	268
108	Polymer-embedded carbon nanotube ribbons for stretchable conductors. <i>Advanced Materials</i> , 2010 , 22, 3027-31	24	253
107	Giant magnetoelectric effect in Metglas/polyvinylidene-fluoride laminates. <i>Applied Physics Letters</i> , 2006 , 89, 083507	3.4	208
106	Thick lead-free ferroelectric films with high Curie temperatures through nanocomposite-induced strain. <i>Nature Nanotechnology</i> , 2011 , 6, 491-5	28.7	191
105	Self-Healable, Stretchable, Transparent Triboelectric Nanogenerators as Soft Power Sources. <i>ACS Nano</i> , 2018 , 12, 6147-6155	16.7	175
104	Flexible Self-Powered GaN Ultraviolet Photoswitch with Piezo-Phototronic Effect Enhanced On/Off Ratio. <i>ACS Nano</i> , 2016 , 10, 1572-9	16.7	161
103	Core-Shell-Yarn-Based Triboelectric Nanogenerator Textiles as Power Cloths. <i>ACS Nano</i> , 2017 , 11, 12764-12771	16.7	143
102	Multimodal system for harvesting magnetic and mechanical energy. <i>Applied Physics Letters</i> , 2008 , 93, 103511	3.4	130
101	Small dc magnetic field response of magnetoelectric laminate composites. <i>Applied Physics Letters</i> , 2006 , 88, 082907	3.4	128
100	Magnetic-dielectric properties of NiFe ₂ O ₄ /PZT particulate composites. <i>Journal Physics D: Applied Physics</i> , 2004 , 37, 823-827	3	126
99	Coupled magnetodielectric properties of laminated PbZr _{0.53} Ti _{0.47} O ₃ /NiFe ₂ O ₄ ceramics. <i>Journal of Applied Physics</i> , 2004 , 95, 5685-5690	2.5	122
98	p-Type MoS ₂ and n-Type ZnO Diode and Its Performance Enhancement by the Piezophototronic Effect. <i>Advanced Materials</i> , 2016 , 28, 3391-8	24	115

97	The thermal and electrical properties of the promising semiconductor MXene Hf ₂ CO ₂ . <i>Scientific Reports</i> , 2016 , 6, 27971	4.9	115
96	Piezotronics and Piezo-phototronics of Third Generation Semiconductor Nanowires. <i>Chemical Reviews</i> , 2019 , 119, 9303-9359	68.1	112
95	Lattice Strain Induced Remarkable Enhancement in Piezoelectric Performance of ZnO-Based Flexible Nanogenerators. <i>ACS Applied Materials & Interfaces</i> , 2016 , 8, 1381-7	9.5	102
94	Large high-frequency magnetoelectric response in laminated composites of piezoelectric ceramics, rare-earth iron alloys and polymer. <i>Applied Physics Letters</i> , 2004 , 84, 3516-3518	3.4	102
93	Humidity-Resistive Triboelectric Nanogenerator Fabricated Using Metal Organic Framework Composite. <i>Advanced Functional Materials</i> , 2019 , 29, 1807655	15.6	100
92	A flexible p-CuO/n-MoS ₂ heterojunction photodetector with enhanced photoresponse by the piezo-phototronic effect. <i>Materials Horizons</i> , 2017 , 4, 274-280	14.4	95
91	High-resolution dynamic pressure sensor array based on piezo-phototronic effect tuned photoluminescence imaging. <i>ACS Nano</i> , 2015 , 9, 3143-50	16.7	94
90	Progress in Triboelectric Materials: Toward High Performance and Widespread Applications. <i>Advanced Functional Materials</i> , 2019 , 29, 1900098	15.6	93
89	Giant magnetoelectric effect in multiferroic laminated composites. <i>Physical Review B</i> , 2005 , 72,	3.3	93
88	Printable Smart Pattern for Multifunctional Energy-Management E-Textile. <i>Matter</i> , 2019 , 1, 168-179	12.7	92
87	Extremely low frequency response of magnetoelectric multilayer composites. <i>Applied Physics Letters</i> , 2005 , 86, 102901	3.4	85
86	Circumferential-mode, quasi-ring-type, magnetoelectric laminate composite highly sensitive electric current and vortex magnetic field sensor. <i>Applied Physics Letters</i> , 2005 , 86, 182506	3.4	82
85	Achieving high-resolution pressure mapping via flexible GaN/ ZnO nanowire LEDs array by piezo-phototronic effect. <i>Nano Energy</i> , 2019 , 58, 633-640	17.1	78
84	Interface engineering on p-CuI/n-ZnO heterojunction for enhancing piezoelectric and piezo-phototronic performance. <i>Nano Energy</i> , 2016 , 26, 417-424	17.1	78
83	Giant magnetoelectric effect (under a dc magnetic bias of 2Oe) in laminate composites of FeBSiC alloy ribbons and Pb(Zn _{1/3} Nb _{2/3})O ₃ /PbTiO ₃ fibers. <i>Applied Physics Letters</i> , 2007 , 91, 022915	3.4	78
82	Magnetoelectric gyration effect in Tb _{1-x} Dy _x Fe ₂ /Bb(Zr,Ti)O ₃ laminated composites at the electromechanical resonance. <i>Applied Physics Letters</i> , 2006 , 89, 243512	3.4	78
81	Flexoelectronics of centrosymmetric semiconductors. <i>Nature Nanotechnology</i> , 2020 , 15, 661-667	28.7	76
80	Geomagnetic sensor based on giant magnetoelectric effect. <i>Applied Physics Letters</i> , 2007 , 91, 123513	3.4	74

79	Equivalent circuit method for static and dynamic analysis of magnetoelectric laminated composites. <i>Science Bulletin</i> , 2008 , 53, 2113-2123	10.6	70
78	Remarkably enhanced triboelectric nanogenerator based on flexible and transparent monolayer titania nanocomposite. <i>Nano Energy</i> , 2018 , 50, 140-147	17.1	68
77	Large-scale fabrication of robust textile triboelectric nanogenerators. <i>Nano Energy</i> , 2020 , 71, 104605	17.1	66
76	Magnetostrictive and magnetoelectric behavior of Fe ₂ O ₃ /at.% GaPb(Zr,Ti)O ₃ laminates. <i>Journal of Applied Physics</i> , 2005 , 97, 103902	2.5	65
75	Resonant bending mode of Terfenol-D/steel/Pb(Zr,Ti)O ₃ magnetoelectric laminate composites. <i>Applied Physics Letters</i> , 2006 , 89, 112911	3.4	65
74	Fe ₂ O ₃ /Pb(Mg _{1/3} Nb _{2/3})O ₃ /PbTiO ₃ magnetoelectric laminate composites. <i>Applied Physics Letters</i> , 2005 , 87, 222504	3.4	61
73	Enhanced NO ₂ gas sensing of a single-layer MoS ₂ by photogating and piezo-phototronic effects. <i>Science Bulletin</i> , 2019 , 64, 128-135	10.6	61
72	Improvement in the Piezoelectric Performance of a ZnO Nanogenerator by a Combination of Chemical Doping and Interfacial Modification. <i>Journal of Physical Chemistry C</i> , 2016 , 120, 6971-6977	3.8	60
71	A quasi(unidirectional) Tellegen gyrator. <i>Journal of Applied Physics</i> , 2006 , 100, 124509	2.5	58
70	Self-powered acoustic source locator in underwater environment based on organic film triboelectric nanogenerator. <i>Nano Research</i> , 2015 , 8, 765-773	10	56
69	Large magnetoelectric susceptibility: The fundamental property of piezoelectric and magnetostrictive laminated composites. <i>Journal of Applied Physics</i> , 2007 , 101, 014102	2.5	51
68	Magnetic-mechanical-electrical-optical coupling effects in GaN-based LED/rare-earth terfenol-D structures. <i>Advanced Materials</i> , 2014 , 26, 6767-72	24	49
67	Multifunctional Coaxial Energy Fiber toward Energy Harvesting, Storage, and Utilization. <i>ACS Nano</i> , 2021 , 15, 1597-1607	16.7	48
66	Triboelectric Nanogenerator as a Self-Powered Communication Unit for Processing and Transmitting Information. <i>ACS Nano</i> , 2016 , 10, 3944-50	16.7	47
65	Piezotronic Effect Enhanced Flexible Humidity Sensing of Monolayer MoS ₂ . <i>ACS Applied Materials & Interfaces</i> , 2018 , 10, 8110-8116	9.5	45
64	Thermal noise cancellation in symmetric magnetoelectric bimorph laminates. <i>Applied Physics Letters</i> , 2008 , 93, 072906	3.4	36
63	Flexible and stretchable triboelectric nanogenerator fabric for biomechanical energy harvesting and self-powered dual-mode human motion monitoring. <i>Nano Energy</i> , 2021 , 86, 106058	17.1	36
62	Magnetic-Induced-Piezopotential Gated MoS ₂ Field-Effect Transistor at Room Temperature. <i>Advanced Materials</i> , 2018 , 30, 1704524	24	33

61	Investigation of external noise and its rejection in magnetoelectric sensor design. <i>Journal of Applied Physics</i> , 2009 , 106, 024512	2.5	33
60	A monolayer MoS ₂ p-n homogenous photodiode with enhanced photoresponse by piezo-phototronic effect. <i>2D Materials</i> , 2018 , 5, 035038	5.9	31
59	Strong magnetoelectric charge coupling in stress-biased multilayer-piezoelectric-magnetostrictive composites. <i>Journal of Applied Physics</i> , 2007 , 101, 124102	2.5	31
58	Enhanced magnetoelectric effect in three-phase MnZnFe ₂ O ₄ /Ba _{1-x} DyxFe ₂ O ₄ /Pb(Zr,Ti)O ₃ composites. <i>Journal of Applied Physics</i> , 2006 , 100, 124108	2.5	30
57	Low frequency wideband nano generators for energy harvesting from natural environment. <i>Nano Energy</i> , 2014 , 6, 66-72	17.1	29
56	A substrate-enhanced MoS ₂ photodetector through a dual-photogating effect. <i>Materials Horizons</i> , 2019 , 6, 826-833	14.4	28
55	Electrical transportation and piezotronic-effect modulation in AlGaIn/GaN MOS HEMTs and unpassivated HEMTs. <i>Nano Energy</i> , 2017 , 39, 53-59	17.1	28
54	Piezotronic-effect-enhanced Ag ₂ S/ZnO photocatalyst for organic dye degradation. <i>RSC Advances</i> , 2017 , 7, 48176-48183	3.7	27
53	A Flexible GaN Nanowire Array-Based Schottky-Type Visible Light Sensor with Strain-Enhanced Photoresponsivity. <i>Advanced Electronic Materials</i> , 2015 , 1, 1500169	6.4	27
52	Piezo-phototronic effect enhanced UV photodetector based on CuI/ZnO double-shell grown on flexible copper microwire. <i>Nanoscale Research Letters</i> , 2016 , 11, 281	5	25
51	Tunable features of magnetoelectric transformers. <i>IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control</i> , 2009 , 56, 1124-7	3.2	25
50	Photoluminescence of nanosized Na _{0.5} Bi _{0.5} TiO ₃ synthesized by a sol-gel process. <i>Materials Letters</i> , 2004 , 58, 829-832	3.3	25
49	High precision epidermal radio frequency antenna via nanofiber network for wireless stretchable multifunction electronics. <i>Nature Communications</i> , 2020 , 11, 5629	17.4	24
48	Highly Integrated Triboelectric Nanogenerator for Efficiently Harvesting Raindrop Energy. <i>Advanced Materials Technologies</i> , 2019 , 4, 1900608	6.8	23
47	Direct Observation of Magnetic Field Induced Ferroelectric Domain Evolution in Self-Assembled Quasi (0-3) BiFeO ₃ -CoFe ₂ O ₄ Thin Films. <i>ACS Applied Materials & Interfaces</i> , 2016 , 8, 442-8	9.5	23
46	Magnetic-Field Sensitivity Enhancement by Magnetoelectric Sensor Arrays. <i>IEEE Electron Device Letters</i> , 2009 , 30, 445-447	4.4	23
45	Vertically aligned NiS ₂ /CoS ₂ /MoS ₂ nanosheet array as an efficient and low-cost electrocatalyst for hydrogen evolution reaction in alkaline media. <i>Science Bulletin</i> , 2020 , 65, 359-366	10.6	23
44	Self-Powered Random Number Generator Based on Coupled Triboelectric and Electrostatic Induction Effects at the Liquid-Dielectric Interface. <i>ACS Nano</i> , 2016 , 10, 11434-11441	16.7	23

43	Self-powered electrochromic devices with tunable infrared intensity. <i>Science Bulletin</i> , 2018 , 63, 795-801	10.6	22
42	Piezotronic effect tuned AlGaIn/GaN high electron mobility transistor. <i>Nanotechnology</i> , 2017 , 28, 455203	3.4	21
41	A chemical solution approach for superconducting and hard epitaxial NbC film. <i>Chemical Communications</i> , 2010 , 46, 7837-9	5.8	19
40	Piezotronics and piezo-phototronics in two-dimensional materials. <i>MRS Bulletin</i> , 2018 , 43, 959-964	3.2	19
39	Dynamic real-time imaging of living cell traction force by piezo-phototronic light nano-antenna array. <i>Science Advances</i> , 2021 , 7,	14.3	18
38	Flexible Li-doped ZnO piezotronic transistor array for in-plane strain mapping. <i>Nano Energy</i> , 2019 , 55, 341-347	17.1	17
37	Design of Bionic Cochlear Basilar Membrane Acoustic Sensor for Frequency Selectivity Based on Film Triboelectric Nanogenerator. <i>Nanoscale Research Letters</i> , 2018 , 13, 191	5	17
36	The magnetoelectric properties of lead zirconate titanate/terfenol-D/PVDF laminate composites. <i>Materials Science and Engineering B: Solid-State Materials for Advanced Technology</i> , 2003 , 99, 211-213	3.1	15
35	Recent Progress of Functional Fiber and Textile Triboelectric Nanogenerators: Towards Electricity Power Generation and Intelligent Sensing. <i>Advanced Fiber Materials</i> , 1	10.9	14
34	Large-Scale Smart Carpet for Self-Powered Fall Detection. <i>Advanced Materials Technologies</i> , 2020 , 5, 1900978	6.8	13
33	Differential-mode vibrational noise cancellation structure for Metglas/Pb(Zr,Ti)O ₃ fiber magnetoelectric laminates. <i>IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control</i> , 2011 , 58, 1541-4	3.2	12
32	Dispersion characteristics for low-frequency magnetoelectric coefficients in bulk ferrite-piezoelectric composites. <i>Solid State Communications</i> , 2007 , 142, 515-518	1.6	12
31	A micromachined piezoelectric microgripper for manipulation of micro/nanomaterials. <i>Review of Scientific Instruments</i> , 2017 , 88, 065002	1.7	11
30	Piezo-Phototronic Matrix via a Nanowire Array. <i>Small</i> , 2017 , 13, 1702377	11	11
29	Analytical insight into the oxygen diffusion in wetted porous cathodes of Li-air batteries. <i>Energy</i> , 2015 , 93, 416-420	7.9	11
28	Progress in piezotronics of transition-metal dichalcogenides. <i>Journal Physics D: Applied Physics</i> , 2018 , 51, 493002	3	11
27	A flower-like CoS/MoS heteronanosheet array as an active and stable electrocatalyst toward the hydrogen evolution reaction in alkaline media.. <i>RSC Advances</i> , 2020 , 10, 8973-8981	3.7	10
26	MoP nanoparticles encapsulated in P-doped carbon as an efficient electrocatalyst for the hydrogen evolution reaction. <i>Catalysis Communications</i> , 2020 , 140, 106000	3.2	10

25	A self-powered AC magnetic sensor based on piezoelectric nanogenerator. <i>Nanotechnology</i> , 2014 , 25, 455503	3.4	10
24	Enhanced spontaneous polarization in double perovskite Bi ₂ FeCrO ₆ films. <i>Journal of the American Ceramic Society</i> , 2019 , 102, 5234-5242	3.8	10
23	Coaxial Hybrid Triboelectric Nanogenerator for Scavenging Multidirectional Mechanical Energy. <i>Advanced Electronic Materials</i> , 2018 , 4, 1800161	6.4	8
22	p-n Junction Based Direct-Current Triboelectric Nanogenerator by Conjunction of Tribovoltaic Effect and Photovoltaic Effect. <i>Nano Letters</i> , 2021 , 21, 10099-10106	11.5	8
21	One-step photodeposition synthesis of TiO ₂ nanobelts/MoS ₂ quantum dots/rGO ternary composite with remarkably enhanced photocatalytic activity. <i>Journal of Materials Science</i> , 2020 , 55, 14773-14786	13.3	7
20	Assessment of extracellular matrix modulation of cell traction force by using silicon nanowire array. <i>Nano Energy</i> , 2018 , 50, 504-512	17.1	7
19	Nano-force sensor based on a single tellurium microwire. <i>Semiconductor Science and Technology</i> , 2017 , 32, 074001	1.8	6
18	Thermoacoustically driven triboelectric nanogenerator: Combining thermoacoustics and nanoscience. <i>Applied Physics Letters</i> , 2017 , 111, 153901	3.4	6
17	Highly sensitive strain sensors based on piezotronic tunneling junction.. <i>Nature Communications</i> , 2022 , 13, 778	17.4	6
16	Multibit tribotronic nonvolatile memory based on van der Waals heterostructures. <i>Nano Energy</i> , 2021 , 83, 105785	17.1	6
15	Photon-Memristive System for Logic Calculation and Nonvolatile Photonic Storage. <i>Advanced Functional Materials</i> , 2020 , 30, 2002945	15.6	5
14	Piezoelectric and deformation potential effects of strain-dependent luminescence in semiconductor quantum well structures. <i>Nano Research</i> , 2017 , 10, 134-144	10	5
13	Performance-Enhanced and Washable Triboelectric Air Filter Based on Polyvinylidene Fluoride/UiO-66 Composite Nanofiber Membrane. <i>Macromolecular Materials and Engineering</i> , 2021 , 306, 2100128	3.9	4
12	Piezotronics modulates high sensitivity relative humidity sensor based on single tellurium microwire. <i>Semiconductor Science and Technology</i> , 2019 , 34, 075011	1.8	3
11	Adsorption kinetics, conformational change, and enzymatic activity of α -glucosidase on hematite (FeO) surfaces. <i>Colloids and Surfaces B: Biointerfaces</i> , 2020 , 193, 111115	6	3
10	Nitrogen-Doped Porous Carbon Nanosheets Strongly Coupled with MoC Nanoparticles for Efficient Electrocatalytic Hydrogen Evolution. <i>Nanoscale Research Letters</i> , 2019 , 14, 329	5	3
9	Enhanced Electrical Performance of Monolayer MoS with Rare Earth Element Sm Doping. <i>Nanomaterials</i> , 2021 , 11,	5.4	3
8	Alternate-Layered MXene Composite Film-Based Triboelectric Nanogenerator with Enhanced Electrical Performance. <i>Nanoscale Research Letters</i> , 2021 , 16, 81	5	3

7	Biocompatible and breathable all-fiber-based piezoresistive sensor with high sensitivity for human physiological movements monitoring. <i>Chemical Engineering Journal</i> , 2022 , 446, 137268	14.7	3
6	A Polymeric Bilayer Multi-Legged Soft Millirobot with Dual Actuation and Humidity Sensing. <i>Sensors</i> , 2021 , 21,	3.8	2
5	A composite triboelectric nanogenerator based on flexible and transparent film impregnated with ZIF-8 nanocrystals. <i>Nanotechnology</i> , 2021 , 32,	3.4	2
4	Mechanoluminescence spectrum tuning from zinc sulfide and all-inorganic perovskite quantum dots composite. <i>Journal of Alloys and Compounds</i> , 2022 , 893, 162333	5.7	1
3	Dynamic piezo-phototronic effect in InGaN/GaN multiple quantum wells. <i>Superlattices and Microstructures</i> , 2021 , 155, 106926	2.8	1
2	Temperature-driven structural phase transition in double perovskite Bi ₂ FeCrO ₆ films. <i>Applied Physics Express</i> , 2020 , 13, 011008	2.4	0
1	Magnetoelectric Laminate Composites IEnhanced Magnetic Field Sensitivity, and High Voltage Gain. <i>Materials Research Society Symposia Proceedings</i> , 2005 , 881, 1		