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Flexible triboelectric generator

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2262	Overall concentration polarization and limiting current density of fuel cells with nanostructured electrodes. <i>Nano Energy</i> , <b>2012</b> , 1, 828-832	17.1	26
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2259	Transparent triboelectric nanogenerators and self-powered pressure sensors based on micropatterned plastic films. <b>2012</b> , 12, 3109-14		1350
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	Flexible triboelectric nanogenerator from micro-nano structured polydimethylsiloxane. <b>2015</b> , 31, 434-438		
2079	Metal-free and non-fluorine paper-based generator. <i>Nano Energy</i> , <b>2015</b> , 14, 236-244		29
2079	Matal Francisco and and Studies and a based apparatus Nana Francis 2015 14 220 244	.1	29 68
,,	Metal-free and non-fluorine paper-based generator. <i>Nano Energy</i> , <b>2015</b> , 14, 236-244  Base-treated polydimethylsiloxane surfaces as enhanced triboelectric nanogenerators. <i>Nano</i>	.1	
2078	Metal-free and non-fluorine paper-based generator. <i>Nano Energy</i> , <b>2015</b> , 14, 236-244  Base-treated polydimethylsiloxane surfaces as enhanced triboelectric nanogenerators. <i>Nano Energy</i> , <b>2015</b> , 15, 523-529  Electrification based devices with encapsulated liquid for energy harvesting, multifunctional	.1	68

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2074	A universal self-charging system driven by random biomechanical energy for sustainable operation of mobile electronics. <b>2015</b> , 6, 8975		423
2073	Integration of micro-supercapacitors with triboelectric nanogenerators for a flexible self-charging power unit. <b>2015</b> , 8, 3934-3943		128
2072	Hybridized Electromagnetic-Triboelectric Nanogenerator for a Self-Powered Electronic Watch. <b>2015</b> , 9, 12301-10		147
2071	Structural Optimization of Triboelectric Nanogenerator for Harvesting Water Wave Energy. <b>2015</b> , 9, 12562-72		154
2070	A flexible and transparent graphene based triboelectric nanogenerator. 2015,		
2069	Simultaneously Harvesting Thermal and Mechanical Energies based on Flexible Hybrid Nanogenerator for Self-Powered Cathodic Protection. <b>2015</b> , 7, 28142-7		46
2068	Paper-based origami triboelectric nanogenerators and self-powered pressure sensors. <b>2015</b> , 9, 901-7		213
2067	Wearable electrode-free triboelectric generator for harvesting biomechanical energy. <i>Nano Energy</i> , <b>2015</b> , 12, 19-25	17.1	107
2066	Self-powered metal surface anti-corrosion protection using energy harvested from rain drops and wind. <i>Nano Energy</i> , <b>2015</b> , 14, 193-200	17.1	93
2065	Spiral-interdigital-electrode-based multifunctional device: Dual-functional triboelectric generator and dual-functional self-powered sensor. <i>Nano Energy</i> , <b>2015</b> , 12, 626-635	17.1	36
2064	Self-cleaning hybrid energy harvester to generate power from raindrop and sunlight. <i>Nano Energy</i> , <b>2015</b> , 12, 636-645	17.1	118
2063	Hexagonal boron nitride assisted growth of stoichiometric Al 2 O 3 dielectric on graphene for triboelectric nanogenerators. <i>Nano Energy</i> , <b>2015</b> , 12, 556-566	17.1	33
2062	Optical and wetting properties of nanostructured fluorinated ethylene propylene changed by mechanical deformation and its application in triboelectric nanogenerators. <b>2015</b> , 2, 015302		9
2061	High-performance nanopattern triboelectric generator by block copolymer lithography. <i>Nano Energy</i> , <b>2015</b> , 12, 331-338	17.1	101
2060	Ultrasensitive self-powered pressure sensing system. <b>2015</b> , 2, 28-36		66
2059	Layer-by-layer polyelectrolyte films for contact electric energy harvesting. <b>2015</b> , 48, 075302		7
2058	Nanopatterned textile-based wearable triboelectric nanogenerator. <b>2015</b> , 9, 3501-9		495
2057	Human walking-driven wearable all-fiber triboelectric nanogenerator containing electrospun polyvinylidene fluoride piezoelectric nanofibers. <i>Nano Energy</i> , <b>2015</b> , 14, 226-235	17.1	213

2056	Transparent and flexible barcode based on sliding electrification for self-powered identification systems. <i>Nano Energy</i> , <b>2015</b> , 12, 278-286	17.1	32
2055	Notepad-like triboelectric generator for efficiently harvesting low-velocity motion energy by interconversion between kinetic energy and elastic potential energy. <b>2015</b> , 7, 1275-83		19
2054	Efficient fiber shaped zinc bromide batteries and dye sensitized solar cells for flexible power sources. <b>2015</b> , 3, 2157-2165		47
2053	Robust triboelectric nanogenerator based on rolling electrification and electrostatic induction at an instantaneous energy conversion efficiency of ~ 55%. <b>2015</b> , 9, 922-30		173
2052	Self-Powered Trace Memorization by Conjunction of Contact-Electrification and Ferroelectricity. <b>2015</b> , 25, 739-747		59
2051	Optimization of Triboelectric Nanogenerator Charging Systems for Efficient Energy Harvesting and Storage. <b>2015</b> , 62, 641-647		110
2050	Eardrum-inspired active sensors for self-powered cardiovascular system characterization and throat-attached anti-interference voice recognition. <b>2015</b> , 27, 1316-26		366
2049	Theoretical systems of triboelectric nanogenerators. <i>Nano Energy</i> , <b>2015</b> , 14, 161-192	17.1	594
2048	Active micro-actuators for optical modulation based on a planar sliding triboelectric nanogenerator. <b>2015</b> , 27, 719-26		75
2047	Magnetic-assisted triboelectric nanogenerators as self-powered visualized omnidirectional tilt sensing system. <b>2014</b> , 4, 4811		82
2046	Energy harvesting for assistive and mobile applications. <b>2015</b> , 3, 153-173		61
2045	Flow-driven triboelectric generator for directly powering a wireless sensor node. <b>2015</b> , 27, 240-8		131
2044	Triboelectric smart machine elements and self-powered encoder. <i>Nano Energy</i> , <b>2015</b> , 13, 92-102	17.1	11
2043	Design and characterization of scalable woven piezoelectric energy harvester for wearable applications. <b>2015</b> , 24, 045008		38
2042	Piezoelectric-driven self-charging supercapacitor power cell. <b>2015</b> , 9, 4337-45		170
2041	Coplanar induction enabled by asymmetric permittivity of dielectric materials for mechanical energy conversion. <b>2015</b> , 7, 6025-9		9
2040	Honeycomb-like three electrodes based triboelectric generator for harvesting energy in full space and as a self-powered vibration alertor. <i>Nano Energy</i> , <b>2015</b> , 15, 766-775	17.1	25
2039	Multi-unit hydroelectric generator based on contact electrification and its service behavior. <i>Nano Energy</i> , <b>2015</b> , 16, 329-338	17.1	33

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2038	(METS). <b>2015</b> , 27, 4749-4755	77
2037	Self-Powered Human-Interactive Transparent Nanopaper Systems. <b>2015</b> , 9, 7399-406	85
2036	Multifunctional triboelectric nanogenerator based on porous micro-nickel foam to harvest mechanical energy. <i>Nano Energy</i> , <b>2015</b> , 16, 516-523	81
2035	PEDOT as a Flexible Organic Electrode for a Thin Film Acoustic Energy Harvester. <b>2015</b> , 7, 16279-86	23
2034	Novel Spiral-Like Electrode Structure Design for Realization of Two Modes of Energy Harvesting. <b>2015</b> , 7, 16450-7	8
2033	Changes in wetting and contact charge transfer by femtosecond laser-ablation of polyimide. <b>2015</b> , 349, 952-956	14
2032	Solution processed flexible hybrid cell for concurrently scavenging solar and mechanical energies.  Nano Energy, <b>2015</b> , 16, 301-309	41
2031	Implantable Self-Powered Low-Level Laser Cure System for Mouse Embryonic Osteoblasts' Proliferation and Differentiation. <b>2015</b> , 9, 7867-73	110
2030	Progress in triboelectric nanogenerators as a new energy technology and self-powered sensors. <b>2015</b> , 8, 2250-2282	1326
2029	Vertically stacked thin triboelectric nanogenerator for wind energy harvesting. <i>Nano Energy</i> , <b>2015</b> , 14, 201-208	132
2028	Highly transparent triboelectric nanogenerator for harvesting water-related energy reinforced by antireflection coating. <b>2015</b> , 5, 9080	149
2027	Contact electrification and energy harvesting using periodically contacted and squeezed water droplets. <b>2015</b> , 31, 3269-76	64
2026	Theory of freestanding triboelectric-layer-based nanogenerators. <i>Nano Energy</i> , <b>2015</b> , 12, 760-774	283
2025	Theoretical Study of Rotary Freestanding Triboelectric Nanogenerators. <b>2015</b> , 25, 2928-2938	102
2024	A cubic triboelectric generator as a self-powered orientation sensor. <b>2015</b> , 58, 842-847	12
2023	Triboelectric Nanogenerator Based on Biocompatible Polymer Materials. <b>2015</b> , 119, 9061-9068	36
2022	. <b>2015</b> , 24, 1338-1345	23
2021	Triboelectric-pyroelectric-piezoelectric hybrid cell for high-efficiency energy-harvesting and self-powered sensing. <b>2015</b> , 27, 2340-7	331

Sulfur-doped-ZnO-nanospire-based transparent flexible nanogenerator self-powered by environmental vibration. <b>2015</b> , 5, 34019-34026		29
Enhanced output-power of nanogenerator by modifying PDMS film with lateral ZnO nanotubes and Ag nanowires. <b>2015</b> , 5, 32566-32571		16
2018 Broadband vibration energy harvesting using triboelectric mechanism. <b>2015</b> ,		
A multi-layered interdigitative-electrodes-based triboelectric nanogenerator for harvesting hydropower. <i>Nano Energy</i> , <b>2015</b> , 15, 256-265	17.1	76
White and green light emissions of flexible polymer composites under electric field and multiple strains. <i>Nano Energy</i> , <b>2015</b> , 14, 372-381	17.1	80
2015 Motion-driven electrochromic reactions for self-powered smart window system. <b>2015</b> , 9, 4757-65		129
2014 Triboelectrification based active sensor for polymer distinguishing. <b>2015</b> ,		3
Single-electrode triboelectric nanogenerator for scavenging friction energy from rolling tires. <i>Nano Energy</i> , <b>2015</b> , 15, 227-234	17.1	124
Self-powered seawater desalination and electrolysis using flowing kinetic energy. <i>Nano Energy</i> , <b>2012</b> , 15, 266-274	17.1	35
2011 Tribotronic Logic Circuits and Basic Operations. <b>2015</b> , 27, 3533-40		50
Stretchable-Rubber-Based Triboelectric Nanogenerator and Its Application as Self-Powered Body Motion Sensors. <b>2015</b> , 25, 3688-3696		261
An Ell-in-oneImesh-typed integrated energy unit for both photoelectric conversion and energy storage in uniform electrochemical system. <i>Nano Energy</i> , <b>2015</b> , 13, 670-678	17.1	47
Triboelectric sensor as self-powered signal reader for scanning probe surface topography imaging. <b>2015</b> , 26, 165501		10
Ultrathin, rollable, paper-based triboelectric nanogenerator for acoustic energy harvesting and self-powered sound recording. <b>2015</b> , 9, 4236-43		323
2006 Triboelectric generators and sensors for self-powered wearable electronics. <b>2015</b> , 9, 3421-7		187
Hybridized electromagnetic-triboelectric nanogenerator for scavenging air-flow energy to sustainably power temperature sensors. <b>2015</b> , 9, 4553-62		127
Triboelectric charging sequence induced by surface functionalization as a method to fabricate high performance triboelectric generators. <b>2015</b> , 9, 4621-7		160
Standards and figure-of-merits for quantifying the performance of triboelectric nanogenerators. <b>2005</b> , 6, 8376		470

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	Impact of contact pressure on output voltage of triboelectric nanogenerator based on deformation of interfacial structures. <i>Nano Energy</i> , <b>2015</b> , 17, 63-71	17.1	88
	Simple triboelectric generator applied on macro-sized surface patterns and test-bed device to control humidity. <b>2015</b> ,		2
	Folded Elastic Strip-Based Triboelectric Nanogenerator for Harvesting Human Motion Energy for Multiple Applications. <b>2015</b> , 7, 20469-76		38
	Stretchable Array of Highly Sensitive Pressure Sensors Consisting of Polyaniline Nanofibers and Au-Coated Polydimethylsiloxane Micropillars. <b>2015</b> , 9, 9974-85		272
	Self-powered electrochemical water treatment system for sterilization and algae removal using water wave energy. <i>Nano Energy</i> , <b>2015</b> , 18, 81-88	17.1	55
1997 1	A super-flexible and lightweight membrane for energy harvesting. <b>2015</b> ,		1
1996 1	A high-efficiency transparent electrification-based generator for harvesting droplet energy. <b>2015</b> ,		5
1005	Mesoporous pores impregnated with Au nanoparticles as effective dielectrics for enhancing triboelectric nanogenerator performance in harsh environments. <b>2015</b> , 8, 3006-3012		241
1994	A high energy output nanogenerator based on reduced graphene oxide. <b>2015</b> , 7, 18147-51		18
1993	Cylindrical spiral triboelectric nanogenerator. <b>2015</b> , 8, 3197-3204		20
1992	On the mechanism and optimization of triboelectric nanogenerators. <b>2015</b> , 26, 425401		2
	Highly Transparent and Flexible Triboelectric Nanogenerators with Subwavelength-Architectured Polydimethylsiloxane by a Nanoporous Anodic Aluminum Oxide Template. <b>2015</b> , 7, 20520-9		73
	3-Dimensional broadband energy harvester based on internal hydrodynamic oscillation with a package structure. <i>Nano Energy</i> , <b>2015</b> , 17, 82-90	17.1	47
1989 .	Triboelectric Nanogenerators as a Self-Powered 3D Acceleration Sensor. <b>2015</b> , 7, 19076-82		110
1988	Self-powered thin-film motion vector sensor. <b>2015</b> , 6, 8031		100
1987	Roll-printed wrinkled electrode for use in a triboelectric generator. <b>2015</b> , 25, 085017		4
	Wearable and Implantable Mechanical Energy Harvesters for Self-Powered Biomedical Systems. <b>2015</b> , 9, 7742-5		104
	Multi-stacked PDMS-based triboelectric generators with conductive textile for efficient energy		45

1984	Facile Fabrication of Micro-Nano Structured Triboelectric Nanogenerator with High Electric Output. <b>2015</b> , 10, 1001		16
1983	A high performance triboelectric nanogenerator for self-powered non-volatile ferroelectric transistor memory. <b>2015</b> , 7, 17306-11		36
1982	Newton's cradle motion-like triboelectric nanogenerator to enhance energy recycle efficiency by utilizing elastic deformation. <b>2015</b> , 3, 21133-21139		20
1981	Elasto-Aerodynamics-Driven Triboelectric Nanogenerator for Scavenging Air-Flow Energy. <b>2015</b> , 9, 9554	l-63	142
1980	Electrospun ion gel nanofibers for flexible triboelectric nanogenerator: electrochemical effect on output power. <b>2015</b> , 7, 16189-94		62
1979	The quantitative analysis for a contact-mode triboelectric energy harvesting device. <b>2015</b> ,		O
1978	The effect of anodized Ti on output performance of biomedical compatible triboelectric nanogenerators used for controlling the degradation of Mg-3wt%Zn-0.8wt%Zr. <b>2015</b> , 26, 495401		4
1977	Natural Fiber Welded Electrode Yarns for Knittable Textile Supercapacitors. <b>2015</b> , 5, 1401286		126
1976	Preparation of Alginate/Graphene Oxide Hybrid Films and Their Integration in Triboelectric Generators. <b>2015</b> , 2015, 1192-1197		16
1975	Wearable Triboelectric Generator for Powering the Portable Electronic Devices. <b>2015</b> , 7, 18225-30		107
1974	Self-powered acoustic source locator in underwater environment based on organic film triboelectric nanogenerator. <b>2015</b> , 8, 765-773		56
1973	Self-powered water splitting using flowing kinetic energy. <b>2015</b> , 27, 272-6		160
1972	Transparent flexible stretchable piezoelectric and triboelectric nanogenerators for powering portable electronics. <i>Nano Energy</i> , <b>2015</b> , 14, 139-160	17.1	166
1971	Triboelectric nanogenerators as a new energy technology: From fundamentals, devices, to applications. <i>Nano Energy</i> , <b>2015</b> , 14, 126-138	17.1	400
1970	Controllable fabrication of ultrafine oblique organic nanowire arrays and their application in energy harvesting. <b>2015</b> , 7, 1285-9		20
1969	Single-electrode-based rotationary triboelectric nanogenerator and its applications as self-powered contact area and eccentric angle sensors. <i>Nano Energy</i> , <b>2015</b> , 11, 323-332	17.1	63
1968	Hybrid energy cell for harvesting mechanical energy from one motion using two approaches. <i>Nano Energy</i> , <b>2015</b> , 11, 162-170	17.1	87
1967	Ferrohydrodynamic energy harvesting based on air droplet movement. <i>Nano Energy</i> , <b>2015</b> , 11, 171-178	17.1	19

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1966	Hierarchical TiO2 nanowire/graphite fiber photoelectrocatalysis setup powered by a wind-driven nanogenerator: A highly efficient photoelectrocatalytic device entirely based on renewable energy. <i>Nano Energy</i> , <b>2015</b> , 11, 19-27	17.1	92	
1965	Triboelectric nanogenerators as self-powered active sensors. <i>Nano Energy</i> , <b>2015</b> , 11, 436-462	17.1	505	
1964	Exsolution-Mimic Heterogeneous Surfaces: Towards Unlimited Catalyst Design. <b>2015</b> , 7, 48-50		18	
1963	High performance triboelectric nanogenerators based on large-scale mass-fabrication technologies. <i>Nano Energy</i> , <b>2015</b> , 11, 304-322	17.1	149	
1962	A Triboelectric Generator Based on Checker-Like Interdigital Electrodes with a Sandwiched PET Thin Film for Harvesting Sliding Energy in All Directions. <b>2015</b> , 5, 1400790		97	
1961	Multilayered-Electrode-Based Triboelectric Nanogenerators with Managed Output Voltage and Multifold Enhanced Charge Transport. <b>2015</b> , 5, 1401452		45	
1960	Effect of diameter and height of electrochemically-deposited ZnO nanorod arrays on the performance of piezoelectric nanogenerators. <b>2015</b> , 149-150, 393-399		25	
1959	Large-scale horizontally aligned ZnO microrod arrays with controlled orientation, periodic distribution as building blocks for chip-in piezo-phototronic LEDs. <b>2015</b> , 11, 438-45		25	
1958	Recent Advances in Wearable Sensors for Health Monitoring. <b>2015</b> , 15, 3119-3126		193	
1957	Tailored graphene systems for unconventional applications in energy conversion and storage devices. <b>2015</b> , 8, 31-54		211	
1956	Functional triboelectric generator as self-powered vibration sensor with contact mode and non-contact mode. <i>Nano Energy</i> , <b>2015</b> , 14, 209-216	17.1	62	
1955	A Self-Powered Triboelectric Nanosensor for PH Detection. <b>2016</b> , 2016, 1-6		6	
1954	Triboelectric Hydrogen Gas Sensor with Pd Functionalized Surface. <b>2016</b> , 6,		19	
1953	Self-powered In-plane Accelerometer Using Triboelectric Mechanism. <b>2016</b> , 773, 012107		2	
1952	Energy harvesting from human motion: materials and techniques. <b>2016</b> , 45, 5455-5473		80	
1951	Self-Powered Piezoionic Strain Sensor toward the Monitoring of Human Activities. <b>2016</b> , 12, 5074-5080		68	
1950	Self-Powered Electrochemical Synthesis of Polypyrrole from the Pulsed Output of a Triboelectric Nanogenerator as a Sustainable Energy System. <b>2016</b> , 26, 3542-3548		75	
1949	Stimulating Acrylic Elastomers by a Triboelectric Nanogenerator <b>T</b> oward Self-Powered Electronic Skin and Artificial Muscle. <b>2016</b> , 26, 4906-4913		73	

1948	Asymmetrical Triboelectric Nanogenerator with Controllable Direct Electrostatic Discharge. <b>2016</b> , 26, 5524-5533	34
1947	Flexible Nanogenerators for Energy Harvesting and Self-Powered Electronics. <b>2016</b> , 28, 4283-305	1065
1946	Triboelectric Nanogenerator Accelerates Highly Efficient Nonviral Direct Conversion and In Vivo Reprogramming of Fibroblasts to Functional Neuronal Cells. <b>2016</b> , 28, 7365-74	70
1945	Silk Nanofiber-Networked Bio-Triboelectric Generator: Silk Bio-TEG. <b>2016</b> , 6, 1502329	138
1944	Lightweight Triboelectric Nanogenerator for Energy Harvesting and Sensing Tiny Mechanical Motion. <b>2016</b> , 26, 4370-4376	49
1943	Self-Powered Electronic Skin with Biotactile Selectivity. <b>2016</b> , 28, 3549-56	80
1942	A Novel Triboelectric Generator Based on the Combination of a Waterwheel-Like Electrode with a Spring Steel Plate For Efficient Harvesting of Low-Velocity Rotational Motion Energy. <b>2016</b> , 2, 1500448	14
1941	Self-Powered Ion Concentration Sensor with Triboelectricity from LiquidBolid Contact Electrification. <b>2016</b> , 2, 1600006	42
1940	Fully Packaged Self-Powered Triboelectric Pressure Sensor Using Hemispheres-Array. <b>2016</b> , 6, 1502566	162
1939	A Triboelectric-Based Artificial Basilar Membrane to Mimic Cochlear Tonotopy. <b>2016</b> , 5, 2481-2487	35
1938	Fabrication of PDMS-based triboelectric nanogenerator for self-sustained power source application. <b>2016</b> , 40, 288-297	31
1937	Triboelectric-Potential-Regulated Charge Transport Through p-n Junctions for Area-Scalable Conversion of Mechanical Energy. <b>2016</b> , 28, 668-76	19
1936	MoS2 Tribotronic Transistor for Smart Tactile Switch. <b>2016</b> , 26, 2104-2109	73
1935	Self-Powered Electrochemistry for the Oxidation of Organic Molecules by a Cross-Linked Triboelectric Nanogenerator. <b>2016</b> , 28, 5188-94	24
1934	A Water-Proof Triboelectric <b>E</b> lectromagnetic Hybrid Generator for Energy Harvesting in Harsh Environments. <b>2016</b> , 6, 1501593	193
1933	Effect of garment design on piezoelectricity harvesting from joint movement. <b>2016</b> , 25, 035012	22
1932	Ar plasma treated polytetrafluoroethylene films for a highly efficient triboelectric generator. <b>2016</b> , 69, 1720-1723	11
1931	Theoretical modelling for enhancing contact-separation triboelectric nanogenerator performance. <b>2016</b> ,	3

1930 Study of Triboelectric Micromechanism for Three Dimensional Energy Harvesting. **2016**, 773, 012069

1929	Predicting the Output of a Triboelectric Energy Harvester Undergoing Mechanical Pressure. <b>2016</b> ,	
1928	A Low Input Current and Wide Conversion Ratio Buck Regulator with 75% Efficiency for High-Voltage Triboelectric Nanogenerators. <b>2016</b> , 6, 19246	14
1927	TriboWalk: triboelectric dual functional wireless system for gait monitoring and energy harvesting. <b>2016</b> , 2016, 4796-4799	2
1926	Charge collection kinetics on ferroelectric polymer surface using charge gradient microscopy. <b>2016</b> , 6, 25087	13
1925	Harvesting the hidden energy for self-powered systems. 2016,	
1924	Effective energy harvesting from a single electrode based triboelectric nanogenerator. <b>2016</b> , 6, 38835	38
1923	The effect of dielectric constant and work function on triboelectric nanogenerators: Analytical and numerical study. <b>2016</b> , 176, 251-256	12
1922	Self-Powered Random Number Generator Based on Coupled Triboelectric and Electrostatic Induction Effects at the Liquid-Dielectric Interface. <b>2016</b> , 10, 11434-11441	23
1921	Model of the triboelectric generator. <b>2016</b> ,	
19 <b>2</b> 0	Flexible fiber-based triboelectric generator for self-powered sensors. <b>2016</b> ,	О
1919	Enhanced triboelectrification of the polydimethylsiloxane surface by ultraviolet irradiation. <b>2016</b> , 108, 133901	24
1918	Theoretical and numerical analysis of triboelectric nanogenerators for self-powered sensors. 2016,	2
1917	Triboelectric generator based on a moving charged bead. <b>2016</b> , 49, 47LT02	5
1916	Deformation of Pyramidal PDMS Stamps During Microcontact Printing. <b>2016</b> , 83,	8
1915	Triboelectric energy harvester with an ultra-thin tribo-dielectric layer by initiated CVD and investigation of underlying physics in the triboelectricity. <b>2016</b> ,	1
1914	Nanoporous-Gold-Based Hybrid Cantilevered Actuator Dealloyed and Driven by A Modified Rotary Triboelectric Nanogenerator. <b>2016</b> , 6, 24092	15
1913	Hybrid energy harvester with simultaneous triboelectric and electromagnetic generation from an embedded floating oscillator in a single package. <i>Nano Energy</i> , <b>2016</b> , 23, 50-59	66

1912	Human Interactive Triboelectric Nanogenerator as a Self-Powered Smart Seat. <b>2016</b> , 8, 9692-9		51
1911	Self-powered electronic-skin for detecting glucose level in body fluid basing on piezo-enzymatic-reaction coupling process. <i>Nano Energy</i> , <b>2016</b> , 26, 148-156	17.1	51
1910	Triboelectric nanogenerator with nanostructured metal surface using water-assisted oxidation. <i>Nano Energy</i> , <b>2016</b> , 21, 258-264	17.1	42
1909	Force-pad made from contact-electrification poly(ethylene oxide)/InSb field-effect transistor. <i>Nano Energy</i> , <b>2016</b> , 22, 468-474	17.1	22
1908	Theoretical study on rotary-sliding disk triboelectric nanogenerators in contact and non-contact modes. <b>2016</b> , 9, 1057-1070		56
1907	A Flexible and Transparent Graphene-Based Triboelectric Nanogenerator. <b>2016</b> , 15, 435-441		31
1906	Rolling Friction Enhanced Free-Standing Triboelectric Nanogenerators and their Applications in Self-Powered Electrochemical Recovery Systems. <b>2016</b> , 26, 1054-1062		74
1905	Controlled synthesis of Se-supported Au/Pd nanoparticles with photo-assisted electrocatalytic activity and their application in self-powered sensing systems. <i>Nano Energy</i> , <b>2016</b> , 22, 564-571	17.1	33
1904	Paper-Based Triboelectric Nanogenerators Made of Stretchable Interlocking Kirigami Patterns. <b>2016</b> , 10, 4652-9		160
1903	Wearable Self-Charging Power Textile Based on Flexible Yarn Supercapacitors and Fabric Nanogenerators. <b>2016</b> , 28, 98-105		608
1902	Harvesting Low-Frequency (. <b>2016</b> , 10, 4797-805		419
1901	Multilayered electret films based triboelectric nanogenerator. <b>2016</b> , 9, 1442-1451		109
1900	Theoretical Study of Triboelectric-Potential Gated/Driven Metal-Oxide-Semiconductor Field-Effect Transistor. <b>2016</b> , 10, 4395-402		29
1899	Heterogeneity of surface potential in contact electrification under ambient conditions: A comparison of pre- and post-contact states. <b>2016</b> , 81, 76-81		11
1898	Linear-grating hybridized electromagnetic-triboelectric nanogenerator for sustainably powering portable electronics. <b>2016</b> , 9, 974-984		35
1897	Dynamic Behavior of the Triboelectric Charges and Structural Optimization of the Friction Layer for a Triboelectric Nanogenerator. <b>2016</b> , 10, 6131-8		190
1896	All-in-one energy harvesting and storage devices. <b>2016</b> , 4, 7983-7999		195
1895	Triboelectric and Piezoelectric Effects in a Combined Tribo-Piezoelectric Nanogenerator Based on an Interfacial ZnO Nanostructure. <b>2016</b> , 26, 8194-8201		63

1894	Triboelectrification. <b>2016</b> , 1-19		8
1893	Ergonomically designed replaceable and multifunctional triboelectric nanogenerator for a uniform contact. <b>2016</b> , 6, 88526-88530		15
1892	Statistically Analyzed Photoresponse of Elastically Bent CdS Nanowires Probed by Light-Compatible In Situ High-Resolution TEM. <b>2016</b> , 16, 6008-6013		24
1891	Self-powered electro-coagulation system driven by a wind energy harvesting triboelectric nanogenerator for decentralized water treatment. <i>Nano Energy</i> , <b>2016</b> , 28, 288-295	17.1	46
1890	Enhanced triboelectric charge through a facile hydrothermal treatment of electrode. <b>2016</b> , 16, 1364-136	8	4
1889	Robust Multilayered Encapsulation for High-Performance Triboelectric Nanogenerator in Harsh Environment. <b>2016</b> , 8, 26697-26703		59
1888	Energy Harvesters for Wearable and Stretchable Electronics: From Flexibility to Stretchability. <b>2016</b> , 28, 9881-9919		309
1887	Triboelectric nanogenerators and power-boards from cellulose nanofibrils and recycled materials.  Nano Energy, <b>2016</b> , 30, 103-108	17.1	121
1886	Experimental verification for a theoretical model of contact-mode triboelectric nano-generators. <b>2016</b> ,		
	Debugh desires of the control of six also also the desired TENC for an thorough the desired by the idian d		
1885	Robust design of unearthed single-electrode TENG from three-dimensionally hybridized copper/polydimethylsiloxane film. <i>Nano Energy</i> , <b>2016</b> , 30, 155-161	17.1	34
1885	copper/polydimethylsiloxane film. <i>Nano Energy</i> , <b>2016</b> , 30, 155-161  Transparent triboelectric generators based on glass and polydimethylsiloxane. <i>Nano Energy</i> , <b>2016</b> ,	17.1 17.1	34 40
1884	copper/polydimethylsiloxane film. <i>Nano Energy</i> , <b>2016</b> , 30, 155-161  Transparent triboelectric generators based on glass and polydimethylsiloxane. <i>Nano Energy</i> , <b>2016</b> ,	<u> </u>	
1884	copper/polydimethylsiloxane film. <i>Nano Energy</i> , <b>2016</b> , 30, 155-161  Transparent triboelectric generators based on glass and polydimethylsiloxane. <i>Nano Energy</i> , <b>2016</b> , 30, 235-241  Triboelectricity Generation from Vertically Aligned Carbon Nanotube Arrays. <b>2016</b> , 8, 27454-27457	<u> </u>	40
1884	copper/polydimethylsiloxane film. <i>Nano Energy</i> , <b>2016</b> , 30, 155-161  Transparent triboelectric generators based on glass and polydimethylsiloxane. <i>Nano Energy</i> , <b>2016</b> , 30, 235-241  Triboelectricity Generation from Vertically Aligned Carbon Nanotube Arrays. <b>2016</b> , 8, 27454-27457	<u> </u>	40
1884 1883 1882	copper/polydimethylsiloxane film. <i>Nano Energy</i> , <b>2016</b> , 30, 155-161  Transparent triboelectric generators based on glass and polydimethylsiloxane. <i>Nano Energy</i> , <b>2016</b> , 30, 235-241  Triboelectricity Generation from Vertically Aligned Carbon Nanotube Arrays. <b>2016</b> , 8, 27454-27457  High performance triboelectric nanogenerators with aligned carbon nanotubes. <b>2016</b> , 8, 18489-18494  Hierarchical structured polymers for light-absorption enhancement of silicon-based solar power systems. <b>2016</b> , 6, 55159-55166  Performance-enhanced triboelectric nanogenerator using the glass transition of polystyrene. <i>Nano</i>	<u> </u>	40 18 75
1884 1883 1882	copper/polydimethylsiloxane film. <i>Nano Energy</i> , <b>2016</b> , 30, 155-161  Transparent triboelectric generators based on glass and polydimethylsiloxane. <i>Nano Energy</i> , <b>2016</b> , 30, 235-241  Triboelectricity Generation from Vertically Aligned Carbon Nanotube Arrays. <b>2016</b> , 8, 27454-27457  High performance triboelectric nanogenerators with aligned carbon nanotubes. <b>2016</b> , 8, 18489-18494  Hierarchical structured polymers for light-absorption enhancement of silicon-based solar power systems. <b>2016</b> , 6, 55159-55166  Performance-enhanced triboelectric nanogenerator using the glass transition of polystyrene. <i>Nano</i>	17.1	40 18 75
1884 1883 1882 1881	copper/polydimethylsiloxane film. <i>Nano Energy</i> , <b>2016</b> , 30, 155-161  Transparent triboelectric generators based on glass and polydimethylsiloxane. <i>Nano Energy</i> , <b>2016</b> , 30, 235-241  Triboelectricity Generation from Vertically Aligned Carbon Nanotube Arrays. <b>2016</b> , 8, 27454-27457  High performance triboelectric nanogenerators with aligned carbon nanotubes. <b>2016</b> , 8, 18489-18494  Hierarchical structured polymers for light-absorption enhancement of silicon-based solar power systems. <b>2016</b> , 6, 55159-55166  Performance-enhanced triboelectric nanogenerator using the glass transition of polystyrene. <i>Nano Energy</i> , <b>2016</b> , 27, 306-312	17.1	40 18 75 10 23

1876	A Stretchable Nanogenerator with Electric/Light Dual-Mode Energy Conversion. 2016, 6, 1600829		62
1875	Nanopillar Arrayed Triboelectric Nanogenerator as a Self-Powered Sensitive Sensor for a Sleep Monitoring System. <b>2016</b> , 10, 8097-103		99
1874	High-performance triboelectric nanogenerators with artificially well-tailored interlocked interfaces. <i>Nano Energy</i> , <b>2016</b> , 27, 595-601	17.1	45
1873	Self-Powered Triboelectric Micro Liquid/Gas Flow Sensor for Microfluidics. <b>2016</b> , 10, 8104-12		98
1872	Transparent and Flexible Self-Charging Power Film and Its Application in a Sliding Unlock System in Touchpad Technology. <b>2016</b> , 10, 8078-86		75
1871	Double-induced-mode integrated triboelectric nanogenerator based on spring steel to maximize space utilization. <b>2016</b> , 9, 3355-3363		25
1870	Figures-of-Merit for Rolling-Friction-Based Triboelectric Nanogenerators. <b>2016</b> , 1, 1600017		24
1869	Tribotronic Enhanced Photoresponsivity of a MoS Phototransistor. <b>2016</b> , 3, 1500419		54
1868	Triboelectric Nanogenerators Driven Self-Powered Electrochemical Processes for Energy and Environmental Science. <b>2016</b> , 6, 1600665		300
1867	Triboelectric Nanogenerator: Lateral Sliding Mode. <b>2016</b> , 49-90		7
1866	A size-unlimited surface microstructure modification method for achieving high performance triboelectric nanogenerator. <i>Nano Energy</i> , <b>2016</b> , 28, 172-178	17.1	93
1865	Self-powered Sensing for Chemical and Environmental Detection. <b>2016</b> , 469-489		
1864	Surface charge self-recovering electret film for wearable energy conversion in a harsh environment. <b>2016</b> , 9, 3085-3091		85
1863	Charging System Optimization of Triboelectric Nanogenerator for Water Wave Energy Harvesting and Storage. <b>2016</b> , 8, 21398-406		56
1862	High-throughput rod-induced electrospinning. <b>2016</b> , 49, 365302		13
1861	Integrated self-charging power unit with flexible supercapacitor and triboelectric nanogenerator. <b>2016</b> , 4, 14298-14306		91
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1860	3D Carbon Electrode Based Triboelectric Nanogenerator. <b>2016</b> , 1, 1600160		13

1858	Mechanically Robust Silver Nanowires Network for Triboelectric Nanogenerators. 2016, 26, 7717-7724	57
1857	Investigation of motion artifacts for biopotential measurement in wearable devices. 2016,	4
1856	Electrochemical oxidation degradation of azobenzene dye self-powered by multilayer-linkage triboelectric nanogenerator. <i>Nano Energy</i> , <b>2016</b> , 30, 52-58	25
1855	A Facile Approach To Develop a Highly Stretchable PVC/ZnSnO3 Piezoelectric Nanogenerator with High Output Power Generation for Powering Portable Electronic Devices. <b>2016</b> , 55, 10671-10680	53
1854	Triboelectrification-Induced Large Electric Power Generation from a Single Moving Droplet on Graphene/Polytetrafluoroethylene. <b>2016</b> , 10, 7297-302	112
1853	On the contact behavior of micro-/nano-structured interface used in vertical-contact-mode triboelectric nanogenerators. <i>Nano Energy</i> , <b>2016</b> , 27, 68-77	54
1852	Tribotronics new field by coupling triboelectricity and semiconductor. 2016, 11, 521-536	82
1851	Triboelectric Nanogenerators for Blue Energy Harvesting. <b>2016</b> , 10, 6429-32	143
1850	Wind-blown Sand Electrification Inspired Triboelectric Energy Harvesting Based on Homogeneous Inorganic Materials Contact: A Theoretical Study and Prediction. <b>2016</b> , 6, 19912	5
1849	Self-Powered, Wireless, Remote Meteorologic Monitoring Based on Triboelectric Nanogenerator Operated by Scavenging Wind Energy. <b>2016</b> , 8, 32649-32654	51
1848	A flexible and biocompatible triboelectric nanogenerator with tunable internal resistance for powering wearable devices. <b>2016</b> , 6, 22233	96
1847	Tribotronic Transistor Array as an Active Tactile Sensing System. <b>2016</b> , 10, 10912-10920	80
1846	All-in-One Shape-Adaptive Self-Charging Power Package for Wearable Electronics. <b>2016</b> , 10, 10580-10588	230
1845	Large Scale Triboelectric Nanogenerator and Self-Powered Pressure Sensor Array Using Low Cost Roll-to-Roll UV Embossing. <b>2016</b> , 6, 22253	87
1844	Hydrophobic SiO2 Electret Enhances the Performance of Poly(vinylidene fluoride) Nanofiber-Based Triboelectric Nanogenerator. <b>2016</b> , 120, 26600-26608	20
1843	Enhancement of piezoelectric perfermance of ZnO based nanogenerator and related applications. <b>2016</b> ,	
1842	Effective energy storage from a triboelectric nanogenerator. <b>2016</b> , 7, 10987	310
1841	Boosted output performance of triboelectric nanogenerator via electric double layer effect. <b>2016</b> , 7, 12985	267

1840	High performance triboelectric nanogenerators based on phase-inversion piezoelectric membranes of poly(vinylidene fluoride)-zinc stannate (PVDF-ZnSnO3) and polyamide-6 (PA6). <i>Nano Energy</i> , <b>2016</b> , 30, 470-480	17.1	97
1839	Flexible microfluidics nanogenerator based on the electrokinetic conversion. <i>Nano Energy</i> , <b>2016</b> , 30, 684-690	17.1	36
1838	A flexible triboelectric-piezoelectric hybrid nanogenerator based on P(VDF-TrFE) nanofibers and PDMS/MWCNT for wearable devices. <b>2016</b> , 6, 36409		137
1837	All-Plastic-Materials Based Self-Charging Power System Composed of Triboelectric Nanogenerators and Supercapacitors. <b>2016</b> , 26, 1070-1076		152
1836	Triboelectric Nanogenerators Based on Melamine and Self-Powered High-Sensitive Sensors for Melamine Detection. <b>2016</b> , 26, 3029-3035		36
1835	Controllable Charge Transfer by Ferroelectric Polarization Mediated Triboelectricity. <b>2016</b> , 26, 3067-30	73	65
1834	A Packaged Self-Powered System with Universal Connectors Based on Hybridized Nanogenerators. <b>2016</b> , 28, 846-52		80
1833	Self-Powered High-Resolution and Pressure-Sensitive Triboelectric Sensor Matrix for Real-Time Tactile Mapping. <b>2016</b> , 28, 2896-903		268
1832	Sandwiched Composite Fluorocarbon Film for Flexible Electret Generator. <b>2016</b> , 2, 1500408		38
1831	Surface dipole enhanced instantaneous charge pair generation in triboelectric nanogenerator. <i>Nano Energy</i> , <b>2016</b> , 26, 360-370	17.1	43
1830	Integrated multi-unit transparent triboelectric nanogenerator harvesting rain power for driving electronics. <i>Nano Energy</i> , <b>2016</b> , 25, 18-25	17.1	73
1829	Magneto-Thermo-Triboelectric Generator (MTTG) for thermal energy harvesting. 2016,		
1828	Flexible, transparent and high-power triboelectric generator with asymmetric graphene/ITO electrodes. <b>2016</b> , 27, 30LT01		10
1827	Fully enclosed hybrid electromagnetic <b>E</b> riboelectric nanogenerator to scavenge vibrational energy. <b>2016</b> , 9, 2226-2233		64
1826	Tactic, reactive, and functional droplets outside of equilibrium. <b>2016</b> , 45, 4766-96		52
1825	In Vivo Self-Powered Wireless Cardiac Monitoring via Implantable Triboelectric Nanogenerator. <b>2016</b> , 10, 6510-8		248
1824	Hybridized nanogenerator for simultaneously scavenging mechanical and thermal energies by electromagnetic-triboelectric-thermoelectric effects. <i>Nano Energy</i> , <b>2016</b> , 26, 164-171	17.1	130
1823	Triboelectric motion sensor combined with electromagnetic induction energy harvester. <b>2016</b> , 246, 66-	72	13

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1822	Magnetic-Assisted Noncontact Triboelectric Nanogenerator Converting Mechanical Energy into Electricity and Light Emissions. <b>2016</b> , 28, 2744-51		107
1821	A Triboelectric Sponge Fabricated from a Cube Sugar Template by 3D Soft Lithography for Superhydrophobicity and Elasticity. <b>2016</b> , 2, 1500331		52
1820	Triboelectric generator for wearable devices fabricated using a casting method. <b>2016</b> , 6, 10094-10098		17
1819	A silk-fibroin-based transparent triboelectric generator suitable for autonomous sensor network. <i>Nano Energy</i> , <b>2016</b> , 20, 37-47	17.1	96
1818	High output polypropylene nanowire array triboelectric nanogenerator through surface structural control and chemical modification. <i>Nano Energy</i> , <b>2016</b> , 19, 48-57	17.1	104
1817	Micro/Nano Integrated Fabrication Technology and Its Applications in Microenergy Harvesting. <b>2016</b> ,		4
1816	Improvement in the Piezoelectric Performance of a ZnO Nanogenerator by a Combination of Chemical Doping and Interfacial Modification. <b>2016</b> , 120, 6971-6977		60
1815	Conductive Fabric-Based Stretchable Hybridized Nanogenerator for Scavenging Biomechanical Energy. <b>2016</b> , 10, 4728-34		68
1814	Efficient Charging of Li-Ion Batteries with Pulsed Output Current of Triboelectric Nanogenerators. <b>2016</b> , 3, 1500255		98
1813	Flexible Organic Tribotronic Transistor Memory for a Visible and Wearable Touch Monitoring System. <b>2016</b> , 28, 106-10		84
1812	Protein-based contact electrification and its uses for mechanical energy harvesting and humidity detecting. <i>Nano Energy</i> , <b>2016</b> , 21, 238-246	17.1	75
1811	A self-powered active hydrogen gas sensor with fast response at room temperature based on triboelectric effect. <b>2016</b> , 231, 601-608		53
1810	A triboelectric textile templated by a three-dimensionally penetrated fabric. <b>2016</b> , 4, 6077-6083		48
1809	Multilayer wavy-structured robust triboelectric nanogenerator for harvesting water wave energy. <i>Nano Energy</i> , <b>2016</b> , 22, 87-94	17.1	121
1808	A three-dimensional integrated nanogenerator for effectively harvesting sound energy from the environment. <b>2016</b> , 8, 4938-44		55
1807	A ball-bearing structured triboelectric nanogenerator for nondestructive damage and rotating speed measurement. <b>2016</b> , 27, 085401		28
1806	Molecular surface functionalization to enhance the power output of triboelectric nanogenerators. <b>2016</b> , 4, 3728-3734		177
1805	Electromechanical behavior of a pendulum-based piezoelectric frequency up-converting energy harvester. <b>2016</b> , 370, 280-305		32

1804	Improving the surface charge density of a contact-separation-based triboelectric nanogenerator by modifying the surface morphology. <b>2016</b> , 159, 102-107		50
1803	Penciling a triboelectric power source on paper. <b>2016</b> ,		2
1802	A flexible and wearable generator with fluorocarbon plasma induced wrinkle structure. <b>2016</b> ,		3
1801	A single-electrode wearable triboelectric nanogenerator based on conductive & stretchable fabric. <b>2016</b> ,		10
1800	Triboelectric Power Generation from Paper Vibration Induced by Sonic Waves. <b>2016</b> , 3, 189-196		
1799	Chemical modification of polymer surfaces for advanced triboelectric nanogenerator development. <b>2016</b> , 9, 514-530		107
1798	Triboelectric Nanogenerator as a Self-Powered Communication Unit for Processing and Transmitting Information. <b>2016</b> , 10, 3944-50		47
1797	Triboelectric Nanogenerator Based on the Internal Motion of Powder with a Package Structure Design. <b>2016</b> , 10, 1017-24		39
1796	Force-assembled triboelectric nanogenerator with high-humidity-resistant electricity generation using hierarchical surface morphology. <i>Nano Energy</i> , <b>2016</b> , 20, 283-293	17.1	77
1795	Self-packaging elastic bellows-type triboelectric nanogenerator. <i>Nano Energy</i> , <b>2016</b> , 20, 84-93	17.1	34
1794	Electrochemically driven mechanical energy harvesting. <b>2016</b> , 7, 10146		103
1793	Introduction. <b>2016</b> , 1-21		
1792	Flexible Triboelectric Nanogenerators: Principle and Fabrication. <b>2016</b> , 75-91		
1791	Lattice Strain Induced Remarkable Enhancement in Piezoelectric Performance of ZnO-Based Flexible Nanogenerators. <b>2016</b> , 8, 1381-7		102
1790	High-output current density of the triboelectric nanogenerator made from recycling rice husks. <i>Nano Energy</i> , <b>2016</b> , 19, 39-47	17.1	50
1789	Ag Nanowires Single Electrode Triboelectric Nanogenerator and Its Angle Sensors. <b>2016</b> , 3, 91-99		3
1788	An intelligent skin based self-powered finger motion sensor integrated with triboelectric nanogenerator. <i>Nano Energy</i> , <b>2016</b> , 19, 532-540	17.1	147
1787	A self-powered sensor with super-hydrophobic nanostructure surfaces for synchronous detection and electricity generation. <i>Nano Energy</i> , <b>2017</b> , 33, 288-292	17.1	19

1786	Atomic Layer Deposition for Advanced Electrode Design in Photoelectrochemical and Triboelectric Systems. <b>2017</b> , 4, 1600835		4
1785	Breath Figure Micromolding Approach for Regulating the Microstructures of Polymeric Films for Triboelectric Nanogenerators. <b>2017</b> , 9, 4988-4997		47
1784	Bacterial Nano-Cellulose Triboelectric Nanogenerator. <i>Nano Energy</i> , <b>2017</b> , 33, 130-137	.1	142
1783	On Maxwell's displacement current for energy and sensors: the origin of nanogenerators. <b>2017</b> , 20, 74-82		969
1782	Full Dynamic-Range Pressure Sensor Matrix Based on Optical and Electrical Dual-Mode Sensing. <b>2017</b> , 29, 1605817		129
1781	Self-Powered Electrochemical Oxidation of 4-Aminoazobenzene Driven by a Triboelectric Nanogenerator. <b>2017</b> , 11, 770-778		40
1780	Triboelectric Nanogenerators Based on Fluorinated Wasted Rubber Powder for Self-Powering Application. <b>2017</b> , 5, 1957-1964		27
1779	A Self-Powered Implantable Drug-Delivery System Using Biokinetic Energy. <b>2017</b> , 29, 1605668		89
1778	A sustainable freestanding biomechanical energy harvesting smart backpack as a portable-wearable power source. <b>2017</b> , 5, 1488-1493		46
1777	Modeling of a nanoscale flexoelectric energy harvester with surface effects. <b>2017</b> , 88, 125-132		39
1776	Penciling a triboelectric nanogenerator on paper for autonomous power MEMS applications. <i>Nano Energy</i> , <b>2017</b> , 33, 393-401	.1	95
1775	Rotating Triboelectric Generator Using Sliding Contact and Noncontact from 1D Fiber Friction.  Nano Energy, <b>2017</b> , 33, 184-194	.1	23
1774	Development of battery-free neural interface and modulated control of tibialis anterior muscle via common peroneal nerve based on triboelectric nanogenerators (TENGs). <i>Nano Energy</i> , <b>2017</b> , 33, 1-11	.1	85
1773	Self-powered wireless smart patch for healthcare monitoring. <i>Nano Energy</i> , <b>2017</b> , 32, 479-487	.1	73
1772	Magnetically levitated-triboelectric nanogenerator as a self-powered vibration monitoring sensor.  Nano Energy, <b>2017</b> , 33, 88-97	.1	46
1771	Comb-shaped electrode-based triboelectric nanogenerators for bi-directional mechanical energy harvesting. <b>2017</b> , 174, 46-51		6
1770	Enhancement of output performance through post-poling technique on BaTiO/PDMS-based triboelectric nanogenerator. <b>2017</b> , 28, 075203		19
1769	Electronic Devices for Human-Machine Interfaces. <b>2017</b> , 4, 1600709		52

1768	A prototype DC triboelectric generator for harvesting energy from natural environment. <b>2017</b> , 86, 34-40		6
1767	Triboelectric nanogenerator based on 317L stainless steel and ethyl cellulose for biomedical applications. <b>2017</b> , 7, 6772-6779		40
1766	Controlled fabrication of nanoscale wrinkle structure by fluorocarbon plasma for highly transparent triboelectric nanogenerator. <b>2017</b> , 3, 16074		41
1765	Environmental life cycle assessment and techno-economic analysis of triboelectric nanogenerators. <b>2017</b> , 10, 653-671		90
1764	Multifunctional TENG for Blue Energy Scavenging and Self-Powered Wind-Speed Sensor. <b>2017</b> , 7, 1602397	,	196
1763	Evolutionary trend analysis of nanogenerator research based on a novel perspective of phased bibliographic coupling. <i>Nano Energy</i> , <b>2017</b> , 34, 93-102	7.1	64
1762	A Flexible PMN-PT Ribbon-Based Piezoelectric-Pyroelectric Hybrid Generator for Human-Activity Energy Harvesting and Monitoring. <b>2017</b> , 3, 1600540		49
1761	Electrospun polyetherimide electret nonwoven for bi-functional smart face mask. <i>Nano Energy</i> , <b>2017</b> , 34, 562-569	'.1	73
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1759	Self-powered transparent glass-based single electrode triboelectric motion tracking sensor array.  Nano Energy, <b>2017</b> , 34, 442-448	7.1	28
1758	Chemical Electrostatics. 2017,		15
1757	Service Behavior of Multifunctional Triboelectric Nanogenerators. <b>2017</b> , 29, 1606703		88
1756	MEMS/NEMS-Enabled Vibrational Energy Harvesting for Self-Powered and Wearable Electronics. <b>2017</b> , 271-297		1
1755	Freestanding solid-state micro-supercapacitor based on laser-patterned nanofibers. 2017,		
1754	Realization of triboelectric energy harvesters using steel-polymer microfabrication methods. 2017,		4
1753	Triboelectrification based active sensor for liquid flow and bubble detetecting. 2017,		1
1752	Mechanics of Crystalline Nanowires: An Experimental Perspective. 2017, 69,		34
1751	Aerodynamic and aeroelastic flutters driven triboelectric nanogenerators for harvesting broadband airflow energy. <i>Nano Energy</i> , <b>2017</b> , 33, 476-484	7.1	58

1750	Broadband Energy Harvester Using Non-linear Polymer Spring and Electromagnetic/Triboelectric Hybrid Mechanism. <b>2017</b> , 7, 41396	82	
1749	Mechanical, Thermal, and Electrical Energy Storage in a Single Working Body: Electrification and Thermal Effects upon Pressure-Induced Water Intrusion-Extrusion in Nanoporous Solids. <b>2017</b> , 9, 7044-7049	17	
1748	Self-powered triboelectric nano vibration accelerometer based wireless sensor system for railway state health monitoring. <i>Nano Energy</i> , <b>2017</b> , 34, 549-555	42	
1747	Enhanced performance of ZnO microballoon arrays for a triboelectric nanogenerator. <b>2017</b> , 28, 135401	23	
1746	Smart network node based on hybrid nanogenerator for self-powered multifunctional sensing.  Nano Energy, <b>2017</b> , 33, 418-426	64	
1745	Novel high-performance self-powered humidity detection enabled by triboelectric effect. <b>2017</b> , 251, 144-152	102	
1744	Ultralight Cut-Paper-Based Self-Charging Power Unit for Self-Powered Portable Electronic and Medical Systems. <b>2017</b> , 11, 4475-4482	164	
1743	Transfer-printable micropatterned fluoropolymer-based triboelectric nanogenerator. <i>Nano Energy</i> , <b>2017</b> , 36, 126-133	37	
1742	Coating TiO2 nanoparticles on the surface of transparent plastic granules using combined electrostatic and heating methods for the photocatalytic degradation of organic pollutants in water. <b>2017</b> , 8, 1-10	8	
1741	Antibacterial triboelectric membrane-based highly-efficient self-charging supercapacitors. <i>Nano Energy</i> , <b>2017</b> , 36, 30-37	27	
1740	Triboelectric Nanogenerator Using Microdome-Patterned PDMS as a Wearable Respiratory Energy Harvester. <b>2017</b> , 2, 1700014	25	
1739	Crumpled Graphene Triboelectric Nanogenerators: Smaller Devices with Higher Output Performance. <b>2017</b> , 2, 1700044	49	
1738	Research Update: Nanogenerators for self-powered autonomous wireless sensors. <b>2017</b> , 5, 073803	31	
1737	A smart mobile pouch as a biomechanical energy harvester towards self-powered smart wireless power transfer applications. <b>2017</b> , 9, 9818-9824	37	
1736	Potential role of motion for enhancing maximum output energy of triboelectric nanogenerator. <b>2017</b> , 5, 074107	23	
1735	Universal power management strategy for triboelectric nanogenerator. <i>Nano Energy</i> , <b>2017</b> , 37, 168-176 <sub>17.1</sub>	219	
1734	Corrugated Textile based Triboelectric Generator for Wearable Energy Harvesting. 2017, 7, 45583	53	
1733	Zinc oxide piezoelectric nano-generators for low frequency applications. <b>2017</b> , 32, 064005	35	

1732	Progress in triboelectric nanogenerators as self-powered smart sensors. <b>2017</b> , 32, 1628-1646		116
1731	Nanogenerators for Self-Powered Gas Sensing. <b>2017</b> , 9, 45		91
1730	Electrocatalytic oxygen evolution reaction for energy conversion and storage: A comprehensive review. <i>Nano Energy</i> , <b>2017</b> , 37, 136-157	17.1	86o
1729	Maximized Effective Energy Output of Contact-Separation-Triggered Triboelectric Nanogenerators as Limited by Air Breakdown. <b>2017</b> , 27, 1700049		90
1728	WGUs sensor based on integrated wind-induced generating units for 360° wind energy harvesting and self-powered wind velocity sensing. <b>2017</b> , 7, 23208-23214		8
1727	Research Update: Hybrid energy devices combining nanogenerators and energy storage systems for self-charging capability. <b>2017</b> , 5, 073804		46
1726	Interdigital electrode based triboelectric nanogenerator for effective energy harvesting from water. <i>Nano Energy</i> , <b>2017</b> , 36, 233-240	17.1	68
1725	A triboelectric charge top-gated graphene transistor. <b>2017</b> , 73, 33-38		5
1724	Flexible transparent tribotronic transistor for active modulation of conventional electronics. <i>Nano Energy</i> , <b>2017</b> , 31, 533-540	17.1	49
1723	Energy conversion technologies towards self-powered electrochemical energy storage systems: the state of the art and perspectives. <b>2017</b> , 5, 1873-1894		88
1722	Hydroelectric generator from transparent flexible zinc oxide nanofilms. <i>Nano Energy</i> , <b>2017</b> , 32, 125-129	17.1	29
1721	Chemically Functionalized Natural Cellulose Materials for Effective Triboelectric Nanogenerator Development. <b>2017</b> , 27, 1700794		147
1720	3D printed noise-cancelling triboelectric nanogenerator. <i>Nano Energy</i> , <b>2017</b> , 38, 377-384	17.1	32
1719	A new protocol toward high output TENG with polyimide as charge storage layer. <i>Nano Energy</i> , <b>2017</b> , 38, 467-476	17.1	78
1718	Mechanics of electrochemically driven mechanical energy harvesting. 2017, 15, 78-82		5
1717	Piezoelectric peptide-based nanogenerator enhanced by single-electrode triboelectric nanogenerator. <b>2017</b> , 5, 074108		34
1716	Flexible PET/EVA-based piezoelectret generator for energy harvesting in harsh environments. <i>Nano Energy</i> , <b>2017</b> , 37, 268-274	17.1	49
1715	Portable triboelectric based wind energy harvester for low power applications. <b>2017</b> , 132, 1		14

1714	A Self-Powered Dynamic Displacement Monitoring System Based on Triboelectric Accelerometer. <b>2017</b> , 7, 1700565		75
1713	Hourglass Triboelectric Nanogenerator as a Direct Current[Power Source. 2017, 7, 1700644		26
1712	A study of sustainable green current generated by the fluid-based triboelectric nanogenerator (FluTENG) with a comparison of contact and sliding mode. <i>Nano Energy</i> , <b>2017</b> , 38, 447-456	17.1	25
1711	Supramolecular-Assembled Nanoporous Film with Switchable Metal Salts for a Triboelectric Nanogenerator. <b>2017</b> , 27, 1701367		17
1710	Multifunctional Textile for Energy Harvesting and Self-Powered Sensing Applications. 2017, 77, 47-50		1
1709	High efficient harvesting of underwater ultrasonic wave energy by triboelectric nanogenerator. <i>Nano Energy</i> , <b>2017</b> , 38, 101-108	17.1	102
1708	All flexible electrospun papers based self-charging power system. <i>Nano Energy</i> , <b>2017</b> , 38, 210-217	17.1	78
1707	Formation of Triboelectric Series via Atomic-Level Surface Functionalization for Triboelectric Energy Harvesting. <b>2017</b> , 11, 6131-6138		109
1706	Lignin biopolymer based triboelectric nanogenerators. <b>2017</b> , 5, 074109		29
1705	Ultrastretchable, transparent triboelectric nanogenerator as electronic skin for biomechanical energy harvesting and tactile sensing. <b>2017</b> , 3, e1700015		674
1704	A multi-dielectric-layered triboelectric nanogenerator as energized by corona discharge. <b>2017</b> , 9, 9668-9	675	48
1703	A new class of flexible nanogenerators consisting of porous aerogel films driven by mechanoradicals. <i>Nano Energy</i> , <b>2017</b> , 38, 401-411	17.1	39
1702	A smart pipet tip: Triboelectricity and thermoelectricity assisted in situ evaluation of electrolyte concentration. <i>Nano Energy</i> , <b>2017</b> , 38, 419-427	17.1	23
1701	Binary Compound Bilayer and Multilayer with Vertical Polarizations: Two-Dimensional Ferroelectrics, Multiferroics, and Nanogenerators. <b>2017</b> , 11, 6382-6388		119
1700	Light-transformable and -healable triboelectric nanogenerators. <i>Nano Energy</i> , <b>2017</b> , 38, 412-418	17.1	20
1699	High efficiency power management and charge boosting strategy for a triboelectric nanogenerator. <i>Nano Energy</i> , <b>2017</b> , 38, 438-446	17.1	127
1698	Cam-based sustainable triboelectric nanogenerators with a resolution-free 3D-printed system. <i>Nano Energy</i> , <b>2017</b> , 38, 326-334	17.1	39
1697	Effect of argon plasma treatment on the output performance of triboelectric nanogenerator. <b>2017</b> , 412, 350-356		48

1696	Magnetic force driven noncontact electromagnetic-triboelectric hybrid nanogenerator for scavenging biomechanical energy. <i>Nano Energy</i> , <b>2017</b> , 35, 233-241	17.1	79
1695	Research Update: Recent progress in the development of effective dielectrics for high-output triboelectric nanogenerator. <b>2017</b> , 5, 073802		38
1694	Research Update: Materials design of implantable nanogenerators for biomechanical energy harvesting. <b>2017</b> , 5,		51
1693	Recent Progress on Piezoelectric and Triboelectric Energy Harvesters in Biomedical Systems. <b>2017</b> , 4, 1700029		298
1692	Synergetic effects in composite-based flexible hybrid mechanical energy harvesting generator. <b>2017</b> , 5, 9113-9121		38
1691	Forecasting potential sensor applications of triboelectric nanogenerators through tech mining. <i>Nano Energy</i> , <b>2017</b> , 35, 358-369	17.1	19
1690	Triboelectric Nanogenerator Powered Electrochemical Degradation of Organic Pollutant Using Pt-Free Carbon Materials. <b>2017</b> , 11, 3965-3972		67
1689	Direct-laser-patterned friction layer for the output enhancement of a triboelectric nanogenerator. <i>Nano Energy</i> , <b>2017</b> , 35, 379-386	17.1	48
1688	A flat-panel-shaped hybrid piezo/triboelectric nanogenerator for ambient energy harvesting. <b>2017</b> , 28, 175402		34
1687	Self-Powered Electrostatic Actuation Systems for Manipulating the Movement of both Microfluid and Solid Objects by Using Triboelectric Nanogenerator. <b>2017</b> , 27, 1606408		66
1686	Nanogenerators: An emerging technology towards nanoenergy. <b>2017</b> , 5, 074103		121
1685	Antibacterial Composite Film-Based Triboelectric Nanogenerator for Harvesting Walking Energy. <b>2017</b> , 9, 11882-11888		81
1684	Tribogenerators. <b>2017</b> , 157-168		
1683	Omnidirectional Bending and Pressure Sensor Based on Stretchable CNT-PU Sponge. <b>2017</b> , 27, 1604434		106
1682	Multilayered flexible nanocomposite for hybrid nanogenerator enabled by conjunction of piezoelectricity and triboelectricity. <b>2017</b> , 10, 785-793		37
1681	Tribotronic Tuning Diode for Active Analog Signal Modulation. <b>2017</b> , 11, 882-888		27
1680	Flexible Triboelectric Nanogenerator Based on Carbon Nanotubes for Self-Powered Weighing . <b>2017</b> , 19, 1600710		30
1679	Large-sized sandpaper coated with solution-processed aluminum for a triboelectric nanogenerator with reliable durability. <b>2017</b> , 7, 137-144		16

1678	Stack/flutter-driven self-retracting triboelectric nanogenerator for portable electronics. <i>Nano Energy</i> , <b>2017</b> , 31, 525-532	17.1	28
1677	Hysteretic behavior of contact force response in triboelectric nanogenerator. <i>Nano Energy</i> , <b>2017</b> , 32, 408-413	17.1	31
1676	A spring-based resonance coupling for hugely enhancing the performance of triboelectric nanogenerators for harvesting low-frequency vibration energy. <i>Nano Energy</i> , <b>2017</b> , 32, 287-293	17.1	124
1675	Spring-assisted triboelectric nanogenerator for efficiently harvesting water wave energy. <i>Nano Energy</i> , <b>2017</b> , 31, 560-567	17.1	134
1674	Single- and few-layers MoS 2 nanocomposite as piezo-catalyst in dark and self-powered active sensor. <i>Nano Energy</i> , <b>2017</b> , 31, 575-581	17.1	96
1673	A Highly Stretchable Fiber-Based Triboelectric Nanogenerator for Self-Powered Wearable Electronics. <b>2017</b> , 27, 1604378		230
1672	A wave-shaped hybrid piezoelectric and triboelectric nanogenerator based on P(VDF-TrFE) nanofibers. <b>2017</b> , 9, 1263-1270		90
1671	A leaf-molded transparent triboelectric nanogenerator for smart multifunctional applications.  Nano Energy, <b>2017</b> , 32, 180-186	17.1	67
1670	An inductor-free auto-power-management design built-in triboelectric nanogenerators. <i>Nano Energy</i> , <b>2017</b> , 31, 302-310	17.1	85
1669	Nanopillar-array architectured PDMS-based triboelectric nanogenerator integrated with a windmill model for effective wind energy harvesting. <i>Nano Energy</i> , <b>2017</b> , 42, 269-281	17.1	93
1668	Digitalized self-powered strain gauge for static and dynamic measurement. <i>Nano Energy</i> , <b>2017</b> , 42, 129-1	h3y71	22
1667	PEDOT electrodes for triboelectric generator devices. <b>2017</b> , 51, 446-451		4
1666	Fully Stretchable Textile Triboelectric Nanogenerator with Knitted Fabric Structures. 2017, 11, 10733-10	)741	149
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1664	Self-Powered Dual-Mode Amenity Sensor Based on the Water-Air Triboelectric Nanogenerator. <b>2017</b> , 11, 10337-10346		81
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1661	Transparent, Flexible Cellulose Nanofibril <b>P</b> hosphorene Hybrid Paper as Triboelectric Nanogenerator. <b>2017</b> , 4, 1700651		55

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1659	Triboelectric effect: A new perspective on electron transfer process. <b>2017</b> , 122, 144302	36
1658	Surface structural analysis of a friction layer for a triboelectric nanogenerator. <i>Nano Energy</i> , <b>2017</b> , 42, 34-42	52
1657	Bipolar charge transfer induced by water: experimental and first-principles studies. <b>2017</b> , 19, 29418-29423	27
1656	Transparent and Flexible Triboelectric Sensing Array for Touch Security Applications. 2017, 11, 8364-8369	69
1655	A Triboelectric Self-Powered Sensor for Tire Condition Monitoring: Concept, Design, Fabrication, and Experiments. <b>2017</b> , 19, 1700318	26
1654	A Sliding-Mode Triboelectric Nanogenerator with Chemical Group Grated Structure by Shadow Mask Reactive Ion Etching. <b>2017</b> , 11, 8796-8803	67
1653	Harvesting electrical energy from carbon nanotube yarn twist. <b>2017</b> , 357, 773-778	214
1652	Embedded Triboelectric Active Sensors for Real-Time Pneumatic Monitoring. <b>2017</b> , 9, 32352-32358	15
1651	Flexible transparent high-voltage diodes for energy management in wearable electronics. <i>Nano Energy</i> , <b>2017</b> , 40, 289-299	30
1650	Self-Powered, Paper-Based Electrochemical Devices for Sensitive Point-of-Care Testing. <b>2017</b> , 2, 1700130	35
1649	Significant triboelectric enhancement using interfacial piezoelectric ZnO nanosheet layer. <i>Nano Energy</i> , <b>2017</b> , 40, 471-480	25
1648	Self-Powered Pulse Sensor for Antidiastole of Cardiovascular Disease. <b>2017</b> , 29, 1703456	235
1647	Self-Powered Gyroscope Ball Using a Triboelectric Mechanism. <b>2017</b> , 7, 1701300	68
1646	Unity Convoluted Design of Solid Li-Ion Battery and Triboelectric Nanogenerator for Self-Powered Wearable Electronics. <b>2017</b> , 7, 1701629	96
1645	A Highly Stretchable and Washable All-Yarn-Based Self-Charging Knitting Power Textile Composed of Fiber Triboelectric Nanogenerators and Supercapacitors. <b>2017</b> , 11, 9490-9499	320
1644	Self-powered fall detection system using pressure sensing triboelectric nanogenerators. <i>Nano Energy</i> , <b>2017</b> , 41, 139-147	39
1643	Soft tubular microfluidics for 2D and 3D applications. <b>2017</b> , 114, 10590-10595	47

1642	Size effect on the output of a miniaturized triboelectric nanogenerator based on superimposed electrode layers. <i>Nano Energy</i> , <b>2017</b> , 41, 128-138	17.1	19
1641	Fast charging self-powered wearable and flexible asymmetric supercapacitor power cell with fish swim bladder as an efficient natural bio-piezoelectric separator. <i>Nano Energy</i> , <b>2017</b> , 40, 633-645	17.1	65
1640	Self-powered Real-time Movement Monitoring Sensor Using Triboelectric Nanogenerator Technology. <b>2017</b> , 7, 10521		47
1639	Biomimetic Artificial Basilar Membranes for Next-Generation Cochlear Implants. <b>2017</b> , 6, 1700674		15
1638	Cellulose-Based Nanomaterials for Energy Applications. <b>2017</b> , 13, 1702240		130
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1636	Triboelectrification-enabled touch sensing for self-powered position mapping and dynamic tracking by a flexible and area-scalable sensor array. <i>Nano Energy</i> , <b>2017</b> , 41, 387-393	17.1	50
1635	Surface Engineering of Graphene Composite Transparent Electrodes for High-Performance Flexible Triboelectric Nanogenerators and Self-Powered Sensors. <b>2017</b> , 9, 36017-36025		33
1634	A transparent silk-fibroin-based triboelectric microgenerator for airflow energy harvesting. 2017,		O
1633	Wearable solar thermoelectric generator driven by unprecedentedly high temperature difference. <i>Nano Energy</i> , <b>2017</b> , 40, 663-672	17.1	66
1632	Seesaw-structured triboelectric nanogenerator for scavenging electrical energy from rotational motion of mechanical systems. <b>2017</b> , 263, 600-609		13
1631	Biocompatible and Flexible Hydrogel Diode-Based Mechanical Energy Harvesting. <b>2017</b> , 2, 1700118		17
1630	Wearable All-Fabric-Based Triboelectric Generator for Water Energy Harvesting. 2017, 7, 1701243		149
1629	Toward Soft Skin-Like Wearable and Implantable Energy Devices. <b>2017</b> , 7, 1700648		140
1628	Tribotronic transistor sensor for enhanced hydrogen detection. <b>2017</b> , 10, 3857-3864		9
1627	Multi-Responsive Wrinkling Patterns by the Photoswitchable Supramolecular Network. <b>2017</b> , 6, 848-853	3	24
1626	Smart Floor with Integrated Triboelectric Nanogenerator As Energy Harvester and Motion Sensor. <b>2017</b> , 9, 26126-26133		46
1625	Bioinspired stretchable triboelectric nanogenerator as energy-harvesting skin for self-powered electronics. <i>Nano Energy</i> , <b>2017</b> , 39, 429-436	17.1	112

1624	Multifunctional power unit by hybridizing contact-separate triboelectric nanogenerator, electromagnetic generator and solar cell for harvesting blue energy. <i>Nano Energy</i> , <b>2017</b> , 39, 608-615	93
1623	Achieving ultrahigh triboelectric charge density for efficient energy harvesting. 2017, 8, 88	350
1622	Self-Powered Pressure Sensor with fully encapsulated 3D printed wavy substrate and highly-aligned piezoelectric fibers array. <b>2017</b> , 7, 6759	54
1621	Triboelectric and microfluidic integrated self-generated tactile sensor. 2017,	1
1620	A double human skin contact based sandwich structured triboelectric micro-generator. 2017,	
1619	Fully casted stretchable triboelectric device for energy harvesting and sensing made of elastomeric materials. <b>2017</b> ,	
1618	Wind-powered triboelectric energy harvester using curved flapping film array. 2017,	2
1617	Rotating-Sleeve Triboelectric-Electromagnetic Hybrid Nanogenerator for High Efficiency of Harvesting Mechanical Energy. <b>2017</b> , 11, 8370-8378	81
1616	Solid-liquid triboelectrification in smart U-tube for multifunctional sensors. <i>Nano Energy</i> , <b>2017</b> , 40, 95-10 <del>6</del> 7.1	59
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1612	High-frequency electrochemical capacitors based on plasma pyrolyzed bacterial cellulose aerogel for current ripple filtering and pulse energy storage. <i>Nano Energy</i> , <b>2017</b> , 40, 107-114	61
1611	Electricity on Rubber Surfaces: A New Energy Conversion Effect. <b>2017</b> , 2, 8940-8947	12
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1608	Core-Shell-Yarn-Based Triboelectric Nanogenerator Textiles as Power Cloths. <b>2017</b> , 11, 12764-12771	143
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1603	Output optimized electret nanogenerators for self-powered long-distance optical communication systems. <b>2017</b> , 9, 18529-18534	5	
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1600	Fully stretchable and highly durable triboelectric nanogenerators based on gold-nanosheet electrodes for self-powered human-motion detection. <i>Nano Energy</i> , <b>2017</b> , 42, 300-306	1 92	
1599	An innovative electro-fenton degradation system self-powered by triboelectric nanogenerator using biomass-derived carbon materials as cathode catalyst. <i>Nano Energy</i> , <b>2017</b> , 42, 314-321	53	
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1593	Towards kilohertz electrochemical capacitors for filtering and pulse energy harvesting. <i>Nano Energy</i> , <b>2017</b> , 39, 306-320	1 60	
1592	Triboelectric charge generation by semiconducting SnO2 film grown by atomic layer deposition. <b>2017</b> , 13, 318-323	2	
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1589	Single-Thread-Based Wearable and Highly Stretchable Triboelectric Nanogenerators and Their Applications in Cloth-Based Self-Powered Human-Interactive and Biomedical Sensing. <b>2017</b> , 27, 1604462	242	

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1587	Improving power output of inertial energy harvesters by employing principal component analysis of input acceleration. <b>2017</b> , 85, 801-808	3
1586	Stretchable Porous Carbon Nanotube-Elastomer Hybrid Nanocomposite for Harvesting Mechanical Energy. <b>2017</b> , 29, 1603115	137
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1583	Tunable Optical Modulator by Coupling a Triboelectric Nanogenerator and a Dielectric Elastomer. <b>2017</b> , 27, 1603788	71
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1581	Boosting Power-Generating Performance of Triboelectric Nanogenerators via Artificial Control of Ferroelectric Polarization and Dielectric Properties. <b>2017</b> , 7, 1600988	153
1580	Integrated triboelectric nanogenerator array based on air-driven membrane structures for water wave energy harvesting. <i>Nano Energy</i> , <b>2017</b> , 31, 351-358	128
1579	Recyclable and Green Triboelectric Nanogenerator. <b>2017</b> , 29, 1604961	111
1578	Ferrofluid-based triboelectric-electromagnetic hybrid generator for sensitive and sustainable vibration energy harvesting. <i>Nano Energy</i> , <b>2017</b> , 31, 233-238	88
1577	Environmentally Friendly Hydrogel-Based Triboelectric Nanogenerators for Versatile Energy Harvesting and Self-Powered Sensors. <b>2017</b> , 7, 1601529	147
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1574	Relationship between triboelectric charge and contact force for two triboelectric layers. <b>2017</b> , 90, 147-152	32
1573	A novel triboelectric nanogenerator with high performance and long duration time of sinusoidal current generation. <b>2017</b> ,	
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1569	Energy Harvesting Based on Polymer. <b>2017</b> , 151-196	6
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1567	Nanoscale static voltage generation and its surface potential decay using scanning probe microscopy. <b>2017</b> , 12, 928-933	3
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1563	3D Printed Materials Based Triboelectric Device for Energy Harvesting and Sensing. <b>2017</b> , 1, 580	7
1562	Water Energy Harvesting and Self-Powered Visible Light Communication Based on Triboelectric Nanogenerator. <b>2018</b> , 6, 1929-1934	8
1561	Self-powered room temperature NO2 detection driven by triboelectric nanogenerator under UV illumination. <i>Nano Energy</i> , <b>2018</b> , 47, 316-324	137
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1558	A MEMS based piezoelectric vibration energy harvester for fault monitoring system. 2018, 24, 3637-3644	7
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1555	All-in-one self-powered flexible microsystems based on triboelectric nanogenerators. <i>Nano Energy</i> , <b>2018</b> , 47, 410-426	185
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1553	Recent progress on printable power supply devices and systems with nanomaterials. 2018, 11, 3065-3087	49

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1550	Highly Flexible, Large-Area, and Facile Textile-Based Hybrid Nanogenerator with Cascaded Piezoelectric and Triboelectric Units for Mechanical Energy Harvesting. <b>2018</b> , 3, 1800016		47
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1545	Energy-loss return gate via liquid dielectric polarization. <b>2018</b> , 9, 1437		9
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1542	Soft and Flexible Bilayer Thermoplastic Polyurethane Foam for Development of Bioinspired Artificial Skin. <b>2018</b> , 10, 14008-14016		28
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1539	Functional material properties of oxide thin films probed by atomic force microscopy on the nanoscale. <b>2018</b> , 181-201		
1538	Study on friction-electrification coupling in sliding-mode triboelectric nanogenerator. <i>Nano Energy</i> , <b>2018</b> , 48, 456-463	17.1	47
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1535	Inversely polarised ferroelectric polymer contact electrodes for triboelectric-like generators from identical materials. <b>2018</b> , 11, 1437-1443		28

1534	Performance modulation of contact electrification nanogenerators by controlling the doping concentration of fluorine-doped tin oxide. <b>2018</b> , 44, 12477-12482		5
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1532	An alginate film-based degradable triboelectric nanogenerator <b>2018</b> , 8, 6719-6726		35
1531	Stretchable and Tailorable Triboelectric Nanogenerator Constructed by Nanofibrous Membrane for Energy Harvesting and Self-Powered Biomechanical Monitoring. <b>2018</b> , 3, 1700370		39
1530	Recent progress on nanostructured conducting polymers and composites: synthesis, application and future aspects. <b>2018</b> , 61, 303-352		140
1529	Deformable conductors for humanthachine interface. <b>2018</b> , 21, 508-526		119
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1525	Exceeding milli-watt powering magneto-mechano-electric generator for standalone-powered electronics. <b>2018</b> , 11, 818-829		62
1524	Flexure hinges based triboelectric nanogenerator by 3D printing. 2018, 20, 38-45		25
1523	Magnetorheological elastomers enabled high-sensitive self-powered tribo-sensor for magnetic field detection. <b>2018</b> , 10, 4745-4752		54
1522	A Highly Stretchable Transparent Self-Powered Triboelectric Tactile Sensor with Metallized Nanofibers for Wearable Electronics. <b>2018</b> , 30, e1706738		230
1521	Keystroke dynamics enabled authentication and identification using triboelectric nanogenerator array. <b>2018</b> , 21, 216-222		122
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1517	Wireless Electric Energy Transmission through Various Isolated Solid Media Based on Triboelectric Nanogenerator. <b>2018</b> , 8, 1703086		53

1516	Flexible and multi-directional piezoelectric energy harvester for self-powered human motion sensor. <b>2018</b> , 27, 035001	37
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1514	Soft triboelectric generators by use of cost-effective elastomers and simple casting process. <b>2018</b> , 271, 88-95	18
1513	Core-shell coaxially structured triboelectric nanogenerator for energy harvesting and motion sensing <b>2018</b> , 8, 2950-2957	50
1512	Highly Porous Polymer Aerogel Film-Based Triboelectric Nanogenerators. <b>2018</b> , 28, 1706365	131
1511	Emulsion Electrospinning of Polytetrafluoroethylene (PTFE) Nanofibrous Membranes for High-Performance Triboelectric Nanogenerators. <b>2018</b> , 10, 5880-5891	82
1510	Engineered and Laser-Processed Chitosan Biopolymers for Sustainable and Biodegradable Triboelectric Power Generation. <b>2018</b> , 30, 1706267	104
1509	Liquid-Metal-Based Super-Stretchable and Structure-Designable Triboelectric Nanogenerator for Wearable Electronics. <b>2018</b> , 12, 2027-2034	247
1508	Liquid-FEP-based U-tube triboelectric nanogenerator for harvesting water-wave energy. <b>2018</b> , 11, 4062-4073	99
1507	Polymer Nanodielectrics: Current Accomplishments and Future Challenges for Electric Energy Storage. <b>2018</b> , 1-48	1
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1492	Coupled Triboelectric Nanogenerator Networks for Efficient Water Wave Energy Harvesting. <b>2018</b> , 12, 1849-1858		199
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1477	A Stretchable, Flexible Triboelectric Nanogenerator for Self-Powered Real-Time Motion Monitoring. <b>2018</b> , 3, 1800021		54
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1357	Piezoelectric and triboelectric nanogenerators: Trends and impacts. <b>2018</b> , 22, 10-13		90
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1355	Design, simulation, and experimental characterization of a heaving triboelectric-electromagnetic wave energy harvester. <i>Nano Energy</i> , <b>2018</b> , 50, 281-290	17.1	24

1354	Triboelectrification-enabled thin-film tactile matrix for self-powered high-resolution imaging. <i>Nano Energy</i> , <b>2018</b> , 50, 497-503	17.1	24
1353	High-Performance Triboelectric Nanogenerator with a Rationally Designed Friction Layer Structure. <b>2018</b> , 1, 2891-2897		31
1352	Screen-Printed Washable Electronic Textiles as Self-Powered Touch/Gesture Tribo-Sensors for Intelligent Human-Machine Interaction. <b>2018</b> , 12, 5190-5196		271
1351	Remarkably enhanced triboelectric nanogenerator based on flexible and transparent monolayer titania nanocomposite. <i>Nano Energy</i> , <b>2018</b> , 50, 140-147	17.1	68
1350	Interdigitated electrodes based on liquid metal encapsulated in elastomer as capacitive sensors and triboelectric nanogenerators. <i>Nano Energy</i> , <b>2018</b> , 50, 266-272	17.1	37
1349	Flexible one-structure arched triboelectric nanogenerator based on common electrode for high efficiency energy harvesting and self-powered motion sensing. <b>2018</b> , 8, 045022		4
1348	Self-powered pressure sensor based on the triboelectric effect and its analysis using dynamic mechanical analysis. <i>Nano Energy</i> , <b>2018</b> , 50, 401-409	17.1	77
1347	Self-powered electrochromic devices with tunable infrared intensity. <b>2018</b> , 63, 795-801		22
1346	Self-Powered Multifunctional Motion Sensor Enabled by Magnetic-Regulated Triboelectric Nanogenerator. <b>2018</b> , 12, 5726-5733		77
1345	Adding a stretchable deep-trap interlayer for high-performance stretchable triboelectric nanogenerators. <i>Nano Energy</i> , <b>2018</b> , 50, 192-200	17.1	54
1344	Air-Flow-Driven Triboelectric Nanogenerators for Self-Powered Real-Time Respiratory Monitoring. <b>2018</b> , 12, 6156-6162		148
1343	Triboelectric-Electromagnetic Hybrid Generator for Harvesting Blue Energy. <b>2018</b> , 10, 54		63
1342	Self-Healable, Stretchable, Transparent Triboelectric Nanogenerators as Soft Power Sources. <b>2018</b> , 12, 6147-6155		175
1341	Self -Powered Insole Plantar Pressure Mapping System. <b>2018</b> , 28, 1801606		68
1340	Disk-based triboelectric nanogenerator operated by rotational force converted from linear force by a gear system. <i>Nano Energy</i> , <b>2018</b> , 50, 489-496	17.1	35
1339	Human Body Constituted Triboelectric Nanogenerators as Energy Harvesters, Code Transmitters, and Motion Sensors. <b>2018</b> , 1, 2955-2960		28
1338	Humidity-Resistant, Fabric-Based, Wearable Triboelectric Energy Harvester by Treatment of Hydrophobic Self-Assembled Monolayers. <b>2018</b> , 3, 1800048		19
1337	Elastic spiral triboelectric nanogenerator as a self-charging case for portable electronics. <i>Nano Energy</i> , <b>2018</b> , 50, 133-139	17.1	19

1336	Microneedles integrated with a triboelectric nanogenerator: an electrically active drug delivery system. <b>2018</b> , 10, 13502-13510		25
1335	Fully Bioabsorbable Natural-Materials-Based Triboelectric Nanogenerators. <b>2018</b> , 30, e1801895		205
1334	Liquid Metal Gated Tribotronic Transistors as an Electronic Gradienter for Angle Measurement. <b>2018</b> , 4, 1800269		11
1333	Sustainable powering triboelectric nanogenerators: Approaches and the path towards efficient use. <i>Nano Energy</i> , <b>2018</b> , 51, 270-285	17.1	77
1332	Biowaste crab shell-extracted chitin nanofiber-based superior piezoelectric nanogenerator. <b>2018</b> , 6, 13848-13858		52
1331	Spherical Triboelectric Nanogenerators Based on Spring-Assisted Multilayered Structure for Efficient Water Wave Energy Harvesting. <b>2018</b> , 28, 1802634		108
1330	Novel augmented reality interface using a self-powered triboelectric based virtual reality 3D-control sensor. <i>Nano Energy</i> , <b>2018</b> , 51, 162-172	17.1	47
1329	A conditioning circuit with exponential enhancement of output energy for triboelectric nanogenerator. <i>Nano Energy</i> , <b>2018</b> , 51, 173-184	17.1	55
1328	AlN piezoelectric thin films for energy harvesting and acoustic devices. <i>Nano Energy</i> , <b>2018</b> , 51, 146-161	17.1	77
1327	Visualizing the knowledge profile on self-powered technology. <i>Nano Energy</i> , <b>2018</b> , 51, 250-259	17.1	10
1326	A powerful dual-responsive soft actuator and photo-to-electric generator based on graphene micro-gasbags for bioinspired applications. <b>2018</b> , 6, 5031-5038		31
1325	Comprehensive dependence of triboelectric nanogenerator on dielectric thickness and external impact for high electric outputs. <b>2018</b> , 124, 045106		8
1324	Flexible Timbo-Like Triboelectric Nanogenerator as Self-Powered Force and Bend Sensor for Wireless and Distributed Landslide Monitoring. <b>2018</b> , 3, 1800144		33
1323	Toward a Rapid-Fabricated Triboelectric Device with a 1,3-Phosphorylated Poly(vinyl alcohol) Polymer for Water Turbulence Energy Harvesting. <b>2018</b> , 3, 8421-8428		2
1322	Graphene-based materials and structures for energy harvesting with fluids IA review. <b>2018</b> , 21, 1019-10	41	50
1321	All 3D printed energy harvester for autonomous and sustainable resource utilization. <i>Nano Energy</i> , <b>2018</b> , 52, 271-278	17.1	26
1320	A contact electrification based wind generator. <b>2018</b> , 280, 252-260		5
1319	Autonomous Flexible Sensors for Health Monitoring. <b>2018</b> , 30, e1802337		101

1318	Self-Powered Multifunctional Transient Bioelectronics. <b>2018</b> , 14, e1802050	31
1317	Pulse sensor based on single-electrode triboelectric nanogenerator. <b>2018</b> , 280, 326-331	17
1316	Self-powered data erasing of nanoscale flash memory by triboelectricity. <i>Nano Energy</i> , <b>2018</b> , 52, 63-70 17.1	9
1315	A triboelectric nanogenerator using silica-based powder for appropriate technology. <b>2018</b> , 280, 85-91	11
1314	Graphene-Bridged Multifunctional Flexible Fiber Supercapacitor with High Energy Density. <b>2018</b> , 10, 28597-28607	59
1313	Triboelectric Nanogenerator Driven Self-Powered Photoelectrochemical Water Splitting Based on Hematite Photoanodes. <b>2018</b> , 12, 8625-8632	44
1312	A Wrinkled PEDOT:PSS Film Based Stretchable and Transparent Triboelectric Nanogenerator for Wearable Energy Harvesters and Active Motion Sensors. <b>2018</b> , 28, 1803684	200
1311	Bennet's charge doubler boosting triboelectric kinetic energy harvesters. <b>2018</b> , 1052, 012027	2
1310	Direct-current triboelectric nanogenerator via water electrification and phase control. <i>Nano Energy</i> , <b>2018</b> , 52, 95-104	32
1309	Polymer tubes as carrier boats of thermosetting and powder materials based on 3D printing for triboelectric nanogenerator with microstructure. <i>Nano Energy</i> , <b>2018</b> , 52, 134-141	32
1308	A highly sensitive, self-powered triboelectric auditory sensor for social robotics and hearing aids. <b>2018</b> , 3,	399
1307	Implantable Energy-Harvesting Devices. <b>2018</b> , 30, e1801511	140
1306	Triboelectric Nanogenerators. <b>2018</b> , 1335-1376	10
1305	High-performance piezoelectric-energy-harvester and self-powered mechanosensing using lead-free potassiumBodium niobate flexible piezoelectric composites. <b>2018</b> , 6, 16439-16449	50
1304	Triboelectric nanogenerator based on rolling motion of beads for harvesting wind energy as active wind speed sensor. <i>Nano Energy</i> , <b>2018</b> , 52, 256-263	46
1303	P(VDF-TrFE) Film on PDMS Substrate for Energy Harvesting Applications. <b>2018</b> , 8, 213	38
1302	A Historical Review of the Development of Electronic Textiles. <b>2018</b> , 6, 34	57
1301	Mechanically Robust Magnetic FeO Nanoparticle/Polyvinylidene Fluoride Composite Nanofiber and Its Application in a Triboelectric Nanogenerator. <b>2018</b> , 10, 25660-25665	47

1300	Flexible Triboelectric Nanogenerators. <b>2018</b> , 383-423		1
1299	Enhanced Power Output of a Triboelectric Nanogenerator using Poly(dimethylsiloxane) Modified with Graphene Oxide and Sodium Dodecyl Sulfate. <b>2018</b> , 10, 25263-25272		71
1298	Triboelectric nanogenerators with transfer-printed arrays of hierarchically dewetted microdroplets. <i>Nano Energy</i> , <b>2018</b> , 51, 588-596	17.1	7
1297	Improved Triboelectric Nanogenerator Output Performance through Polymer Nanocomposites Filled with Core-shell-Structured Particles. <b>2018</b> , 10, 25683-25688		30
1296	Material influence in newly proposed ferroelectric energy harvesters. <b>2018</b> , 29, 3305-3316		6
1295	An Adaptable Interface Conditioning Circuit Based on Triboelectric Nanogenerators for Self-Powered Sensors. <b>2018</b> , 9,		5
1294	1D Piezoelectric Material Based Nanogenerators: Methods, Materials and Property Optimization. <b>2018</b> , 8,		33
1293	Structural figure-of-merits of triboelectric nanogenerators at powering loads. <i>Nano Energy</i> , <b>2018</b> , 51, 688-697	17.1	40
1292	Self-Powered Plasmonic UV Detector, Based on Reduced Graphene Oxide/Ag Nanoparticles. <b>2018</b> , 39, 1433-1436		10
1291	MEMS Piezoelectric Vibration Energy Harvesters. <b>2018</b> , 1297-1333		1
1290	Electricity Generation through Light-Responsive Diving-Surfacing Locomotion of a Functionally Cooperating Smart Device. <b>2018</b> , 30, e1803125		31
1289	Self-powered triboelectric touch sensor made of 3D printed materials. <i>Nano Energy</i> , <b>2018</b> , 52, 54-62	17.1	27
1288	Tube-based triboelectric nanogenerator for self-powered detecting blockage and monitoring air pressure. <i>Nano Energy</i> , <b>2018</b> , 52, 71-77	17.1	33
1287	Optimization of contact-mode triboelectric nanogeneration for high energy conversion efficiency. <b>2018</b> , 61, 1		1
1286	Electron blocking layer-based interfacial design for highly-enhanced triboelectric nanogenerators. <i>Nano Energy,</i> <b>2018</b> , 50, 9-15	17.1	64
1285	Triboelectric Nanogenerator Based on Biocompatible and Easily Available Polymer Films. <b>2018</b> , 3, 5055-	5061	11
1284	3D printing individualized triboelectric nanogenerator with macro-pattern. <i>Nano Energy</i> , <b>2018</b> , 50, 126-7	1372.1	43
1283	Ultrahigh charge density realized by charge pumping at ambient conditions for triboelectric nanogenerators. <i>Nano Energy</i> , <b>2018</b> , 49, 625-633	17.1	159

1282	Wearable triboelectric nanogenerators based on hybridized triboelectric modes for harvesting mechanical energy <b>2018</b> , 8, 26243-26250	8
1281	Facile roughness fabrications and their roughness effects on electrical outputs of the triboelectric nanogenerator. <b>2018</b> , 27, 105026	18
1280	Simple fabrication of a multiwall carbon nanotube lelastomer composite with a rough surface and its application in force sensing. <b>2018</b> , 199, 106-113	3
1279	Self-Power Dynamic Sensor Based on Triboelectrification for Tilt of Direction and Angle. <b>2018</b> , 18,	7
1278	Theory of contact electrification: Optical transitions in two-level systems. <i>Nano Energy</i> , <b>2018</b> , 52, 517-52 <b>3</b> 7.1	41
1277	A Self-Powered Smart Roller-Bearing Based on a Triboelectric Nanogenerator for Measurement of Rotation Movement. <b>2018</b> , 3, 1800219	9
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1274	Transparent and flexible high power triboelectric nanogenerator with metallic nanowire-embedded tribonegative conducting polymer. <i>Nano Energy,</i> <b>2018</b> , 53, 152-159	31
1273	Toward self-powered photodetection enabled by triboelectric nanogenerators. <b>2018</b> , 6, 11893-11902	32
1272	Triboelectric Series of 2D Layered Materials. <b>2018</b> , 30, e1801210	110
1271	Direct-Current Triboelectric Nanogenerator Realized by Air Breakdown Induced Ionized Air Channel. <b>2018</b> , 8, 1800889	79
1270	Interdigitated Electrode-Based Triboelectric Sliding Sensor for Security Monitoring. 2018, 3, 1800189	30
1269	Raising the Working Temperature of a Triboelectric Nanogenerator by Quenching Down Electron Thermionic Emission in Contact-Electrification. <b>2018</b> , 30, e1803968	116
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1267	TriboelectricInermoelectric Hybrid Nanogenerator for Harvesting Energy from Ambient Environments. <b>2018</b> , 3, 1800166	40
1266	Electrochemical sensing platform based on the biomass-derived microporous carbons for simultaneous determination of ascorbic acid, dopamine, and uric acid. <b>2018</b> , 121, 96-103	93
1265	Controlling Surface Charge Generated by Contact Electrification: Strategies and Applications. <b>2018</b> , 30, e1802405	81

1264	Cost-effective triboelectric nanogenerator based on teflon tape and conductive copper foil tape. <b>2018</b> , 199, 114-117		6
1263	Nanostructured polymer-based piezoelectric and triboelectric materials and devices for energy harvesting applications. <b>2018</b> , 51, 303001		62
1262	A textile-based triboelectric nanogenerator with humidity-resistant output characteristic and its applications in self-powered healthcare sensors. <i>Nano Energy</i> , <b>2018</b> , 50, 513-520	17.1	130
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1259	Energy Harvesting Research: The Road from Single Source to Multisource. <b>2018</b> , 30, e1707271		125
1258	Traditional weaving craft for one-piece self-charging power textile for wearable electronics. <i>Nano Energy</i> , <b>2018</b> , 50, 536-543	17.1	102
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1256	Triboelectric effect based instantaneous self-powered wireless sensing with self-determined identity. <i>Nano Energy</i> , <b>2018</b> , 51, 1-9	17.1	40
1255	Prospective Applications of Renewable Energy-Based Electrochemical Systems in Wastewater Treatment. <b>2018</b> , 513-541		4
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1253	Ultrasensitive flexible self-powered ammonia sensor based on triboelectric nanogenerator at room temperature. <i>Nano Energy</i> , <b>2018</b> , 51, 231-240	17.1	69
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1251	Progressive contact-separate triboelectric nanogenerator based on conductive polyurethane foam regulated with a Bennet doubler conditioning circuit. <i>Nano Energy</i> , <b>2018</b> , 51, 10-18	17.1	53
1250	Ferromagnetic nanoparticle-embedded hybrid nanogenerator for harvesting omnidirectional vibration energy. <b>2018</b> , 10, 12276-12283		15
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1248	Keystroke Dynamics Identification Based on Triboelectric Nanogenerator for Intelligent Keyboard Using Deep Learning Method. <b>2019</b> , 4, 1800167		36
1247	Overview of Triboelectric Nanogenerators. <b>2019</b> , 1-18		1

1246	Piezoelectrets for wearable energy harvesters and sensors. <i>Nano Energy</i> , <b>2019</b> , 65, 104033	17.1	52
1245	Self-powered Flexible PDMS Channel Assisted Discrete Liquid Column Motion Based Triboelectric Nanogenerator (DLC-TENG) as Mechanical Transducer. <b>2019</b> , 6, 907-917		14
1244	A highly elastic self-charging power system for simultaneously harvesting solar and mechanical energy. <i>Nano Energy</i> , <b>2019</b> , 65, 103997	17.1	31
1243	A Battery-Like Self-Charge Universal Module for Motional Energy Harvest. <b>2019</b> , 9, 1901875		48
1242	Self-powered wearable touchpad composed of all commercial fabrics utilizing a crossline array of triboelectric generators. <i>Nano Energy</i> , <b>2019</b> , 65, 103994	17.1	22
1241	Triboelectric nanogenerators enabled sensing and actuation for robotics. <i>Nano Energy</i> , <b>2019</b> , 65, 104005	17.1	34
1240	Textile-based triboelectric nanogenerators with high-performance via optimized functional elastomer composited tribomaterials as wearable power source. <i>Nano Energy</i> , <b>2019</b> , 65, 104012	17.1	29
1239	Ion-Enhanced Field Emission Triboelectric Nanogenerator. <b>2019</b> , 9, 1901731		31
1238	Harvesting liquid stream energy from unsteady peristaltic flow induced pulsatile Flow-TENG (PF-TENG) using slipping polymeric surface inside elastomeric tubing. <i>Nano Energy</i> , <b>2019</b> , 65, 104017	17.1	31
1237	Signal Output of Triboelectric Nanogenerator at Oil-Water-Solid Multiphase Interfaces and its Application for Dual-Signal Chemical Sensing. <b>2019</b> , 31, e1902793		64
1236	Improving sensitivity of self-powered room temperature NO2 sensor by triboelectric-photoelectric coupling effect. <b>2019</b> , 115, 073504		50
1235	Fingerprint-Inspired Conducting Hierarchical Wrinkles for Energy-Harvesting E-Skin. <b>2019</b> , 29, 1903580		48
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1233	Recent Progress of Direct Ink Writing of Electronic Components for Advanced Wearable Devices. <b>2019</b> , 1, 1718-1734		54
1232	Vibration-Energy-Harvesting System: Transduction Mechanisms, Frequency Tuning Techniques, and Biomechanical Applications. <b>2019</b> , 4, 1900177		22
1231	Progress on wearable triboelectric nanogenerators in shapes of fiber, yarn, and textile. <b>2019</b> , 20, 837-857	7	48
1230	A low-frequency, broadband and tri-hybrid energy harvester with septuple-stable nonlinearity-enhanced mechanical frequency up-conversion mechanism for powering portable electronics. <i>Nano Energy</i> , <b>2019</b> , 64, 103943	17.1	14
1229	Photo-carrier extraction by triboelectricity for carrier transport layer-free photodetectors. <i>Nano Energy</i> , <b>2019</b> , 65, 103958	17.1	13

1228	Whirling-Folded Triboelectric Nanogenerator with High Average Power for Water Wave Energy Harvesting. <b>2019</b> , 29, 1904867		62
1227	A flexible single-electrode-based triboelectric nanogenerator based on double-sided nanostructures. <b>2019</b> , 9, 075221		7
1226	Maghemite/Polyvinylidene Fluoride Nanocomposite for Transparent, Flexible Triboelectric Nanogenerator and Noncontact Magneto-Triboelectric Nanogenerator. <b>2019</b> , 7, 14856-14866		10
1225	Enhanced performance triboelectric nanogenerators based on solid polymer electrolytes with different concentrations of cations. <i>Nano Energy</i> , <b>2019</b> , 64, 103960	17.1	26
1224	Mutual Insight on Ferroelectrics and Hybrid Halide Perovskites: A Platform for Future Multifunctional Energy Conversion. <b>2019</b> , 31, e1807376		48
1223	Linear freestanding electret generator for harvesting swinging motion energy: Optimization and experiment. <i>Nano Energy</i> , <b>2019</b> , 65, 104013	17.1	16
1222	Highly stretchable triboelectric tactile sensor for electronic skin. <i>Nano Energy</i> , <b>2019</b> , 64, 103907	17.1	42
1221	A flexible triboelectric nanogenerator integrated with an artificial petal micro/nanostructure surface. <b>2019</b> , 58, SDDL02		2
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1219	Self-powered smart active RFID tag integrated with wearable hybrid nanogenerator. <i>Nano Energy</i> , <b>2019</b> , 64, 103911	17.1	43
1218	Polymer-Assisted Metal Deposition (PAMD) for Flexible and Wearable Electronics: Principle, Materials, Printing, and Devices. <b>2019</b> , 31, e1902987		80
1217	Sliding non-contact inductive nanogenerator. <i>Nano Energy</i> , <b>2019</b> , 63, 103878	17.1	14
1216	Design and Optimization of a MEMS Triboelectric Energy Harvester for Nano-sensor Applications. <b>2019</b> ,		3
1215	Mechanically Active Transducing Element Based on Solidliquid Triboelectric Nanogenerator for Self-Powered Sensing. <b>2019</b> , 6, 741-749		22
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1210	Multifunctional Sensor Based on Translational-Rotary Triboelectric Nanogenerator. <b>2019</b> , 9, 1901124		58
1209	A Nonencapsulative Pendulum-Like Paper <b>B</b> ased Hybrid Nanogenerator for Energy Harvesting. <b>2019</b> , 9, 1901149		57
1208	Skin-Inspired Electronics and Its Applications in Advanced Intelligent Systems. <b>2019</b> , 1, 1900063		12
1207	Development of textile-based triboelectric nanogenerators integrated with plastic metal electrodes for wearable devices. <b>2019</b> , 104, 2633-2644		7
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1205	Energy harvesting and wireless power transmission by a hybridized electromagnetic <b>E</b> riboelectric nanogenerator. <b>2019</b> , 12, 2678-2684		86
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1203	Triboelectric-TFT Flip-Flop for Bistable Latching of Dielectric Elastomer Actuators. <b>2019</b> , 5, 1900205		5
1202	A Review of Human-Powered Energy Harvesting for Smart Electronics: Recent Progress and Challenges. <b>2019</b> , 6, 821-851		63
1201	Seesaw structured triboelectric nanogenerator with enhanced output performance and its applications in self-powered motion sensing. <i>Nano Energy</i> , <b>2019</b> , 65, 103944	17.1	33
1200	Liquid single-electrode triboelectric nanogenerator based on graphene oxide dispersion for wearable electronics. <i>Nano Energy</i> , <b>2019</b> , 64, 103948	17.1	39
1200 1199		17.1 17.1	
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1003	Post-fabrication modifications of thermoplastic polymeric nanofiber membranes with electroactive polymers for triboelectric nanogenerators. <i>Nano Energy</i> , <b>2019</b> , 59, 697-704	17.1	12
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985	Self-powered intelligent buoy system by water wave energy for sustainable and autonomous wireless sensing and data transmission. <i>Nano Energy</i> , <b>2019</b> , 61, 1-9	. 83
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967 966	Nanogenerator for scavenging low frequency vibrations. <b>2019</b> , 29, 053001  Wearable high-dielectric-constant polymers with coreBhell liquid metal inclusions for biomechanical energy harvesting and a self-powered user interface. <b>2019</b> , 7, 7109-7117		23
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<ul><li>966</li><li>965</li><li>964</li><li>963</li></ul>	Wearable high-dielectric-constant polymers with coreEhell liquid metal inclusions for biomechanical energy harvesting and a self-powered user interface. 2019, 7, 7109-7117  Wearable and Implantable Devices for Cardiovascular Healthcare: from Monitoring to Therapy Based on Flexible and Stretchable Electronics. 2019, 29, 1808247  Wearable and Implantable Triboelectric Nanogenerators. 2019, 29, 1808820  Quantifying the power output and structural figure-of-merits of triboelectric nanogenerators in a charging system starting from the Maxwell's displacement current. <i>Nano Energy</i> , 2019, 59, 380-389  AC-Filtering Supercapacitors Based on Edge Oriented Vertical Graphene and Cross-Linked Carbon	17.1	<ul><li>31</li><li>207</li><li>166</li><li>56</li></ul>
<ul><li>966</li><li>965</li><li>964</li><li>963</li><li>962</li></ul>	Wearable high-dielectric-constant polymers with coreBhell liquid metal inclusions for biomechanical energy harvesting and a self-powered user interface. 2019, 7, 7109-7117  Wearable and Implantable Devices for Cardiovascular Healthcare: from Monitoring to Therapy Based on Flexible and Stretchable Electronics. 2019, 29, 1808247  Wearable and Implantable Triboelectric Nanogenerators. 2019, 29, 1808820  Quantifying the power output and structural figure-of-merits of triboelectric nanogenerators in a charging system starting from the Maxwell's displacement current. Nano Energy, 2019, 59, 380-389  AC-Filtering Supercapacitors Based on Edge Oriented Vertical Graphene and Cross-Linked Carbon Nanofiber. 2019, 12,	17.1	<ul><li>31</li><li>207</li><li>166</li><li>56</li><li>7</li></ul>

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805	A fully packed spheroidal hybrid generator for water wave energy harvesting and self-powered position tracking. <i>Nano Energy</i> , <b>2020</b> , 69, 104439	17.1	52
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784	Triboelectric-electromagnetic hybrid nanogenerator driven by wind for self-powered wireless transmission in Internet of Things and self-powered wind speed sensor. <i>Nano Energy</i> , <b>2020</b> , 68, 104319	17.1	52
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762	Gas-Responsive and Self-Powered Visual Composite Langmuir-Blodgett Films for Ultrathin Gas Sensors <b>2022</b> ,		
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760	Self-Powered Tactile Sensor for Gesture Recognition Using Deep Learning Algorithms.		2
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677	Promoting Maturation and Contractile Function of Neonatal Rat Ventricular Myocytes by Self-Powered Implantable Triboelectric Nanogenerator.	
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660	Morphological Engineering of Sensing Materials for Flexible Pressure Sensors and Artificial Intelligence Applications. <b>2022</b> , 14,	7
659	Local Dipole Enhancement of Space-Charge Piezophototronic Catalysts of Core-Shell Polytetrafluoroethylene@TiO2 Nanospheres. <i>Nano Energy</i> , <b>2022</b> , 107619	1
658	Ferromagnetic-Based Charge-Accumulation Triboelectric Nanogenerator With Ultrahigh Surface Charge Density. 2201754	1
657	Poling-Polarization-Mediated Centrosymmetric Charge-Transfer Organic-Cocrystal-Based Flexible Triboelectric Nanogenerator.	
656	Recent Advances toward Wearable Sweat Monitoring Systems. 2200513	
655	Triazine skeletal covalent organic frameworks: A versatile highly positive surface potential triboelectric layer for energy harvesting and self-powered applications. <i>Nano Energy</i> , <b>2022</b> , 107620	1
654	Durability Improvement of Breeze-Driven Triboelectric-Electromagnetic Hybrid Nanogenerator by a Travel-Controlled Approach. 2205710	3
653	Flexible single-electrode triboelectric nanogenerator with MWCNT/PDMS composite film for environmental energy harvesting and human motion monitoring.	2

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651	Toxic micro/nano particles removal in water via triboelectric nanogenerator. <i>Nano Energy</i> , <b>2022</b> , 100, 107433	17.1	1
650	Hybrid electronic skin combining triboelectric nanogenerator and humidity sensor for contact and non-contact sensing. <i>Nano Energy</i> , <b>2022</b> , 101, 107541	17.1	1
649	Plastic film based lightweight thruster driven by triboelectric nanogenerator for multi-purpose propulsion applications. <i>Nano Energy</i> , <b>2022</b> , 101, 107558	17.1	1
648	Recent advances on ink-based printing techniques for triboelectric nanogenerators: Printable inks, printing technologies and applications. <i>Nano Energy</i> , <b>2022</b> , 101, 107585	17.1	1
647	Stretchable multifunctional self-powered systems with Cu-EGaIn liquid metal electrodes. <i>Nano Energy</i> , <b>2022</b> , 101, 107582	17.1	1
646	MXene-based materials for advanced nanogenerators. <i>Nano Energy</i> , <b>2022</b> , 101, 107556	17.1	3
645	A contextual framework development toward triboelectric nanogenerator commercialization. <i>Nano Energy</i> , <b>2022</b> , 101, 107572	17.1	1
644	Bioinspired butterfly wings triboelectric nanogenerator with drag amplification for multidirectional underwater-wave energy harvesting. <b>2022</b> , 323, 119648		1
643	Recent progress in fibrous high-entropy energy harvesting devices for wearable applications. <i>Nano Energy</i> , <b>2022</b> , 101, 107600	17.1	O
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639	Millivolt-Level Stable Voltage Output of Triboelectric Nanogenerator Under Random Excitation by Double Limiting. 2200374		
638	Hybrid Triboelectric-Electromagnetic Nanogenerator with a Double-Sided Fluff and Double Halbach Array for Wave Energy Harvesting. 2205011		2
637	Micro-force sensing techniques and traceable reference forces: a review.		О
636	Prediction of Wave Energy Flux in the Bohai Sea through Automated Machine Learning. <b>2022</b> , 10, 1025		1
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631	Switchless Oscillating Charge Pump-Based Triboelectric Nanogenerator and an Additional Electromagnetic Generator for Harvesting Vertical Vibration Energy. <b>2022</b> , 14, 34081-34092		Ο
630	Electrospun PA66/Graphene Fiber Films and Application on Flexible Triboelectric Nanogenerators. <b>2022</b> , 15, 5191		
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626	Performance analysis and application of a hybrid electromagnetic-triboelectric nanogenerator for energy harvesting. <b>2022</b> , 8, 9184-9200		0
625	Ionic Shape Memory Polymer Gels as Multifunctional Sensors.		
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623	Research on self-powered coded angle sensor for rock climbing training. 2022, 1-1		
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621	Triboelectric Nanogenerators for Harvesting Diverse Water Kinetic Energy. <b>2022</b> , 13, 1219		O
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619	Multi-Effects Coupled Nanogenerators. <b>2022</b> , 2, 243-244		
618	Interfacial Material Engineering for Enhancing Triboelectric Nanogenerators. 2022, 31, 218-227		
617	Making use of water droplets as a sustainable green energy source. <b>2022</b> , 1, 7-10		2

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613	Highly Adaptive LiquidBolid Triboelectric Nanogenerator-Assisted Self-Powered Water Wave Motion Sensor. <b>2022</b> , 4, 3870-3879	1
612	Self-powered flexible triboelectric touch sensor based on micro-pyramidal PDMS films and cellulose acetate nanofibers. <b>2022</b> , 100550	1
611	Enhancing Drug Utilization Efficiency via Dish-Structured Triboelectric Nanogenerator. 10,	1
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608	Water Droplet-Based Nanogenerators. 2201383	3
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582	Photomechaelectric nanogenerator. <b>2022</b> ,	Ο
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523	Ultra-high-speed hybrid ceramic triboelectric bearing with real-time dynamic instability monitoring. <b>2022</b> , 103, 107759	O
522	PEO-PDMS-based triboelectric nanogenerators as self-powered sensors for driver status monitoring. <b>2023</b> , 451, 138961	1
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515	Highly Efficient Long-Lasting Triboelectric Nanogenerator Upon Impact and its Application to Daily-Life Self-Cleaning Solar Panel.	O
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512	Triboelectric Nanogenerator Metamaterials for Joint Vibration Mitigation and Self-Powered Structure Monitoring.	О
511	Integrated temperature and pressure dual-mode sensors based on elastic PDMS foams decorated with thermoelectric PEDOT:PSS and carbon nanotubes for human energy harvesting and electronic-skin. <b>2022</b> , 10, 18256-18266	4
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503	A highly stable bimetallic organic framework for enhanced electrical performance of cellulose nanofiber-based triboelectric nanogenerators.	O
502	Study of Triboelectric Charges in Thin Dielectric and Semiconductor Films by SPM Methods. <b>2022</b> , 56, 325-328	О
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498	Triboelectric Nanogenerator Based on PTFE Plastic Waste Bottle and Aluminum Foil. <b>2022</b> , 2, 203-213  Enhanced Performance of Triboelectric Nanogenerator with Micro-Rhombic Patterned PDMS for	О
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483	Core-Shell ZnO@Microporous Organic Polymer Nanospheres as Enhanced Piezo-Triboelectric Energy Harvesting Materials.	О
482	Application of Triboelectric Nanogenerator in Fluid Dynamics Sensing: Past and Future. <b>2022</b> , 12, 3261	2
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471	Tailoring charge affinity, dielectric property, and band gap of bacterial cellulose paper by multifunctional Ti2NbO7 nanosheets for improving triboelectric nanogenerator performance.	O
470	The electron transfer mechanism between metal and silicon oxide composites for triboelectric nanogenerators.	О
469	A Flexible Triboelectric Nanogenerator Based on Multilayer MXene/Cellulose Nanofibril Composite Film for Patterned Electroluminescence Display. <b>2022</b> , 15, 6770	О
468	Enhanced Triboelectric Nanogenerator Performance Based on Mechanical Imprinting PDMS Microstructures. 2201525	O
467	Self-powered forest ambient monitoring microsystem based on wind energy hybrid nanogenerators.	O
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444	Multi-purpose triboelectric-electromagnetic hybrid nanogenerator with a mechanical motion-controlled switch for harvesting low-frequency energy. <b>2022</b> , 107867	О
443	TOWARDS AUTONOMOUS WEARABLE TRIBOELECTRIC SYSTEMS INTEGRATED ON TEXTILES. <b>2022</b> , 105264	O
442	Low-Temperature Plasma Sintering of Inkjet-Printed Metal Salt Decomposition Inks on Flexible Substrates. 2200834	O
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421	Freshwater Production Towards Microgrid Integration: Physics, Progress, and Prospects of Solar-Thermal Evaporation. <b>2022</b> , 100037	O
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419	A Study of the Performance Degradation of Conductive Threads Based on the Effects of Tensile Forces and Repeated Washing. <b>2022</b> , 14, 4581	3

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414	A Review on Wearable Electrospun Polymeric Piezoelectric Sensors and Energy Harvesters. 2200442	2
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411	High-Performance and Low-Cost Overhead Projector Sheet-Based Triboelectric Nanogenerator for Self-Powered Cholesteric Liquid Crystal, Electroluminescence, and Portable Electronic Devices.	О
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409	ZIF-67-Metal©rganic-Framework-Based Triboelectric Nanogenerator for Self-Powered Devices. <b>2022</b> , 2, 291-302	О
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404	All-Printed Wearable Triboelectric Nanogenerator with Ultra-Charged Electron Accumulation Polymers Based on MXene Nanoflakes. 2200819	О
403	A Lightweight Sensitive Triboelectric Nanogenerator Sensor for Monitoring Loop Drive Technology in Table Tennis Training. <b>2022</b> , 11, 3212	Ο
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387	Antibacterial flexible triboelectric nanogenerator via capillary force lithography. <b>2023</b> , 630, 611-622	1
386	A hybrid triboelectric and piezoelectric nanogenerator with #Al2O3 NPs/Doku and PVDF/SWCNTs nanofibers. <b>2023</b> , 656, 130403	O
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369	Bio-inspired water-driven electricity generators: From fundamental mechanisms to practical applications. <b>2022</b> ,	4
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366	Multifunctional Properties of Polyvinylidene-Fluoride-Based Materials: From Energy Harvesting to Energy Storage.	0
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342	3D fibrous aerogels from 1D polymer nanofibers for energy and environmental applications.	6
341	Maxwell displacement current induced wireless self-powered gas sensor array. <b>2023</b> , 30, 100951	О
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339	PVA-silk fibroin bio-based triboelectric nanogenerator. <b>2023</b> , 105, 108035	1
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333	Cellulosic gel-based triboelectric nanogenerators for energy harvesting and emerging applications. <b>2023</b> , 106, 108079	2
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329	Photovoltaic-triboelectric hybridized nanogenerator for simultaneously scavenging light and liquid-droplet energies. <b>2023</b> , 106, 108063	1

328	Respiration-mediated self-switched triboelectric nanogenerator for wearable point-of-care prevention and alarm of asthma. <b>2023</b> , 106, 108058	O
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322	A Helix-like Triboelectric Nanogenerator for Efficient Ambient Vibrational Energy Harvesting and Self-powered Applications. <b>2022</b> ,	O
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311	Pendulum Energy Harvesters: A Review. <b>2022</b> , 15, 8674	1

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306	The morphology effect of embedded ZnO particles-based composite on flexible hybrid piezoelectric triboelectric nanogenerators for harvesting biomechanical energy.	0
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303	Power Management for TENG-Generated Power. <b>2023</b> , 1-39	O
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299	A battery-free music-driven humidity sensor for intelligent wearable sensing system in smart diaper.	O
298	Self-powered speech recognition system for deaf users. <b>2022</b> , 3, 101168	O
297	Triboelectric nanogenerators for clinical diagnosis and therapy: A report of recent progress. <b>2022</b> , 16, 100195	O
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293	Transparent, Stretchable, and Recyclable Triboelectric Nanogenerator Based on an Acid- and Alkali-Resistant Hydrogel.	O

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291	An Eccentric-structured Hybrid Triboelectric-Electromagnetic Nanogenerator for Low-frequency Mechanical Energy Harvesting. <b>2022</b> , 108094	O
<b>2</b> 90	High-Performance Flexible Triboelectric Nanogenerator Based on Environmentally Friendly, Low-Cost Sodium Carboxymethylcellulose for Energy Harvesting and Self-Powered Sensing.	O
289	Intelligent electronic passworded locker with unique and personalized security barriers for home security.	O
288	Self-powered In-Phase Sensing and Regulating Mechanical System Enabled by Nanogenerator and Electrorheological Fluid. 2212248	0
287	Heart Energy Harvesting and Cardiac Bioelectronics: Technologies and Perspectives. <b>2022</b> , 2, 344-385	O
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285	Asymmetric-Internal-Capacitance-Induced Charge Aggregation for the Hot-Surface Triboelectric Nanogenerator.	O
284	Unprecedented Triboelectric Effect of Lignin on Enhancing the Electrical Outputs of Natural-Rubber-Based Triboelectric Nanogenerators (TENGs).	O
283	Rational Design of Advanced Triboelectric Materials for Energy Harvesting and Emerging Applications. 2201251	O
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281	Cellulose-based superhydrophobic wrinkled paper and electrospinning film as green tribolayer for water wave energy harvesting. <b>2022</b> ,	O
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275	Self-Powered Fine Dust Filtration Using Triboelectrification-Induced Electric Field. <b>2022</b> , 17,	O

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273	Towards a Highly Efficient ZnO Based Nanogenerator. <b>2022</b> , 13, 2200	O
272	Enhanced Durability and Robustness of Triboelectric Nanogenerators with Blade-Enclosed Structure for Breeze Energy Harvesting. 2200367	O
271	Piezoelectric soft robot driven by mechanical energy.	O
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269	Self-Powered Nitrogen Dioxide Sensor Based on Pd-Decorated ZnO/MoSe2 Nanocomposite Driven by Triboelectric Nanogenerator. <b>2022</b> , 12, 4274	1
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267	Economical Polypropylene-Based Triboelectric Nanogenerator for Self-powered Biomechanical Sensor Application.	O
266	Triboelectric Nanogenerators via Electronic Circuit Design. <b>2023</b> , 1-29	O
265	Boosting the Performance on Scale-Level of Triboelectric Nanogenerators by Controllable Self-Triggering. 2203707	O
264	Real-Time Non-Driving Behavior Recognition Using Deep Learning-Assisted Triboelectric Sensors in Conditionally Automated Driving. 2210580	0
263	PEO/cellulose composite paper based triboelectric nanogenerator and its application in human-health detection. <b>2022</b> ,	O
262	Self-powered smart agriculture sensing using triboelectric nanogenerators based on living plant leaves. <b>2022</b> , 108097	O
261	A Multi-Layer Stacked Triboelectric Nanogenerator Based on a Rotation-to-Translation Mechanism for Fluid Energy Harvesting and Environmental Protection. 2210920	O
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259	LEGO-block-inspired versatile triboelectric nanogenerator as power cells to harvest vibration energy.	O
258	Triboelectric-electromagnetic Hybrid Generator with Single Timer under Monostable Operation for Wind Energy Harvesting.	О
257	Integrated wearable smart sensor system for real-time multi-parameter respiration health monitoring. <b>2023</b> , 4, 101191	О

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255	The Sealed Bionic Fishtail-structured TENG Combined with the Biomimetic Underwater Robot for Ocean Sensor Systems. <b>2023</b> , 108210	O
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250	A Method of Vibration Measurement with the Triboelectric Sensor during Geo-Energy Drilling. <b>2023</b> , 16, 770	1
249	Advances in self-powered sports monitoring sensors based on triboelectric nanogenerators. 2023,	O
248	Leaf-Like TENGs for Harvesting Gentle Wind Energy at An Air Velocity as Low as 0.2[mls [1]. 2212207	1
247	3D-Printable and Multifunctional Conductive Nanocomposite with Tunable Mechanics Inspired by Sesame Candy. <b>2023</b> , 108166	O
246	Gas Discharge Tubes for Significantly Boosting the Instantaneous Current and Active Power of Load Driven by Triboelectric Nanogenerators. <b>2023</b> , 108200	0
245	A bio-inspired total current nanogenerator.	O
244	Probing Contact Electrification between Gas and Solid Surface. <b>2023</b> , 3, 1-11	О
243	From Piezoelectric Nanogenerator to Non-Invasive Medical Sensor: A Review. <b>2023</b> , 13, 113	1
242	Scalable one-step wet-spinning of triboelectric fibers for large-area power and sensing textiles.	0
241	Paper-Based Triboelectric Nanogenerators. <b>2023</b> , 1-22	O
240	Low-Pressure Air Plasma-Treated Polytetrafluoroethylene Surface for Efficient Triboelectric Nanogenerator. <b>2023</b> , 100330	O
239	Emerging Self-Powered Autonomous Sensing Triboelectric Fibers toward Future Wearable Human-Computer Interaction Devices. 2200044	O

238	Harsh Environmental-Tolerant and High-Performance Triboelectric Nanogenerator Based on Nanofiber/Microsphere Hybrid Membranes. <b>2023</b> , 16, 562	2
237	Carbon nanotubes field-effect transistor pressure sensor based on three-dimensional conformal force-sensitive gate modulation. <b>2023</b> , 204, 456-464	O
236	Emerging MXene/cellulose composites: Design strategies and diverse applications. 2023, 458, 141402	O
235	Self-powered liquid crystal lens based on a triboelectric nanogenerator. <b>2023</b> , 107, 108143	O
234	Triboelectric nanogenerators for blue energy harvesting in simulated wave conditions. 2023, 107, 108157	1
233	Antibacterial self-cleaning nylon-11/TiO2nanofiber membranes as triboelectric nanogenerators. <b>2023</b> , 17, 100869	O
232	Self-powered overspeed wake-up alarm system based on triboelectric nanogenerators for intelligent transportation. <b>2023</b> , 107, 108150	O
231	Fabricating of double layered flexible pressure sensor with a high-sensitivity based on inkjet printed micro-concave structure. <b>2023</b> , 351, 114161	Ο
230	Triboelectric nanogenerator for neuromorphic electronics. <b>2023</b> , 2, 100014	O
229	Nanoscale topotactic phase transformation modulated by triboelectrification for high memory storage. <b>2023</b> , 107, 108169	O
228	Extended bandwidth of 2DOF double impact triboelectric energy harvesting: Theoretical and experimental verification. <b>2023</b> , 333, 120593	0
227	Multi-channel self-powered attitude sensor based on triboelectric nanogenerator and inertia. <b>2023</b> , 107, 108164	O
226	A nonresonant triboelectric-electromagnetic energy harvester via a vibro-impact mechanism for low-frequency multi-directional excitations. <b>2023</b> , 107, 108123	0
225	A rotating tower-like triboelectric nanogenerator for ultrahigh charge density breakthrough. <b>2023</b> , 108, 108204	O
224	Edible cellulose-based conductive composites for triboelectric nanogenerators and supercapacitors. <b>2023</b> , 108, 108168	O
223	Lead-free CsBi3I10 perovskite based photo-enhanced triboelectric nanogenerator. <b>2023</b> , 108, 108209	O
222	A triboelectric nanogenerator based on commercial ITO-PET sheets for mechanical energy harvesting and self-powered indicator display applications. <b>2023</b> , 336, 133866	0
221	Integrated Solar Panel with Triboelectric Nanogenerator Array for Synergistic Harvesting of Raindrop and Solar Energy. 2209713	O

220	Triboelectric Nanogenerators as Sensing for Smart Home. <b>2023</b> , 1-37	Ο
219	Fe3O4-Filled Cellulose Paper for Triboelectric Nanogenerator Application. 2023, 15, 94	1
218	A Flexible Tribotronic Artificial Synapse with Bioinspired Neurosensory Behavior. 2023, 15,	1
217	Recent Progress of Flexible Photodetectors Based on Low-Dimensional IIIVI Semiconductors and Their Application in Wearable Electronics. 2211548	O
216	PACT. <b>2022</b> , 6, 1-27	0
215	Self-Powered Wearable Breath Sensor cum-Nanogenerator using AuNR-rGO-PVDF Nanocomposite. <b>2023</b> , 1-1	O
214	Triboelectric Nanogenerator for Particle Filtering. <b>2023</b> , 1-32	Ο
213	SolidIquid contact TENG using a melting near-field direct writing PCL nano-fiber structure. 1-13	Ο
212	Recent Progress in Piezoelectric-Triboelectric Effects Coupled Nanogenerators. 2023, 13, 385	O
211	Ultrastretchable Triboelectric Nanogenerators Based on Ecoflex/Porous Carbon for Self-Powered Gesture Recognition. 2201769	O
210	Conversion Electrode and Drive Capacitance for Connecting Microfluidic Devices and Triboelectric Nanogenerator. <b>2023</b> , 12, 522	0
209	Triboelectric Nanogenerators for Self-Powered Electrochemistry. <b>2023,</b> 1-18	Ο
208	Nanogenerator (NG) based on ZnO: Synthesis, performance, and applications - Mini review. 2023,	Ο
207	Flexible Photodetectors Based on II-VI Semiconductors. <b>2023</b> , 469-494	Ο
206	Harvesting Water Wave Energy by Triboelectric Nanogenerators. 2023, 1-36	Ο
205	Dynamic molecular tunnel junctions based on self-assembled monolayer for high tunneling current triboelectricity generation.	O
204	High Efficient and High Durability Triboelectric Nanogenerators for Blue Energy. 2023, 1-34	0
203	Frequency-enhanced triboelectric-electromagnetic hybrid generator integrated with multi-generation units for wind energy harvesting. <b>2023</b> , 2419, 012007	O

202	2D WS2-Based Single-Electrode Triboelectric Nanogenerator for Power Generation and Motion Sensing.	О
201	Innovative Technology for Self-Powered Sensors: Triboelectric Nanogenerators. 2200058	O
200	Appraisal of conducting polymers for potential bioelectronics. 2023, 265-298	O
199	Multilayered Helical Spherical Triboelectric Nanogenerator with Charge Shuttling for Water Wave Energy Harvesting. 2201392	O
198	Triboelectric Nanogenerators for Implantable Medical Science. <b>2023</b> , 1-30	O
197	Remote-Controlled Droplet Chains-Based Electricity Generators. 2203825	O
196	Novel Flexible Friction Layer Constructed from ZnO In Situ Grown on ZnSnO3 Nanocubes Toward Significantly Enhancing Output Performances of a Triboelectric Nanogenerator.	О
195	Boosting the Durability of Triboelectric Nanogenerators: A Critical Review and Prospect. 2213407	Ο
194	Nanocavities Stabilize Charge: Surface Topology is a General Strategy For Controlling Charge Dissipation.	О
193	Flexible Hybrid Piezoelectric-Electrostatic Device for Energy Harvesting and Sensing Applications. 2202173	Ο
192	Drug-screening triboelectric nanogenerator-based strain sensor for cardiomyocyte contractility. <b>2023</b> , 109, 108251	O
191	Leaf surface-microstructure inspired fabrication of fish gelatin-based triboelectric nanogenerator. <b>2023</b> , 109, 108231	O
190	Nanogenerators for biomedical applications. <b>2023</b> , 35, 105493	О
189	Environmentally-friendly natural materials for triboelectric nanogenerators:A review.	O
188	Triboelectric Nanogenerator for Human-Machine Interfacing. <b>2023</b> , 1-29	O
187	Recent Progress of Tactile and Force Sensors for Human Machine Interaction. 2023, 23, 1868	Ο
186	More Than Energy Harvesting in Electret Electronics-Moving toward Next-Generation Functional System. 2214859	О
185	Silicone-Based Multifunctional Thin Films with Improved Triboelectric and Sensing Performances via Chemically Interfacial Modification. <b>2023</b> , 8, 7135-7142	O

184	Flexible Triboelectric Tactile Sensor Based on a Robust MXene/Leather Film for HumanMachine Interaction. <b>2023</b> , 15, 13802-13812	O
183	Strongly enhanced charge density via gradient nano-doping for high performance elastic-material-based triboelectric nanogenerators. <b>2023</b> ,	O
182	Biocompatible and Long-Term Monitoring Strategies of Wearable, Ingestible and Implantable Biosensors: Reform the Next Generation Healthcare. <b>2023</b> , 23, 2991	1
181	Smart Triboelectric Nanogenerators Based on Stimulus-Response Materials: From Intelligent Applications to Self-Powered Systems. <b>2023</b> , 13, 1316	О
180	Cellulose-based materials for air purification: A review. <b>2023</b> , 194, 116331	О
179	Design of high-performance triboelectric-piezoelectric hybridized mechanical energy harvester inspired by three-phase asynchronous generator. <b>2023</b> , 108, 108236	O
178	Ionic Flexible Mechanical Sensors: Mechanisms, Structural Engineering, Applications, and Challenges.	O
177	LightInduced transition of charged carrier transport in symmetric metalEemiconductorEnetal contacts. <b>2023</b> , 47, 106384	O
176	Emergence of Non-photoresponsive Catalytic Techniques for Environmental Remediation and Energy Generation.	О
175	Self-Powered Electrocatalytic Nitrate to Ammonia Driven by Lightweight Triboelectric Nanogenerators for Wind Energy Harvesting. <b>2023</b> , 108434	O
174	Smart wearable triboelectric nanogenerator for self-powered bioelectronics and therapeutics. <b>2023</b> , 275, 111992	0
173	A High-Performance S-TENG based on the Synergistic Effect of Keratin and Calcium Chloride for Finger Activity Tracking. <b>2023</b> , 108443	О
172	Self-healing fluorinated poly(urethane urea) for mechanically and environmentally stable, high performance, and versatile fully self-healing triboelectric nanogenerators. <b>2023</b> , 108, 108243	О
171	Human motion recognition by a shoes-floor triboelectric nanogenerator and its application in fall detection. <b>2023</b> , 108, 108230	O
170	A multi-hole resonator enhanced acoustic energy harvester for ultra-high electrical output and machine-learning-assisted intelligent voice sensing. <b>2023</b> , 108, 108237	О
169	MXene effectively enhances the electron-withdrawing (EW) ability and dielectric properties of PVDF-TrFE nanofibers for triboelectric nanogenerators. <b>2023</b> , 664, 131172	O
168	Self-powered energy harvesting and implantable storage system based on hydrogel-enabled all-solid-state supercapacitor and triboelectric nanogenerator. <b>2023</b> , 463, 142427	0
167	A humidity- and environment-resisted high-performance triboelectric nanogenerator with superhydrophobic interface for energy harvesting and sensing. <b>2023</b> , 109, 108300	O

166	A self-powered triboelectric UV photodetector based on coupling impedance matching and photoresistive effect by sensing-electrode model. <b>2023</b> , 109, 108294	O
165	Self-powered triboelectric MEMS accelerometer. <b>2023</b> , 109, 108282	O
164	Position sensing of jetting droplets enabled by triboelectric nanogenerators. 2023, 109, 108289	О
163	Slippery contact on organogel enabling droplet energy harvest. <b>2023</b> , 109, 108286	O
162	Large-scale production of the 3D warp knitted terry fabric triboelectric nanogenerators for motion monitoring and energy harvesting. <b>2023</b> , 109, 108309	О
161	Characteristic of solid-ferrofluid triboelectric nanogenerator for ultra-low-frequency vibration energy harvesting. <b>2023</b> , 111, 108395	O
160	On the temperature and humidity effects of contact electrification in semiconductor-semiconductor case: An energy band model for electron transfer in triboelectrification. <b>2023</b> , 32, 101791	0
159	Tribovoltaic effect: Fundamental working mechanism and emerging applications. <b>2023</b> , 22, 100318	O
158	Vertically integrated triboelectric nanogenerators using PDMS/LSCO composite. <b>2023</b> , 292, 116388	О
157	A biocompatible, eco-friendly, and high-performance triboelectric nanogenerator based on sepiolite, bentonite, and kaolin decorated chitosan composite film. <b>2023</b> , 110, 108354	О
156	Self-powered angle-resolved triboelectric nanogenerator for underwater vibration localization. <b>2023</b> , 110, 108392	О
155	Hybrid vector and pressure sensor for fingertip dynamics sensing using DC-triboelectric/AC-piezoelectric mechanisms. <b>2023</b> , 355, 114330	O
154	Self-powered digital microfluidics driven by rotational triboelectric nanogenerator. 2023, 110, 108376	О
153	Cellulosic triboelectric materials for stable energy harvesting from hot and humid conditions. <b>2023</b> , 111, 108426	О
152	Aligned PLLA electrospun fibres based biodegradable triboelectric nanogenerator. 2023, 110, 108325	О
151	Roll to roll triboelectric fiber manufacturing for smart-textile self-powered sensor and harvester. <b>2023</b> , 111, 108378	O
150	Boosting power output of fluttering triboelectric nanogenerator based on charge excitation through multi-utilization of wind. <b>2023</b> , 111, 108389	О
149	Recent advances on porous materials and structures for high-performance triboelectric nanogenerators. <b>2023</b> , 111, 108365	O

148	Polyvinylidene fluoride/aromatic hyperbranched polyester 2nd generation based triboelectric sensor for polysomnographic and health monitoring applications. <b>2023</b> , 355, 114311	0
147	A systematic review on new advancement and assessment of emerging polymeric cryogels for environmental sustainability and energy production. <b>2023</b> , 316, 123678	Ο
146	Experimental study on the effect of electrical and mechanical conditions on piezoelectric energy harvesting. <b>2022</b> ,	O
145	Wearable bistable triboelectric nanogenerator for harvesting torsional vibration energy from human motion. <b>2023</b> , 109, 108315	Ο
144	Contact-electro-catalysis for Direct Synthesis of H 2 O 2 under Ambient Conditions.	Ο
143	Nanotechnology Applied to Cellulosic Materials. <b>2023</b> , 16, 3104	Ο
142	PDMS/PVDF- MoS2 based flexible triboelectric nanogenerator for mechanical energy harvesting. <b>2023</b> , 274, 125910	Ο
141	A compact quasi-zero-stiffness device for vibration suppression and energy harvesting. <b>2023</b> , 250, 108284	О
140	Eco-friendly mass production of MoS2 flakes in pure water for performance enhancement of triboelectric nanogenerator. <b>2023</b> , 625, 157235	0
139	Nonlinear modelling of unimorph and bimorph magneto-electro-elastic energy harvesters. <b>2023</b> , 119, 803-830	Ο
138	A ferroelectric/ferroelastic energy harvester: Load impedance and frequency effects. 2023, 277, 116687	O
137	Mechanical intelligent wave energy harvesting and self-powered marine environment monitoring. <b>2023</b> , 108, 108222	O
136	Triboelectric Nanogenerator-Based Near-Field Electrospinning System for Optimizing PVDF Fibers with High Piezoelectric Performance. <b>2023</b> , 15, 5242-5252	1
135	Triboelectric-Electromagnetic Hybrid Wind-Energy Harvester with a Low Startup Wind Speed in Urban Self-Powered Sensing. <b>2023</b> , 14, 298	Ο
134	Recent Progress in Self-Powered Wireless Sensors and Systems Based on TENG. <b>2023</b> , 23, 1329	Ο
133	Theoretical and experimental investigation of a Faraday disc generator. 2022,	Ο
132	Soft Ball-Based Triboelectric <b>E</b> lectromagnetic Hybrid Nanogenerators for Wave Energy Harvesting. <b>2023</b> , 8, 2201246	O
131	Self-powered flow sensing for automobile based on triboelectric nanogenerator with magnetic field modulation mechanism. <b>2023</b> , 108, 108233	1

130	Review of Triboelectric Nanogenerators Applied to the Field of Intelligent Robotics. 2022,	О
129	Achieving High-Performance Triboelectric Nanogenerator by DC Pump Strategy. 2201957	О
128	Worm Generator: A System for High-Throughput in Vivo Screening. <b>2023</b> , 23, 1280-1288	О
127	A high-output silk-based triboelectric nanogenerator with durability and humidity resistance. <b>2023</b> , 108, 108244	О
126	2D janus niobium oxydihalide NbOXY: Multifunctional piezoelectric semiconductor for electronics, photonics, sensing and sustainable energy applications. <b>2023</b> , 31, 101001	O
125	Self-powered triboelectric mechanical motion sensor for simultaneous monitoring of linear-rotary multi-motion. <b>2023</b> , 108, 108239	1
124	Mylar Interlayer-Mediated Performance Enhancement of a Flexible Triboelectric Nanogenerator for Self-Powered Pressure Sensing Application. <b>2023</b> , 5, 1002-1012	О
123	Rationally Designed Anti-Glare Panel Arrays as Highway Wind Energy Harvester. 2214934	О
122	An Advanced Strategy to Enhance TENG Output: Reducing Triboelectric Charge Decay. 2209895	О
121	High performance wide frequency band triboelectric nanogenerator based on multilayer wave superstructure for harvesting vibration energy.	О
120	Energy Storage for Triboelectric Nanogenerator Generated Energy. <b>2023</b> , 1-34	О
119	A self-powered sound-driven humidity sensor for wearable intelligent dehydration monitoring system. <b>2023</b> , 34, 195501	О
118	Self-Powered Biosensors for Monitoring Human Physiological Changes. <b>2023</b> , 13, 236	0
117	Natural Silkworm Cocoon-Based Hierarchically Architected Composite Triboelectric Nanogenerators for Biomechanical Energy Harvesting.	О
116	Biowaste Eggshell Membranes for Bio-triboelectric Nanogenerators and Smart Sensors. <b>2023</b> , 8, 6699-6707	О
115	Laser-Induced Graphitization of Lignin/PLLA Composite Sheets for Biodegradable Triboelectric Nanogenerators. <b>2023</b> , 11, 3114-3122	О
114	Nanoarchitectonics of Triboelectric Nanogenerator for Conversion of Abundant Mechanical Energy to Green Hydrogen. <b>2023</b> , 13, 2203476	О
113	Triboelectric Nanogenerator as Intelligent Sensors for Security and Human Behavior. <b>2023</b> , 1-30	О

112	Wearable Electronics Based on Stretchable Organic Semiconductors. 2206309	О
111	Low-cost triboelectric nanogenerator based on aseptic carton package. <b>2023</b> , 17, 100965	O
110	A Flexible Triboelectric Nanogenerator Integrated with CMCh-Fe/LiCl Hydrogel Electrode for Cheerleading Monitoring. <b>2023</b> , 18,	0
109	Machine Learning-Enhanced Flexible Mechanical Sensing. <b>2023</b> , 15,	O
108	Triboelectric Nanogenerator as Wearable Sensing Devices. <b>2023</b> , 1-50	0
107	Study of ZnO nanosheets growth parameters effect on the performance of the triboelectric nanogenerator. <b>2023</b> ,	O
106	A mechanically adaptive polymer based triboelectric nanogenerator for long-life self-powered wearable electronics. <b>2023</b> , 188, 111937	0
105	Charge-Accumulating-Flutter-Based Triboelectric Nanogenerator via Discharge Gateway. <b>2023</b> , 13,	O
104	Investigation of Contact Electrification between 2D MXenes and MoS 2 through Density Functional Theory and Triboelectric Probes. <b>2023</b> , 33,	0
103	MOF-derived porous Ni/C material for high-performance hybrid nanogenerator and self-powered wearable sensor. <b>2023</b> , 168, 107492	0
102	Fabrication and feasibility study of polymer-based triboelectric nanogenerator towards blue energy harvesting. <b>2023</b> , 1, 100006	0
101	Boosting the output of hydrocapacitors by structure modification. <b>2023</b> , 29, 101405	O
100	Bioresorbable Pressure Sensor and Its Applications in Abnormal Respiratory Event Identification. <b>2023</b> , 5, 1761-1769	0
99	Flexible Strain and Pressure Sensors for Electronic Skin. <b>2023</b> , 138-150	0
98	High current implementation of Cu/P-type GaN triboelectric nanogenerator. 2023, 122, 083903	0
97	Fabrication of a Silicon Elastomer-Based Self-Powered Flexible Triboelectric Sensor for Wearable Energy Harvesting and Biomedical Applications. <b>2023</b> , 5, 1750-1760	O
96	Transition metal chalcogenides for next-generation energy storage.	0
95	Recent Advances in Mechanical Vibration Energy Harvesters Based on Triboelectric Nanogenerators. 2300401	O

94	Electric Eel Biomimetics for Energy Storage and Conversion. 2201435	О
93	Triboelectric Nanogenerator as a Probe for Studying Liquid Charge Transfer. <b>2023</b> , 1-12	O
92	A Stereoscopically Structured Triboelectric Nanogenerator for Bending Sensors and Hierarchical Interactive Systems. <b>2023</b> , 6, 3590-3598	0
91	Harvesting Vibration and Ultrasound Energy by Triboelectric Nanogenerators. 2023, 1-40	O
90	Cellulose-based Conductive Gels and Their Applications.	O
89	Smart Triboelectric Nanogenerators Toward Human-Oriented Technologies: Health Monitoring, Wound Healing, Drug Delivery. 2201500	O
88	Surface engineering AgNW transparent conductive films for triboelectric nanogenerator and self-powered pressure sensor. <b>2023</b> , 462, 142170	O
87	Self-Powered Triboelectric Nanogenerator for Security Applications. <b>2023</b> , 14, 592	O
86	A flexible and stretchable triboelectric nanogenerator based on a medical conductive hydrogel for biomechanical energy harvesting and electronic switches. <b>2023</b> , 15, 6812-6821	O
85	Soft Robotic Perception System with Ultrasonic Auto-Positioning and Multimodal Sensory Intelligence. <b>2023</b> , 17, 4985-4998	1
84	Power Generation by a Limestone-Contained Putty. <b>2023</b> , 8, 9326-9333	O
83	Charge storage coating based triboelectric nanogenerator and its applications in self-powered anticorrosion and antifouling. <b>2023</b> , 17,	O
82	Ball-Mill-Inspired Durable Triboelectric Nanogenerator for Wind Energy Collecting and Speed Monitoring. <b>2023</b> , 13, 939	0
81	AgITellulose Hybrid Filler for Boosting the Power Output of a Triboelectric Nanogenerator. <b>2023</b> , 15, 1295	O
80	Robust Solid-Liquid Triboelectric Nanogenerators: Mechanisms, Strategies and Applications. 2300764	O
79	Triboelectric immunotherapy using electrostatic-breakdown induced direct-current. 2023,	O
78	Freestanding-Mode Tribovoltaic Nanogenerator for Harvesting Sliding and Rotational Mechanical Energy. 2300079	0
77	All-Silicone Rubber Triboelectric Nanogenerators with Graphite-Impregnated Electrodes. <b>2023</b> , 1, 1069-1078	0

76	Technology Roadmap for Flexible Sensors. <b>2023</b> , 17, 5211-5295	О
75	A nanogenerator based on metal nanoparticles and magnetic ionic gradients. 2023, 15,	O
74	A Self-Powered Multifunctional Sensor for Downhole Motor Based on Triboelectric Nanogenerator. <b>2023</b> , 23, 8252-8260	O
73	All-in-One Sensing System for Online Vibration Monitoring via IR Wireless Communication as Driven by High-Power TENG. 2300051	O
72	Generation of Electrical Energy Using Fish Market Waste Fish Fin from Mechanical Motion for Battery-Less SelfPowered Wearable Sensors and IoT Devices.	0
71	Low-cost composite film triboelectric nanogenerators for a self-powered touch sensor. <b>2023</b> , 15, 6263-6272	O
70	Ultrasound-Driven Injectable and Fully Biodegradable Triboelectric Nanogenerators. 2201350	O
69	Solid-Liquid Triboelectric Nanogenerator Based on Vortex-Induced Resonance. <b>2023</b> , 13, 1036	O
68	LiquidBolid Triboelectric Nanogenerator for Bubble Energy Harvesting. 2201791	0
67	Cross-Link-Dependent Ionogel-Based Triboelectric Nanogenerators with Slippery and Antireflective Properties. 2301381	O
66	Hybrid Nanogenerators for Ocean Energy Harvesting: Mechanisms, Designs, and Applications. 2300847	O
65	Opportunities and Challenges in Power Management Systems for Triboelectric Nanogenerators. <b>2023</b> , 5, 1347-1375	O
64	Review: materials for biocompatible tribo-piezo nanogenerators.	O
63	Fabrication of biodegradable triboelectric nanogenerator by laser-induced graphitization of lignin/PLLA composite sheets. <b>2023</b> ,	O
62	Advances in solidBolid contacting triboelectric nanogenerator for ocean energy harvesting. 2023,	О
61	Omnidirectional wind piezoelectric energy harvesting. <b>2023</b> , 56, 234003	O
60	Human Machine Interaction via Dual Modes of Voice and Gesture Enabled by Triboelectric Nanogenerator and Machine Learning. <b>2023</b> , 15, 17009-17018	O
59	Development of a Triboelectric Nanogenerator for Joining of Silver Nanorods. 2201348	O

58	3D Extruded Graphene Thermoelectric Threads for Self-Powered Oral Health Monitoring. 2300908	О
57	Contact-electro-catalysis for Direct Synthesis of H 2 O 2 under Ambient Conditions.	Ο
56	Laminating Structure for Interlayer Corona Discharge Treatment Toward Ion-Based Nanogenerators. 2300097	О
55	Skin-Interfaced Wearable Sweat Sensors for Precision Medicine.	O
54	Recent progress in textile-based triboelectric force sensors for wearable electronics. 2023, 6,	O
53	Fabrication of Advanced Cellulosic Triboelectric Materials via Dielectric Modulation.	О
52	Recent developments in 2D materials for energy harvesting applications.	O
51	Three-dimensional triboelectric nanogenerator with carboxymethylated cellulose nanofiber and perfluoroalkoxy films. <b>2023</b> ,	O
50	Theory of Maxwell&rsquo;s equations for a mechano-driven media system for a non-inertia medium movement system. <b>2023</b> ,	О
49	Improving the Durability of Triboelectric Nanogenerator. <b>2023</b> , 1-37	O
48	A bioinspired, self-powered, flytrap-based sensor and actuator enabled by voltage triggered hydrogel electrodes.	O
47	Calotropis (Ark) Fibers based TENG: from Waste Material to Energy Source. 2022,	О
46	Material selection rules for high performance triboelectric nanogenerators. 2023,	О
45	Enhancing Surface Charge Density of Materials. <b>2023</b> , 1-26	O
44	Waterproof, Breathable, and UV-Protective Nanofiber-Based Triboelectric Nanogenerator for Self-Powered Sensors. <b>2023</b> , 11, 5608-5616	О
43	Recent Advances in Triboelectric Nanogenerators for Marine Exploitation.	0
42	Triboelectric nanogenerators: the beginning of blue dream.	2
41	Enhancing output performance of wearable triboelectric nanogenerators by manipulating the permittivity of BaTiO3-base/PVA composite films. <b>2023</b> , 32, 055017	O

40	Simple Fabrication of Transparent Triboelectric Nanogenerator Based on Coffee-Ring-Free AgNW Electrode via Spray Deposition with Surfactant.	0
39	A Robust Triboelectric Nanogenerator Resistant to Humidity and Temperature in Ambient Environment.	Ο
38	A medical waste X-ray film based triboelectric nanogenerator for self-powered devices, sensors, and smart buildings.	Ο
37	A Machine-Braided Flame-Retardant Triboelectric Yarn/Textile for Fireproof Application.	Ο
36	Anticorrosion by triboelectric cathodic protection. <b>2023</b> , 543-550	O
35	Amplifying the Output of a Triboelectric Nanogenerator Using an Intermediary Layer of Gallium-Based Liquid Metal Particles. <b>2023</b> , 13, 1290	Ο
34	A Noncontact Constant-Voltage Triboelectric Nanogenerator via Charge Excitation. 2066-2076	Ο
33	Piezoelectric Nanogenerators Based On BaTiO3/PDMS Composites for High-Frequency Applications. <b>2023</b> , 8, 13911-13919	O
32	Power Management Systems for Triboelectric Nanogenerators. <b>2023</b> , 1-34	О
31	Multiscale architected porous materials for renewable energy conversion and storage. <b>2023</b> , 59, 102768	О
30	Sustainable charged composites with amphiphobic surfaces for harsh environment <b>l</b> olerant non-contact mode triboelectric nanogenerators. <b>2023</b> , 112, 108428	0
29	Mechanical Systems for Triboelectric Nanogenerators. <b>2023</b> , 1-50	O
28	Triboelectric Nanogenerators for Civil Infrastructure Systems. <b>2023</b> , 1-23	Ο
27	Friction Force Excitation Effect on the Sliding-mode Triboelectric Nanogenerator. 2023, 108504	O
26	Fully stretchable textile-based triboelectric nanogenerators with crepe-paper-induced surface microstructures. <b>2023</b> , 13, 11142-11149	О
25	Pyro-Phototronic Effect for Advanced Photodetectors and Novel Light Energy Harvesting. <b>2023</b> , 13, 1336	Ο
24	Wearable cotton fabric-based single-electrode-mode triboelectric nanogenerator for self-powered human motion monitoring.	0
23	Triboelectric nanogenerators and piezoelectric nanogenerators for preventing and treating heart diseases.	Ο

22	Recent Advances, Properties, Fabrication and Opportunities in Two-Dimensional Materials for their Potential Sustainable Applications. <b>2023</b> , 102780	О
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17	Triboelectric Nanogenerator for Self-Charging Power Pack. <b>2023</b> , 1-32	O
16	Spray-coated Inorganic Lead-free Double Perovskite Cs2AgBiBr6 Based Large-scale Triboelectric Nanogenerator for Enhanced Energy Harvesting.	O
15	Hybrid energy harvesting systems for self-powered sustainable water purification by harnessing ambient energy. <b>2023</b> , 17,	O
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13	Composite piezoelectric-electromagnetic synchronously powering and sensing device for vehicle monitoring. <b>2023</b> , 286, 117040	O
12	Statistical Modeling Enabled Design of High-performance Conductive Composite Fiber Materials for Energy Harvesting and Self-powered Sensing. <b>2023</b> , 143052	0
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