Venkateswaran Vivekananthan

List of Publications by Year in descending order

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37 papers

1,602 citations

218381 26 h-index 35 g-index

38 all docs 38 docs citations

38 times ranked 1484 citing authors

#	Article	IF	CITATIONS
1	Wearable Triboelectric Nanogenerator from Waste Materials for Autonomous Information Transmission <i>via</i> Morse Code. ACS Applied Materials & Eamp; Interfaces, 2022, 14, 5328-5337.	4.0	52
2	Green Energy from Edible Materials: Triboelectrification-Enabled Sustainable Self-Powered Human Joint Movement Monitoring. ACS Sustainable Chemistry and Engineering, 2022, 10, 6549-6558.	3.2	21
3	Porosity modulated piezo-triboelectric hybridized nanogenerator for sensing small energy impacts. Applied Materials Today, 2021, 22, 100900.	2.3	28
4	Biodegradable metal-organic framework MIL-88A for triboelectric nanogenerator. IScience, 2021, 24, 102064.	1.9	52
5	A highly reliable contact-separation based triboelectric nanogenerator for scavenging bio-mechanical energy and self-powered electronics. Journal of Mechanical Science and Technology, 2021, 35, 2131-2139.	0.7	10
6	Triboelectric nanogenerator using multiferroic materials: An approach for energy harvesting and self-powered magnetic field detection. Nano Energy, 2021, 85, 105964.	8.2	53
7	A fully packed spheroidal hybrid generator for water wave energy harvesting and self-powered position tracking. Nano Energy, 2020, 69, 104439.	8.2	86
8	Synergetic enhancement of energy harvesting performance in triboelectric nanogenerator using ferroelectric polarization for self-powered IR signaling and body activity monitoring. Journal of Materials Chemistry A, 2020, 8, 22257-22268.	5.2	44
9	Encapsulated Triboelectric–Electromagnetic Hybrid Generator for a Sustainable Blue Energy Harvesting and Self-Powered Oil Spill Detection. ACS Applied Electronic Materials, 2020, 2, 3100-3108.	2.0	38
10	Green energy from working surfaces: a contact electrification–enabled data theft protection and monitoring smart table. Materials Today Energy, 2020, 18, 100544.	2.5	23
11	Substantial improvement on electrical energy harvesting by chemically modified/sandpaper-based surface modification in micro-scale for hybrid nanogenerators. Applied Surface Science, 2020, 514, 145904.	3.1	27
12	A Sustainable Blue Energy Scavenging Smart Buoy toward Self-Powered Smart Fishing Net Tracker. ACS Sustainable Chemistry and Engineering, 2020, 8, 4120-4127.	3.2	26
13	A highly reliable, impervious and sustainable triboelectric nanogenerator as a zero-power consuming active pressure sensor. Nanoscale Advances, 2020, 2, 746-754.	2.2	70
14	Triboelectric nanogenerators from reused plastic: An approach for vehicle security alarming and tire motion monitoring in rover. Applied Materials Today, 2020, 19, 100625.	2.3	30
15	Aloe vera: A tropical desert plant to harness the mechanical energy by triboelectric and piezoelectric approaches. Nano Energy, 2020, 73, 104767.	8.2	38
16	Fe2O3 magnetic particles derived triboelectric-electromagnetic hybrid generator for zero-power consuming seismic detection. Nano Energy, 2019, 64, 103926.	8.2	56
17	Piezophototronic gated optofluidic logic computations empowering intrinsic reconfigurable switches. Nature Communications, 2019, 10, 4381.	5.8	29
18	Zero-power consuming intruder identification system by enhanced piezoelectricity of K _{0.5} Na _{0.5} NbO ₃ using substitutional doping of BTO NPs. Journal of Materials Chemistry C, 2019, 7, 7563-7571.	2.7	32

#	Article	lF	CITATIONS
19	A flexible piezoelectric composite nanogenerator based on doping enhanced lead-free nanoparticles. Materials Letters, 2019, 249, 73-76.	1.3	58
20	A fully packed water-proof, humidity resistant triboelectric nanogenerator for transmitting Morse code. Nano Energy, 2019, 60, 850-856.	8.2	95
21	Sustainable Human-Machine Interactive Triboelectric Nanogenerator toward a Smart Computer Mouse. ACS Sustainable Chemistry and Engineering, 2019, 7, 7177-7182.	3.2	42
22	A sliding mode contact electrification based triboelectric-electromagnetic hybrid generator for small-scale biomechanical energy harvesting. Micro and Nano Systems Letters, 2019, 7, .	1.7	23
23	Piezoâ€Phototronic Effect: Regulation of Charge Carrier Dynamics in ZnO Microarchitectureâ€Based UV/Visible Photodetector via Photonicâ€Strain Induced Effects (Small 11/2018). Small, 2018, 14, 1870048.	5.2	0
24	Battery-Free Electronic Smart Toys: A Step toward the Commercialization of Sustainable Triboelectric Nanogenerators. ACS Sustainable Chemistry and Engineering, 2018, 6, 6110-6116.	3.2	39
25	Trash to energy: A facile, robust and cheap approach for mitigating environment pollutant using household triboelectric nanogenerator. Applied Energy, 2018, 219, 338-349.	5.1	79
26	Regulation of Charge Carrier Dynamics in ZnO Microarchitectureâ€Based UV/Visible Photodetector via Photonicâ€Strain Induced Effects. Small, 2018, 14, e1703044.	5.2	29
27	Adaptable piezoelectric hemispherical composite strips using a scalable groove technique for a self-powered muscle monitoring system. Nanoscale, 2018, 10, 907-913.	2.8	43
28	Direct In Situ Hybridized Interfacial Quantification to Stimulate Highly Flexile Self-Powered Photodetector. Journal of Physical Chemistry C, 2018, 122, 12177-12184.	1.5	16
29	Sustainable yarn type-piezoelectric energy harvester as an eco-friendly, cost-effective battery-free breath sensor. Applied Energy, 2018, 228, 1767-1776.	5.1	43
30	Biocompatible Collagen Nanofibrils: An Approach for Sustainable Energy Harvesting and Battery-Free Humidity Sensor Applications. ACS Applied Materials & Samp; Interfaces, 2018, 10, 18650-18656.	4.0	86
31	A sustainable freestanding biomechanical energy harvesting smart backpack as a portable-wearable power source. Journal of Materials Chemistry C, 2017, 5, 1488-1493.	2.7	62
32	Scavenging Biomechanical Energy Using High-Performance, Flexible BaTiO ₃ Nanocube/PDMS Composite Films. ACS Sustainable Chemistry and Engineering, 2017, 5, 4730-4738.	3.2	92
33	A flexible, planar energy harvesting device for scavenging road side waste mechanical energy via the synergistic piezoelectric response of K _{0.5} Na _{0.5} NbO ₃ -BaTiO ₃ /PVDF composite films. Nanoscale, 2017, 9, 15122-15130.	2.8	62
34	Sustainable Biomechanical Energy Scavenger toward Self-Reliant Kids' Interactive Battery-Free Smart Puzzle. ACS Sustainable Chemistry and Engineering, 2017, 5, 7310-7316.	3.2	37
35	Sub-Picomolar Recognition of Cr ³⁺ through Bioinspired Organic–Inorganic Ensemble Utilization. ACS Sensors, 2016, 1, 663-669.	4.0	21
36	Highly Directional 1D Supramolecular Assembly of New Diketopyrrolopyrrole-Based Gel for Organic Solar Cell Applications. Langmuir, 2016, 32, 4346-4351.	1.6	48

#	Article	IF	CITATIONS
37	Triboelectric Nanogenerators: Design, Fabrication, Energy Harvesting, and Portable-Wearable Applications. , 0, , .		11