

# Venkateswaran Vivekananthan

## List of Publications by Year in descending order

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Version: 2024-02-01

37  
papers

1,602  
citations

218381

26  
h-index

360668

35  
g-index

38  
all docs

38  
docs citations

38  
times ranked

1484  
citing authors

#	ARTICLE	IF	CITATIONS
1	A fully packed water-proof, humidity resistant triboelectric nanogenerator for transmitting Morse code. <i>Nano Energy</i> , 2019, 60, 850-856.	8.2	95
2	Scavenging Biomechanical Energy Using High-Performance, Flexible BaTiO <sub>3</sub> /Nanocube/PDMS Composite Films. <i>ACS Sustainable Chemistry and Engineering</i> , 2017, 5, 4730-4738.	3.2	92
3	Biocompatible Collagen Nanofibrils: An Approach for Sustainable Energy Harvesting and Battery-Free Humidity Sensor Applications. <i>ACS Applied Materials &amp; Interfaces</i> , 2018, 10, 18650-18656.	4.0	86
4	A fully packed spheroidal hybrid generator for water wave energy harvesting and self-powered position tracking. <i>Nano Energy</i> , 2020, 69, 104439.	8.2	86
5	Trash to energy: A facile, robust and cheap approach for mitigating environment pollutant using household triboelectric nanogenerator. <i>Applied Energy</i> , 2018, 219, 338-349.	5.1	79
6	A highly reliable, impervious and sustainable triboelectric nanogenerator as a zero-power consuming active pressure sensor. <i>Nanoscale Advances</i> , 2020, 2, 746-754.	2.2	70
7	A sustainable freestanding biomechanical energy harvesting smart backpack as a portable-wearable power source. <i>Journal of Materials Chemistry C</i> , 2017, 5, 1488-1493.	2.7	62
8	A flexible, planar energy harvesting device for scavenging road side waste mechanical energy via the synergistic piezoelectric response of K <sub>0.5</sub> Na <sub>0.5</sub> NbO <sub>3</sub> -BaTiO <sub>3</sub> /PVDF composite films. <i>Nanoscale</i> , 2017, 9, 15122-15130.	2.8	62
9	A flexible piezoelectric composite nanogenerator based on doping enhanced lead-free nanoparticles. <i>Materials Letters</i> , 2019, 249, 73-76.	1.3	58
10	Fe <sub>2</sub> O <sub>3</sub> magnetic particles derived triboelectric-electromagnetic hybrid generator for zero-power consuming seismic detection. <i>Nano Energy</i> , 2019, 64, 103926.	8.2	56
11	Triboelectric nanogenerator using multiferroic materials: An approach for energy harvesting and self-powered magnetic field detection. <i>Nano Energy</i> , 2021, 85, 105964.	8.2	53
12	Biodegradable metal-organic framework MIL-88A for triboelectric nanogenerator. <i>IScience</i> , 2021, 24, 102064.	1.9	52
13	Wearable Triboelectric Nanogenerator from Waste Materials for Autonomous Information Transmission via Morse Code. <i>ACS Applied Materials &amp; Interfaces</i> , 2022, 14, 5328-5337.	4.0	52
14	Highly Directional 1D Supramolecular Assembly of New Diketopyrrolopyrrole-Based Gel for Organic Solar Cell Applications. <i>Langmuir</i> , 2016, 32, 4346-4351.	1.6	48
15	Synergetic enhancement of energy harvesting performance in triboelectric nanogenerator using ferroelectric polarization for self-powered IR signaling and body activity monitoring. <i>Journal of Materials Chemistry A</i> , 2020, 8, 22257-22268.	5.2	44
16	Adaptable piezoelectric hemispherical composite strips using a scalable groove technique for a self-powered muscle monitoring system. <i>Nanoscale</i> , 2018, 10, 907-913.	2.8	43
17	Sustainable yarn type-piezoelectric energy harvester as an eco-friendly, cost-effective battery-free breath sensor. <i>Applied Energy</i> , 2018, 228, 1767-1776.	5.1	43
18	Sustainable Human-Machine Interactive Triboelectric Nanogenerator toward a Smart Computer Mouse. <i>ACS Sustainable Chemistry and Engineering</i> , 2019, 7, 7177-7182.	3.2	42

#	ARTICLE	IF	CITATIONS
19	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
20	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
21	Aloe vera: A tropical desert plant to harness the mechanical energy by triboelectric and piezoelectric approaches. Nano Energy, 2020, 73, 104767.	8.2	38
22	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
23	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
24	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
25	Regulation of Charge Carrier Dynamics in ZnO Microarchitecture-Based UV/Visible Photodetector via Photonic-Strain Induced Effects. Small, 2018, 14, e1703044.	5.2	29
26	Piezophototronic gated optofluidic logic computations empowering intrinsic reconfigurable switches. Nature Communications, 2019, 10, 4381.	5.8	29
27	Porosity modulated piezo-triboelectric hybridized nanogenerator for sensing small energy impacts. Applied Materials Today, 2021, 22, 100900.	2.3	28
28	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
29	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
30	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
31	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
32	Sub-Picomolar Recognition of $Cr^{3+}$ through Bioinspired Organic-Inorganic Ensemble Utilization. ACS Sensors, 2016, 1, 663-669.	4.0	21
33	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
34	Direct In Situ Hybridized Interfacial Quantification to Stimulate Highly Flexible Self-Powered Photodetector. Journal of Physical Chemistry C, 2018, 122, 12177-12184.	1.5	16
35	Triboelectric Nanogenerators: Design, Fabrication, Energy Harvesting, and Portable-Wearable Applications. , 0, , .		11
36	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

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37	Piezo-Phototronic Effect: Regulation of Charge Carrier Dynamics in ZnO Microarchitecture-Based UV/Visible Photodetector via Photonic-Strain Induced Effects (Small 11/2018). Small, 2018, 14, 1870048.	5.2	0