

# Balasubramaniam Saravanakumar

## List of Publications by Citations

**Source:**

<https://exaly.com/author-pdf/3952618/balasubramaniam-saravanakumar-publications-by-citations.pdf>

**Version:** 2024-04-28

This document has been generated based on the publications and citations recorded by exaly.com. For the latest version of this publication list, visit the link given above.

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

72  
papers

2,139  
citations

27  
h-index

44  
g-index

75  
ext. papers

2,566  
ext. citations

5.6  
avg, IF

5.37  
L-index

#	Paper	IF	Citations
72	Flexible, Hybrid Piezoelectric Film (BaTi(1-x)Zr(x)O <sub>3</sub> )/PVDF Nanogenerator as a Self-Powered Fluid Velocity Sensor. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2015</b> , 7, 9831-40	9.5	188
71	Piezoelectric-driven self-charging supercapacitor power cell. <i>ACS Nano</i> , <b>2015</b> , 9, 4337-45	16.7	170
70	Rambutan peels promoted biomimetic synthesis of bioinspired zinc oxide nanochains for biomedical applications. <i>Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy</i> , <b>2015</b> , 137, 250-8	4.4	110
69	Self-powered pH sensor based on a flexible organic-inorganic hybrid composite nanogenerator. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2014</b> , 6, 13716-23	9.5	97
68	NiCoS nanosheet-decorated 3D, porous Ni film@Ni wire electrode materials for all solid-state asymmetric supercapacitor applications. <i>Nanoscale</i> , <b>2017</b> , 9, 18819-18834	7.7	84
67	Ferrimagnetism in cobalt ferrite (CoFe <sub>2</sub> O <sub>4</sub> ) nanoparticles. <i>Nano Structures Nano Objects</i> , <b>2018</b> , 14, 84-91	5.6	79
66	Fabrication of a ZnO nanogenerator for eco-friendly biomechanical energy harvesting. <i>RSC Advances</i> , <b>2013</b> , 3, 16646	3.7	71
65	Thermally reduced graphene oxide-coated fabrics for flexible supercapacitors and self-powered systems. <i>Nano Energy</i> , <b>2015</b> , 15, 587-597	17.1	69
64	Novel Cu/CuO/ZnO hybrid hierarchical nanostructures for non-enzymatic glucose sensor application. <i>Journal of Electroanalytical Chemistry</i> , <b>2014</b> , 717-718, 90-95	4.1	68
63	Multifunctional Nanocarpet for Cancer Theranostics: Remotely Controlled Graphene Nanoheaters for Thermo-Chemosensitisation and Magnetic Resonance Imaging. <i>Scientific Reports</i> , <b>2016</b> , 6, 20543	4.9	66
62	Polypyrrole-Decorated Hierarchical NiCo <sub>2</sub> O <sub>4</sub> Nanoneedles/Carbon Fiber Papers for Flexible High-Performance Supercapacitor Applications. <i>Electrochimica Acta</i> , <b>2017</b> , 247, 524-534	6.7	64
61	Piezoelectric BaTiO <sub>3</sub> /alginate spherical composite beads for energy harvesting and self-powered wearable flexion sensor. <i>Composites Science and Technology</i> , <b>2017</b> , 142, 65-78	8.6	59
60	Facile synthesis of graphene/ZnO nanocomposites by low temperature hydrothermal method. <i>Materials Research Bulletin</i> , <b>2013</b> , 48, 878-883	5.1	58
59	Investigation of UV photoresponse property of Al, N co-doped ZnO film. <i>Journal of Alloys and Compounds</i> , <b>2013</b> , 580, 538-543	5.7	57
58	Human Interactive Triboelectric Nanogenerator as a Self-Powered Smart Seat. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2016</b> , 8, 9692-9	9.5	51
57	Synthesis and characterization of NiCo <sub>2</sub> O <sub>4</sub> nanoplates as efficient electrode materials for electrochemical supercapacitors. <i>Applied Surface Science</i> , <b>2016</b> , 370, 452-458	6.7	47
56	A microcrystalline cellulose ingrained polydimethylsiloxane triboelectric nanogenerator as a self-powered locomotion detector. <i>Journal of Materials Chemistry C</i> , <b>2017</b> , 5, 1810-1815	7.1	45

55	Growth of 2D ZnO Nanowall for Energy Harvesting Application. <i>Journal of Physical Chemistry C</i> , <b>2014</b> , 118, 8831-8836	3.8	45
54	Mesoporous 3D NiCo <sub>2</sub> O <sub>4</sub> /MWCNT nanocomposite aerogels prepared by a supercritical CO <sub>2</sub> drying method for high performance hybrid supercapacitor electrodes. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , <b>2018</b> , 538, 451-459	5.1	43
53	Fabrication of an eco-friendly composite nanogenerator for self-powered photosensor applications. <i>Carbon</i> , <b>2015</b> , 84, 56-65	10.4	37
52	Holey two dimensional manganese cobalt oxide nanosheets as a high-performance electrode for supercapattery. <i>Chemical Engineering Journal</i> , <b>2019</b> , 373, 547-555	14.7	36
51	Construction of three-dimensional MnO <sub>2</sub> /Ni network as an efficient electrode material for high performance supercapacitors. <i>Electrochimica Acta</i> , <b>2020</b> , 342, 136041	6.7	33
50	Fabrication of PDMS-based triboelectric nanogenerator for self-sustained power source application. <i>International Journal of Energy Research</i> , <b>2016</b> , 40, 288-297	4.5	31
49	Structural, optical and magnetic properties of CuFe <sub>2</sub> O <sub>4</sub> nanoparticles. <i>Journal of Materials Science: Materials in Electronics</i> , <b>2018</b> , 29, 1975-1984	2.1	30
48	Controlled synthesis and electrochemical properties of Ag-doped Co <sub>3</sub> O <sub>4</sub> nanorods. <i>International Journal of Hydrogen Energy</i> , <b>2017</b> , 42, 29666-29671	6.7	29
47	Single-crystalline ZnO sheet Source-Gated Transistors. <i>Scientific Reports</i> , <b>2016</b> , 6, 19232	4.9	29
46	Vanadium Pentoxide/Reduced Graphene Oxide Composite as an Efficient Electrode Material for High-Performance Supercapacitors and Self-Powered Systems. <i>Energy Technology</i> , <b>2015</b> , 3, 913-924	3.5	28
45	Electrical measurement of PVA/graphene nanofibers for transparent electrode applications. <i>Synthetic Metals</i> , <b>2014</b> , 191, 113-119	3.6	26
44	Rational design of binder-free ZnCo <sub>2</sub> O <sub>4</sub> and Fe <sub>2</sub> O <sub>3</sub> decorated porous 3D Ni as high-performance electrodes for asymmetric supercapacitor. <i>Ceramics International</i> , <b>2018</b> , 44, 10635-10645	5.1	22
43	Worm structure piezoelectric energy harvester using ionotropic gelation of barium titanate-calcium alginate composite. <i>Energy</i> , <b>2017</b> , 118, 1146-1155	7.9	22
42	Coral-like reduced graphene oxide/tungsten sulfide hybrid as a cathode host of high performance lithium-sulfur battery. <i>Journal of Power Sources</i> , <b>2019</b> , 420, 22-28	8.9	18
41	Energy coupling processes in InGaN/GaN nanopillar light emitting diodes embedded with Ag and Ag/SiO <sub>2</sub> nanoparticles. <i>Journal of Materials Chemistry</i> , <b>2012</b> , 22, 21749		18
40	Self powered pH sensor using piezoelectric composite worm structures derived by ionotropic gelation approach. <i>Sensors and Actuators B: Chemical</i> , <b>2016</b> , 237, 534-544	8.5	17
39	3D-Flower-Like Copper Sulfide Nanoflake-Decorated Carbon Nanofragments-Modified Glassy Carbon Electrodes for Simultaneous Electrocatalytic Sensing of Co-existing Hydroquinone and Catechol. <i>Sensors</i> , <b>2019</b> , 19,	3.8	16
38	Structural, Optical and Magnetic Properties of NiO Nanopowders. <i>Journal of Nanoscience and Nanotechnology</i> , <b>2018</b> , 18, 4658-4666	1.3	15

37	Effect of Substrate Temperature on the Structural and Optical Properties of Nanocrystalline Cadmium Selenide Thin Films Prepared by Electron Beam Evaporation Technique. <i>Acta Physica Polonica A</i> , <b>2010</b> , 118, 623-628	0.6	15
36	3D honeycomb NiCo <sub>2</sub> S <sub>4</sub> @ Ni(OH) <sub>2</sub> nanosheets for flexible all-solid-state asymmetric supercapacitors with enhanced specific capacitance. <i>Journal of Alloys and Compounds</i> , <b>2019</b> , 790, 693-702	5.7	14
35	Gate-tunable photoresponse of defective graphene: from ultraviolet to visible. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2015</b> , 7, 2171-7	9.5	14
34	Enhancing the performance and stability of NiCo <sub>2</sub> O <sub>4</sub> nanoneedle coated on Ni foam electrodes with Ni seed layer for supercapacitor applications. <i>Ceramics International</i> , <b>2019</b> , 45, 13099-13111	5.1	13
33	Analysis of Physical Properties and Hydroxyapatite Precipitation In Vitro of TiO <sub>2</sub> -Containing Phosphate-Based Glass Systems. <i>Journal of the American Ceramic Society</i> , <b>2010</b> , 93, 4053-4060	3.8	12
32	Synthesis and characterisation of nanobioactive glass for biomedical applications. <i>Materials Letters</i> , <b>2011</b> , 65, 31-34	3.3	11
31	Synthesis of highly active biocompatible ZrO <sub>2</sub> nanorods using a bioextract. <i>Ceramics International</i> , <b>2020</b> , 46, 25915-25920	5.1	11
30	Three-dimensional BiO/Ti microspheres as an advanced negative electrode for hybrid supercapacitors. <i>Chemical Communications</i> , <b>2020</b> , 56, 12973-12976	5.8	11
29	Highly Flexible Electrospun Hybrid (Polyurethane/Dextran/Pyocyanin) Membrane for Antibacterial Activity via Generation of Oxidative Stress. <i>ACS Omega</i> , <b>2018</b> , 3, 14551-14561	3.9	11
28	Highly Stabilized Silicon Nanoparticles for Lithium Storage via Hierarchical Carbon Architecture. <i>ACS Applied Energy Materials</i> , <b>2020</b> , 3, 4777-4786	6.1	10
27	Efficient photocatalytic degradation of hazardous pollutants by homemade kitchen blender novel technique via 2D-material of few-layer MXene nanosheets. <i>Chemosphere</i> , <b>2021</b> , 281, 130984	8.4	10
26	Thickness-Dependent Electrical Transport Properties of Graphene. <i>Science of Advanced Materials</i> , <b>2013</b> , 5, 542-548	2.3	9
25	Quaternary CuFeSnS/PVP/rGO Composite for Supercapacitor Applications. <i>ACS Omega</i> , <b>2021</b> , 6, 9471-9480	3.9	9
24	Designing rational and cheapest SeO <sub>2</sub> electrocatalyst for long stable water splitting process. <i>Journal of Physics and Chemistry of Solids</i> , <b>2020</b> , 145, 109544	3.9	8
23	CoNiSe Nanostructures for Clean Energy Production. <i>ACS Omega</i> , <b>2020</b> , 5, 14702-14710	3.9	8
22	Plasma-induced photoresponse in few-layer graphene. <i>Carbon</i> , <b>2014</b> , 73, 25-33	10.4	8
21	Defect-induced metallic-to-semiconducting transition in multilayer graphene. <i>RSC Advances</i> , <b>2015</b> , 5, 16821-16827	3.7	8
20	Nickel, bismuth, and cobalt vanadium oxides for supercapacitor applications. <i>Ceramics International</i> , <b>2020</b> , 46, 28206-28210	5.1	8

19	Self-induced gate dielectric for graphene field-effect transistor. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2013</b> , 5, 6443-6	9.5	7
18	An investigation of the electrical properties of p-type Al:N Co-doped ZnO thin films. <i>Journal of the Korean Physical Society</i> , <b>2012</b> , 61, 1737-1741	0.6	7
17	Fabrication of nanofiber coated with l-arginine via electrospinning technique: a novel nanomatrix to counter oxidative stress under crosstalk of co-cultured fibroblasts and satellite cells. <i>Cell Communication and Adhesion</i> , <b>2018</b> , 24, 19-32		7
16	Neutral and alkaline chemical environment dependent synthesis of Mn <sub>3</sub> O <sub>4</sub> for oxygen evolution reaction (OER). <i>Materials Chemistry and Physics</i> , <b>2020</b> , 247, 122864	4.4	6
15	Functional reduced graphene oxide/cobalt hydroxide composite for energy storage applications. <i>Materials Letters</i> , <b>2020</b> , 276, 128193	3.3	6
14	Asymmetric polyhedron structured NiSe <sub>2</sub> @MoSe <sub>2</sub> device for use as a supercapacitor. <i>Nanoscale Advances</i> , <b>2021</b> , 3, 4207-4215	5.1	6
13	Electrochemical Deposition of 58SiO <sub>2</sub> -33CaO-9P <sub>2</sub> O <sub>5</sub> Nanobioactive Glass Particles on Ti-6Al-4V Alloy for Biomedical Applications. <i>International Journal of Applied Ceramic Technology</i> , <b>2015</b> , 12, 95-105	2	5
12	Investigation on copper based oxide, sulfide and selenide derivatives oxygen evolution reaction activity. <i>Applied Nanoscience (Switzerland)</i> , <b>2020</b> , 10, 4299-4306	3.3	4
11	Biomedical application of single anatase phase TiO <sub>2</sub> nanoparticles with addition of Rambutan (Nephelium lappaceum L.) fruit peel extract. <i>Applied Nanoscience (Switzerland)</i> , <b>2021</b> , 11, 699-708	3.3	4
10	Hydrothermal Method Derived MnMoO <sub>4</sub> Crystals: Effect of Cationic Surfactant on Microstructures and Electrochemical Properties. <i>ChemistrySelect</i> , <b>2020</b> , 5, 7728-7733	1.8	3
9	Comprehensive Review on Flexoelectric Energy Harvesting Technology: Mechanisms, Device Configurations, and Potential Applications. <i>ACS Applied Electronic Materials</i> , <b>2021</b> , 3, 2898-2924	4	3
8	Transition-Metal Element (Ni, Co)-Doped MgO Microflowers for Electrochemical Biosensor Applications. <i>Jom</i> , <b>2019</b> , 71, 279-284	2.1	3
7	Preparation of NiCo <sub>2</sub> O <sub>4</sub> microspheres employing hydrothermal approach. <i>International Journal of Hydrogen Energy</i> , <b>2021</b> , 46, 17060-17070	6.7	2
6	NiMoO nanorods photocatalytic activity comparison under UV and visible light. <i>Environmental Research</i> , <b>2021</b> , 197, 111073	7.9	2
5	High performance MnSn(OH) <sub>6</sub> electrodes for energy conversion application. <i>Materials Letters</i> , <b>2021</b> , 282, 128888	3.3	2
4	Fabrication and Characterization of Supercapacitors toward Self-Powered System <b>2018</b> ,		2
3	Engineering of Thermally Converted 3D-NiO Co <sub>3</sub> O <sub>4</sub> /Ni//3D-?-Fe <sub>4</sub> N C@Ni/SS Porous Electrodes for High-performance Supercapatteries. <i>Electrochimica Acta</i> , <b>2022</b> , 412, 140076	6.7	2
2	Three Dimensional Porous Binary Metal Oxide Networks for High Performance Supercapacitor Electrodes	167-192	

- 1 Electrochemical Oxygen Evolution Reaction Activity of Tin Sulfide Nanostructures. *ChemistrySelect*, **2020**, 5, 11703-11707 1.8