

# Ramasamy Thangavelu Rajendra Kuma

## List of Publications by Year in descending order

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79  
papers

2,780  
citations

147801  
31  
h-index

189892  
50  
g-index

79  
all docs

79  
docs citations

79  
times ranked

3981  
citing authors

#	ARTICLE	IF	CITATIONS
1	Visible light-assisted degradation of 4-nitrophenol and methylene blue using low energy carbon ion-implanted ZnO nanorod arrays: Effect on mechanistic insights and stability. <i>Chemosphere</i> , 2022, 287, 132283.	8.2	4
2	Enhanced visible-light degradation of organic dyes via porous g-C <sub>3</sub> N <sub>4</sub> . Phosphorus, Sulfur and Silicon and the Related Elements, 2022, 197, 200-208.	1.6	3
3	Electrochemical Non-enzymatic sensor based on Co-H2ABDC Metal Organic Framework for detection of glyphosate. <i>Chemical Physics Letters</i> , 2022, 795, 139481.	2.6	10
4	Titanium-Based Metal-Organic Framework/TiO <sub>2</sub> Composite for Degradation of Dyes Under Solar Light Irradiation. <i>Journal of Electronic Materials</i> , 2021, 50, 2565-2575.	2.2	7
5	NiMoO <sub>4</sub> /reduced graphene oxide composite as an electrode material for hybrid supercapacitor. <i>Materials Science in Semiconductor Processing</i> , 2021, 135, 106078.	4.0	28
6	MWCNT enabled smart textiles based flexible and wearable sensor for human motion and humidity monitoring. <i>Cellulose</i> , 2021, 28, 2505-2520.	4.9	26
7	MoS <sub>2</sub> Nanosheets Decorated Multi-walled Carbon Nanotube Composite Electrocatalyst for 4-Nitrophenol Detection and Hydrogen Evolution Reaction. <i>Electroanalysis</i> , 2020, 32, 2571-2580.	2.9	14
8	Mn-Ni binary metal oxide for high-performance supercapacitor and electro-catalyst for oxygen evolution reaction. <i>Ceramics International</i> , 2020, 46, 28006-28012.	4.8	34
9	Plasmonic effect and charge separation-induced photocatalytic degradation of organic dyes utilizing Au/ZnFe <sub>2</sub> O <sub>4</sub> @rGO ternary composite. <i>Applied Physics A: Materials Science and Processing</i> , 2020, 126, 1.	2.3	4
10	A radially controlled ZnS interlayer on ultra-long ZnO@Cd <sub>2</sub> S <sub>3</sub> core-shell nanorod arrays for promoting the visible photocatalytic degradation of antibiotics. <i>Nanoscale</i> , 2020, 12, 14047-14060.	5.6	11
11	Magnetite-Decorated Reduced Graphene Oxide: A Study of Multifunctional Antibacterial and Removal of Lead Ion Properties for Water Disinfection Applications. <i>Advanced Engineering Materials</i> , 2020, 22, 2000395.	3.5	7
12	Promotional Effect of Cu <sub>2</sub> S@ZnS Nanograins as a Shell Layer on ZnO Nanorod Arrays for Boosting Visible Light Photocatalytic H <sub>2</sub> Evolution. <i>Journal of Physical Chemistry C</i> , 2020, 124, 3610-3620.	3.1	23
13	Solvothermal synthesis of Fe <sub>3</sub> S <sub>4</sub> @graphene composite electrode materials for energy storage. <i>Carbon Letters</i> , 2020, 30, 667-673.	5.9	8
14	Development of the PANI/MWCNT Nanocomposite-Based Fluorescent Sensor for Selective Detection of Aqueous Ammonia. <i>ACS Omega</i> , 2020, 5, 8414-8422.	3.5	30
15	Nitrogen-Implanted ZnO Nanorod Arrays for Visible Light Photocatalytic Degradation of a Pharmaceutical Drug Acetaminophen. <i>ACS Omega</i> , 2019, 4, 11973-11979.	3.5	51
16	Birnessite MnO <sub>2</sub> decorated MWCNTs composite as a nonenzymatic hydrogen peroxide sensor. <i>Chemical Physics Letters</i> , 2019, 731, 136612.	2.6	18
17	Glucose oxidase immobilized amine terminated multiwall carbon nanotubes/reduced graphene oxide/polyaniline/gold nanoparticles modified screen-printed carbon electrode for highly sensitive amperometric glucose detection. <i>Materials Science and Engineering C</i> , 2019, 105, 110075.	7.3	74
18	Highly sensitive amperometric detection of glutamate by glutamic oxidase immobilized Pt nanoparticle decorated multiwalled carbon nanotubes(MWCNTs)/polypyrrole composite. <i>Biosensors and Bioelectronics</i> , 2019, 130, 307-314.	10.1	39

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19	Polyvinyl alcohol wrapped multiwall carbon nanotube (MWCNTs) network on fabrics for wearable room temperature ethanol sensor. <i>Sensors and Actuators B: Chemical</i> , 2018, 261, 297-306.	7.8	83
20	Impact of Oxygen Functional Groups on Reduced Graphene Oxide-Based Sensors for Ammonia and Toluene Detection at Room Temperature. <i>ACS Omega</i> , 2018, 3, 4105-4112.	3.5	62
21	Magnetite Nanoparticle Decorated Reduced Graphene Oxide Composite as an Efficient and Recoverable Adsorbent for the Removal of Cesium and Strontium Ions. <i>Industrial &amp; Engineering Chemistry Research</i> , 2018, 57, 1225-1232.	3.7	42
22	Influence of Fe <sub>3</sub> O <sub>4</sub> nanoparticles decoration on dye adsorption and magnetic separation properties of Fe <sub>3</sub> O <sub>4</sub> /rGO nanocomposites. <i>Separation Science and Technology</i> , 2018, 53, 2159-2169.	2.5	30
23	Effective shell wall thickness of vertically aligned ZnO-ZnS core-shell nanorod arrays on visible photocatalytic and photo sensing properties. <i>Applied Catalysis B: Environmental</i> , 2018, 237, 128-139.	20.2	91
24	Enhancement of magnetostrictive properties of Galfenol thin films. <i>Journal of Magnetism and Magnetic Materials</i> , 2018, 451, 300-304.	2.3	14
25	Polyaniline Anchored MWCNTs on Fabric for High Performance Wearable Ammonia Sensor. <i>ACS Sensors</i> , 2018, 3, 1822-1830.	7.8	153
26	Evolution of Visible Photocatalytic Properties of Cu-Doped CeO <sub>2</sub> Nanoparticles: Role of Cu <sup>2+</sup> -Mediated Oxygen Vacancies and the Mixed-Valence States of Ce Ions. <i>ACS Sustainable Chemistry and Engineering</i> , 2018, 6, 8536-8546.	6.7	55
27	Controlled fabrication and electrowetting properties of silicon nanostructures. <i>Journal of Adhesion Science and Technology</i> , 2017, 31, 31-40.	2.6	3
28	Phase evolution and magnetic properties of DC sputtered Fe-Ga (Galfenol) thin films with growth temperatures. <i>Journal of Alloys and Compounds</i> , 2017, 704, 420-424.	5.5	12
29	<i>In situ</i> attachment and its hydrophobicity of size- and shape-controlled silver nanoparticles on fabric surface for bioapplication. <i>Inorganic and Nano-Metal Chemistry</i> , 2017, 47, 1196-1203.	1.6	9
30	Electro Catalytic Properties of $\beta$ , $\gamma$ , $\delta$ MnO <sub>2</sub> and $\beta$ MnOOH Nanoparticles: Role of Polymorphs on Enzyme Free H <sub>2</sub> O <sub>2</sub> Sensing. <i>Electroanalysis</i> , 2017, 29, 1481-1489.	2.9	40
31	Regeneration of an efficient, solar active hierarchical ZnO flower photocatalyst for repeatable usage: controlled desorption of poisoned species from active catalytic sites. <i>RSC Advances</i> , 2017, 7, 4983-4992.	3.6	50
32	Ultrasonic-assisted fabrication of superhydrophobic ZnO nanowall films. <i>Bulletin of Materials Science</i> , 2017, 40, 505-511.	1.7	4
33	Robust water repellent ZnO nanorod array by Swift Heavy Ion Irradiation: Effect of Electronic Excitation Induced Local Chemical State Modification. <i>Scientific Reports</i> , 2017, 7, 3251.	3.3	23
34	Adsorption behaviour of reduced graphene oxide towards cationic and anionic dyes: Co-action of electrostatic and $\pi$ - $\pi$ interactions. <i>Materials Chemistry and Physics</i> , 2017, 194, 243-252.	4.0	198
35	Engineering Silicon to Porous Silicon and Silicon Nanowires by Metal-Assisted Chemical Etching: Role of Ag Size and Electron-Scavenging Rate on Morphology Control and Mechanism. <i>ACS Omega</i> , 2017, 2, 4540-4547.	3.5	33
36	MWCNT Based Non-Enzymatic H <sub>2</sub> O <sub>2</sub> Sensor: Influence of Amine Functionalization on the Electrochemical H <sub>2</sub> O <sub>2</sub> Sensing. <i>Journal of the Electrochemical Society</i> , 2016, 163, B627-B632.	2.9	16

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37	Characterization of tannic acid- and gallic acid-functionalized single- and multiwalled carbon nanotubes and an <i>in vitro</i> evaluation of their antioxidant properties. <i>Journal of Taibah University Medical Sciences</i> , 2016, 11, 469-477.	0.9	8
38	One step $\text{Ag}^{\text{TM}}$ and $\text{Ag}^{\text{TM}}$ Ag nanostructured thin films for ultrahigh sensitive SERS Detection. <i>Materials Science and Engineering C</i> , 2016, 68, 831-836.	7.3	5
39	Ce <sub>2</sub> S <sub>3</sub> decorated ZnO-ZnS core-shell nanorod arrays: Efficient solar-driven photocatalytic properties. <i>Catalysis Today</i> , 2016, 278, 271-279.	4.4	31
40	Facile construction of vertically aligned ZnO nanorod/PEDOT:PSS hybrid heterojunction-based ultraviolet light sensors: efficient performance and mechanism. <i>Nanotechnology</i> , 2016, 27, 095304.	2.6	52
41	Facile construction of vertically aligned EuS-ZnO hybrid core shell nanorod arrays for visible light driven photocatalytic properties. <i>AIP Conference Proceedings</i> , 2015, , .	0.4	0
42	Growth and Magnetic Properties of RF Sputtered Fe-Ga Thin Films. <i>Materials Research</i> , 2015, 18, 946-952.	1.3	6
43	Enhanced vacuum sensing performance of multiwalled carbon nanotubes: role of defects and carboxyl functionalization. <i>RSC Advances</i> , 2015, 5, 20479-20485.	3.6	20
44	Synthesis and electrocatalytic properties of manganese dioxide for non-enzymatic hydrogen peroxide sensing. <i>Materials Science in Semiconductor Processing</i> , 2015, 31, 709-714.	4.0	28
45	Visible-light-driven SnO <sub>2</sub> /TiO <sub>2</sub> nanotube nanocomposite for textile effluent degradation. <i>RSC Advances</i> , 2015, 5, 20424-20431.	3.6	33
46	Unexpected production of singlet oxygen by sub-micron cerium oxide particles and enhanced photocatalytic activity against methyl orange. <i>RSC Advances</i> , 2015, 5, 56982-56986.	3.6	7
47	Multiwalled Carbon Nanotube Oxygen Sensor: Enhanced Oxygen Sensitivity at Room Temperature and Mechanism of Sensing. <i>ACS Applied Materials &amp; Interfaces</i> , 2015, 7, 23857-23865.	8.0	40
48	Synthesis and Catalytic Properties of Al and Cu doped ZnO Thin Films on the Photolytic Degradation of Methylene Blue. <i>Synthesis and Reactivity in Inorganic, Metal Organic, and Nano Metal Chemistry</i> , 2014, 44, 1316-1322.	0.6	3
49	Field and temperature dependent electron transport properties of random network single walled and multi walled carbon nanotubes. <i>Materials Research Express</i> , 2014, 1, 035004.	1.6	3
50	Photocatalytic degradation of endocrine disruptor Bisphenol-A in the presence of prepared CexZn1-xO nanocomposites under irradiation of sunlight. <i>Journal of Environmental Sciences</i> , 2014, 26, 2362-2368.	6.1	23
51	Enhanced Room-Temperature Ferromagnetism on Co-Doped CeO <sub>2</sub> Nanoparticles: Mechanism and Electronic and Optical Properties. <i>Journal of Physical Chemistry C</i> , 2014, 118, 27039-27047.	3.1	94
52	Control of interconnected ZnO nanowires to vertically aligned ZnO nanorod arrays by tailoring the underlying spray deposited ZnO seed layer. <i>Materials Research Bulletin</i> , 2014, 60, 584-588.	5.2	9
53	In Vitro Bacterial Cytotoxicity of CNTs: Reactive Oxygen Species Mediate Cell Damage Edges over Direct Physical Puncturing. <i>Langmuir</i> , 2014, 30, 592-601.	3.5	69
54	Alignment, Morphology and Defect Control of Vertically Aligned ZnO Nanorod Array: Competition between $\text{C}_{12}\text{E}_{8}$ Surfactant and $\text{C}_{12}\text{E}_{8}$ Stabilizer Roles of the Amine Species and Its Photocatalytic Properties. <i>Crystal Growth and Design</i> , 2014, 14, 2873-2879.	3.0	33

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55	Cobalt-doped cerium oxide nanoparticles: Enhanced photocatalytic activity under UV and visible light irradiation. <i>Materials Science in Semiconductor Processing</i> , 2014, 26, 218-224.	4.0	98
56	Fabrication and Electrowetting Properties of Poly Si Nanostructure Based Superhydrophobic Platform. <i>Plasma Chemistry and Plasma Processing</i> , 2013, 33, 807-816.	2.4	8
57	ZnO microrods to nanowalled microtubes: optimization using simple fluorescence microscopy and enhanced photocatalytic properties. <i>Journal of Microscopy</i> , 2013, 252, 217-225.	1.8	4
58	Recent Progress on the Synthesis and Applications of Carbon Based Nanostructures. <i>Recent Patents on Nanotechnology</i> , 2012, 6, 99-104.	1.3	9
59	Effects of the crystallite mosaic spread on integrated peak intensities in $2\theta$ measurements of highly crystallographically textured ZnO thin films. <i>Journal Physics D: Applied Physics</i> , 2011, 44, 375401.	2.8	20
60	Simple Approach to Superamphiphobic Overhanging Silicon Nanostructures. <i>Journal of Physical Chemistry C</i> , 2010, 114, 2936-2940.	3.1	105
61	Nanobits: customizable scanning probe tips. <i>Nanotechnology</i> , 2009, 20, 395703.	2.6	27
62	On the suitability of carbon nanotube forests as non-stick surfaces for nanomanipulation. <i>Soft Matter</i> , 2008, 4, 392.	2.7	14
63	Guiding of highly charged ions through insulating nanocapillaries. <i>Canadian Journal of Physics</i> , 2008, 86, 327-330.	1.1	7
64	Control of ZnO nanorod array density by Zn supersaturation variation and effects on field emission. <i>Nanotechnology</i> , 2007, 18, 215704.	2.6	48
65	Li doped and undoped ZnO nanocrystalline thin films: a comparative study of structural and optical properties. <i>Journal of Sol-Gel Science and Technology</i> , 2007, 43, 171-177.	2.4	132
66	Guiding of highly charged ions by highly ordered SiO <sub>2</sub> nanocapillaries. <i>Physical Review A</i> , 2006, 73, .	2.5	118
67	Fabrication of silicon dioxide nanocapillary arrays for guiding highly charged ions. <i>Nanotechnology</i> , 2005, 16, 1697-1700.	2.6	34
68	Characteristics of amorphous VO <sub>2</sub> thin films prepared by pulsed laser deposition. <i>Journal of Materials Science</i> , 2004, 39, 2869-2871.	3.7	13
69	Formation of ordered pore arrays at the nanoscale by electrochemical etching of n-type silicon. <i>Superlattices and Microstructures</i> , 2004, 36, 245-253.	3.1	14
70	Optoelectronic properties of Zn <sub>0.52</sub> Se <sub>0.48</sub> /Si Schottky diodes. <i>Solid-State Electronics</i> , 2004, 48, 2219-2223.	1.4	31
71	Determination of Thermal Parameters of Vanadium Oxide Uncooled Microbolometer Infrared Detector. <i>Journal of Infrared, Millimeter and Terahertz Waves</i> , 2003, 24, 327-334.	0.6	9
72	Room temperature deposited vanadium oxide thin films for uncooled infrared detectors. <i>Materials Research Bulletin</i> , 2003, 38, 1235-1240.	5.2	49

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73	Optical constants of DC magnetron sputtered titanium dioxide thin films measured by spectroscopic ellipsometry. <i>Crystal Research and Technology</i> , 2003, 38, 773-778.	1.3	49
74	Structural characterization of DC magnetron-sputtered TiO <sub>2</sub> thin films using XRD and Raman scattering studies. <i>Materials Science in Semiconductor Processing</i> , 2003, 6, 547-550.	4.0	44
75	Structural properties of V <sub>2</sub> O <sub>5</sub> thin films prepared by vacuum evaporation. <i>Materials Science in Semiconductor Processing</i> , 2003, 6, 543-546.	4.0	51
76	Influence of deposition temperature on the growth of vacuum evaporated V <sub>2</sub> O <sub>5</sub> thin films. <i>Materials Letters</i> , 2003, 57, 3820-3825.	2.6	34
77	Study of a pulsed laser deposited vanadium oxide based microbolometer array. <i>Smart Materials and Structures</i> , 2003, 12, 188-192.	3.5	43
78	Synthesis and Characterization of Reduced Graphene Oxide. <i>Advanced Materials Research</i> , 0, 678, 56-60.	0.3	42
79	Synthesis and Antibacterial Studies of Nano Structured Ag Thin Films. <i>Advanced Materials Research</i> , 0, 678, 291-296.	0.3	4