

# Praveen C Ramamurthy

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/8081560/publications.pdf>

Version: 2024-02-01

259  
papers

4,259  
citations

109264

35  
h-index

182361

51  
g-index

266  
all docs

266  
docs citations

266  
times ranked

4662  
citing authors

#	ARTICLE	IF	CITATIONS
1	Dielectric properties of novel PVA/ZnO hybrid nanocomposite films. <i>Composites Part B: Engineering</i> , 2013, 47, 314-319.	5.9	202
2	Polyaniline/single-walled carbon nanotube composite electronic devices. <i>Solid-State Electronics</i> , 2004, 48, 2019-2024.	0.8	112
3	Influence of Dust Deposition on Photovoltaic Panel Performance. <i>Energy Procedia</i> , 2014, 54, 690-700.	1.8	106
4	Sustainable removal of Cr(VI) using graphene oxide-zinc oxide nanohybrid: Adsorption kinetics, isotherms and thermodynamics. <i>Environmental Research</i> , 2022, 203, 111891.	3.7	101
5	Nitrates in the environment: A critical review of their distribution, sensing techniques, ecological effects and remediation. <i>Chemosphere</i> , 2022, 287, 131996.	4.2	92
6	Pigmented Silk Nanofibrous Composite for Skeletal Muscle Tissue Engineering. <i>Advanced Healthcare Materials</i> , 2016, 5, 1222-1232.	3.9	81
7	Morphology controllable microwave absorption property of polyvinylbutyral (PVB)-MnO <sub>2</sub> nanocomposites. <i>Composites Part B: Engineering</i> , 2018, 132, 188-196.	5.9	74
8	Mechanism and kinetics of adsorption and removal of heavy metals from wastewater using nanomaterials. <i>Environmental Chemistry Letters</i> , 2021, 19, 2351-2381.	8.3	72
9	Industrial waste fly ash cenosphere composites based broad band microwave absorber. <i>Composites Part B: Engineering</i> , 2018, 134, 151-163.	5.9	69
10	Ruthenium based metallopolymer grafted reduced graphene oxide as a new hybrid solar light harvester in polymer solar cells. <i>Scientific Reports</i> , 2017, 7, 43133.	1.6	68
11	Electromagnetic interference shielding effectiveness of polyaniline-nickel oxide coated cenosphere composite film. <i>Composites Communications</i> , 2017, 4, 37-42.	3.3	66
12	Occurrence, toxicity and remediation of polyethylene terephthalate plastics. A review. <i>Environmental Chemistry Letters</i> , 2022, 20, 1777-1800.	8.3	65
13	Novel AgBr/Ag <sub>3</sub> PO <sub>4</sub> Decorated Ceria Nanoflake Composites for Enhanced Photocatalytic Activity toward Dyes and Bacteria under Visible Light. <i>Industrial &amp; Engineering Chemistry Research</i> , 2015, 54, 8031-8042.	1.8	62
14	Adsorption and detoxification of pharmaceutical compounds from wastewater using nanomaterials: A review on mechanism, kinetics, valorization and circular economy. <i>Journal of Environmental Management</i> , 2021, 300, 113569.	3.8	61
15	Synthesis and characterization of flexible epoxy nanocomposites reinforced with amine functionalized aluminum nanoparticles: a potential encapsulant for organic devices. <i>Polymer Chemistry</i> , 2011, 2, 221-228.	1.9	60
16	A Donor-Acceptor Donor Structured Organic Conductor with S-S Chalcogen Bonding. <i>Crystal Growth and Design</i> , 2014, 14, 459-466.	1.4	60
17	Poly(vinyl butyral) -polyaniline-magnetically functionalized fly ash cenosphere composite film for electromagnetic interference shielding. <i>Composites Part B: Engineering</i> , 2016, 106, 224-233.	5.9	59
18	A non-enzymatic urea sensor based on the nickel sulfide / graphene oxide modified glassy carbon electrode. <i>Materials Chemistry and Physics</i> , 2020, 245, 122798.	2.0	55

#	ARTICLE	IF	CITATIONS
19	Enhanced sunlight photocatalytic activity of Ag <sub>3</sub> PO <sub>4</sub> decorated novel combustion synthesis derived TiO <sub>2</sub> nanobelts for dye and bacterial degradation. <i>Photochemical and Photobiological Sciences</i> , 2015, 14, 1227-1237.	1.6	53
20	Outstanding Absolute Electromagnetic Interference Shielding Effectiveness of Cross-Linked PEDOT:PSS Film. <i>Advanced Materials Interfaces</i> , 2019, 6, 1901353.	1.9	52
21	MXene interlayered crosslinked conducting polymer film for highly specific absorption and electromagnetic interference shielding. <i>Materials Advances</i> , 2020, 1, 177-183.	2.6	48
22	Covalent Grafting of Polydimethylsiloxane over Surface-Modified Alumina Nanoparticles. <i>Industrial &amp; Engineering Chemistry Research</i> , 2011, 50, 6585-6593.	1.8	47
23	Novel synergistic photocatalytic degradation of antibiotics and bacteria using V-doped TiO <sub>2</sub> under visible light: the state of nitrogen in V-doped TiO <sub>2</sub> . <i>New Journal of Chemistry</i> , 2016, 40, 3464-3475.	1.4	47
24	Outstanding electromagnetic interference shielding effectiveness of polyvinylbutyral-polyaniline nanocomposite film. <i>RSC Advances</i> , 2016, 6, 79058-79065.	1.7	43
25	New covalent hybrids of graphene oxide with core modified and -expanded porphyrins: Synthesis, characterisation and their non linear optical properties. <i>Carbon</i> , 2017, 122, 307-318.	5.4	43
26	Micro (nano) plastics in wastewater: A critical review on toxicity risk assessment, behaviour, environmental impact and challenges. <i>Chemosphere</i> , 2022, 290, 133169.	4.2	43
27	Protamine-Capped Mesoporous Silica Nanoparticles for Biologically Triggered Drug Release. <i>Particle and Particle Systems Characterization</i> , 2014, 31, 449-458.	1.2	42
28	Million-Fold Decrease in Polymer Moisture Permeability by a Graphene Monolayer. <i>ACS Nano</i> , 2016, 10, 6501-6509.	7.3	42
29	Electronic Properties of Polyaniline/Carbon Nanotube Composites. <i>Synthetic Metals</i> , 2003, 137, 1497-1498.	2.1	40
30	Conducting polymer-carbon black nanocomposite sensor for volatile organic compounds and correlating sensor response by molecular dynamics. <i>Sensors and Actuators B: Chemical</i> , 2014, 201, 308-320.	4.0	40
31	Nonlinear optical second harmonic generation in ZnS quantum dots and observation on optical properties of ZnS/PMMA nanocomposites. <i>Optics Communications</i> , 2014, 313, 231-237.	1.0	40
32	Electromagnetic interference shielding efficiency of MnO <sub>2</sub> nanorod doped polyaniline film. <i>Materials Research Express</i> , 2017, 4, 025013.	0.8	40
33	Development of Molecularly Imprinted Conducting Polymer Composite Film-Based Electrochemical Sensor for Melamine Detection in Infant Formula. <i>ACS Omega</i> , 2020, 5, 4090-4099.	1.6	40
34	Ionomer Based Blend as Water Vapor Barrier Material for Organic Device Encapsulation. <i>ACS Applied Materials &amp; Interfaces</i> , 2013, 5, 4409-4416.	4.0	37
35	Lightweight polyaniline-cobalt coated fly ash cenosphere composite film for electromagnetic interference shielding. <i>Electronic Materials Letters</i> , 2016, 12, 603-609.	1.0	37
36	Detection and disinfection of COVID-19 virus in wastewater. <i>Environmental Chemistry Letters</i> , 2021, 19, 1917-1933.	8.3	37

#	ARTICLE	IF	CITATIONS
37	Effect of annealing on electrical conductivity and morphology of polyaniline films. <i>Journal of Applied Polymer Science</i> , 2001, 82, 3602-3610.	1.3	35
38	Hybrid nanocomposite films of polyvinyl alcohol and ZnO as interactive gas barrier layers for electronics device passivation. <i>RSC Advances</i> , 2012, 2, 11536.	1.7	35
39	Polyvinylbutyral Based Hybrid Organic/Inorganic Films as a Moisture Barrier Material. <i>Industrial &amp; Engineering Chemistry Research</i> , 2013, 52, 4383-4394.	1.8	34
40	Mechanical and Electrical Properties of Solution-Processed Polyaniline/Multiwalled Carbon Nanotube Composite Films. <i>Journal of the Electrochemical Society</i> , 2004, 151, G502.	1.3	33
41	Efficient interfacial charge transfer through plasmon sensitized Ag@Bi <sub>2</sub> O <sub>3</sub> hierarchical photoanodes for photoelectrocatalytic degradation of chlorinated phenols. <i>Physical Chemistry Chemical Physics</i> , 2018, 20, 3710-3723.	1.3	33
42	Synthesis and characterization of high molecular weight polyaniline for organic electronic applications. <i>Polymer Engineering and Science</i> , 2012, 52, 1821-1830.	1.5	31
43	Aggregation induced light harvesting of molecularly engineered D-A- $\pi$ -A carbazole dyes for dye-sensitized solar cells. <i>Solar Energy</i> , 2018, 174, 1085-1096.	2.9	31
44	High photoconductive combustion synthesized TiO <sub>2</sub> derived nanobelts for photocatalytic water purification under solar irradiation. <i>New Journal of Chemistry</i> , 2015, 39, 6040-6051.	1.4	29
45	Narrow band gap conjugated polymer for improving the photovoltaic performance of P3HT:PCBM ternary blend bulk heterojunction solar cells. <i>Polymer Chemistry</i> , 2015, 6, 962-972.	1.9	28
46	An updated review on factors and their inter-linked influences on photovoltaic system performance. <i>Heliyon</i> , 2018, 4, e00815.	1.4	28
47	Polyaniline/carbon nanotube composite Schottky contacts. <i>Polymer Engineering and Science</i> , 2004, 44, 28-33.	1.5	26
48	Flexible poly(vinyl alcohol-co-ethylene)/modified MMT moisture barrier composite for encapsulating organic devices. <i>RSC Advances</i> , 2013, 3, 12831.	1.7	26
49	Impedance spectroscopy of novel hybrid composite films of polyvinylbutyral (PVB)/functionalized mesoporous silica. <i>Composites Part B: Engineering</i> , 2014, 58, 134-139.	5.9	26
50	Multifunctional nanohybrid for simultaneous detection and removal of Arsenic(III) from aqueous solutions. <i>Chemosphere</i> , 2022, 289, 133101.	4.2	26
51	Variation of the donor and acceptor in D $\pi$ A based cyanopyridine dyes and its effect on dye sensitized solar cells. <i>New Journal of Chemistry</i> , 2019, 43, 15673-15680.	1.4	25
52	Tailorable electromagnetic interference shielding using nickel coated glass fabric-epoxy composite with excellent mechanical property. <i>Composites Communications</i> , 2018, 10, 110-115.	3.3	24
53	One-step hydrothermal synthesis of marigold flower-like nanostructured MoS <sub>2</sub> as a counter electrode for dye-sensitized solar cells. <i>Journal of Solid State Electrochemistry</i> , 2018, 22, 3331-3341.	1.2	24
54	Wonder or evil?: Multifaceted health hazards and health benefits of Cannabis sativa and its phytochemicals. <i>Saudi Journal of Biological Sciences</i> , 2021, 28, 7290-7313.	1.8	24

#	ARTICLE	IF	CITATIONS
55	Fabrication of porous 1D WO <sub>3</sub> NRs and WO <sub>3</sub> /BiVO <sub>4</sub> hetero junction photoanode for efficient photoelectrochemical water splitting. <i>Materials Chemistry and Physics</i> , 2021, 274, 125095.	2.0	24
56	A CMOS Gas Sensor Array Platform With Fourier Transform Based Impedance Spectroscopy. <i>IEEE Transactions on Circuits and Systems I: Regular Papers</i> , 2012, 59, 2507-2517.	3.5	23
57	Tailoring optoelectronic properties of CH <sub>3</sub> NH <sub>3</sub> PbI <sub>3</sub> perovskite photovoltaics using Al nanoparticle modified PC61BM layer. <i>Solar Energy</i> , 2020, 201, 621-627.	2.9	23
58	New low band gap 2-(4-(trifluoromethyl)phenyl)-1H-benzo[d]imidazole and benzo[1,2-c;4,5-c' <sup>2</sup> ]bis[1,2,5]thiadiazole based conjugated polymers for organic photovoltaics. <i>RSC Advances</i> , 2014, 4, 44902-44910.	1.7	22
59	Effects of temperature and clay content on water absorption characteristics of modified MMT clay/cyclic olefin copolymer nanocomposite films: Permeability, dynamic mechanical properties and the encapsulated organic device performance. <i>Composites Part B: Engineering</i> , 2015, 73, 1-9.	5.9	22
60	Polyvinylbutyral-Polyaniline Nanocomposite for High Microwave Absorption Efficiency. <i>ACS Omega</i> , 2018, 3, 16542-16548.	1.6	22
61	Mesoporous Cu <sub>2</sub> ZnSnS <sub>4</sub> nanoparticle film as a flexible and reusable visible light photocatalyst. <i>Optical Materials</i> , 2019, 98, 109492.	1.7	22
62	Mechanism and kinetics of Cr(VI) adsorption on biochar derived from <i>Citrobacter freundii</i> under different pyrolysis temperatures. <i>Journal of Water Process Engineering</i> , 2022, 47, 102723.	2.6	22
63	Lead ion sensor with electrodes modified by imidazole-functionalized polyaniline. <i>Mikrochimica Acta</i> , 2012, 177, 317-323.	2.5	21
64	Dielectric impedance studies of poly(vinyl butyral)-carbon sphere composite films. <i>Polymer Composites</i> , 2014, 35, 1636-1643.	2.3	21
65	Doped silicon nanoparticles for enhanced charge transportation in organic-inorganic hybrid solar cells. <i>Solar Energy</i> , 2018, 173, 744-751.	2.9	21
66	Molecularly imprinted polyaniline molecular receptor-based chemical sensor for the electrochemical determination of melamine. <i>Journal of Molecular Recognition</i> , 2020, 33, e2836.	1.1	21
67	Toxicity and detoxification of monocrotophos from ecosystem using different approaches: A review. <i>Chemosphere</i> , 2021, 275, 130051.	4.2	21
68	A novel CaO nanocomposite cross linked graphene oxide for Cr(VI) removal and sensing from wastewater. <i>Chemosphere</i> , 2022, 301, 134714.	4.2	21
69	Colorimetric anion sensor based on receptor having indole- and thiourea-binding sites. <i>RSC Advances</i> , 2014, 4, 20592-20598.	1.7	20
70	Performance of an ionomer blend-nanocomposite as an effective gas barrier material for organic devices. <i>RSC Advances</i> , 2014, 4, 11176.	1.7	20
71	Iminodiacetic acid functionalized polypyrrole modified electrode as Pb(II) sensor: Synthesis and DPASV studies. <i>Electrochimica Acta</i> , 2014, 137, 557-563.	2.6	20
72	Molybdenum disulfide/reduced graphene oxide hybrids with enhanced electrocatalytic activity: An efficient counter electrode for dye-sensitized solar cells. <i>Journal of Electroanalytical Chemistry</i> , 2019, 847, 113236.	1.9	20

#	ARTICLE	IF	CITATIONS
73	Optically Transparent Protective Coating for ITO-Coated PET-Based Microwave Metamaterial Absorbers. <i>IEEE Transactions on Components, Packaging and Manufacturing Technology</i> , 2020, 10, 378-388.	1.4	20
74	Electrochemical copolymerization of thiophene derivatives; a precursor to photovoltaic devices. <i>Electrochimica Acta</i> , 2011, 56, 8184-8191.	2.6	19
75	Self-Assembled, Aligned ZnO Nanorod Buffer Layers for High-Current-Density, Inverted Organic Photovoltaics. <i>ACS Applied Materials &amp; Interfaces</i> , 2014, 6, 16792-16799.	4.0	19
76	Molecular-level architectural design using benzothiadiazole-based polymers for photovoltaic applications. <i>Beilstein Journal of Organic Chemistry</i> , 2017, 13, 863-873.	1.3	19
77	Functionalization of textile cotton fabric with reduced graphene oxide/MnO <sub>2</sub> /polyaniline based electrode for supercapacitor. <i>Materials Research Express</i> , 2019, 6, 125708.	0.8	19
78	Microbial biotechnological approaches: renewable bioprocessing for the future energy systems. <i>Microbial Cell Factories</i> , 2021, 20, 55.	1.9	19
79	Pulsed laser deposition film of a donor-acceptor donor polymer as possible active layer in devices. <i>Journal of Materials Science</i> , 2011, 46, 2259-2266.	1.7	18
80	Random copolymers consisting of dithienylcyclopentadienone, thiophene and benzothiadiazole for bulk heterojunction solar cells. <i>Solar Energy Materials and Solar Cells</i> , 2012, 105, 263-271.	3.0	18
81	Novel thiophene derivative hybrid composite solar cells. <i>Solar Energy Materials and Solar Cells</i> , 2012, 96, 101-107.	3.0	18
82	Cell (module) temperature regulated performance of a building integrated photovoltaic system in tropical conditions. <i>Renewable Energy</i> , 2014, 72, 140-148.	4.3	18
83	In-situ synthesized poly(vinyl butyral)/MMT-clay nanocomposites: The role of degree of acetalization and clay content on thermal, mechanical and permeability properties of PVB matrix. <i>Composites Science and Technology</i> , 2015, 117, 417-427.	3.8	18
84	Work Function-Tunable Amorphous Carbon-Silver Nanocomposite Hybrid Electrode for Optoelectronic Applications. <i>ACS Applied Materials &amp; Interfaces</i> , 2021, 13, 4284-4293.	4.0	18
85	Dithienylcyclopentadienone derivative-co-benzothiadiazole: An alternating copolymer for organic photovoltaics. <i>Solar Energy Materials and Solar Cells</i> , 2012, 98, 448-454.	3.0	17
86	Influence of MnO <sub>2</sub> decorated Fe nano cauliflowers on microwave absorption and impedance matching of polyvinylbutyral (PVB) matrix. <i>Materials Research Express</i> , 2016, 3, 095003.	0.8	17
87	Photobleaching dynamics in small molecule vs. polymer organic photovoltaic blends with 1,7-bis-trifluoromethylfullerene. <i>Journal of Materials Chemistry A</i> , 2018, 6, 4623-4628.	5.2	16
88	Low cost, trouble-free disposable pencil graphite electrode sensor for the simultaneous detection of hydroquinone and catechol. <i>Materials Chemistry and Physics</i> , 2022, 278, 125663.	2.0	16
89	Integration and Distribution of Carbon Nanotubes in Solution-Processed Polyaniline/Carbon Nanotube Composites. <i>Journal of the Electrochemical Society</i> , 2007, 154, H495.	1.3	15
90	Imidazole functionalized polyaniline: Synthesis, characterization, and Cu (II) coordination studies. <i>Journal of Applied Polymer Science</i> , 2012, 123, 526-534.	1.3	15

#	ARTICLE	IF	CITATIONS
91	Evidence of Bipolar Resistive Switching Memory in Perovskite Solar Cell. IEEE Journal of the Electron Devices Society, 2018, 6, 454-463.	1.2	15
92	Influence of N,N[ <sup>É1</sup> ]-Dimethylpropyleneurea Content in Polyaniline on Electrical Characteristics and Device Performance. Electrochemical and Solid-State Letters, 2003, 6, G113.	2.2	14
93	Fabrication of device quality films of high loaded PPy/MWCNT nanocomposites using pulsed laser deposition. Organic Electronics, 2010, 11, 1489-1499.	1.4	14
94	Effect of silane functionalized alumina on poly(vinyl butyral) nanocomposite films: Thermal, mechanical, and moisture barrier studies. Polymer Composites, 2014, 35, 1426-1435.	2.3	14
95	A Surlyn/magnesium oxide nanocomposite as an effective water vapor barrier for organic device encapsulation. RSC Advances, 2015, 5, 32580-32587.	1.7	14
96	Interface Electrode Morphology Effect on Carrier Concentration and Trap Defect Density in an Organic Photovoltaic Device. ACS Applied Materials & Interfaces, 2017, 9, 28774-28784.	4.0	14
97	Influence of copper oxide grown on various conducting substrates towards improved performance for photoelectrocatalytic bacterial inactivation. Molecular Catalysis, 2018, 451, 161-169.	1.0	14
98	Poly (L-leucine) modified carbon paste electrode as an electrochemical sensor for the detection of paracetamol in presence of folic acid. Materials Science for Energy Technologies, 2020, 3, 626-632.	1.0	14
99	Synthesis and characterization of silicone polymer/functionalized mesostructured silica composites. Polymer Chemistry, 2011, 2, 2643.	1.9	13
100	Nanostructured barbed wire architecturing of organic conducting material blends by electrospinning. Applied Physics Letters, 2012, 100, 013302.	1.5	13
101	Layer-by-Layer Assembly of Nafion on Surlyn with Ultrahigh Water Vapor Barrier. Langmuir, 2014, 30, 14606-14611.	1.6	13
102	Novel multifunctional molecular recognition elements based on molecularly imprinted poly (aniline-co-itaconic acid) composite thin film for melamine electrochemical detection. Sensing and Bio-Sensing Research, 2020, 27, 100318.	2.2	13
103	Fabrication of Poly(Vinylidene Chloride-Co-Vinyl Chloride)/TiO <sub>2</sub> Nanocomposite Films and Their Dielectric Properties. Science of Advanced Materials, 2014, 6, 946-953.	0.1	13
104	Electrode Transport Layerâ€Metal Electrode Interface Morphology Tailoring for Enhancing the Performance of Perovskite Solar Cells. ACS Applied Electronic Materials, 2022, 4, 689-697.	2.0	13
105	Studying VOC in lead free inorganic perovskite photovoltaics by tuning energy bandgap and defect density. Ceramics International, 2022, 48, 29414-29420.	2.3	13
106	Design and morphology control of a thiophene derivative through electrospinning using various solvents. RSC Advances, 2015, 5, 60419-60425.	1.7	12
107	Nickel coated flyash (Ni-FAC) cenosphere doped polyaniline composite film for electromagnetic shielding. Materials Research Express, 2015, 2, 036403.	0.8	12
108	Effect of structural isomerism in BODIPY based donor-acceptor co-polymers on their photovoltaic performance. Solar Energy, 2019, 186, 215-224.	2.9	12

#	ARTICLE	IF	CITATIONS
109	Enhancement of microwave absorption bandwidth of polymer blend using ferromagnetic gadolinium silicide nanoparticles. <i>Materials Letters</i> , 2019, 252, 178-181.	1.3	12
110	Gadolinium silicide (Gd <sub>5</sub> Si <sub>4</sub> ) nanoparticles for tuneable broad band microwave absorption. <i>Materials Research Express</i> , 2019, 6, 055053.	0.8	12
111	2,3-di(2-furyl) quinoxaline bearing 3-ethyl rhodanine and 1,3 indandione based heteroaromatic conjugated T-shaped push-pull chromophores: Design, synthesis, photophysical and non-linear optical investigations. <i>Dyes and Pigments</i> , 2020, 173, 107887.	2.0	12
112	A novel non-enzymatic urea sensor based on the nickel complex of a benzimidazolyl pyridine derivative. <i>Journal of Electroanalytical Chemistry</i> , 2021, 883, 115062.	1.9	12
113	Investigation of selective sensing of a diamine for aldehyde by experimental and simulation studies. <i>Analyst</i> , 2014, 139, 6456-6466.	1.7	11
114	TiO <sub>2</sub> /EVOH based reactive interlayer in Surlyn for organic device encapsulation. <i>Materials Research Express</i> , 2016, 3, 025302.	0.8	11
115	Moldable biomimetic nanoscale optoelectronic platforms for simultaneous enhancement in optical absorption and charge transport. <i>Nanoscale</i> , 2018, 10, 3730-3737.	2.8	11
116	Experimental investigation of charge transfer, charge extraction, and charge carrier concentration in P3HT:PBD-DT-DPP:PC70BM ternary blend photovoltaics. <i>Solar Energy</i> , 2018, 174, 1078-1084.	2.9	11
117	Analysis of in-service composite insulators used in overhead railway traction. <i>Engineering Failure Analysis</i> , 2020, 108, 104227.	1.8	11
118	Nitric Oxide: A Ubiquitous Signal Molecule for Enhancing Plant Tolerance to Salinity Stress and Their Molecular Mechanisms. <i>Journal of Plant Growth Regulation</i> , 2021, 40, 2329-2341.	2.8	11
119	Electromagnetic Data-Driven Approach to Realize the Best Microwave Absorption Characteristics of MXene-Based Nanocomposites. <i>ACS Applied Electronic Materials</i> , 2021, 3, 4558-4567.	2.0	11
120	Optimising the photovoltaic parameters in donor-acceptor-acceptor ternary polymer solar cells using Machine Learning framework. <i>Solar Energy</i> , 2022, 231, 447-457.	2.9	11
121	Organic passivation layer on flexible Surlyn substrate for encapsulating organic photovoltaics. <i>Applied Physics Letters</i> , 2014, 105, .	1.5	10
122	Optical and electronic property tailoring by MoS <sub>2</sub> -polymer hybrid solar cell. <i>Organic Electronics</i> , 2017, 48, 138-146.	1.4	10
123	Design and Fabrication of Photonic Structured Organic Solar Cells by Electrospinning. <i>Journal of Physical Chemistry C</i> , 2017, 121, 8531-8540.	1.5	10
124	Design and Fabrication of a Highly Stable Polymer Carbon Nanotube Nanocomposite Chemiresistive Sensor for Nitrate Ion Detection in Water. <i>ECS Journal of Solid State Science and Technology</i> , 2018, 7, Q3054-Q3064.	0.9	10
125	Light management through up-conversion and scattering mechanism of rare earth nanoparticle in polymer photovoltaics. <i>Optical Materials</i> , 2019, 94, 286-293.	1.7	10
126	Instigating network structure in bulk heterojunction organic solar cells creating a unique approach in augmenting the optical absorption. <i>Polymer</i> , 2016, 91, 146-155.	1.8	9



#	ARTICLE	IF	CITATIONS
127	BODIPY based A-D-A molecules: Effect of CF <sub>3</sub> group substitution at meso phenyl group. <i>Dyes and Pigments</i> , 2020, 177, 108289.	2.0	9
128	Electrochemical detection of Cr(VI) and Cr(III) ions present in aqueous solutions using bio-modified carbon paste electrode: a voltammetric study. <i>International Journal of Environmental Analytical Chemistry</i> , 2022, 102, 2053-2073.	1.8	9
129	Chemically Room Temperature Crosslinked Polyvinyl Alcohol (PVA) with Anomalous Microwave Absorption Characteristics. <i>Macromolecular Rapid Communications</i> , 2021, 42, e2000763.	2.0	9
130	Role of electrodes on perovskite solar cells performance: A review. <i>ISSS Journal of Micro and Smart Systems</i> , 2022, 11, 61-79.	1.0	9
131	Encapsulation for Improving the Efficiencies of Solar Cells. <i>Nanostructure Science and Technology</i> , 2014, , 23-40.	0.1	8
132	Aminosilane Functionalized Cenosphere in Poly(vinyl butyral) Composite Films: Moisture Resistant Encapsulated Schottky Devices. <i>Polymer-Plastics Technology and Engineering</i> , 2014, 53, 684-692.	1.9	8
133	Dâ€“Aâ€“D-structured conducting polymer-modified electrodes for detection of lead(II) ions in water. <i>Journal of Applied Electrochemistry</i> , 2014, 44, 133-139.	1.5	8
134	Electronic Device Fabricated From Polyaniline / Single walled Carbon Nanotubes Composite. <i>Materials Research Society Symposia Proceedings</i> , 2003, 772, 431.	0.1	8
135	Facile embedding of gold nanostructures in the hole transporting layer for efficient polymer solar cells. <i>Organic Electronics</i> , 2018, 54, 148-153.	1.4	7
136	Synthesis, characterisation and optical studies of new tetraethyl- ruyrin-graphene oxide covalent adducts. <i>Optical Materials</i> , 2018, 76, 42-47.	1.7	7
137	Polycondensation of thiophene-flanked cyanopyridine and carbazole via direct arylation polymerization for solar cell application. <i>Reactive and Functional Polymers</i> , 2018, 133, 1-8.	2.0	7
138	Microwave absorption efficiency of poly (vinyl-butyril)/Ultra-thin nickel coated fly ash cenosphere composite. <i>Surfaces and Interfaces</i> , 2020, 19, 100430.	1.5	7
139	Amine Functionalized polyaniline grafted to exfoliated graphite oxide: Synthesis, characterization and multi-element sensor studies. <i>Journal of Electroanalytical Chemistry</i> , 2015, 757, 137-143.	1.9	6
140	Performance evaluation for PV systems to synergistic influences of dust, wind and panel temperatures: Spectral insight. , 2016, , .		6
141	Influence of Mesoporous Silica and Butyral Content on the Mechanical, Water Absorption, and Permeability Properties of in situ Synthesized Silica/PVB Nanocomposite Films. <i>Polymer-Plastics Technology and Engineering</i> , 2016, 55, 1220-1230.	1.9	6
142	Organic Inorganic Hybrid Hole Transport Layer for Light Management in Inverted Organic Photovoltaic. <i>IEEE Journal of Photovoltaics</i> , 2017, 7, 787-791.	1.5	6
143	Evaluation of Polymer Solar Cell Efficiency To Understand the Burn-in Loss. <i>Journal of Physical Chemistry C</i> , 2019, 123, 22699-22705.	1.5	6
144	2D layering of silicon nanocrystals at TiO <sub>2</sub> /CuI heterojunction for enhanced charge transport. <i>Journal of Applied Physics</i> , 2019, 125, .	1.1	6

#	ARTICLE	IF	CITATIONS
145	Investigation of processâ€“structureâ€“property relationship in ternary organic photovoltaics. Journal of Applied Physics, 2020, 128, 145501.	1.1	6
146	Low band gap thienothiophene-diketopyrrolopyrrole copolymers with V2O5 as hole transport layer for photovoltaic application. Optical Materials, 2020, 109, 110303.	1.7	6
147	Differential regulation of drought stress by biological membrane transporters and channels. Plant Cell Reports, 2021, 40, 1565-1583.	2.8	6
148	Dataâ€“driven methodology to realize strong and broadband microwave absorption properties of polymerâ€“fly ash cenosphere composite. Journal of Applied Polymer Science, 2022, 139, 51981.	1.3	6
149	Biological degradation of polyethylene terephthalate by rhizobacteria. Environmental Science and Pollution Research, 2023, 30, 116488-116497.	2.7	6
150	Mechanical Properties Of Polyaniline / Multi-walled Carbon Nanotube Composite Films. Materials Research Society Symposia Proceedings, 2003, 791, 1.	0.1	5
151	Mechanistic overview of the curing behavior of hydride terminated polydimethylsiloxane with allyl functionalized alumina by calorimetry and rheometry. Thermochimica Acta, 2011, 524, 74-79.	1.2	5
152	Organic device electrode fabricated by aluminum in nanopowder and bulk form and effect on device properties. , 2012, , .		5
153	Water Vapor Barrier Material by Covalent Self-Assembly for Organic Device Encapsulation. Industrial & Engineering Chemistry Research, 2014, 53, 17894-17900.	1.8	5
154	The design of polyaniline based sensor for the qualitative estimation of malonaldehyde. Measurement: Journal of the International Measurement Confederation, 2014, 47, 1-4.	2.5	5
155	Solvent polarity and nanoscale morphology in bulk heterojunction organic solar cells: A case study. Journal of Applied Physics, 2014, 115, 104302.	1.1	5
156	The influence of mesoporous silica in low Tg cyclic olefin copolymer nanocomposite films: Mechanical and moisture barrier studies. Composites Science and Technology, 2014, 96, 80-87.	3.8	5
157	Effect of Micro-Structured Copper as Cathode Material for P3HT-Based Diode. IEEE Nanotechnology Magazine, 2015, 14, 218-223.	1.1	5
158	Understanding coupled electro-thermal processes in the catastrophic failure of organic electronic devices. Organic Electronics, 2016, 39, 354-360.	1.4	5
159	Design and synthesis of thieno[3,4- <i>bc</i> ]pyrrole-4,6-dione based conjugated copolymers for organic solar cells. Polymer International, 2017, 66, 1206-1213.	1.6	5
160	Insights into electrochemical behavior and kinetics of NiP on PEDOT:PSS/reduced graphene oxide as high-performance electrodes for alkaline urea oxidation. Journal of Solid State Electrochemistry, 0, , 1.	1.2	5
161	Modelling of optical transport behavior of organic photovoltaic devices with nano-pillar transparent conducting electrodes. Journal of Applied Physics, 2014, 116, 074504.	1.1	4
162	Water vapor permeabilities through polymers: diffusivities from experiments and simulations. Materials Research Express, 2014, 1, 035301.	0.8	4

#	ARTICLE	IF	CITATIONS
163	Reactive interlayer based ultra-low moisture permeable membranes for organic photovoltaic encapsulation. <i>Physical Chemistry Chemical Physics</i> , 2015, 17, 23165-23172.	1.3	4
164	Evaluation of electromagnetic interference shielding using Poly(3,4-ethylenedioxythiophene) Polystyrene sulfonate blend. , 2016, , .		4
165	Source materials grain size effect on electrode microstructure and its effect on conventional bulk hetero-junction photovoltaics. <i>Solar Energy Materials and Solar Cells</i> , 2017, 172, 244-251.	3.0	4
166	Correlation between structural and electrochemical properties of potassium doped strontium silicates for electrolyte application in intermediate temperature solid oxide fuel cells. <i>Journal of Alloys and Compounds</i> , 2018, 745, 555-561.	2.8	4
167	Higher Open-Circuit Voltage and Stability in MAPbI <sub>3</sub> Perovskite Solar Cells Using A Bilayer Hole-Transport Layer with a D-A-D Architected Polymer. , 2018, , .		4
168	Strategic fluorination of polymers and fullerenes improves photostability of organic photovoltaic blends. <i>Organic Electronics</i> , 2018, 62, 685-694.	1.4	4
169	Light trapping in photovoltaic devices with weak dielectric absorbers: Nanostructured dielectric and metal interfaces. <i>Optical Materials</i> , 2019, 89, 288-294.	1.7	4
170	Design, synthesis, fabrication and simulation of conjugated molecule for detection of lithium ions. <i>Materials Research Express</i> , 2019, 6, 045101.	0.8	4
171	Green synthesis of germanium nano ink and inkjet printing of Si/Ge heterostructure. <i>Materials Research Bulletin</i> , 2020, 132, 110984.	2.7	4
172	Efficacy of Ultraviolet-C Devices for the Disinfection of Personal Protective Equipment Fabrics and N95 Respirators. <i>Journal of Research of the National Institute of Standards and Technology</i> , 2021, 126, .	0.4	4
173	Effect of top electrode using Silver Nano powder on the performance of Perovskite Solar cells. , 2021, , .		4
174	Biodegradation of phorate by bacterial strains in the presence of humic acid and metal ions. <i>Journal of Basic Microbiology</i> , 2022, 62, 498-507.	1.8	4
175	Chromium (VI) detection by microbial carbon dots: Microwave synthesis and mechanistic study. <i>Journal of Basic Microbiology</i> , 2022, 62, 455-464.	1.8	4
176	Fabrication and theoretical analysis of sodium alpha-olefin sulfonate-anchored carbon paste electrode for the simultaneous detection of adrenaline and paracetamol. <i>Journal of Applied Electrochemistry</i> , 2022, 52, 697.	1.5	4
177	CMOS Gas Sensor Array Platform with Fourier Transform Based Impedance Spectroscopy. , 2012, , .		3
178	Fabrication of free-standing PEDOT:PSS nanofiber mats using electrospinning. , 2014, , .		3
179	Modeling processâ€“structureâ€“property relationship in organic photovoltaics using a robust diffuse interface approach. <i>AIP Advances</i> , 2020, 10, 065304.	0.6	3
180	Porous fibres of a polymer blend for broadband microwave absorption. <i>Materials Advances</i> , 2021, 2, 3613-3619.	2.6	3

#	ARTICLE	IF	CITATIONS
181	Insights into the Electrochemical Behavior and Kinetics of NiP@PANI/rGO as a High-Performance Electrode for Alkaline Urea Oxidation. <i>Electrocatalysis</i> , 2022, 13, 283-298.	1.5	3
182	Nanoscale small molecule self-assembled ITO for photon harvesting in polymer and perovskite solar cells. <i>Solar Energy</i> , 2022, 240, 201-210.	2.9	3
183	Effect of cuprous iodide passivation in perovskite solar cells. <i>Journal of Materials Science: Materials in Electronics</i> , 2022, 33, 14457-14467.	1.1	3
184	Dielectric relaxations above room temperature in DMPU derived polyaniline film. <i>Physica B: Condensed Matter</i> , 2012, 407, 3828-3832.	1.3	2
185	Electrospun photonics topography for organic photovoltaics. <i>Materials Research Society Symposia Proceedings</i> , 2014, 1671, 1.	0.1	2
186	Novel poly (vinyl butyral) (PVB)/polyaniline-cenosphere composite film for EMI shielding. <i>AIP Conference Proceedings</i> , 2016, , .	0.3	2
187	Mechanical Actuation of Conducting Polymer in the Presence of Organic Vapor Stimulus. <i>IEEE Sensors Journal</i> , 2017, 17, 3391-3397.	2.4	2
188	Microwave absorption property of PVB-polyaniline nanocomposite. , 2017, , .		2
189	Plasmonic Silver Structures for Improved Perovskite Photovoltaic Performance. , 2017, , .		2
190	Effect of process optimization on electronic properties of conjugated small molecules. <i>Materials Research Express</i> , 2018, 5, 086305.	0.8	2
191	Conjugated Molecule Based Sensor for Microbial Detection in Water with <i>E. coli</i> as a Case Study and Elucidation of Interaction Mechanism. <i>Electroanalysis</i> , 2018, 30, 1172-1183.	1.5	2
192	Shaping Resonant Light Confinement and Optoelectronic Spectra Using Strain in Hierarchical Multiscale Structures. <i>Advanced Optical Materials</i> , 2019, 7, 1900471.	3.6	2
193	Omnidirectional sub-bandgap photo-detection using functionalized moulded composite flexible platforms. <i>Optical Materials</i> , 2019, 88, 359-365.	1.7	2
194	Mechanical Reliability of Photovoltaic Cells under Cyclic Thermal Loading. <i>Journal of Electronic Materials</i> , 2020, 49, 59-71.	1.0	2
195	Molecular insights into photostability of fluorinated organic photovoltaic blends: role of fullerene electron affinity and donor-acceptor miscibility. <i>Sustainable Energy and Fuels</i> , 2020, 4, 5721-5731.	2.5	2
196	Polypyrrole@polyaniline-reduced graphene oxide nanocomposite support material and Cobalt for the enhanced electrocatalytic activity of nickel phosphide microsphere towards alkaline urea oxidation. <i>Materials Research Express</i> , 2021, 8, 095303.	0.8	2
197	A novel electrochemical sensor based on 2,6-bis (2-benzimidazolyl) pyridine for the detection of Bisphenol A. <i>Materials Chemistry and Physics</i> , 2022, 275, 125287.	2.0	2
198	Fabrication of Hollow Microspheres Using Single Step Electrospaying Process. <i>Journal of Research Updates in Polymer Science</i> , 2014, 3, 108-113.	0.3	2

#	ARTICLE	IF	CITATIONS
199	Development of low power laser in-situ thickness measurement for correlating the dust thickness to the PV performance. Cleaner Engineering and Technology, 2021, 5, 100332.	2.1	2
200	Comparative studies on physical and chemical routes for animal waste-derived activated carbon for microwave absorption in the X-band. Journal of Materials Science: Materials in Electronics, 2022, 33, 3425-3437.	1.1	2
201	Polymer-metal/metal oxide-coated fly ash cenosphere composite film for electromagnetic interference shielding. , 2022, , 729-761.		2
202	An innovative catalyst of PdNiP nanosphere deposited PEDOT:PSS/rGO hybrid material as an efficient electrocatalyst for alkaline urea oxidation. Polymer Bulletin, 2023, 80, 1265-1283.	1.7	2
203	A Promising Ketone Containing Alternating Copolymer for Organic Photovoltaics. Materials Research Society Symposia Proceedings, 2013, 1500, 1.	0.1	1
204	Organic solar cell by using vertically aligned nanostructured ZnO nanorods. , 2013, , .		1
205	Organic nanocomposite sensor for detection of Escherichia coli. , 2014, , .		1
206	Various architectures of electrosprayed photoactive materials: A step towards light management. Materials Research Society Symposia Proceedings, 2014, 1668, 7.	0.1	1
207	In-situ flexural OPV measurements on flexible glass substrate. , 2015, , .		1
208	Organic Molecule Based Sensor for Aldehyde Detection. Smart Sensors, Measurement and Instrumentation, 2015, , 299-325.	0.4	1
209	Molecular architecturing of a small two dimensional A-D-A molecule for photovoltaic application. MRS Advances, 2016, 1, 2917-2922.	0.5	1
210	Light trapping and management in inverted organic solar cells employing metal nanoparticles. , 2016, , .		1
211	Design of nanostructures for light management in organic photovoltaic devices. , 2016, , .		1
212	Nickel Electrode for Improving Current Density in Organic Electronic Device. IETE Technical Review (Institution of Electronics and Telecommunication Engineers, India), 2016, 33, 29-33.	2.1	1
213	Thienothiophene-benzoxadiazole based conjugated copolymer for organic photovoltaic application. Materials Today Communications, 2017, 11, 132-138.	0.9	1
214	Performance of Monocrystalline Silicon solar cell- Influence of dust on Ultra-Violet and Visible region during early stage of deposition. , 2017, , .		1
215	Effect of molecular architecture on morphology in the nanostructures and its applications in superhydrophobicity and organic photovoltaics. Journal of Materials Science, 2018, 53, 1264-1278.	1.7	1
216	Long term aging studies of Graphene/Surlyn encapsulated organic photovoltaic devices. , 2018, , .		1

#	ARTICLE	IF	CITATIONS
217	Safety of Light Emitting Diode (LED) Based Domestic Lighting in Rural Context. , 2018, , .		1
218	Biodegradation of monocrotophos by indigenous soil bacterial isolates in the presence of humic acid, Fe (III) and Cu (II) ions. Bioresource Technology Reports, 2021, 15, 100778.	1.5	1
219	Analysis of Cr(VI) Bioremediation by Citrobacter freundii Using Synchrotron Soft X-ray Scanning Transmission X-ray Microscopy. Quantum Beam Science, 2021, 5, 28.	0.6	1
220	Role of silver-PC61BM composite electron transport layer in methylammonium lead iodide solar cell. Materials Letters, 2021, 302, 130448.	1.3	1
221	Photo-active polymer nanocomposite layer for energy applications. , 2021, , 135-156.		1
222	Tailorable microwave absorption characteristics of bio waste-based composites through a macroscopic design. Materials Advances, 2021, 2, 3715-3725.	2.6	1
223	Effect of annealing on electrical conductivity and morphology of polyaniline films. Journal of Applied Polymer Science, 2001, 82, 3602-3610.	1.3	1
224	Enhancement in Open-Circuit Voltage of Semitransparent MAPbI <sub>3</sub> -xBr <sub>x</sub> perovskite solar cells by methyl amine treatment and optimal Hole Transport Layer. , 2020, , .		1
225	Charge transport in cross-linked PEDOT:PSS near metal-insulator transition. Journal of Applied Physics, 2022, 131, 155101.	1.1	1
226	Flexible Organic Photodetector with High Responsivity in Visible Range. , 2022, , .		1
227	Selectivity of organic nanocomposite sensor for detection of aldehydes. , 2013, , .		0
228	Device fabrication of insoluble donor-acceptor structured molecule by pulsed laser deposition: a comparative study using different laser source. , 2013, , .		0
229	Understanding evolution of electronic energy bands in low turn-on voltage DACz polymer diodes. , 2014, , .		0
230	Synthesis and Characterization of Trifluoromethylated Benzimidazole and Benzo[1,2-B:3,4-B']Dithiophene Based Donor-Acceptor Conjugated Polymer for Polymer Solar Cells. Materials Research Society Symposia Proceedings, 2014, 1668, 18.	0.1	0
231	Understanding degradation phenomena in organic electronic devices. , 2015, , .		0
232	Influence of thiophene spacer on conjugated polymer for organic photovoltaics. , 2016, , .		0
233	Effect of structural isomerism on charge transport in copolymer of BODIPY and Benzodithiophene. , 2016, , .		0
234	Nanostructure-based enhancement of performance in thin-film photovoltaic devices. , 2016, , .		0

#	ARTICLE	IF	CITATIONS
235	Notice of Removal Tuning of molecular energy levels and photovoltaic properties of benzothiadiazole based D-A-D small molecule. , 2017, , .		0
236	Synthesis of Cu <sub>2</sub> ZnSnSn <sub>4</sub> nanoparticles for solar cell applications. , 2018, , .		0
237	PDMS-Ni coated flyash cenosphere composite for broadband microwave absorption. , 2018, , .		0
238	Effect of meso substituent on Optoelectronic Properties in BODIPY based donor acceptor Copolymers. , 2018, , .		0
239	Effect of Fluorination on the D-A-D type Hole Transporting Materials for Perovskite Solar Cells. , 2018, , .		0
240	Benzimidazole/reduced graphene oxide based field effect transistor for mercury ion detection in water. , 2018, , .		0
241	Hexylthiophene based Conjugated Polymer Metal-ion Sensor. , 2018, , .		0
242	Optically Assorted Electrospun Nanofiber Mats of Electroactive Blends for Flexible Electronics. , 2018, , .		0
243	Development of New Blue-Light Emitting PPV Block Copolymer: Synthesis, Characterization and Electro-Optical Studies. , 2018, , .		0
244	Polydispersed Metal Nanoparticles at the Interface for Improved Optoelectronic Properties in Perovskite Photovoltaics. , 2018, , .		0
245	Controlling the Morphology and Conductivity of Thiophene Nanofibers using Electrospinning for Flexible devices. , 2018, , .		0
246	Hierarchical structures and multiscale optical coupling for improved photodetectors. , 2018, , .		0
247	Hermetic Sealed Perovskite Solar Cells: Water Stable Encapsulation. , 2021, , .		0
248	Structure and Morphology-Dependent Electrical Characteristics of Conjugated Organic Crystals Acquired by Various Growth Methods. Journal of Electronic Materials, 2021, 50, 6206-6213.	1.0	0
249	Light trapping and management in inverted organic solar cells employing metal nanoparticles. , 2017, , .		0
250	Effect Of Chemical Structuring On Physical Architecture In Superhydrophobic And Organic Photovoltaics. , 2018, , .		0
251	Sustainable Photovoltaics. Lecture Notes in Energy, 2020, , 25-85.	0.2	0
252	Role of microbes in methane emission from constructed wetlands. , 2022, , 489-506.		0

#	ARTICLE	IF	CITATIONS
253	Nanomaterials in Optoelectronics. Energy Systems in Electrical Engineering, 2022, , 29-41.	0.5	0
254	Introduction to Photovoltaic Devices. Energy Systems in Electrical Engineering, 2022, , 43-69.	0.5	0
255	Competence of nanoparticles for removal of pesticides from wastewater: an overview. , 2022, , 253-266.		0
256	Design and fabrication of a solid-state chemiresistive sensor for the detection of hexavalent chromium. , 2022, , .		0
257	Design and Development of Onsite Biofilter Unit for Effective Remediation of Contaminants from Wastewater. Clean - Soil, Air, Water, 0, , 2100396.	0.7	0
258	Polyanthranilic acid microspheres as an active material for electrochemical detection of sub-picomolar lead ion concentrations in aqueous media. Ionics, 0, , .	1.2	0
259	Enhancement in the inherent photostability of small molecule-based BHJ device by molecular architecturing. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2022, 283, 115841.	1.7	0