Roy Vellaisamy

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206 81 48 7,942 h-index g-index citations papers 6.28 9,123 7.7 220 L-index avg, IF ext. citations ext. papers

#	Paper	IF	Citations
206	Towards the development of flexible non-volatile memories. <i>Advanced Materials</i> , 2013 , 25, 5425-49	24	394
205	Recent progress in magnetic iron oxide-semiconductor composite nanomaterials as promising photocatalysts. <i>Nanoscale</i> , 2015 , 7, 38-58	7.7	386
204	An Overview of the Development of Flexible Sensors. <i>Advanced Materials</i> , 2017 , 29, 1700375	24	293
203	Luminescent and structural properties of ZnO nanorods prepared under different conditions. <i>Applied Physics Letters</i> , 2003 , 83, 141-143	3.4	292
202	Designed synthesis and surface engineering strategies of magnetic iron oxide nanoparticles for biomedical applications. <i>Nanoscale</i> , 2016 , 8, 19421-19474	7.7	223
201	Synergies of Electrochemical Metallization and Valance Change in All-Inorganic Perovskite Quantum Dots for Resistive Switching. <i>Advanced Materials</i> , 2018 , 30, e1800327	24	177
200	Arrays of ZnO/Zn(x)Cd(1-x)Se nanocables: band gap engineering and photovoltaic applications. <i>Nano Letters</i> , 2011 , 11, 4138-43	11.5	172
199	Magnetic properties of Mn doped ZnO tetrapod structures. <i>Applied Physics Letters</i> , 2004 , 84, 756-758	3.4	170
198	Supramolecular polymers and chromonic mesophases self-organized from phosphorescent cationic organoplatinum(II) complexes in water. <i>Angewandte Chemie - International Edition</i> , 2009 , 48, 7621-5	16.4	154
197	Layer-by-layer-assembled reduced graphene oxide/gold nanoparticle hybrid double-floating-gate structure for low-voltage flexible flash memory. <i>Advanced Materials</i> , 2013 , 25, 872-7, 793	24	153
196	Semiconducting and electroluminescent nanowires self-assembled from organoplatinum(II) complexes. <i>Angewandte Chemie - International Edition</i> , 2008 , 47, 9895-9	16.4	150
195	Microcontact printing of ultrahigh density gold nanoparticle monolayer for flexible flash memories. <i>Advanced Materials</i> , 2012 , 24, 3556-61	24	131
194	A one-pot route to the synthesis of alloyed Cu/Ag bimetallic nanoparticles with different mass ratios for catalytic reduction of 4-nitrophenol. <i>Journal of Materials Chemistry A</i> , 2015 , 3, 3450-3455	13	128
193	An upconverted photonic nonvolatile memory. <i>Nature Communications</i> , 2014 , 5, 4720	17.4	108
192	Recent Advances of Flexible Data Storage Devices Based on Organic Nanoscaled Materials. <i>Small</i> , 2018 , 14, 1703126	11	102
191	Fingertip-Skin-Inspired Highly Sensitive and Multifunctional Sensor with Hierarchically Structured Conductive Graphite/Polydimethylsiloxane Foams. <i>Advanced Functional Materials</i> , 2019 , 29, 1808829	15.6	98
190	Mimicking Neuroplasticity in a Hybrid Biopolymer Transistor by Dual Modes Modulation. <i>Advanced Functional Materials</i> , 2019 , 29, 1902374	15.6	95

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189	Nonvolatile multilevel data storage memory device from controlled ambipolar charge trapping mechanism. <i>Scientific Reports</i> , 2013 , 3, 2319	4.9	95	
188	Self-assembled nanostructures with tridentate cyclometalated platinum(II) complexes. <i>Chemical Communications</i> , 2006 , 3972-4	5.8	90	
187	Low-Cost, Disposable, Flexible and Highly Reproducible Screen Printed SERS Substrates for the Detection of Various Chemicals. <i>Scientific Reports</i> , 2015 , 5, 10208	4.9	89	•
186	Monoclinic Tungsten Oxide with {100} Facet Orientation and Tuned Electronic Band Structure for Enhanced Photocatalytic Oxidations. <i>ACS Applied Materials & Discrete Research</i> 8, 10367-74	9.5	86	
185	Exchange bias and the origin of magnetism in Mn-doped ZnO tetrapods. <i>Applied Physics Letters</i> , 2004 , 85, 2589-2591	3.4	84	
184	Nanocomposite field effect transistors based on zinc oxide/polymer blends. <i>Applied Physics Letters</i> , 2007 , 90, 223509	3.4	79	
183	Phenothiazine and carbazole substituted pyrene based electroluminescent organic semiconductors for OLED devices. <i>Journal of Materials Chemistry C</i> , 2016 , 4, 1009-1018	7.1	78	
182	Parkinson's Disease: Extracellular Nanomatrix-Induced Self-Organization of Neural Stem Cells into Miniature Substantia Nigra-Like Structures with Therapeutic Effects on Parkinsonian Rats (Adv. Sci. 24/2019). <i>Advanced Science</i> , 2019 , 6, 1970144	13.6	78	
181	Emerging perovskite materials for high density data storage and artificial synapses. <i>Journal of Materials Chemistry C</i> , 2018 , 6, 1600-1617	7.1	77	
180	Novel Direct Nanopatterning Approach to Fabricate Periodically Nanostructured Perovskite for Optoelectronic Applications. <i>Advanced Functional Materials</i> , 2017 , 27, 1606525	15.6	75	
179	A high-performance organic field-effect transistor based on platinum(II) porphyrin: peripheral substituents on porphyrin ligand significantly affect film structure and charge mobility. <i>Chemistry - an Asian Journal</i> , 2008 , 3, 1092-103	4.5	75	
178	Phototunable Biomemory Based on Light-Mediated Charge Trap. <i>Advanced Science</i> , 2018 , 5, 1800714	13.6	75	
177	Evolutionary Metal Oxide Clusters for Novel Applications: Toward High-Density Data Storage in Nonvolatile Memories. <i>Advanced Materials</i> , 2018 , 30, 1703950	24	74	
176	Nanoparticle size dependent threshold voltage shifts in organic memory transistors. <i>Journal of Materials Chemistry</i> , 2011 , 21, 14575		74	
175	Tube-like ternary Fe2O3@SnO2@Cu2O sandwich heterostructures: synthesis and enhanced photocatalytic properties. <i>ACS Applied Materials & Samp; Interfaces</i> , 2014 , 6, 13088-97	9.5	70	
174	Limits of open circuit voltage in organic photovoltaic devices. <i>Applied Physics Letters</i> , 2010 , 96, 113303	3.4	69	
173	Toward non-volatile photonic memory: concept, material and design. <i>Materials Horizons</i> , 2018 , 5, 641-65	5 4 4.4	67	
172	Carbon based materials: a review of adsorbents for inorganic and organic compounds. <i>Materials Advances</i> , 2021 , 2, 598-627	3.3	66	

171	Highly Sensitive and Ultrastable Skin Sensors for Biopressure and Bioforce Measurements Based on Hierarchical Microstructures. <i>ACS Applied Materials & Amp; Interfaces</i> , 2018 , 10, 4086-4094	9.5	59
170	Improving efficiency of organic photovoltaic cells with pentacene-doped CuPc layer. <i>Applied Physics Letters</i> , 2007 , 91, 191109	3.4	59
169	Folic acid conjugated self-assembled layered double hydroxide nanoparticles for high-efficacy-targeted drug delivery. <i>Chemical Communications</i> , 2013 , 49, 10938-40	5.8	56
168	A Simple Design for Strongly Emissive Sky-Blue Phosphorescent Neutral Rhenium Complexes: Synthesis, Photophysics, and Electroluminescent Devices. <i>Chemistry of Materials</i> , 2014 , 26, 2544-2550	9.6	54
167	Size Controllable and Surface Tunable Zeolitic Imidazolate Framework-8-Poly(acrylic acid sodium salt) Nanocomposites for pH Responsive Drug Release and Enhanced in Vivo Cancer Treatment. <i>ACS Applied Materials & Drug Release</i> , 2017 , 9, 32990-33000	9.5	54
166	Biological Spiking Synapse Constructed from Solution Processed Bimetal Core-Shell Nanoparticle Based Composites. <i>Small</i> , 2018 , 14, e1800288	11	54
165	Low voltage flexible nonvolatile memory with gold nanoparticles embedded in poly(methyl methacrylate). <i>Nanotechnology</i> , 2012 , 23, 344014	3.4	50
164	Single microcrystals of organoplatinum(II) complexes with high charge-carrier mobility. <i>Chemical Science</i> , 2011 , 2, 216-220	9.4	50
163	Functionalized Arylacetylene Oligomers for Organic Thin-Film Transistors (OTFTs). <i>Advanced Materials</i> , 2005 , 17, 1258-1261	24	50
162	Artificial Synapse Emulated by Charge Trapping-Based Resistive Switching Device. <i>Advanced Materials Technologies</i> , 2019 , 4, 1800342	6.8	49
161	Wetting properties and SERS applications of ZnO/Ag nanowire arrays patterned by a screen printing method. <i>Journal of Materials Chemistry C</i> , 2016 , 4, 6371-6379	7.1	48
160	Solution processed molecular floating gate for flexible flash memories. <i>Scientific Reports</i> , 2013 , 3, 3093	4.9	48
159	Highly conducting two-dimensional copper(I) 4-hydroxythiophenolate network. <i>Chemical Communications</i> , 2010 , 46, 7328-30	5.8	48
158	Photoinitiation and Inhibition under Monochromatic Green Light for Storage of Colored 3D Images in Holographic Polymer-Dispersed Liquid Crystals. <i>ACS Applied Materials & Dispersed Liquid Crystals</i> . <i>ACS Applied Materials & Dispersed Liquid Crystals</i> .	-9819	47
157	Bulk heterojunction photovoltaic cells based on tetra-methyl substituted copper(II) phthalocyanine:P3HT:PCBM composite. <i>Chemical Communications</i> , 2011 , 47, 9654-6	5.8	47
156	All-Printed Solid-State Microsupercapacitors Derived from Self-Template Synthesis of Ag@PPy Nanocomposites. <i>Advanced Materials Technologies</i> , 2018 , 3, 1700206	6.8	46
155	Method for measurement of the density of thin films of small organic molecules. <i>Review of Scientific Instruments</i> , 2007 , 78, 034104	1.7	44
154	Tunable Band-Selective UV-Photodetectors by 3D Self-Assembly of Heterogeneous Nanoparticle Networks. <i>Advanced Functional Materials</i> , 2016 , 26, 7359-7366	15.6	44

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153	Energy-band engineering for tunable memory characteristics through controlled doping of reduced graphene oxide. <i>ACS Nano</i> , 2014 , 8, 1923-31	16.7	42
152	Long aliphatic chain coated rare-earth nanocrystal as polymer-based optical waveguide amplifiers. <i>Journal of Materials Chemistry</i> , 2010 , 20, 7526		42
151	Controlled ambipolar charge transport through a self-assembled gold nanoparticle monolayer. <i>Advanced Materials</i> , 2012 , 24, 1247-51	24	41
150	Influence of the donor/acceptor interface on the open-circuit voltage in organic solar cells. <i>Applied Physics Letters</i> , 2009 , 95, 093307	3.4	41
149	The molecularly imprinted polymer essentials: curation of anticancer, ophthalmic, and projected gene therapy drug delivery systems. <i>Journal of Controlled Release</i> , 2018 , 287, 24-34	11.7	40
148	CdSe/ZnS coreEhell quantum dots charge trapping layer for flexible photonic memory. <i>Journal of Materials Chemistry C</i> , 2015 , 3, 3173-3180	7.1	40
147	Two-dimensional benzodithiophene and benzothiadiazole based solution-processed small molecular organic field-effect transistors & solar cells. <i>Journal of Materials Chemistry C</i> , 2014 , 2, 3921	7.1	39
146	Ultrasound-Induced Organogel Formation Followed by Thin Film Fabrication via Simple Doctor Blading Technique for Field-Effect Transistor Applications. <i>ACS Applied Materials & Document Blading</i> 1, 18991-7	9.5	39
145	Fabrication of carboxymethyl cellulose and graphene oxide bio-nanocomposites for flexible nonvolatile resistive switching memory devices. <i>Carbohydrate Polymers</i> , 2019 , 214, 213-220	10.3	38
144	Ultra-flexible nonvolatile memory based on donor-acceptor diketopyrrolopyrrole polymer blends. <i>Scientific Reports</i> , 2015 , 5, 10683	4.9	38
143	The n-type conduction of indium-doped Cu2O thin films fabricated by direct current magnetron co-sputtering. <i>Applied Physics Letters</i> , 2015 , 107, 083901	3.4	38
142	Solution-processed, indacenodithiophene-based, small-molecule organic field-effect transistors and solar cells. <i>Journal of Materials Chemistry C</i> , 2014 , 2, 7523	7.1	37
141	The strain and thermal induced tunable charging phenomenon in low power flexible memory arrays with a gold nanoparticle monolayer. <i>Nanoscale</i> , 2013 , 5, 1972-9	7.7	37
140	Improved polyvinylpyrrolidone microneedle arrays with non-stoichiometric cyclodextrin. <i>Journal of Materials Chemistry B</i> , 2014 , 2, 1699-1705	7.3	36
139	Pre- and post-treatments free nanocomposite based hole transport layer for high performance organic solar cells with considerably enhanced reproducibility. <i>Nano Energy</i> , 2017 , 34, 76-85	17.1	35
138	Controllable Fabrication and Tuned Electrochemical Performance of Potassium Co-Ni Phosphate Microplates as Electrodes in Supercapacitors. <i>ACS Applied Materials & Discounty and Phosphate Materials & Discounty and Phosphate Acts and Provided Materials & Discounty and Phosphate Acts and Provided Materials & Discounty and Phosphate Acts and Provided Materials & Discounty and Provided Materials & Disco</i>	1 ⁹ 4 ⁵	35
137	Synergetic enhancement on flame retardancy by melamine phosphate modified lignin in rice husk ash filled P34HB biocomposites. <i>Composites Science and Technology</i> , 2018 , 168, 246-254	8.6	35
136	Wearable and flexible thin film thermoelectric module for multi-scale energy harvesting. <i>Journal of Power Sources</i> , 2020 , 455, 227983	8.9	33

135	Functional high-k nanocomposite dielectrics for flexible transistors and inverters with excellent mechanical properties. <i>Journal of Materials Chemistry</i> , 2012 , 22, 14246		33
134	Homoleptic copper(I) phenylselenolate polymer as a single-source precursor for Cu2Se nanocrystals. Structure, photoluminescence and application in field-effect transistor. <i>Chemical Science</i> , 2010 , 1, 515	9.4	33
133	Self-Powered Implantable Medical Devices: Photovoltaic Energy Harvesting Review. <i>Advanced Healthcare Materials</i> , 2020 , 9, e2000779	10.1	33
132	Polypyrrole-Modified NH4NiPO4IH2O Nanoplate Arrays on Ni Foam for Efficient Electrode in Electrochemical Capacitors. <i>ACS Sustainable Chemistry and Engineering</i> , 2016 , 4, 5578-5584	8.3	33
131	Hybrid Flexible Resistive Random Access Memory-Gated Transistor for Novel Nonvolatile Data Storage. <i>Small</i> , 2016 , 12, 390-6	11	32
130	Homoleptic copper(I) arylthiolates as a new class of p-type charge carriers: structures and charge mobility studies. <i>Chemistry - A European Journal</i> , 2008 , 14, 2965-75	4.8	32
129	Significantly improved dielectric properties of polylactide nanocomposites via TiO2 decorated carbon nanotubes. <i>Composites Part A: Applied Science and Manufacturing</i> , 2019 , 127, 105650	8.4	31
128	Polymerflanoparticle hybrid dielectrics for flexible transistors and inverters. <i>Journal of Materials Chemistry</i> , 2012 , 22, 4060		31
127	Ecofriendly UV-protective films based on poly(propylene carbonate) biocomposites filled with TiO decorated lignin. <i>International Journal of Biological Macromolecules</i> , 2019 , 126, 1030-1036	7.9	31
126	A Novel Type of Aqueous Dispersible Ultrathin-Layered Double Hydroxide Nanosheets for in Vivo Bioimaging and Drug Delivery. <i>ACS Applied Materials & Delivery (Naterials & Deliv</i>	9.5	30
125	Controllable threshold voltage shifts of polymer transistors and inverters by utilizing gold nanoparticles. <i>Applied Physics Letters</i> , 2012 , 101, 033306	3.4	30
124	Synaptic Plasticity and Filtering Emulated in Metal©rganic Frameworks Nanosheets Based Transistors. <i>Advanced Electronic Materials</i> , 2020 , 6, 1900978	6.4	30
123	Fe3O4/Au/Fe3O4 nanoflowers exhibiting tunable saturation magnetization and enhanced bioconjugation. <i>Nanoscale</i> , 2012 , 4, 747-51	7.7	28
122	Biodegradable skin-inspired nonvolatile resistive switching memory based on gold nanoparticles embedded alkali lignin. <i>Organic Electronics</i> , 2018 , 59, 382-388	3.5	28
121	Two-dimensional molybdenum disulphide nanosheet-covered metal nanoparticle array as a floating gate in multi-functional flash memories. <i>Nanoscale</i> , 2015 , 7, 17496-503	7.7	27
120	A General Method: Designing a Hypocrystalline Hydroxide Intermediate to Achieve Ultrasmall and Well-Dispersed Ternary Metal Oxide for Efficient Photovoltaic Devices. <i>Advanced Functional Materials</i> , 2019 , 29, 1904684	15.6	27
119	Localized Surface Plasmon Resonance-Mediated Charge Trapping/Detrapping for Core-Shell Nanorod-Based Optical Memory Cells. <i>ACS Applied Materials & Description of Core-Shell Memory Cells.</i> 10 (2016) 10 (201	9.5	27
118	Surface engineering of reduced graphene oxide for controllable ambipolar flash memories. <i>ACS Applied Materials & District Applied & District A</i>	9.5	27

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117	Journal of Materials Chemistry, 2010 , 20, 6245		27	
116	Deep-red to near-infrared electrophosphorescence based on bis(8-hydroxyquinolato) platinum(II) complexes. <i>Applied Physics Letters</i> , 2008 , 92, 163305	3.4	27	
115	Controlled self-assembly of functional metal octaethylporphyrin 1 D nanowires by solution-phase precipitative method. <i>Chemistry - an Asian Journal</i> , 2008 , 3, 1968-78	4.5	27	
114	Photo-reactive charge trapping memory based on lanthanide complex. <i>Scientific Reports</i> , 2015 , 5, 1499	984.9	27	
113	Finely dispersed Au nanoparticles on graphitic carbon nitride as highly active photocatalyst for hydrogen peroxide production. <i>Catalysis Communications</i> , 2019 , 123, 69-72	3.2	27	
112	Bis(5,7-dimethyl-8-hydroxyquinolinato)platinum(II) complex for efficient organic heterojunction solar cells. <i>Chemistry - an Asian Journal</i> , 2011 , 6, 3223-9	4.5	26	
111	High-efficiency orange and yellow organic light-emitting devices using platinum(II) complexes containing extended Econjugated cyclometalated ligands as dopant materials. <i>Applied Physics Letters</i> , 2007 , 91, 063508	3.4	26	
110	Solution-Processed Rare-Earth Oxide Thin Films for Alternative Gate Dielectric Application. <i>ACS Applied Materials & Dielectric Application</i> , 8, 31128-31135	9.5	25	
109	Classical photopolymerization kinetics, exceptional gelation, and improved diffraction efficiency and driving voltage in scaffolding morphological H-PDLCs afforded using a photoinitibitor. <i>Polymer Chemistry</i> , 2015 , 6, 8259-8269	4.9	25	
108	Near-Infrared-Irradiation-Mediated Synaptic Behavior from Tunable Charge-Trapping Dynamics. <i>Advanced Electronic Materials</i> , 2020 , 6, 1900765	6.4	25	
107	Enhanced lifetime of organic light-emitting diodes using soluble tetraalkyl-substituted copper phthalocyanines as anode buffer layers. <i>Journal of Materials Chemistry C</i> , 2016 , 4, 7377-7382	7.1	25	
106	Hierarchical yolkEhell layered potassium niobate for tuned pH-dependent photocatalytic H2 evolution. <i>Catalysis Science and Technology</i> , 2017 , 7, 1000-1005	5.5	24	
105	Pyrene based conjugated materials: synthesis, characterization and electroluminescent properties. <i>Physical Chemistry Chemical Physics</i> , 2014 , 16, 23320-8	3.6	24	
104	Poly(3-hexylthiophene) nanotubes with tunable aspect ratios and charge transport properties. <i>ACS Applied Materials & District Applied & Di</i>	9.5	21	
103	Importance of molecular alignment for organic photovoltaic devices. <i>Applied Physics Letters</i> , 2010 , 97, 163301	3.4	21	
102	Organic field-effect transistors fabricated with N,N?-substituted dialkyl-1,3,8,10-tetramethylquinacridone compounds. <i>Applied Physics Letters</i> , 2009 , 95, 123305	3.4	21	
101	Au-nanoparticle-supported ZnO as highly efficient photocatalyst for H2O2 production. <i>Catalysis Communications</i> , 2020 , 134, 105860	3.2	20	
100	Low temperature processed bilayer dielectrics for low-voltage flexible saturated load inverters. Applied Physics Letters, 2011 , 98, 092904	3.4	19	

99	Coaxial nanocables of p-type zinc telluride nanowires sheathed with silicon oxide: synthesis, characterization and properties. <i>Nanotechnology</i> , 2009 , 20, 455702	3.4	19
98	Surface Decoration on Polymeric Gate Dielectrics for Flexible Organic Field-Effect Transistors via Hydroxylation and Subsequent Monolayer Self-Assembly. <i>ACS Applied Materials & Amp; Interfaces</i> , 2015 , 7, 23464-71	9.5	18
97	Porosification-reduced optical trapping of silicon nanostructures. <i>Nanoscale</i> , 2012 , 4, 5835-9	7.7	18
96	Bioinspired, Self-Powered, and Highly Sensitive Electronic Skin for Sensing Static and Dynamic Pressures. <i>ACS Applied Materials & Samp; Interfaces</i> , 2020 , 12, 37239-37247	9.5	18
95	Tube-like Fe2O3@Ag/AgCl heterostructure: controllable synthesis and enhanced plasmonic photocatalytic activity. <i>RSC Advances</i> , 2015 , 5, 61239-61248	3.7	17
94	Rhelogical and antibacterial performance of sodium alginate/zinc oxide composite coating for cellulosic paper. <i>Colloids and Surfaces B: Biointerfaces</i> , 2018 , 167, 538-543	6	16
93	Real-time storage of thermal signals in organic memory with floating coreBhell nanoparticles. Journal of Materials Chemistry C, 2017 , 5, 8415-8423	7.1	16
92	Tetra-methyl substituted copper (II) phthalocyanine as a hole injection enhancer in organic light-emitting diodes. <i>AIP Advances</i> , 2015 , 5, 107205	1.5	16
91	Ambipolar organic light-emitting electrochemical transistor based on a heteroleptic charged iridium(III) complex. <i>Applied Physics Letters</i> , 2013 , 102, 083301	3.4	16
90	Printed High-k Dielectric for Flexible Low-Power Extended Gate Field-Effect Transistor in Sensing Pressure. <i>ACS Applied Electronic Materials</i> , 2019 , 1, 711-717	4	15
89	Reversible conversion of dominant polarity in ambipolar polymer/graphene oxide hybrids. <i>Scientific Reports</i> , 2015 , 5, 9446	4.9	15
88	Microwave-assisted synthesis, structure, and tunable liquid-crystal properties of 2,5-diaryl-1,3,4-thiadiazole derivatives through peripheral n-alkoxy chains. <i>Chemistry - an Asian Journal</i> , 2009 , 4, 1099-107	4.5	15
87	Ambipolar charge transport and electroluminescence properties of ZnO nanorods. <i>Applied Physics Letters</i> , 2008 , 93, 023502	3.4	15
86	Serpentine Ni Ge O (OH) Nanosheets with Tailored Layers and Size for Efficient Oxygen Evolution Reactions. <i>Small</i> , 2018 , 14, e1803015	11	15
85	Enhanced self-assembled monolayer treatment on polymeric gate dielectrics with ultraviolet/ozone assistance in organic thin film transistors. <i>RSC Advances</i> , 2015 , 5, 64471-64477	3.7	14
84	All-room-temperature solution-processed new nanocomposites based hole transport layer from synthesis to film formation for high-performance organic solar cells towards ultimate energy-efficient fabrication. <i>Nano Energy</i> , 2018 , 47, 26-34	17.1	14
83	Structure-charge transport relationship of 5,15-dialkylated porphyrins. <i>Chemical Communications</i> , 2012 , 48, 5139-41	5.8	14
82	Poly(3-hexylthiophene)/Gold Nanoparticle Hybrid System with an Enhanced Photoresponse for Light-Controlled Electronic Devices. <i>Particle and Particle Systems Characterization</i> , 2013 , 30, 599-605	3.1	14

(2018-2015)

81	Diffusion of gold nanoparticles in toluene and water as seen by dynamic light scattering. <i>Journal of Nanoparticle Research</i> , 2015 , 17, 1	2.3	13	
80	Efficient Photocatalytic Hydrogen Peroxide Production over TiO2 Passivated by SnO2. <i>Catalysts</i> , 2019 , 9, 623	4	13	
79	Flexible organic/inorganic heterojunction transistors with low operating voltage. <i>Journal of Materials Chemistry C</i> , 2013 , 1, 7073	7.1	13	
78	Mechanochemical changes on cyclometalated Ir(III) acyclic carbene complexes design and tuning of luminescent mechanochromic transition metal complexes. <i>Inorganic Chemistry Frontiers</i> , 2020 , 7, 786-	98 ₄	13	
77	Investigation on the mobility and stability in organic thin film transistors consisting of bilayer gate dielectrics. <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2016 , 213, 79-84	1.6	13	
76	Controlled Nonvolatile Transition in Polyoxometalates-Graphene Oxide Hybrid Memristive Devices. <i>Advanced Materials Technologies</i> , 2019 , 4, 1800551	6.8	13	
75	The microwave dielectric properties of transparent ZnAl2O4 ceramics fabricated by spark plasma sintering. <i>Journal of Materials Science: Materials in Electronics</i> , 2017 , 28, 9589-9595	2.1	12	
74	Synthesis and photovoltaic properties of conjugated DA copolymers based on thienyl substituted pyrene and diketopyrrolopyrrole for polymer solar cells. <i>Journal of Polymer Science Part A</i> , 2014 , 52, 319	8-320	4 ¹²	
73	Homoleptic platinum(II) and palladium(II) organothiolates and phenylselenolates: solvothermal synthesis, structural determination, optical properties, and single-source precursors for PdSe and PdS nanocrystals. <i>Chemistry - an Asian Journal</i> , 2010 , 5, 2062-74	4.5	12	
72	Graphene Field Effect Transistor Biosensors Based on Aptamer for Amyloid-Detection. <i>IEEE Sensors Journal</i> , 2020 , 20, 12488-12494	4	11	
71	Metal ion-responsive photonic colloidal crystalline micro-beads with electrochemically tunable photonic diffraction colours. <i>Sensors and Actuators B: Chemical</i> , 2016 , 223, 318-323	8.5	11	
70	Self-aligned, full solution process polymer field-effect transistor on flexible substrates. <i>Scientific Reports</i> , 2015 , 5, 15770	4.9	11	
69	Star-configured carbazole as an efficient near-ultraviolet emitter and hole-transporting material for organic light-emitting devices. <i>Applied Physics Letters</i> , 2008 , 92, 073305	3.4	11	
68	Dislocation-induced ultra-low lattice thermal conductivity in rare earth doped EZn4Sb3. <i>Scripta Materialia</i> , 2020 , 174, 95-101	5.6	11	
67	Recent developments on magnetic molecular imprinted polymers (MMIPs) for sensing, capturing, and monitoring pharmaceutical and agricultural pollutants. <i>Journal of Chemical Technology and Biotechnology</i> , 2021 , 96, 1151-1160	3.5	11	
66	Defect and Dopant Mediated Thermoelectric Power Factor Tuning in EZn4Sb3. <i>Advanced Electronic Materials</i> , 2020 , 6, 1901284	6.4	10	
65	Data Storage: Recent Advances of Flexible Data Storage Devices Based on Organic Nanoscaled Materials (Small 10/2018). <i>Small</i> , 2018 , 14, 1870042	11	10	
64	Polypyridyl chromium(III) complexes for non-volatile memory application: impact of the coordination sphere on memory device performance. <i>Journal of Materials Chemistry C</i> , 2018 , 6, 1445-145	70 ¹	10	

63	Flash memory based on solution processed hafnium dioxide charge trapping layer. <i>Journal of Materials Chemistry C</i> , 2014 , 2, 4233-4238	7.1	10
62	Controlled assembly of silver nanoparticles monolayer on 3D polymer nanotubes and their applications. <i>Small</i> , 2014 , 10, 4645-50	11	10
61	Photophysical, Cellular-Uptake, and Bioimaging Studies of Luminescent Ruthenium(II) P olypyridine Complexes Containing a d-Fructose Pendant. <i>European Journal of Inorganic Chemistry</i> , 2017 , 2017, 5288	- 3 294	10
60	Improving the performance of polymer solar cells by adjusting the crystallinity and nanoscale phase separation. <i>Chinese Physics B</i> , 2012 , 21, 078401	1.2	10
59	A low voltage programmable unipolar inverter with a gold nanoparticle monolayer on plastic. <i>Nanotechnology</i> , 2013 , 24, 205202	3.4	10
58	Field-effect transistor fabricated with nickel(II) etioporphyrin-I micrometer-sized crystals. <i>Applied Physics Letters</i> , 2008 , 93, 223305	3.4	10
57	Portable molecularly imprinted polymer-based platform for detection of histamine in aqueous solutions. <i>Journal of Hazardous Materials</i> , 2021 , 410, 124609	12.8	10
56	A new pyrene cored small organic molecule with a flexible alkyl spacer: a potential solution processable blue emitter with bright photoluminescence. <i>New Journal of Chemistry</i> , 2017 , 41, 11383-11	396	9
55	A Comparative Evaluation of Physicochemical Properties and Photocatalytic Efficiencies of Cerium Oxide and Copper Oxide Nanofluids. <i>Catalysts</i> , 2020 , 10, 34	4	8
54	(E)-1,2-Di(thiophen-2-yl)ethene based high mobility polymer for efficient photovoltaic devices without any post treatment. <i>RSC Advances</i> , 2016 , 6, 68049-68057	3.7	8
53	Interface Engineering via Photopolymerization-Induced Phase Separation for Flexible UV-Responsive Phototransistors. <i>ACS Applied Materials & Distributed Materials & Distribut</i>	9.5	7
52	A Exyclodextrin Modified Graphitic Carbon Nitride with Au Co-Catalyst for Efficient Photocatalytic Hydrogen Peroxide Production. <i>Nanomaterials</i> , 2020 , 10,	5.4	7
51	Employing PCBTDPP as an Efficient Donor Polymer for High Performance Ternary Polymer Solar Cells. <i>Polymers</i> , 2019 , 11,	4.5	6
50	Selective and sensitive onsite detection of phthalates in common solvents. <i>Sensors and Actuators B: Chemical</i> , 2018 , 259, 650-657	8.5	6
49	A general, rapid and solvent-free approach to fabricating nanostructured polymer surfaces. <i>Science China Technological Sciences</i> , 2014 , 57, 2328-2333	3.5	6
48	Simultaneous Enhancement of Thermopower and Electrical Conductivity through Isovalent Substitution of Cerium in Bismuth Selenide Thermoelectric Materials. <i>ACS Applied Materials & ACS Applied Materials & Interfaces</i> , 2019 , 11, 44026-44035	9.5	6
47	Dual plasmonic-enhanced bulk-heterojunction solar cell incorporating gold nanoparticles into solution-processed anode buffer layer and active layer. <i>Physica Status Solidi - Rapid Research Letters</i> , 2015 , 9, 115-119	2.5	5
46	Organic photovoltaic cells with copper (II) tetra-methyl substituted phthalocyanine. <i>Chinese Physics B</i> , 2013 , 22, 128505	1.2	5

45	Influence of nitrogen dopant source on the structural, photoluminescence and electrical properties of ZnO thin films deposited by pulsed spray pyrolysis. <i>Ceramics International</i> , 2019 , 45, 24324-24330	5.1	4
44	Extracellular Nanomatrix-Induced Self-Organization of Neural Stem Cells into Miniature Substantia Nigra-Like Structures with Therapeutic Effects on Parkinsonian Rats. <i>Advanced Science</i> , 2019 , 6, 190182	2 ^{13.6}	4
43	MetallhsulatorMetal Transistors. Advanced Materials, 2008, 20, 2120-2124	24	4
42	Biosensors and Point-of-Care Devices for Bacterial Detection: Rapid Diagnostics Informing Antibiotic Therapy. <i>Advanced Healthcare Materials</i> , 2021 , e2101546	10.1	4
41	Au modified Bi2O3-TiO2 hybrid for photocatalytic synthesis of hydrogen peroxide. <i>Catalysis Communications</i> , 2021 , 155, 106315	3.2	4
40	Effective decoupling of seebeck coefficient and the electrical conductivity through isovalent substitution of erbium in bismuth selenide thermoelectric material. <i>Journal of Alloys and Compounds</i> , 2021 , 857, 157559	5.7	4
39	Ultralow Thermal Conductivity in Dual-Doped n-Type Bi2Te3 Material for Enhanced Thermoelectric Properties. <i>Advanced Electronic Materials</i> , 2021 , 7, 2000910	6.4	4
38	Wearable Device for Monitoring Heart Rate Based on Low-Cost Piezoresistive Sensor 2019,		3
37	Improving the chemical potential of nitrogen to tune the electron density and mobility of ZnSnN2. Journal of Materials Chemistry C, 2020 , 8, 4314-4320	7.1	3
36	The role of a nanoparticle monolayer on the flow of polymer melts in nanochannels. <i>Nanoscale</i> , 2014 , 6, 11013-8	7.7	3
35	Mobility Enhancement of P3HT-Based OTFTs upon Blending with Au Nanorods. <i>Particle and Particle Systems Characterization</i> , 2015 , 32, 1051-1057	3.1	3
34	Hydrophilic poly-ether side-chained benzodithiophene-based homopolymer for solar cells and field-effect transistors. <i>Journal of Materials Science</i> , 2015 , 50, 2263-2271	4.3	3
33	Charge transport in monolayer poly(3-hexylthiophene) thin-film transistors. <i>Chinese Physics B</i> , 2014 , 23, 048501	1.2	3
32	Structural, electrical, and optical properties of Zn1\(\text{NSnxO} \) thin films deposited by reactive co-sputtering. <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2013 , 210, 2404-2408	1.6	3
31	Alignment of charge-transfer complexes for molecular devices. <i>Journal of Materials Chemistry</i> , 2010 , 20, 434-438		3
30	The Principle and Architectures of Optical Stress Sensors and the Progress on the Development of Microbend Optical Sensors. <i>Advanced Optical Materials</i> , 2021 , 9, 2001693	8.1	3
29	Highly Sensitive and Cost-Effective Portable Sensor for Early Gastric Carcinoma Diagnosis. <i>Sensors</i> , 2021 , 21,	3.8	3
28	A Statistical Method for Determining Optical and Geometrical Characteristics of Cirrus Clouds. <i>Climate</i> , 2019 , 7, 72	3.1	2

27	Multiple Stressor Effects of Radon and Phthalates in Children: Background Information and Future Research. <i>International Journal of Environmental Research and Public Health</i> , 2020 , 17,	4.6	2
26	Single-Component Oligomer Nanoparticle-Based Size-Dependent Dual-Emission Modulation. <i>Journal of Physical Chemistry C</i> , 2018 , 122, 4199-4205	3.8	2
25	Importance of alkyl chain-length on the self-assembly of new Ni(qdt)2 complexes and charge transport properties. <i>RSC Advances</i> , 2013 , 3, 12075	3.7	2
24	Towards the Development of Flexible Non-Volatile Memories (Adv. Mater. 38/2013). <i>Advanced Materials</i> , 2013 , 25, 5424-5424	24	2
23	Defect Engineering Boosted Ultrahigh Thermoelectric Power Conversion Efficiency in Polycrystalline SnSe. <i>ACS Applied Materials & Description of the Polycrystalline SnSe. ACS Applied Materials & Description of the Polycrystalline SnSe. ACS Applied Materials & Description of the Polycrystalline SnSe. ACS Applied Materials & Description of the Polycrystalline SnSe. ACS Applied Materials & Description of the Polycrystalline SnSe. ACS Applied Materials & Description of the Polycrystalline SnSe. ACS Applied Materials & Description of the Polycrystalline SnSe. ACS Applied Materials & Description of the Polycrystalline SnSe. ACS Applied Materials & Description of the Polycrystalline SnSe. ACS Applied Materials & Description of the Polycrystalline SnSe. ACS Applied Materials & Description of the Polycrystalline SnSe. ACS Applied Materials & Description of the Polycrystalline SnSe. ACS Applied Materials & Description of the Polycrystalline SnSe. ACS Applied Materials & Description of the Polycrystalline SnSe. ACS Applied Materials & Description of the Polycrystalline SnSe. ACS Applied Materials & Description of the Polycrystalline SnSe. ACS Applied Materials & Description of the Polycrystalline SnSe. ACS Applied Materials & Description of the Polycrystalline SnSe. ACS Applied Materials & Description of the Polycrystalline SnSe. ACS Applied Materials & Description of the Polycrystalline SnSe. ACS Applied Materials & Description of the Polycrystalline SnSe. ACS Applied Materials & Description of the Polycrystalline SnSe. ACS Applied Materials & Description of the Polycrystalline SnSe. ACS Applied Materials & Description of the Polycrystalline SnSe. ACS Applied Materials & Description of the Polycrystalline SnSe. ACS Applied Materials & Description of the Polycrystalline SnSe. ACS Applied Materials & Description of the Polycrystalline SnSe. ACS Applied Materials & Description of the Polycrystalline SnSe. ACS Applied Materials & Description of the Polycrystalline SnSe. ACS Applied Materials & Description of the Polycrystall</i>	9.5	2
22	Amorphous carbon nano-inclusions for strategical enhancement of thermoelectric performance in Earth-abundant Cu3SbS4. <i>Journal of Alloys and Compounds</i> , 2022 , 900, 163433	5.7	2
21	Gating a Single Cell: A Label-Free and Real-Time Measurement Method for Cellular Progression. <i>Analytical Chemistry</i> , 2020 , 92, 1738-1745	7.8	2
20	Dual-Gated Transistor Platform for On-Site Detection of Lead Ions at Trace Levels. <i>Analytical Chemistry</i> , 2018 , 90, 7399-7405	7.8	2
19	Flexible Floating Gate Memory 2018 , 215-228		1
18	Memory Devices: Synergies of Electrochemical Metallization and Valance Change in All-Inorganic Perovskite Quantum Dots for Resistive Switching (Adv. Mater. 28/2018). <i>Advanced Materials</i> , 2018 , 30, 1870207	24	1
17	Nanocomposite: Poly(3-hexylthiophene)/Gold Nanoparticle Hybrid System with an Enhanced Photoresponse for Light-Controlled Electronic Devices (Part. Part. Syst. Charact. 7/2013). <i>Particle and Particle Systems Characterization</i> , 2013 , 30, 646-646	3.1	1
16	Frequency Selective Surfaces with Nanoparticles Unit Cell. <i>Micromachines</i> , 2015 , 6, 1421-1426	3.3	1
15	The Properties and SCR de-NOx Application of Supported V2O5/TiO2 Catalysts with Different Polymerization State of VOx Species Controlled by the pH Value of Their Precursors. <i>ChemistrySelect</i> , 2020 , 5, 12952-12959	1.8	1
14	Hierarchically Interlaced 2D Copper Iodide/MXene Composite for High Thermoelectric Performance. <i>Physica Status Solidi - Rapid Research Letters</i> ,2100419	2.5	1
13	Enhanced Thermoelectric Performance of Bulk Bismuth Selenide: Synergistic Effect of Indium and Antimony Co-doping. <i>ACS Sustainable Chemistry and Engineering</i> , 2022 , 10, 3862-3871	8.3	1
12	Polyoxometalates-Graphene Oxide: Controlled Nonvolatile Transition in Polyoxometalates-Graphene Oxide Hybrid Memristive Devices (Adv. Mater. Technol. 3/2019). <i>Advanced Materials Technologies</i> , 2019 , 4, 1970016	6.8	O
11	Fabrication of micropillar substrates using replicas of alpha-particle irradiated and chemically etched PADC films. <i>Applied Radiation and Isotopes</i> , 2012 , 70, 1432-5	1.7	О
10	Rapid nanomolding of nanotopography on flexible substrates to control muscle cell growth with enhanced maturation. <i>Microsystems and Nanoengineering</i> , 2021 , 7, 89	7.7	O

LIST OF PUBLICATIONS

9	CHO cell dysfunction due to radiation-induced bystander signals observed by real-time electrical impedance measurement. <i>Biosensors and Bioelectronics</i> , 2021 , 181, 113142	11.8)
8	3D Microstructured Frequency Selective Surface Based on Carbonized Polyimide Films for Terahertz Applications. <i>Advanced Optical Materials</i> ,2102178	8.1	O
7	Photonic Synapse: Mimicking Neuroplasticity in a Hybrid Biopolymer Transistor by Dual Modes Modulation (Adv. Funct. Mater. 31/2019). <i>Advanced Functional Materials</i> , 2019 , 29, 1970212	15.6	
6	Microcontact Printing: Microcontact Printing of Ultrahigh Density Gold Nanoparticle Monolayer for Flexible Flash Memories (Adv. Mater. 26/2012). <i>Advanced Materials</i> , 2012 , 24, 3555-3555	24	
5	Ambipolar Charge Transport in DNA Molecules. Advanced Materials, 2008, 20, 1258-1262	24	
4	Investigation on the Direct and Bystander Effects in HeLa Cells Exposed to Very Low Radiation Using Electrical Impedance Measurement. <i>ACS Omega</i> , 2021 , 6, 13995-14003	3.9	
3	Self-assembled nanostructures of linear arylacetylenes and their aza-substituted analogues. <i>AIP Advances</i> , 2016 , 6, 065210	1.5	
2	Photoredox Catalysis for the Fabrication of Water-Repellent Surfaces with Application for Oil/Water Separation. <i>Langmuir</i> , 2021 , 37, 11592-11602	4	

Thermoelectric properties of sulfide and selenide-based materials **2022**, 293-328