Roy Vellaisamy

List of Publications by Year in Descending Order

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

#	Paper	IF	Citations
206	Amorphous carbon nano-inclusions for strategical enhancement of thermoelectric performance in Earth-abundant Cu3SbS4. *Journal of Alloys and Compounds*, **2022**, 900, 163433	5.7	2
205	Enhanced Thermoelectric Performance of Bulk Bismuth Selenide: Synergistic Effect of Indium and Antimony Co-doping. *ACS Sustainable Chemistry and Engineering*, **2022**, 10, 3862-3871	8.3	1
204	Thermoelectric properties of sulfide and selenide-based materials **2022**, 293-328		
203	Rapid nanomolding of nanotopography on flexible substrates to control muscle cell growth with enhanced maturation. *Microsystems and Nanoengineering*, **2021**, 7, 89	7.7	0
202	Biosensors and Point-of-Care Devices for Bacterial Detection: Rapid Diagnostics Informing Antibiotic Therapy. *Advanced Healthcare Materials*, **2021**, e2101546	10.1	4
201	Defect Engineering Boosted Ultrahigh Thermoelectric Power Conversion Efficiency in Polycrystalline SnSe. *ACS Applied Materials & Interfaces*, **2021**,	9.5	2
200	The Principle and Architectures of Optical Stress Sensors and the Progress on the Development of Microbend Optical Sensors. *Advanced Optical Materials*, **2021**, 9, 2001693	8.1	3
199	Highly Sensitive and Cost-Effective Portable Sensor for Early Gastric Carcinoma Diagnosis. *Sensors*, **2021**, 21,	3.8	3
198	Investigation on the Direct and Bystander Effects in HeLa Cells Exposed to Very Low □Radiation Using Electrical Impedance Measurement. *ACS Omega*, **2021**, 6, 13995-14003	3.9	
197	CHO cell dysfunction due to radiation-induced bystander signals observed by real-time electrical impedance measurement. *Biosensors and Bioelectronics*, **2021**, 181, 113142	11.8	0
196	Au modified Bi2O3-TiO2 hybrid for photocatalytic synthesis of hydrogen peroxide. *Catalysis Communications*, **2021**, 155, 106315	3.2	4
195	Effective decoupling of seebeck coefficient and the electrical conductivity through isovalent substitution of erbium in bismuth selenide thermoelectric material. *Journal of Alloys and Compounds*, **2021**, 857, 157559	5.7	4
194	Portable molecularly imprinted polymer-based platform for detection of histamine in aqueous solutions. *Journal of Hazardous Materials*, **2021**, 410, 124609	12.8	10
193	Ultralow Thermal Conductivity in Dual-Doped n-Type Bi2Te3 Material for Enhanced Thermoelectric Properties. *Advanced Electronic Materials*, **2021**, 7, 2000910	6.4	4
192	Carbon based materials: a review of adsorbents for inorganic and organic compounds. *Materials Advances*, **2021**, 2, 598-627	3.3	66
191	Recent developments on magnetic molecular imprinted polymers (MMIPs) for sensing, capturing, and monitoring pharmaceutical and agricultural pollutants. *Journal of Chemical Technology and Biotechnology*, **2021**, 96, 1151-1160	3.5	11
190	Photoredox Catalysis for the Fabrication of Water-Repellent Surfaces with Application for Oil/Water Separation. *Langmuir*, **2021**, 37, 11592-11602	4	

189	Graphene Field Effect Transistor Biosensors Based on Aptamer for Amyloid-Detection. *IEEE Sensors Journal*, **2020**, 20, 12488-12494	4	11
188	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
187	Defect and Dopant Mediated Thermoelectric Power Factor Tuning in Zn4Sb3. *Advanced Electronic Materials*, **2020**, 6, 1901284	6.4	10
186	Multiple Stressor Effects of Radon and Phthalates in Children: Background Information and Future Research. *International Journal of Environmental Research and Public Health*, **2020**, 17,	4.6	2
185	Wearable and flexible thin film thermoelectric module for multi-scale energy harvesting. *Journal of Power Sources*, **2020**, 455, 227983	8.9	33
184	Mechanochemical changes on cyclometalated Ir(III) acyclic carbene complexes design and tuning of luminescent mechanochromic transition metal complexes. *Inorganic Chemistry Frontiers*, **2020**, 7, 786-794	6.8	13
183	Dislocation-induced ultra-low lattice thermal conductivity in rare earth doped Zn4Sb3. *Scripta Materialia*, **2020**, 174, 95-101	5.6	11
182	Near-Infrared-Irradiation-Mediated Synaptic Behavior from Tunable Charge-Trapping Dynamics. *Advanced Electronic Materials*, **2020**, 6, 1900765	6.4	25
181	Au-nanoparticle-supported ZnO as highly efficient photocatalyst for H2O2 production. *Catalysis Communications*, **2020**, 134, 105860	3.2	20
180	Gating a Single Cell: A Label-Free and Real-Time Measurement Method for Cellular Progression. *Analytical Chemistry*, **2020**, 92, 1738-1745	7.8	2
179	Synaptic Plasticity and Filtering Emulated in MetalOrganic Frameworks Nanosheets Based Transistors. *Advanced Electronic Materials*, **2020**, 6, 1900978	6.4	30
178	A Comparative Evaluation of Physicochemical Properties and Photocatalytic Efficiencies of Cerium Oxide and Copper Oxide Nanofluids. *Catalysts*, **2020**, 10, 34	4	8
177	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. *ChemistrySelect*, **2020**, 5, 12952-12959	1.8	1
176	Self-Powered Implantable Medical Devices: Photovoltaic Energy Harvesting Review. *Advanced Healthcare Materials*, **2020**, 9, e2000779	10.1	33
175	Bioinspired, Self-Powered, and Highly Sensitive Electronic Skin for Sensing Static and Dynamic Pressures. *ACS Applied Materials & Interfaces*, **2020**, 12, 37239-37247	9.5	18
174	A Cyclodextrin Modified Graphitic Carbon Nitride with Au Co-Catalyst for Efficient Photocatalytic Hydrogen Peroxide Production. *Nanomaterials*, **2020**, 10,	5.4	7
173	Wearable Device for Monitoring Heart Rate Based on Low-Cost Piezoresistive Sensor **2019**,		3
172	Employing PCBTDPP as an Efficient Donor Polymer for High Performance Ternary Polymer Solar Cells. *Polymers*, **2019**, 11,	4.5	6

171	Significantly improved dielectric properties of polylactide nanocomposites via TiO2 decorated carbon nanotubes. *Composites Part A: Applied Science and Manufacturing*, **2019**, 127, 105650	8.4	31
170	A Statistical Method for Determining Optical and Geometrical Characteristics of Cirrus Clouds. *Climate*, **2019**, 7, 72	3.1	2
169	Mimicking Neuroplasticity in a Hybrid Biopolymer Transistor by Dual Modes Modulation. *Advanced Functional Materials*, **2019**, 29, 1902374	15.6	95
168	Printed High-k Dielectric for Flexible Low-Power Extended Gate Field-Effect Transistor in Sensing Pressure. *ACS Applied Electronic Materials*, **2019**, 1, 711-717	4	15
167	Fingertip-Skin-Inspired Highly Sensitive and Multifunctional Sensor with Hierarchically Structured Conductive Graphite/Polydimethylsiloxane Foams. *Advanced Functional Materials*, **2019**, 29, 1808829	15.6	98
166	Fabrication of carboxymethyl cellulose and graphene oxide bio-nanocomposites for flexible nonvolatile resistive switching memory devices. *Carbohydrate Polymers*, **2019**, 214, 213-220	10.3	38
165	Polyoxometalates-Graphene Oxide: Controlled Nonvolatile Transition in Polyoxometalates-Graphene Oxide Hybrid Memristive Devices (Adv. Mater. Technol. 3/2019). *Advanced Materials Technologies*, **2019**, 4, 1970016	6.8	0
164	Influence of nitrogen dopant source on the structural, photoluminescence and electrical properties of ZnO thin films deposited by pulsed spray pyrolysis. *Ceramics International*, **2019**, 45, 24324-24330	5.1	4
163	Photonic Synapse: Mimicking Neuroplasticity in a Hybrid Biopolymer Transistor by Dual Modes Modulation (Adv. Funct. Mater. 31/2019). *Advanced Functional Materials*, **2019**, 29, 1970212	15.6	
162	Efficient Photocatalytic Hydrogen Peroxide Production over TiO2 Passivated by SnO2. *Catalysts*, **2019**, 9, 623	4	13
161	A General Method: Designing a Hypocrystalline Hydroxide Intermediate to Achieve Ultrasmall and Well-Dispersed Ternary Metal Oxide for Efficient Photovoltaic Devices. *Advanced Functional Materials*, **2019**, 29, 1904684	15.6	27
160	Extracellular Nanomatrix-Induced Self-Organization of Neural Stem Cells into Miniature Substantia Nigra-Like Structures with Therapeutic Effects on Parkinsonian Rats. *Advanced Science*, **2019**, 6, 1901822	13.6	4
159	Finely dispersed Au nanoparticles on graphitic carbon nitride as highly active photocatalyst for hydrogen peroxide production. *Catalysis Communications*, **2019**, 123, 69-72	3.2	27
158	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). *Advanced Science*, **2019**, 6, 1970144	13.6	78
157	Simultaneous Enhancement of Thermopower and Electrical Conductivity through Isovalent Substitution of Cerium in Bismuth Selenide Thermoelectric Materials. *ACS Applied Materials & Interfaces*, **2019**, 11, 44026-44035	9.5	6
156	Ecofriendly UV-protective films based on poly(propylene carbonate) biocomposites filled with TiO decorated lignin. *International Journal of Biological Macromolecules*, **2019**, 126, 1030-1036	7.9	31
155	Controlled Nonvolatile Transition in Polyoxometalates-Graphene Oxide Hybrid Memristive Devices. *Advanced Materials Technologies*, **2019**, 4, 1800551	6.8	13
154	Artificial Synapse Emulated by Charge Trapping-Based Resistive Switching Device. *Advanced Materials Technologies*, **2019**, 4, 1800342	6.8	49

153	Flexible Floating Gate Memory **2018**, 215-228		1
152	Data Storage: Recent Advances of Flexible Data Storage Devices Based on Organic Nanoscaled Materials (Small 10/2018). *Small*, **2018**, 14, 1870042	11	10
151	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. *Nano Energy*, **2018**, 47, 26-34	17.1	14
150	Recent Advances of Flexible Data Storage Devices Based on Organic Nanoscaled Materials. *Small*, **2018**, 14, 1703126	11	102
149	Polypyridyl chromium(III) complexes for non-volatile memory application: impact of the coordination sphere on memory device performance. *Journal of Materials Chemistry C*, **2018**, 6, 1445-1450	7.1	10
148	Emerging perovskite materials for high density data storage and artificial synapses. *Journal of Materials Chemistry C*, **2018**, 6, 1600-1617	7.1	77
147	Highly Sensitive and Ultrastable Skin Sensors for Biopressure and Bioforce Measurements Based on Hierarchical Microstructures. *ACS Applied Materials & Interfaces*, **2018**, 10, 4086-4094	9.5	59
146	Single-Component Oligomer Nanoparticle-Based Size-Dependent Dual-Emission Modulation. *Journal of Physical Chemistry C*, **2018**, 122, 4199-4205	3.8	2
145	Interface Engineering via Photopolymerization-Induced Phase Separation for Flexible UV-Responsive Phototransistors. *ACS Applied Materials & Interfaces*, **2018**, 10, 7487-7496	9.5	7
144	Selective and sensitive onsite detection of phthalates in common solvents. *Sensors and Actuators B: Chemical*, **2018**, 259, 650-657	8.5	6
143	Controllable Fabrication and Tuned Electrochemical Performance of Potassium Co-Ni Phosphate Microplates as Electrodes in Supercapacitors. *ACS Applied Materials & Interfaces*, **2018**, 10, 3506-3514	9.5	35
142	Toward non-volatile photonic memory: concept, material and design. *Materials Horizons*, **2018**, 5, 641-654	14.4	67
141	Evolutionary Metal Oxide Clusters for Novel Applications: Toward High-Density Data Storage in Nonvolatile Memories. *Advanced Materials*, **2018**, 30, 1703950	24	74
140	All-Printed Solid-State Microsupercapacitors Derived from Self-Template Synthesis of Ag@PPy Nanocomposites. *Advanced Materials Technologies*, **2018**, 3, 1700206	6.8	46
139	Memory Devices: Synergies of Electrochemical Metallization and Valance Change in All-Inorganic Perovskite Quantum Dots for Resistive Switching (Adv. Mater. 28/2018). *Advanced Materials*, **2018**, 30, 1870207	24	1
138	Rhelogical and antibacterial performance of sodium alginate/zinc oxide composite coating for cellulosic paper. *Colloids and Surfaces B: Biointerfaces*, **2018**, 167, 538-543	6	16
137	The molecularly imprinted polymer essentials: curation of anticancer, ophthalmic, and projected gene therapy drug delivery systems. *Journal of Controlled Release*, **2018**, 287, 24-34	11.7	40
136	Synergetic enhancement on flame retardancy by melamine phosphate modified lignin in rice husk ash filled P34HB biocomposites. *Composites Science and Technology*, **2018**, 168, 246-254	8.6	35

135	Serpentine Ni Ge O (OH) Nanosheets with Tailored Layers and Size for Efficient Oxygen Evolution Reactions. *Small*, **2018**, 14, e1803015	11	15
134	Dual-Gated Transistor Platform for On-Site Detection of Lead Ions at Trace Levels. *Analytical Chemistry*, **2018**, 90, 7399-7405	7.8	2
133	Synergies of Electrochemical Metallization and Valance Change in All-Inorganic Perovskite Quantum Dots for Resistive Switching. *Advanced Materials*, **2018**, 30, e1800327	24	177
132	Biological Spiking Synapse Constructed from Solution Processed Bimetal Core-Shell Nanoparticle Based Composites. *Small*, **2018**, 14, e1800288	11	54
131	Biodegradable skin-inspired nonvolatile resistive switching memory based on gold nanoparticles embedded alkali lignin. *Organic Electronics*, **2018**, 59, 382-388	3.5	28
130	Phototunable Biomemory Based on Light-Mediated Charge Trap. *Advanced Science*, **2018**, 5, 1800714	13.6	75
129	Novel Direct Nanopatterning Approach to Fabricate Periodically Nanostructured Perovskite for Optoelectronic Applications. *Advanced Functional Materials*, **2017**, 27, 1606525	15.6	75
128	Hierarchical yolk–shell layered potassium niobate for tuned pH-dependent photocatalytic H2 evolution. *Catalysis Science and Technology*, **2017**, 7, 1000-1005	5.5	24
127	Pre- and post-treatments free nanocomposite based hole transport layer for high performance organic solar cells with considerably enhanced reproducibility. *Nano Energy*, **2017**, 34, 76-85	17.1	35
126	The microwave dielectric properties of transparent ZnAl2O4 ceramics fabricated by spark plasma sintering. *Journal of Materials Science: Materials in Electronics*, **2017**, 28, 9589-9595	2.1	12
125	Photoinitiation and Inhibition under Monochromatic Green Light for Storage of Colored 3D Images in Holographic Polymer-Dispersed Liquid Crystals. *ACS Applied Materials & Interfaces*, **2017**, 9, 1810-1819	9.5	47
124	A new pyrene cored small organic molecule with a flexible alkyl spacer: a potential solution processable blue emitter with bright photoluminescence. *New Journal of Chemistry*, **2017**, 41, 11383-11390	3.6	9
123	A Novel Type of Aqueous Dispersible Ultrathin-Layered Double Hydroxide Nanosheets for in Vivo Bioimaging and Drug Delivery. *ACS Applied Materials & Interfaces*, **2017**, 9, 34185-34193	9.5	30
122	Photophysical, Cellular-Uptake, and Bioimaging Studies of Luminescent Ruthenium(II) Polypyridine Complexes Containing a d-Fructose Pendant. *European Journal of Inorganic Chemistry*, **2017**, 2017, 5288-5294	2.3	10
121	Localized Surface Plasmon Resonance-Mediated Charge Trapping/Detrapping for Core-Shell Nanorod-Based Optical Memory Cells. *ACS Applied Materials & Interfaces*, **2017**, 9, 34101-34110	9.5	27
120	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. *ACS Applied Materials & Interfaces*, **2017**, 9, 32990-33000	9.5	54
119	An Overview of the Development of Flexible Sensors. *Advanced Materials*, **2017**, 29, 1700375	24	293
118	Real-time storage of thermal signals in organic memory with floating core–shell nanoparticles. *Journal of Materials Chemistry C*, **2017**, 5, 8415-8423	7.1	16

117	Solution-Processed Rare-Earth Oxide Thin Films for Alternative Gate Dielectric Application. *ACS Applied Materials & Interfaces*, **2016**, 8, 31128-31135	9.5	25
116	Designed synthesis and surface engineering strategies of magnetic iron oxide nanoparticles for biomedical applications. *Nanoscale*, **2016**, 8, 19421-19474	7.7	223
115	Wetting properties and SERS applications of ZnO/Ag nanowire arrays patterned by a screen printing method. *Journal of Materials Chemistry C*, **2016**, 4, 6371-6379	7.1	48
114	Hybrid Flexible Resistive Random Access Memory-Gated Transistor for Novel Nonvolatile Data Storage. *Small*, **2016**, 12, 390-6	11	32
113	Phenothiazine and carbazole substituted pyrene based electroluminescent organic semiconductors for OLED devices. *Journal of Materials Chemistry C*, **2016**, 4, 1009-1018	7.1	78
112	Metal ion-responsive photonic colloidal crystalline micro-beads with electrochemically tunable photonic diffraction colours. *Sensors and Actuators B: Chemical*, **2016**, 223, 318-323	8.5	11
111	Ultrasound-Induced Organogel Formation Followed by Thin Film Fabrication via Simple Doctor Blading Technique for Field-Effect Transistor Applications. *ACS Applied Materials & Interfaces*, **2016**, 8, 18991-7	9.5	39
110	Enhanced lifetime of organic light-emitting diodes using soluble tetraalkyl-substituted copper phthalocyanines as anode buffer layers. *Journal of Materials Chemistry C*, **2016**, 4, 7377-7382	7.1	25
109	Self-assembled nanostructures of linear arylacetylenes and their aza-substituted analogues. *AIP Advances*, **2016**, 6, 065210	1.5	
108	Monoclinic Tungsten Oxide with {100} Facet Orientation and Tuned Electronic Band Structure for Enhanced Photocatalytic Oxidations. *ACS Applied Materials & Interfaces*, **2016**, 8, 10367-74	9.5	86
107	Tunable Band-Selective UV-Photodetectors by 3D Self-Assembly of Heterogeneous Nanoparticle Networks. *Advanced Functional Materials*, **2016**, 26, 7359-7366	15.6	44
106	Polypyrrole-Modified NH4NiPO4H2O Nanoplate Arrays on Ni Foam for Efficient Electrode in Electrochemical Capacitors. *ACS Sustainable Chemistry and Engineering*, **2016**, 4, 5578-5584	8.3	33
105	(E)-1,2-Di(thiophen-2-yl)ethene based high mobility polymer for efficient photovoltaic devices without any post treatment. *RSC Advances*, **2016**, 6, 68049-68057	3.7	8
104	Investigation on the mobility and stability in organic thin film transistors consisting of bilayer gate dielectrics. *Physica Status Solidi (A) Applications and Materials Science*, **2016**, 213, 79-84	1.6	13
103	A one-pot route to the synthesis of alloyed Cu/Ag bimetallic nanoparticles with different mass ratios for catalytic reduction of 4-nitrophenol. *Journal of Materials Chemistry A*, **2015**, 3, 3450-3455	13	128
102	Ultra-flexible nonvolatile memory based on donor-acceptor diketopyrrolopyrrole polymer blends. *Scientific Reports*, **2015**, 5, 10683	4.9	38
101	Low-Cost, Disposable, Flexible and Highly Reproducible Screen Printed SERS Substrates for the Detection of Various Chemicals. *Scientific Reports*, **2015**, 5, 10208	4.9	89
100	Enhanced self-assembled monolayer treatment on polymeric gate dielectrics with ultraviolet/ozone assistance in organic thin film transistors. *RSC Advances*, **2015**, 5, 64471-64477	3.7	14

99	Tube-like Fe2O3@Ag/AgCl heterostructure: controllable synthesis and enhanced plasmonic photocatalytic activity. *RSC Advances*, **2015**, 5, 61239-61248	3.7	17
98	Diffusion of gold nanoparticles in toluene and water as seen by dynamic light scattering. *Journal of Nanoparticle Research*, **2015**, 17, 1	2.3	13
97	Reversible conversion of dominant polarity in ambipolar polymer/graphene oxide hybrids. *Scientific Reports*, **2015**, 5, 9446	4.9	15
96	Two-dimensional molybdenum disulphide nanosheet-covered metal nanoparticle array as a floating gate in multi-functional flash memories. *Nanoscale*, **2015**, 7, 17496-503	7.7	27
95	Surface Decoration on Polymeric Gate Dielectrics for Flexible Organic Field-Effect Transistors via Hydroxylation and Subsequent Monolayer Self-Assembly. *ACS Applied Materials & Interfaces*, **2015**, 7, 23464-71	9.5	18
94	The n-type conduction of indium-doped Cu2O thin films fabricated by direct current magnetron co-sputtering. *Applied Physics Letters*, **2015**, 107, 083901	3.4	38
93	Recent progress in magnetic iron oxide-semiconductor composite nanomaterials as promising photocatalysts. *Nanoscale*, **2015**, 7, 38-58	7.7	386
92	Self-aligned, full solution process polymer field-effect transistor on flexible substrates. *Scientific Reports*, **2015**, 5, 15770	4.9	11
91	Tetra-methyl substituted copper (II) phthalocyanine as a hole injection enhancer in organic light-emitting diodes. *AIP Advances*, **2015**, 5, 107205	1.5	16
90	Mobility Enhancement of P3HT-Based OTFTs upon Blending with Au Nanorods. *Particle and Particle Systems Characterization*, **2015**, 32, 1051-1057	3.1	3
89	Classical photopolymerization kinetics, exceptional gelation, and improved diffraction efficiency and driving voltage in scaffolding morphological H-PDLCs afforded using a photoinitibitor. *Polymer Chemistry*, **2015**, 6, 8259-8269	4.9	25
88	CdSe/ZnS core shell quantum dots charge trapping layer for flexible photonic memory. *Journal of Materials Chemistry C*, **2015**, 3, 3173-3180	7.1	40
87	Surface engineering of reduced graphene oxide for controllable ambipolar flash memories. *ACS Applied Materials & Interfaces*, **2015**, 7, 1699-708	9.5	27
86	Dual plasmonic-enhanced bulk-heterojunction solar cell incorporating gold nanoparticles into solution-processed anode buffer layer and active layer. *Physica Status Solidi - Rapid Research Letters* , **2015**, 9, 115-119	2.5	5
85	Hydrophilic poly-ether side-chained benzodithiophene-based homopolymer for solar cells and field-effect transistors. *Journal of Materials Science*, **2015**, 50, 2263-2271	4.3	3
84	Frequency Selective Surfaces with Nanoparticles Unit Cell. *Micromachines*, **2015**, 6, 1421-1426	3.3	1
83	Photo-reactive charge trapping memory based on lanthanide complex. *Scientific Reports*, **2015**, 5, 14998	4.9	27
82	Improved polyvinylpyrrolidone microneedle arrays with non-stoichiometric cyclodextrin. *Journal of Materials Chemistry B*, **2014**, 2, 1699-1705	7.3	36

81	Two-dimensional benzodithiophene and benzothiadiazole based solution-processed small molecular organic field-effect transistors & solar cells. *Journal of Materials Chemistry C*, **2014**, 2, 3921	7.1	39
80	Solution-processed, indacenodithiophene-based, small-molecule organic field-effect transistors and solar cells. *Journal of Materials Chemistry C*, **2014**, 2, 7523	7.1	37
79	Flash memory based on solution processed hafnium dioxide charge trapping layer. *Journal of Materials Chemistry C*, **2014**, 2, 4233-4238	7.1	10
78	The role of a nanoparticle monolayer on the flow of polymer melts in nanochannels. *Nanoscale*, **2014**, 6, 11013-8	7.7	3
77	Controlled assembly of silver nanoparticles monolayer on 3D polymer nanotubes and their applications. *Small*, **2014**, 10, 4645-50	11	10
76	A Simple Design for Strongly Emissive Sky-Blue Phosphorescent Neutral Rhenium Complexes: Synthesis, Photophysics, and Electroluminescent Devices. *Chemistry of Materials*, **2014**, 26, 2544-2550	9.6	54
75	Poly(3-hexylthiophene) nanotubes with tunable aspect ratios and charge transport properties. *ACS Applied Materials & Interfaces*, **2014**, 6, 11874-81	9.5	21
74	An upconverted photonic nonvolatile memory. *Nature Communications*, **2014**, 5, 4720	17.4	108
73	Pyrene based conjugated materials: synthesis, characterization and electroluminescent properties. *Physical Chemistry Chemical Physics*, **2014**, 16, 23320-8	3.6	24
72	Synthesis and photovoltaic properties of conjugated D-A copolymers based on thienyl substituted pyrene and diketopyrrolopyrrole for polymer solar cells. *Journal of Polymer Science Part A*, **2014**, 52, 3198-3204	3.5	12
71	Energy-band engineering for tunable memory characteristics through controlled doping of reduced graphene oxide. *ACS Nano*, **2014**, 8, 1923-31	16.7	42
70	Tube-like ternary □Fe2O3@SnO2@Cu2O sandwich heterostructures: synthesis and enhanced photocatalytic properties. *ACS Applied Materials & Interfaces*, **2014**, 6, 13088-97	9.5	70
69	Charge transport in monolayer poly(3-hexylthiophene) thin-film transistors. *Chinese Physics B*, **2014**, 23, 048501	1.2	3
68	A general, rapid and solvent-free approach to fabricating nanostructured polymer surfaces. *Science China Technological Sciences*, **2014**, 57, 2328-2333	3.5	6
67	Layer-by-layer-assembled reduced graphene oxide/gold nanoparticle hybrid double-floating-gate structure for low-voltage flexible flash memory. *Advanced Materials*, **2013**, 25, 872-7, 793	24	153
66	Flexible organic/inorganic heterojunction transistors with low operating voltage. *Journal of Materials Chemistry C*, **2013**, 1, 7073	7.1	13
65	Folic acid conjugated self-assembled layered double hydroxide nanoparticles for high-efficacy-targeted drug delivery. *Chemical Communications*, **2013**, 49, 10938-40	5.8	56
64	Importance of alkyl chain-length on the self-assembly of new Ni(qdt)2 complexes and charge transport properties. *RSC Advances*, **2013**, 3, 12075	3.7	2

63	The strain and thermal induced tunable charging phenomenon in low power flexible memory arrays with a gold nanoparticle monolayer. *Nanoscale*, **2013**, 5, 1972-9	7.7	37
62	Towards the development of flexible non-volatile memories. *Advanced Materials*, **2013**, 25, 5425-49	24	394
61	A low voltage programmable unipolar inverter with a gold nanoparticle monolayer on plastic. *Nanotechnology*, **2013**, 24, 205202	3.4	10
60	Organic photovoltaic cells with copper (II) tetra-methyl substituted phthalocyanine. *Chinese Physics B*, **2013**, 22, 128505	1.2	5
59	Solution processed molecular floating gate for flexible flash memories. *Scientific Reports*, **2013**, 3, 3093	4.9	48
58	Ambipolar organic light-emitting electrochemical transistor based on a heteroleptic charged iridium(III) complex. *Applied Physics Letters*, **2013**, 102, 083301	3.4	16
57	Poly(3-hexylthiophene)/Gold Nanoparticle Hybrid System with an Enhanced Photoresponse for Light-Controlled Electronic Devices. *Particle and Particle Systems Characterization*, **2013**, 30, 599-605	3.1	14
56	Nanocomposite: Poly(3-hexylthiophene)/Gold Nanoparticle Hybrid System with an Enhanced Photoresponse for Light-Controlled Electronic Devices (Part. Part. Syst. Charact. 7/2013). *Particle and Particle Systems Characterization*, **2013**, 30, 646-646	3.1	1
55	Nonvolatile multilevel data storage memory device from controlled ambipolar charge trapping mechanism. *Scientific Reports*, **2013**, 3, 2319	4.9	95
54	Towards the Development of Flexible Non-Volatile Memories (Adv. Mater. 38/2013). *Advanced Materials*, **2013**, 25, 5424-5424	24	2
53	Structural, electrical, and optical properties of Zn1SnxO thin films deposited by reactive co-sputtering. *Physica Status Solidi (A) Applications and Materials Science*, **2013**, 210, 2404-2408	1.6	3
52	Controlled ambipolar charge transport through a self-assembled gold nanoparticle monolayer. *Advanced Materials*, **2012**, 24, 1247-51	24	41
51	Improving the performance of polymer solar cells by adjusting the crystallinity and nanoscale phase separation. *Chinese Physics B*, **2012**, 21, 078401	1.2	10
50	Polymernanoparticle hybrid dielectrics for flexible transistors and inverters. *Journal of Materials Chemistry*, **2012**, 22, 4060		31
49	Structure-charge transport relationship of 5,15-dialkylated porphyrins. *Chemical Communications*, **2012**, 48, 5139-41	5.8	14
48	Fabrication of micropillar substrates using replicas of alpha-particle irradiated and chemically etched PADC films. *Applied Radiation and Isotopes*, **2012**, 70, 1432-5	1.7	0
47	Low voltage flexible nonvolatile memory with gold nanoparticles embedded in poly(methyl methacrylate). *Nanotechnology*, **2012**, 23, 344014	3.4	50
46	Fe3O4/Au/Fe3O4 nanoflowers exhibiting tunable saturation magnetization and enhanced bioconjugation. *Nanoscale*, **2012**, 4, 747-51	7.7	28

45	Porosification-reduced optical trapping of silicon nanostructures. *Nanoscale*, **2012**, 4, 5835-9	7.7	18
44	Microcontact printing of ultrahigh density gold nanoparticle monolayer for flexible flash memories. *Advanced Materials*, **2012**, 24, 3556-61	24	131
43	Microcontact Printing: Microcontact Printing of Ultrahigh Density Gold Nanoparticle Monolayer for Flexible Flash Memories (Adv. Mater. 26/2012). *Advanced Materials*, **2012**, 24, 3555-3555	24	
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