

Prashant Sonar

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209
papers

7,837
citations

44
h-index

82
g-index

228
ext. papers

9,096
ext. citations

8.1
avg, IF

6.49
L-index

#	Paper	IF	Citations
209	High mobility diketopyrrolopyrrole (DPP)-based organic semiconductor materials for organic thin film transistors and photovoltaics. <i>Energy and Environmental Science</i> , 2013 , 6, 1684	35.4	552
208	A high mobility P-type DPP-thieno[3,2-b]thiophene copolymer for organic thin-film transistors. <i>Advanced Materials</i> , 2010 , 22, 4862-6	24	462
207	A low-bandgap diketopyrrolopyrrole-benzothiadiazole-based copolymer for high-mobility ambipolar organic thin-film transistors. <i>Advanced Materials</i> , 2010 , 22, 5409-13	24	370
206	Annealing-free high-mobility diketopyrrolopyrrole-quaterthiophene copolymer for solution-processed organic thin film transistors. <i>Journal of the American Chemical Society</i> , 2011 , 133, 2198-204	16.4	359
205	Organic non-fullerene acceptors for organic photovoltaics. <i>Energy and Environmental Science</i> , 2011 , 4, 1558	35.4	348
204	Advanced Materials for Use in Soft Self-Healing Devices. <i>Advanced Materials</i> , 2017 , 29, 1604973	24	265
203	Solution processable low bandgap diketopyrrolopyrrole (DPP) based derivatives: novel acceptors for organic solar cells. <i>Journal of Materials Chemistry</i> , 2010 , 20, 3626		234
202	High mobility organic thin film transistor and efficient photovoltaic devices using versatile donor-acceptor polymer semiconductor by molecular design. <i>Energy and Environmental Science</i> , 2011 , 4, 2288	35.4	154
201	3,6-Di(furan-2-yl)pyrrolo[3,4-c]pyrrole-1,4(2H,5H)-dione and bithiophene copolymer with rather disordered chain orientation showing high mobility in organic thin film transistors. <i>Journal of Materials Chemistry</i> , 2011 , 21, 10829		126
200	Organic interfacial materials for perovskite-based optoelectronic devices. <i>Energy and Environmental Science</i> , 2019 , 12, 1177-1209	35.4	125
199	Developments of Diketopyrrolopyrrole-Dye-Based Organic Semiconductors for a Wide Range of Applications in Electronics. <i>Advanced Materials</i> , 2020 , 32, e1903882	24	124
198	Cubic silsesquioxanes for use in solution processable organic light emitting diodes (OLED). <i>Journal of Materials Chemistry</i> , 2009 , 19, 9103		121
197	Molecular Engineering Using an Anthanthrone Dye for Low-Cost Hole Transport Materials: A Strategy for Dopant-Free, High-Efficiency, and Stable Perovskite Solar Cells. <i>Advanced Energy Materials</i> , 2018 , 8, 1703007	21.8	115
196	Organic field-effect transistor-based flexible sensors. <i>Chemical Society Reviews</i> , 2020 , 49, 3423-3460	58.5	113
195	Field-effect transistors based on self-organized molecular nanostripes. <i>Nano Letters</i> , 2005 , 5, 2422-5	11.5	113
194	A Highly Sensitive Diketopyrrolopyrrole-Based Ambipolar Transistor for Selective Detection and Discrimination of Xylene Isomers. <i>Advanced Materials</i> , 2016 , 28, 4012-8	24	112
193	Development of Dopant-Free Organic Hole Transporting Materials for Perovskite Solar Cells. <i>Advanced Energy Materials</i> , 2020 , 10, 1903326	21.8	111

192	Furan containing diketopyrrolopyrrole copolymers: synthesis, characterization, organic field effect transistor performance and photovoltaic properties. <i>Journal of Materials Chemistry</i> , 2012 , 22, 4425-4435		102
191	Nonvolatile multilevel data storage memory device from controlled ambipolar charge trapping mechanism. <i>Scientific Reports</i> , 2013 , 3, 2319	4.9	95
190	Synthesis, characterization and comparative study of thiophene-Benzothiadiazole based donor-acceptor-donor (DAD) materials. <i>Journal of Materials Chemistry</i> , 2009 , 19, 3228		88
189	1,3,6,8-tetrasubstituted pyrenes: solution-processable materials for application in organic electronics. <i>Organic Letters</i> , 2010 , 12, 3292-5	6.2	86
188	A furan-containing conjugated polymer for high mobility ambipolar organic thin film transistors. <i>Chemical Communications</i> , 2012 , 48, 8383-5	5.8	83
187	Electron-accepting conjugated materials based on 2-vinyl-4,5-dicyanoimidazoles for application in organic electronics. <i>Journal of Organic Chemistry</i> , 2009 , 74, 3293-8	4.2	80
186	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
185	High-Mobility Organic Thin Film Transistors Based on Benzothiadiazole-Sandwiched Dihexylquaterthiophenes. <i>Chemistry of Materials</i> , 2008 , 20, 3184-3190	9.6	78
184	Advanced liquid biopsy technologies for circulating biomarker detection. <i>Journal of Materials Chemistry B</i> , 2019 , 7, 6670-6704	7.3	74
183	Biodegradable Materials and Green Processing for Green Electronics. <i>Advanced Materials</i> , 2020 , 32, e2001491	14.91	71
182	One-Step Macroscopic Alignment of Conjugated Polymer Systems by Epitaxial Crystallization during Spin-Coating. <i>Advanced Functional Materials</i> , 2013 , 23, 2368-2377	15.6	69
181	An overview on basics of organic and dye sensitized solar cells, their mechanism and recent improvements. <i>Renewable and Sustainable Energy Reviews</i> , 2017 , 78, 1262-1287	16.2	66
180	A non-fullerene electron acceptor based on fluorene and diketopyrrolopyrrole building blocks for solution-processable organic solar cells with an impressive open-circuit voltage. <i>Physical Chemistry Chemical Physics</i> , 2014 , 16, 23837-42	3.6	56
179	Dopant-free novel hole-transporting materials based on quinacridone dye for high-performance and humidity-stable mesoporous perovskite solar cells. <i>Journal of Materials Chemistry A</i> , 2019 , 7, 5315-5323	13.3	55
178	Solid-state assemblies and optical properties of conjugated oligomers combining fluorene and thiophene units. <i>Journal of Materials Chemistry</i> , 2007 , 17, 728-735		54
177	4-Hexylbithieno[3,2-b:2'3']pyridine: An Efficient Electron-Accepting Unit in Fluorene and Indenofluorene Copolymers for Light-Emitting Devices. <i>Macromolecules</i> , 2004 , 37, 709-715	5.5	53
176	Boosting inverted perovskite solar cell performance by using 9,9-bis(4-diphenylaminophenyl)fluorene functionalized with triphenylamine as a dopant-free hole transporting material. <i>Journal of Materials Chemistry A</i> , 2019 , 7, 12507-12517	13	52
175	3D-hybrid networks with controllable electrical conductivity from the electrochemical deposition of terthiophene-functionalized polyphenylene dendrimers. <i>Angewandte Chemie - International Edition</i> , 2005 , 44, 2447-51	16.4	52

174	Organic field effect transistors (OFETs) in environmental sensing and health monitoring: A review. <i>TrAC - Trends in Analytical Chemistry</i> , 2019 , 111, 27-36	14.6	52
173	White paper on the future of plasma science and technology in plastics and textiles. <i>Plasma Processes and Polymers</i> , 2019 , 16, 1700228	3.4	51
172	Multifunctional Optoelectronics via Harnessing Defects in Layered Black Phosphorus. <i>Advanced Functional Materials</i> , 2019 , 29, 1901991	15.6	50
171	Thienylvinylene-thienyl and Naphthalene Core Substituted with Triphenylamines Highly Efficient Hole Transporting Materials and Their Comparative Study for Inverted Perovskite Solar Cells. <i>Solar Rrl</i> , 2017 , 1, 1700105	7.1	49
170	One step facile synthesis of a novel anthanthrone dye-based, dopant-free hole transporting material for efficient and stable perovskite solar cells. <i>Journal of Materials Chemistry C</i> , 2018 , 6, 3699-3708	7.8	48
169	Furan substituted diketopyrrolopyrrole and thienylenevinylene based low band gap copolymer for high mobility organic thin film transistors. <i>Journal of Materials Chemistry</i> , 2012 , 22, 17284		48
168	OFET based explosive sensors using diketopyrrolopyrrole and metal organic framework composite active channel material. <i>Sensors and Actuators B: Chemical</i> , 2016 , 223, 114-122	8.5	47
167	Design and modification of three-component randomly incorporated copolymers for high performance organic photovoltaic applications. <i>Polymer Chemistry</i> , 2013 , 4, 804-811	4.9	47
166	Polyoxometalates (POMs): from electroactive clusters to energy materials. <i>Energy and Environmental Science</i> , 2021 , 14, 1652-1700	35.4	46
165	Low-Cost Alternative High-Performance Hole-Transport Material for Perovskite Solar Cells and Its Comparative Study with Conventional SPIRO-OMeTAD. <i>Advanced Electronic Materials</i> , 2017 , 3, 1700139	6.4	43
164	Thiophene-Benzothiadiazole-Thiophene (DAD) based polymers: effect of donor/acceptor moieties adjacent to DAD segment on photophysical and photovoltaic properties. <i>Journal of Materials Chemistry</i> , 2011 , 21, 10532		43
163	Rodlike bimetallic ruthenium and osmium complexes bridged by phenylene spacers. Synthesis, electrochemistry, and photophysics. <i>Inorganic Chemistry</i> , 2005 , 44, 4706-18	5.1	42
162	Acene-based organic semiconductors for organic light-emitting diodes and perovskite solar cells. <i>Journal of Materials Chemistry C</i> , 2018 , 6, 9017-9029	7.1	41
161	Synthesis of diketopyrrolopyrrole based copolymers via the direct arylation method for p-channel and ambipolar OFETs. <i>Physical Chemistry Chemical Physics</i> , 2014 , 16, 4275-83	3.6	41
160	Isoindigo dye incorporated copolymers with naphthalene and anthracene: promising materials for stable organic field effect transistors. <i>Polymer Chemistry</i> , 2013 , 4, 1983	4.9	40
159	Poly(2,5-bis(2-octyldodecyl)-3,6-di(furan-2-yl)-2,5-dihydro-pyrrolo[3,4-c]pyrrole-1,4-dione-co-thieno[3,2-b]thiophene): a high performance polymer semiconductor for both organic thin film transistors and organic photovoltaics. <i>Physical Chemistry Chemical Physics</i> , 2012 , 14, 7162-9	3.6	40
158	Effect of thermal annealing Super Yellow emissive layer on efficiency of OLEDs. <i>Scientific Reports</i> , 2017 , 7, 40805	4.9	39
157	Supramolecular Organization in Fluorene/Indenofluorene/Oligothiophene Alternating Conjugated Copolymers. <i>Advanced Functional Materials</i> , 2005 , 15, 1426-1434	15.6	39

156	Molecular Engineering Strategy for High Efficiency Fullerene-Free Organic Solar Cells Using Conjugated 1,8-Naphthalimide and Fluorenone Building Blocks. <i>ACS Applied Materials & Interfaces</i> , 2017 , 9, 16967-16976	9.5	38
155	Ultra-flexible nonvolatile memory based on donor-acceptor diketopyrrolopyrrole polymer blends. <i>Scientific Reports</i> , 2015 , 5, 10683	4.9	38
154	Charge transport study of high mobility polymer thin-film transistors based on thiophene substituted diketopyrrolopyrrole copolymers. <i>Physical Chemistry Chemical Physics</i> , 2013 , 15, 9735-41	3.6	38
153	High mobility top-gate and dual-gate polymer thin-film transistors based on diketopyrrolopyrrole-naphthalene copolymer. <i>Applied Physics Letters</i> , 2011 , 98, 253305	3.4	38
152	Hole mobility of 3.56 cm ² V ⁻¹ s ⁻¹ accomplished using more extended dithienothiophene with furan flanked diketopyrrolopyrrole polymer. <i>Journal of Materials Chemistry C</i> , 2015 , 3, 9299-9305	7.1	37
151	Solution processable poly(2,5-dialkyl-2,5-dihydro-3,6-di-2-thienyl-pyrrolo[3,4-c]pyrrole-1,4-dione) for ambipolar organic thin film transistors. <i>Organic Electronics</i> , 2012 , 13, 1606-1613	3.5	37
150	Charge transport and density of trap states in balanced high mobility ambipolar organic thin-film transistors. <i>Organic Electronics</i> , 2012 , 13, 136-141	3.5	36
149	A fluorenone based low band gap solution processable copolymer for air stable and high mobility organic field effect transistors. <i>Chemical Communications</i> , 2013 , 49, 1588-90	5.8	36
148	All-Rounder Low-Cost Dopant-Free D-A-D Hole-Transporting Materials for Efficient Indoor and Outdoor Performance of Perovskite Solar Cells. <i>Advanced Electronic Materials</i> , 2020 , 6, 1900884	6.4	35
147	Logic-gate devices based on printed polymer semiconducting nanostripes. <i>Nano Letters</i> , 2013 , 13, 3643-3648	11.5	35
146	Synthesis, thin-film morphology, and comparative study of bulk and bilayer heterojunction organic photovoltaic devices using soluble diketopyrrolopyrrole molecules. <i>Energy and Environmental Science</i> , 2011 , 4, 3617	35.4	35
145	Photophysical characterization of light-emitting poly(indenofluorene)s. <i>ChemPhysChem</i> , 2005 , 6, 1650-60.2	6.2	35
144	Recent Progress in Fluorescent Blue Light-emitting Materials. <i>Current Organic Chemistry</i> , 2010 , 14, 2034-2069	19.9	33
143	A benzothiadiazole end capped donor-acceptor based small molecule for organic electronics. <i>Physical Chemistry Chemical Physics</i> , 2013 , 15, 17064-9	3.6	30
142	Improved performance in diketopyrrolopyrrole-based transistors with bilayer gate dielectrics. <i>ACS Applied Materials & Interfaces</i> , 2014 , 6, 3170-5	9.5	28
141	Relation between charge carrier mobility and lifetime in organic photovoltaics. <i>Journal of Applied Physics</i> , 2013 , 114, 184503	2.5	28
140	Thiophene-tetrafluorophenyl-thiophene: a promising building block for ambipolar organic field effect transistors. <i>Journal of Materials Chemistry C</i> , 2015 , 3, 2080-2085	7.1	27
139	Surface engineering of reduced graphene oxide for controllable ambipolar flash memories. <i>ACS Applied Materials & Interfaces</i> , 2015 , 7, 1699-708	9.5	27

138	Tuning the Charge Carrier Polarity of Organic Transistors by Varying the Electron Affinity of the Flanked Units in Diketopyrrolopyrrole-Based Copolymers. <i>Advanced Functional Materials</i> , 2020 , 30, 1907452	15.6	27
137	Current advancements on charge selective contact interfacial layers and electrodes in flexible hybrid perovskite photovoltaics. <i>Journal of Energy Chemistry</i> , 2021 , 54, 151-173	12	27
136	Template based sintering of WO ₃ nanoparticles into porous tungsten oxide nanofibers for acetone sensing applications. <i>Journal of Materials Chemistry C</i> , 2019 , 7, 2961-2970	7.1	26
135	Dual chemosensor for the rapid detection of mercury(ii) pollution and biothiols. <i>Analyst, The</i> , 2019 , 144, 4908-4916	5	26
134	Naphthalimide end capped anthraquinone based solution-processable n-channel organic semiconductors: effect of alkyl chain engineering on charge transport. <i>Journal of Materials Chemistry C</i> , 2018 , 6, 3774-3786	7.1	24
133	Pyrene based conjugated materials: synthesis, characterization and electroluminescent properties. <i>Physical Chemistry Chemical Physics</i> , 2014 , 16, 23320-8	3.6	24
132	Recent Progress in the Abatement of Hazardous Pollutants Using Photocatalytic TiO ₂ -Based Building Materials. <i>Nanomaterials</i> , 2020 , 10,	5.4	23
131	Water-based nanoparticulate solar cells using a diketopyrrolopyrrole donor polymer. <i>Physical Chemistry Chemical Physics</i> , 2014 , 16, 2647-53	3.6	22
130	Comparative behavior of CdS and CdSe quantum dots in poly(3-hexylthiophene) based nanocomposites. <i>Materials Research Bulletin</i> , 2006 , 41, 198-208	5.1	22
129	Pretreatment and fermentation of lignocellulosic biomass: reaction mechanisms and process engineering. <i>Reaction Chemistry and Engineering</i> , 2020 , 5, 2017-2047	4.9	22
128	High-Mobility Ambipolar Organic Thin-Film Transistor Processed From a Nonchlorinated Solvent. <i>ACS Applied Materials & Interfaces</i> , 2016 , 8, 24325-30	9.5	22
127	Conjoint use of Dibenzosilole and Indan-1,3-dione Functionalities to Prepare an Efficient Non-Fullerene Acceptor for Solution-Processable Bulk-Heterojunction Solar Cells. <i>Asian Journal of Organic Chemistry</i> , 2015 , 4, 1096-1102	3	21
126	Nanomorphology influence on the light conversion mechanisms in highly efficient diketopyrrolopyrrole based organic solar cells. <i>Organic Electronics</i> , 2013 , 14, 326-334	3.5	21
125	Tin oxide for optoelectronic, photovoltaic and energy storage devices: a review. <i>Journal of Materials Chemistry A</i> , 2021 , 9, 16621-16684	13	21
124	Synergistic Use of Pyridine and Selenophene in a Diketopyrrolopyrrole-Based Conjugated Polymer Enhances the Electron Mobility in Organic Transistors. <i>Advanced Functional Materials</i> , 2020 , 30, 2000489	15.6	20
123	Naphthalene flanked diketopyrrolopyrrole based organic semiconductors for high performance organic field effect transistors. <i>New Journal of Chemistry</i> , 2018 , 42, 12374-12385	3.6	20
122	Diketopyrrolopyrrole copolymers based chemical sensors for the detection and discrimination of volatile organic compounds. <i>Sensors and Actuators B: Chemical</i> , 2017 , 251, 49-56	8.5	19
121	A highly sensitive SERS quenching nanosensor for the determination of tumor necrosis factor alpha in blood. <i>Sensors and Actuators B: Chemical</i> , 2020 , 310, 127867	8.5	19

120	Thiophene-based dendronized macromonomers and polymers. <i>Polymer</i> , 2007 , 48, 4996-5004	3.9	19
119	Enhancing the Electrochemical Doping Efficiency in Diketopyrrolopyrrole-Based Polymer for Organic Electrochemical Transistors. <i>Advanced Electronic Materials</i> , 2021 , 7, 2000701	6.4	19
118	Isolation and Detection of Exosomes Using Fe ₂ O ₃ Nanoparticles. <i>ACS Applied Nano Materials</i> , 2021 , 4, 1175-1186	5.6	19
117	Diketopyrrolopyrrole based organic semiconductors with different numbers of thiophene units: symmetry tuning effect on electronic devices. <i>New Journal of Chemistry</i> , 2018 , 42, 4017-4028	3.6	18
116	Charge carrier velocity distributions in high mobility polymer field-effect transistors. <i>Applied Physics Letters</i> , 2012 , 100, 153302	3.4	18
115	9-Fluorenone and 9,10-anthraquinone potential fused aromatic building blocks to synthesize electron acceptors for organic solar cells. <i>New Journal of Chemistry</i> , 2017 , 41, 2899-2909	3.6	17
114	Defect analysis of sputter grown cupric oxide for optical and electronics application. <i>Journal Physics D: Applied Physics</i> , 2015 , 48, 495104	3	17
113	ZnO layers for opto-electronic applications from solution-based and low-temperature processing of an organometallic precursor. <i>Journal of Materials Chemistry</i> , 2012 , 22, 20896		17
112	Organic Electrochemical Transistors for In Vivo Bioelectronics. <i>Advanced Materials</i> , 2021 , 33, e2101874	24	17
111	. <i>IEEE Transactions on Electron Devices</i> , 2012 , 59, 1494-1500	2.9	16
110	A study of the effects metal residues in poly(9,9-dioctylfluorene) have on field-effect transistor device characteristics. <i>Synthetic Metals</i> , 2007 , 157, 872-875	3.6	16
109	Reversible conversion of dominant polarity in ambipolar polymer/graphene oxide hybrids. <i>Scientific Reports</i> , 2015 , 5, 9446	4.9	15
108	Biowaste-Derived, Self-Organized Arrays of High-Performance 2D Carbon Emitters for Organic Light-Emitting Diodes. <i>Advanced Materials</i> , 2020 , 32, e1906176	24	15
107	Controlling aggregation and crystallization of solution processed diketopyrrolopyrrole based polymer for high performance thin film transistors by pre-metered slot die coating process. <i>Organic Electronics</i> , 2016 , 36, 113-119	3.5	15
106	Potassium Doping to Enhance Green Photoemission of Light-Emitting Diodes Based on CsPbBr ₃ Perovskite Nanocrystals. <i>Advanced Optical Materials</i> , 2020 , 8, 2000742	8.1	14
105	Nanoscale phase domain structure and associated device performance of organic solar cells based on a diketopyrrolopyrrole polymer. <i>RSC Advances</i> , 2013 , 3, 20113	3.7	14
104	Polyethylene Glycol Coated Magnetic Nanoparticles: Hybrid Nanofluid Formulation, Properties and Drug Delivery Prospects. <i>Nanomaterials</i> , 2021 , 11,	5.4	14
103	Photo-Cross-Linkable Polymer Inks for Solution-Based OLED Fabrication. <i>Macromolecules</i> , 2019 , 52, 9105-9113	5.3	13

102	A Study of Diphenylfumaronitrile and Furan-Substituted Diketopyrrolopyrrole Alternating Copolymer and Its Thin-Film Transistors. <i>Macromolecular Chemistry and Physics</i> , 2014 , 215, 725-732	2.6	13
101	Impact of Al passivation and cosputter on the structural property of FeSi_2 for Al-doped $\text{FeSi}_2/\text{n-Si}(100)$ based solar cells application. <i>ACS Applied Materials & Interfaces</i> , 2013 , 5, 5455-60	9.5	13
100	Iron(II) Spin Transition Complexes with Dendritic Ligands, Part I. <i>European Journal of Inorganic Chemistry</i> , 2008 , 2008, 1613-1622	2.3	13
99	Synthesis and study of conductivity behaviour of blended conducting polymer films irradiated with swift heavy ions of silicon. <i>Current Applied Physics</i> , 2003 , 3, 247-250	2.6	13
98	Recent progress and growth in biosensors technology: A critical review. <i>Journal of Industrial and Engineering Chemistry</i> , 2022 ,	6.3	13
97	Solution-Processed Pure Sulfide $\text{Cu}_2(\text{Zn}_{0.6}\text{Cd}_{0.4})\text{SnS}_4$ Solar Cells with Efficiency 10.8% Using Ultrathin CuO Intermediate Layer. <i>Solar Rrl</i> , 2020 , 4, 2000293	7.1	13
96	Crowning of dibenzosilole with a naphthalenediimide functional group to prepare an electron acceptor for organic solar cells. <i>Dyes and Pigments</i> , 2015 , 120, 314-321	4.6	12
95	Bactericidal Silver Nanoparticles by Atmospheric Pressure Solution Plasma Processing. <i>Nanomaterials</i> , 2020 , 10,	5.4	12
94	Electrical characteristics of lateral heterostructure organic field-effect bipolar transistors. <i>Applied Physics Letters</i> , 2009 , 94, 013308	3.4	12
93	Polymer-mediated synthesis of Fe_2O_3 nano-particles. <i>Polyhedron</i> , 2001 , 20, 1489-1494	2.7	12
92	Organic Transistor Based on Cyclopentadithiophene-Benzothiadiazole Donor-Acceptor Copolymer for the Detection and Discrimination between Multiple Structural Isomers. <i>Advanced Functional Materials</i> , 2019 , 29, 1808188	15.6	12
91	A triphenylamine substituted quinacridone derivative for solution processed organic light emitting diodes. <i>Materials Chemistry and Physics</i> , 2018 , 206, 56-63	4.4	12
90	Efficient Plastic Recycling and Remolding Circular Economy Using the Technology of TrustBlockchain. <i>Sustainability</i> , 2021 , 13, 9142	3.6	12
89	Triethylene Glycol Substituted Diketopyrrolopyrrole- and Isoindigo-Dye Based Donor-Acceptor Copolymers for Organic Light-Emitting Electrochemical Cells and Transistors. <i>Advanced Electronic Materials</i> , 2020 , 6, 1901414	6.4	11
88	Experimental and modeling study of low-voltage field-effect transistors fabricated with molecularly aligned copolymer floating films. <i>Flexible and Printed Electronics</i> , 2018 , 3, 015006	3.1	11
87	An Electron-Accepting Chromophore Based on Fluorene and Naphthalenediimide Building Blocks for Solution-Processable Bulk Heterojunction Devices. <i>Asian Journal of Organic Chemistry</i> , 2015 , 4, 800-807	3.7	11
86	Band Gap Tunable N-Type Molecules for Organic Field Effect Transistors. <i>Journal of Physical Chemistry C</i> , 2013 , 117, 11530-11539	3.8	11
85	Emerging Perovskite Solar Cell Technology: Remedial Actions for the Foremost Challenges. <i>Advanced Energy Materials</i> , 2101085	21.8	11

84	Short Alkyl Chain Engineering Modulation on Naphthalene Flanked Diketopyrrolopyrrole toward High-Performance Single Crystal Transistors and Organic Thin Film Displays. <i>Advanced Electronic Materials</i> , 2021 , 7, 2000804	6.4	11
83	Diketopyrrolopyrrole-based polymer:fullerene nanoparticle films with thermally stable morphology for organic photovoltaic applications. <i>MRS Communications</i> , 2017 , 7, 67-73	2.7	10
82	A comparative study of electrochemical, optical properties and electropolymerization behavior of thiophene- and furan-substituted diketopyrrolopyrrole. <i>Journal of Materials Research</i> , 2017 , 32, 810-821	2.5	10
81	Naphthalene flanked diketopyrrolopyrrole: a new conjugated building block with hexyl or octyl alkyl side chains for electropolymerization studies and its biosensor applications. <i>Polymer Chemistry</i> , 2019 , 10, 3722-3739	4.9	10
80	Time-independent charge carrier mobility in a model polymer:fullerene organic solar cell. <i>Organic Electronics</i> , 2015 , 16, 205-211	3.5	10
79	Flexible Sensors Based on Organic-Inorganic Hybrid Materials. <i>Advanced Materials Technologies</i> , 2021 , 6, 2000889	6.8	10
78	Diketopyrrolopyrrole-Based Dual-Acceptor Copolymers to Realize Tunable Charge Carrier Polarity of Organic Field-Effect Transistors and High-Performance Nonvolatile Ambipolar Flash Memories. <i>ACS Applied Electronic Materials</i> , 2020 , 2, 1609-1618	4	9
77	Control of Geminate Recombination by the Material Composition and Processing Conditions in Novel Polymer: Nonfullerene Acceptor Photovoltaic Devices. <i>Journal of Physical Chemistry A</i> , 2018 , 122, 1253-1260	2.8	9
76	. <i>IEEE Sensors Journal</i> , 2018 , 18, 1364-1372	4	9
75	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, 11383-11390	3.6	9
74	Density of trap states in a polymer field-effect transistor. <i>Applied Physics Letters</i> , 2014 , 105, 133302	3.4	9
73	Synthesis, characterization and comparative OFET behaviour of indenofluorene-bithiophene and terthiophene alternating copolymers. <i>Synthetic Metals</i> , 2010 , 160, 468-474	3.6	9
72	Iron(II) Spin-Transition Complexes with Dendritic Ligands, Part II. <i>European Journal of Inorganic Chemistry</i> , 2010 , 2010, 3930-3941	2.3	9
71	Fluorination of pyrene-based organic semiconductors enhances the performance of light emitting diodes and halide perovskite solar cells. <i>Organic Electronics</i> , 2020 , 77, 105524	3.5	9
70	Enhanced amperometric acetone sensing using electrospun non-stoichiometric WO ₃ nanofibers. <i>Journal of Materials Chemistry C</i> , 2021 , 9, 671-678	7.1	9
69	Efficiency enhancement of low-cost metal free dye sensitized solar cells via non-thermal atmospheric pressure plasma surface treatment. <i>Solar Energy</i> , 2021 , 215, 367-374	6.8	9
68	Naphthalimide end-capped diphenylacetylene: a versatile organic semiconductor for blue light emitting diodes and a donor or an acceptor for solar cells. <i>New Journal of Chemistry</i> , 2019 , 43, 9243-9254	2.6	8
67	Charge Transport in Deep and Shallow States in a High-Mobility Polymer FET. <i>IEEE Transactions on Electron Devices</i> , 2016 , 63, 1254-1259	2.9	8

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65	Charge transport studies in donor-acceptor block copolymer PDPP-TNT and PC71BM based inverted organic photovoltaic devices processed in room conditions. <i>AIP Advances</i> , 2015 , 5, 077177	1.5	8
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