Prashant Sonar

List of Publications by Year
in descending order

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220	10,444	36303	39675
papers	citations	51 h-index	94 g-index

228	228	228	10893
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Ultra-bright green carbon dots with excitation-independent fluorescence for bioimaging. Journal of Nanostructure in Chemistry, 2023, 13, 377-387.	9.1	13
2	Monochromatic Blue and Switchable Blueâ€Green Carbon Quantum Dots by Roomâ€Temperature Air Plasma Processing. Advanced Materials Technologies, 2022, 7, 2100586.	5.8	16
3	Electrochemical Impedance Spectroscopy and its Applications in Sensor Development and Measuring Battery Performance. IEEE Sensors Journal, 2022, 22, 10152-10162.	4.7	8
4	Band Alignment with Selfâ€Assembled 2D Layer of Carbon Derived from Waste to Balance Charge Injection in Perovskite Crystals Based Rigid and Flexible Light Emitting Diodes. Advanced Materials Technologies, 2022, 7, 2100583.	5.8	4
5	Reviewâ€"Contemporary Progresses in Carbon-Based Electrode Material in Li-S Batteries. Journal of the Electrochemical Society, 2022, 169, 020530.	2.9	28
6	Recent progress and growth in biosensors technology: A critical review. Journal of Industrial and Engineering Chemistry, 2022, 109, 21-51.	5.8	94
7	Surface Treatment of Inorganic CsPbI3 Nanocrystals with Guanidinium Iodide for Efficient Perovskite Light-Emitting Diodes with High Brightness. Nano-Micro Letters, 2022, 14, 69.	27.0	24
8	Directional Carrier Polarity Tunability in Ambipolar Organic Transistors Based on Diketopyrrolopyrrole and Bithiophene Imide Dual-Acceptor Semiconducting Polymers. Chemistry of Materials, 2022, 34, 3140-3151.	6.7	10
9	Reviewâ€"Chemical Structures and Stability of Carbon-doped Graphene Nanomaterials and the Growth Temperature of Carbon Nanomaterials Grown by Chemical Vapor Deposition for Electrochemical Catalysis Reactions. ECS Journal of Solid State Science and Technology, 2022, 11, 041003.	1.8	11
10	Functional Materials Research at Queensland University of Technology's Centre for Materials Science. Advanced Materials Technologies, 2022, 7, .	5.8	0
11	Composition and concentration-dependent photoluminescence of nitrogen-doped carbon dots. Advanced Powder Technology, 2022, 33, 103560.	4.1	7
12	Fluorenone and triphenylamine based donorâ€"acceptorâ€"donor (Dâ€"Aâ€"D) for solution-processed organic light-emitting diodes. Flexible and Printed Electronics, 2022, 7, 025009.	2.7	1
13	Current Trends and Future Perspectives of Nanomaterials in Food Packaging Application. Journal of Nanomaterials, 2022, 2022, 1-32.	2.7	31
14	A paper-based optical sensor for the screening of viruses through the cysteine residues of their surface proteins: A proof of concept on the detection of coronavirus infection. Talanta, 2022, 248, 123630.	5.5	4
15	A simplified approach to thermally activated delayed fluorescence (TADF) bipolar host polymers. Polymer Chemistry, 2022, 13, 4241-4248.	3.9	5
16	Versatile <scp>azaâ€BODIPY</scp>â€based <scp>lowâ€bandgap</scp> conjugated small molecule for light harvesting and <scp>nearâ€infrared</scp> photodetection. InformaÄnÃ-MateriÃ¡ly, 2022, 4, .	17.3	7
17	A SERS quenching method for the sensitive determination of insulin. Drug Testing and Analysis, 2021, 13, 1048-1053.	2.6	6
18	Current advancements on charge selective contact interfacial layers and electrodes in flexible hybrid perovskite photovoltaics. Journal of Energy Chemistry, 2021, 54, 151-173.	12.9	51

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19	Enhancing the Electrochemical Doping Efficiency in Diketopyrrolopyrroleâ€Based Polymer for Organic Electrochemical Transistors. Advanced Electronic Materials, 2021, 7, .	5.1	39
20	Enhanced amperometric acetone sensing using electrospun non-stoichiometric WO_{3â^'x} nanofibers. Journal of Materials Chemistry C, 2021, 9, 671-678.	5.5	17
21	Short Alkyl Chain Engineering Modulation on Naphthalene Flanked Diketopyrrolopyrrole toward Highâ€Performance Single Crystal Transistors and Organic Thin Film Displays. Advanced Electronic Materials, 2021, 7, 2000804.	5.1	18
22	Effect of controlled humidity on resistive switching of multilayer VO2 devices. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2021, 264, 114968.	3.5	14
23	Tin oxide for optoelectronic, photovoltaic and energy storage devices: a review. Journal of Materials Chemistry A, 2021, 9, 16621-16684.	10.3	146
24	Isolation and Detection of Exosomes Using Fe₂O₃ Nanoparticles. ACS Applied Nano Materials, 2021, 4, 1175-1186.	5.0	41
25	Organic Transistors: Enhancing the Electrochemical Doping Efficiency in Diketopyrrolopyrroleâ€Based Polymer for Organic Electrochemical Transistors (Adv. Electron. Mater. 1/2021). Advanced Electronic Materials, 2021, 7, 2170004.	5.1	1
26	Self-assembled carbon dot-wrapped perovskites enable light trapping and defect passivation for efficient and stable perovskite solar cells. Journal of Materials Chemistry A, 2021, 9, 7508-7521.	10.3	21
27	Polyethylene Glycol Coated Magnetic Nanoparticles: Hybrid Nanofluid Formulation, Properties and Drug Delivery Prospects. Nanomaterials, 2021, 11, 440.	4.1	34
28	Flexible Sensors Based on Organicâ€“Inorganic Hybrid Materials. Advanced Materials Technologies, 2021, 6, 2000889.	5.8	43
29	Efficiency enhancement of low-cost metal free dye sensitized solar cells via non-thermal atmospheric pressure plasma surface treatment. Solar Energy, 2021, 215, 367-374.	6.1	13
30	Facile Use of Silver Nanoparticles-Loaded Alumina/Silica in Nanofluid Formulations for Enhanced Catalytic Performance toward 4-Nitrophenol Reduction. International Journal of Environmental Research and Public Health, 2021, 18, 2994.	2.6	4
31	Materials Design and Optimization for Next-Generation Solar Cell and Light-Emitting Technologies. Journal of Physical Chemistry Letters, 2021, 12, 4638-4657.	4.6	12
32	Energy-Level Manipulation in Novel Indacenodithiophene-Based Donorâ€“Acceptor Polymers for Near-Infrared Organic Photodetectors. ACS Applied Materials & Interfaces, 2021, 13, 29866-29875.	8.0	19
33	Electrochemical Detection of Global DNA Methylation Using Biologically Assembled Polymer Beads. Cancers, 2021, 13, 3787.	3.7	1
34	p-i-n Structured Semitransparent Perovskite Solar Cells with Solution-Processed Electron Transport Layer. Journal of Electronic Materials, 2021, 50, 5732-5739.	2.2	7
35	Efficient Plastic Recycling and Remolding Circular Economy Using the Technology of Trustâ€“Blockchain. Sustainability, 2021, 13, 9142.	3.2	38
36	Highly-stable memristive devices with synaptic characteristics based on hydrothermally synthesized MnO2 active layers. Journal of Alloys and Compounds, 2021, 872, 159653.	5.5	17

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37	Black Phosphorusâ€"Diketopyrrolopyrrole Polymer Semiconductor Hybrid for Enhanced Charge Transfer and Photodetection. Advanced Photonics Research, 2021, 2, 2100150.	3.6	3
38	Structural Geometry Variation of 1,4-Naphthalene-Based Co-Polymers to Tune the Device Performance of PVK-Host-Based OLEDs. Polymers, 2021, 13, 2914.	4.5	4
39	Single and dual-gate organic field-effect transistors based on diketopyrrolopyrrole-diethienothiophene polymers: performance modulation via dielectric interfaces. Materials Research Express, 2021, 8, 096301.	1.6	1
40	Antibody coated conductive polymer for the electrochemical immunosensing of Human Cardiac Troponin I in blood plasma. Analytica Chimica Acta, 2021, 1185, 339082.	5.4	17
41	e-MagnetoMethyl IP: a magnetic nanoparticle-mediated immunoprecipitation and electrochemical detection method for global DNA methylation. Analyst, The, 2021, 146, 3654-3665.	3.5	3
42	Emissive semi-interpenetrating polymer networks for ink-jet printed multilayer OLEDs. Polymer Chemistry, 2021, 12, 5567-5573.	3.9	4
43	Polyoxometalates (POMs): from electroactive clusters to energy materials. Energy and Environmental Science, 2021, 14, 1652-1700.	30.8	184
44	Emerging Perovskite Solar Cell Technology: Remedial Actions for the Foremost Challenges. Advanced Energy Materials, 2021, 11, .	19.5	40
45	Organic Electrochemical Transistors for In Vivo Bioelectronics. Advanced Materials, 2021, 33, e2101874.	21.0	78
46	Emerging Perovskite Solar Cell Technology: Remedial Actions for the Foremost Challenges (Adv.) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 3	19.5	2
47	Reviewâ€"Carbon Electrodes in Magnesium Sulphur Batteries: Performance Comparison of Electrodes and Future Directions. Journal of the Electrochemical Society, 2021, 168, 120555.	2.9	12
48	Organic Electrochemical Transistors for In Vivo Bioelectronics (Adv. Mater. 49/2021). Advanced Materials, 2021, 33, .	21.0	1
49	Fluorination of pyrene-based organic semiconductors enhances the performance of light emitting diodes and halide perovskite solar cells. Organic Electronics, 2020, 77, 105524.	2.6	10
50	Small molecular material as an interfacial layer in hybrid inverted structure perovskite solar cells. Materials Science in Semiconductor Processing, 2020, 108, 104908.	4.0	8
51	Tuning the Charge Carrier Polarity of Organic Transistors by Varying the Electron Affinity of the Flanked Units in Diketopyrrolopyrroleâ€Based Copolymers. Advanced Functional Materials, 2020, 30, 1907452.	14.9	45
52	Developments of Diketopyrrolopyrroleâ€Dyeâ€Based Organic Semiconductors for a Wide Range of Applications in Electronics. Advanced Materials, 2020, 32, e1903882.	21.0	212
53	Recent Progress in the Abatement of Hazardous Pollutants Using Photocatalytic TiO2-Based Building Materials. Nanomaterials, 2020, 10, 1854.	4.1	44
54	Pretreatment and fermentation of lignocellulosic biomass: reaction mechanisms and process engineering. Reaction Chemistry and Engineering, 2020, 5, 2017-2047.	3.7	57

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55	Solutionâ€Processed Pure Sulfide Cu₂(Zn_{0.6}Cd_{0.4})SnS₄ Solar Cells with Efficiency 10.8% Using Ultrathin CuO Intermediate Layer. Solar Rrl, 2020, 4, 2000293.	5.8	16
56	Elucidation of Thermal Degradation Model for Low and High Density Polyethylene by Statistical Parameters. ChemistrySelect, 2020, 5, 14153-14160.	1.5	3
57	Performance evaluation of a low-cost, novel vanadium nitride xerogel (VNXG) as a platinum-free electrocatalyst for dye-sensitized solar cells. RSC Advances, 2020, 10, 41177-41186.	3.6	13
58	Reduced Threshold Voltages and Enhanced Mobilities in Diketopyrrolopyrroleâ€“Dithienothiophene Polymerâ€Based Organic Transistor by Interface Engineering. Physica Status Solidi (A) Applications and Materials Science, 2020, 217, 2000097.	1.8	5
59	Interface modification using a post-treatment-free heteropolyacid for effective charge selective bilayer formation in perovskite solar cells. Materials Letters, 2020, 277, 128393.	2.6	2
60	A printable thermally activated delayed fluorescence polymer light emitting diode. Journal of Materials Chemistry C, 2020, 8, 13001-13009.	5.5	12
61	Pyrrolo[3,2-b]pyrrole-1,4-dione (IsoDPP) End Capped with Napthalimide or Phthalimide: Novel Small Molecular Acceptors for Organic Solar Cells. Molecules, 2020, 25, 4700.	3.8	5
62	Solutionâ€Processed Pure Sulfide Cu₂(Zn_{0.6}Cd_{0.4})SnS₄ Solar Cells with Efficiency 10.8% Using Ultrathin CuO Intermediate Layer. Solar Rrl, 2020, 4, 2070096.	5.8	0
63	Green Electronics: Biodegradable Materials and Green Processing for Green Electronics (Adv. Mater.) Tj ETQq1 1 0.784314 rgBT /Over	21.0	2
64	Electrode and dielectric layer interface device engineering study using furan flanked diketopyrrolopyrroleâ€“dithienothiophene polymer based organic transistors. Scientific Reports, 2020, 10, 19989.	3.3	9
65	Diketopyrrolopyrrole-Based Dual-Acceptor Copolymers to Realize Tunable Charge Carrier Polarity of Organic Field-Effect Transistors and High-Performance Nonvolatile Ambipolar Flash Memories. ACS Applied Electronic Materials, 2020, 2, 1609-1618.	4.3	21
66	Lightâ€Emitting Electrochemical Cells: Triethylene Glycol Substituted Diketopyrrolopyrroleâ€•and Isoindigoâ€Dye Based Donorâ€“Acceptor Copolymers for Organic Lightâ€Emitting Electrochemical Cells and Transistors (Adv. Electron. Mater. 5/2020). Advanced Electronic Materials, 2020, 6, 2070025.	5.1	1
67	Organic field-effect transistor-based flexible sensors. Chemical Society Reviews, 2020, 49, 3423-3460.	38.1	230
68	Potassium Doping to Enhance Green Photoemission of Lightâ€Emitting Diodes Based on CsPbBr₃ Perovskite Nanocrystals. Advanced Optical Materials, 2020, 8, 2000742.	7.3	32
69	Synergistic Use of Pyridine and Selenophene in a Diketopyrrolopyrroleâ€Based Conjugated Polymer Enhances the Electron Mobility in Organic Transistors. Advanced Functional Materials, 2020, 30, 2000489.	14.9	43
70	Bactericidal Silver Nanoparticles by Atmospheric Pressure Solution Plasma Processing. Nanomaterials, 2020, 10, 874.	4.1	20
71	Triethylene Glycol Substituted Diketopyrrolopyrroleâ€•and Isoindigoâ€Dye Based Donorâ€“Acceptor Copolymers for Organic Lightâ€Emitting Electrochemical Cells and Transistors. Advanced Electronic Materials, 2020, 6, 1901414.	5.1	20
72	Rapid and selective detection of recombinant human erythropoietin in human blood plasma by a sensitive optical sensor. Analyst, The, 2020, 145, 5508-5515.	3.5	9

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73	Biodegradable Materials and Green Processing for Green Electronics. Advanced Materials, 2020, 32, e2001591.	21.0	168
74	A highly sensitive SERS quenching nanosensor for the determination of tumor necrosis factor alpha in blood. Sensors and Actuators B: Chemical, 2020, 310, 127867.	7.8	30
75	Carbon dots derived from human hair for ppb level chloroform sensing in water. Sustainable Materials and Technologies, 2020, 25, e00159.	3.3	21
76	Biowasteâ€Derived, Selfâ€Organized Arrays of Highâ€Performance 2D Carbon Emitters for Organic Lightâ€Emitting Diodes. Advanced Materials, 2020, 32, e1906176.	21.0	27
77	Electropolymerized Porous Polymer Films on Flexible Indium Tin Oxide Using Trifunctional Furan Substituted Benzene Conjugated Monomer for Biosensing. ACS Applied Polymer Materials, 2020, 2, 351-359.	4.4	10
78	Development of Dopantâ€Free Organic Hole Transporting Materials for Perovskite Solar Cells. Advanced Energy Materials, 2020, 10, 1903326.	19.5	202
79	Allâ€Rounder Lowâ€Cost Dopantâ€Free Dâ€Aâ€D Holeâ€Transporting Materials for Efficient Indoor and Outdoor Performance of Perovskite Solar Cells. Advanced Electronic Materials, 2020, 6, 1900884.	5.1	72
80	Highly Efficient Microscopic Charge Transport within Crystalline Domains in a Furanâ€Flanked Diketopyrrolopyrroleâ€Based Conjugated Copolymer. Advanced Functional Materials, 2020, 30, 2000389.	14.9	11
81	Versatile nature of anthanthrone based polymers as active multifunctional semiconductors for various organic electronic devices. Materials Advances, 2020, 1, 3428-3438.	5.4	9
82	White paper on the future of plasma science and technology in plastics and textiles. Plasma Processes and Polymers, 2019, 16, 1700228.	3.0	73
83	Naphthalene flanked diketopyrrolopyrrole: A new DPP family member and its comparative optoelectronic properties with thiophene- and furan- flanked DPP counterparts. Organic Electronics, 2019, 74, 290-298.	2.6	9
84	Dual chemosensor for the rapid detection of mercury(ii) pollution and biothiols. Analyst, The, 2019, 144, 4908-4916.	3.5	36
85	Multifunctional Optoelectronics via Harnessing Defects in Layered Black Phosphorus. Advanced Functional Materials, 2019, 29, 1901991.	14.9	97
86	Photo-Cross-Linkable Polymer Inks for Solution-Based OLED Fabrication. Macromolecules, 2019, 52, 9105-9113.	4.8	17
87	Optoelectronics: Multifunctional Optoelectronics via Harnessing Defects in Layered Black Phosphorus (Adv. Funct. Mater. 39/2019). Advanced Functional Materials, 2019, 29, 1970272.	14.9	2
88	Template based sintering of WO₃ nanoparticles into porous tungsten oxide nanofibers for acetone sensing applications. Journal of Materials Chemistry C, 2019, 7, 2961-2970.	5.5	33
89	Organic interfacial materials for perovskite-based optoelectronic devices. Energy and Environmental Science, 2019, 12, 1177-1209.	30.8	185
90	Naphthalene flanked diketopyrrolopyrrole: a new conjugated building block with hexyl or octyl alkyl side chains for electropolymerization studies and its biosensor applications. Polymer Chemistry, 2019, 10, 3722-3739.	3.9	16

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91	Naphthalimide end-capped diphenylacetylene: a versatile organic semiconductor for blue light emitting diodes and a donor or an acceptor for solar cells. New Journal of Chemistry, 2019, 43, 9243-9254.	2.8	15
92	Boosting inverted perovskite solar cell performance by using 9,9-bis(4-diphenylaminophenyl)fluorene functionalized with triphenylamine as a dopant-free hole transporting material. Journal of Materials Chemistry A, 2019, 7, 12507-12517.	10.3	62
93	Indenofluorene-based-copolymers: Influence of electron-deficient benzothiadiazole (BT) and benzooxadiazole (BO) moieties on light emitting devices. Organic Electronics, 2019, 70, 14-24.	2.6	10
94	Photo-assisted Amperometric Acetone Sensing of PVP/WO3 Hybrid Nanofibers. , 2019, , .		1
95	Application of A Novel, Non-Doped, Organic Hole-Transport Layer into Single-Walled Carbon Nanotube/Silicon Heterojunction Solar Cells. Applied Sciences (Switzerland), 2019, 9, 4721.	2.5	3
96	Advanced liquid biopsy technologies for circulating biomarker detection. Journal of Materials Chemistry B, 2019, 7, 6670-6704.	5.8	118
97	Organic Transistor Based on Cyclopentadithiopheneâ€Benzothiadiazole Donorâ€“Acceptor Copolymer for the Detection and Discrimination between Multiple Structural Isomers. Advanced Functional Materials, 2019, 29, 1808188.	14.9	20
98	Organic field effect transistors (OFETs) in environmental sensing and health monitoring: A review. TrAC - Trends in Analytical Chemistry, 2019, 111, 27-36.	11.4	84
99	Dopant-free novel hole-transporting materials based on quinacridone dye for high-performance and humidity-stable mesoporous perovskite solar cells. Journal of Materials Chemistry A, 2019, 7, 5315-5323.	10.3	70
100	Molecular Engineering Using an Anthanthrone Dye for Lowâ€Cost Hole Transport Materials: A Strategy for Dopantâ€Free, Highâ€Efficiency, and Stable Perovskite Solar Cells. Advanced Energy Materials, 2018, 8, 1703007.	19.5	154
101	Naphthalimide end capped anthraquinone based solution-processable n-channel organic semiconductors: effect of alkyl chain engineering on charge transport. Journal of Materials Chemistry C, 2018, 6, 3774-3786.	5.5	30
102	Control of Geminate Recombination by the Material Composition and Processing Conditions in Novel Polymer: Nonfullerene Acceptor Photovoltaic Devices. Journal of Physical Chemistry A, 2018, 122, 1253-1260.	2.5	10
103	A Spectroscopy and Microscopy Study of Parylene-C OFETs for Explosive Sensing. IEEE Sensors Journal, 2018, 18, 1364-1372.	4.7	10
104	Diketopyrrolopyrrole based organic semiconductors with different numbers of thiophene units: symmetry tuning effect on electronic devices. New Journal of Chemistry, 2018, 42, 4017-4028.	2.8	19
105	Experimental and modeling study of low-voltage field-effect transistors fabricated with molecularly aligned copolymer floating films. Flexible and Printed Electronics, 2018, 3, 015006.	2.7	15
106	One step facile synthesis of a novel anthanthrone dye-based, dopant-free hole transporting material for efficient and stable perovskite solar cells. Journal of Materials Chemistry C, 2018, 6, 3699-3708.	5.5	61
107	A triphenylamine substituted quinacridone derivative for solution processed organic light emitting diodes. Materials Chemistry and Physics, 2018, 206, 56-63.	4.0	15
108	Vinylene and benzo[c][1,2,5]thiadiazole: effect of the Ï€-spacer unit on the properties of bis(2-oxoindolin-3-ylidene)-benzodifuran-dione containing polymers for n-channel organic field-effect transistors. RSC Advances, 2018, 8, 38919-38928.	3.6	2

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109	Acene-based organic semiconductors for organic light-emitting diodes and perovskite solar cells. Journal of Materials Chemistry C, 2018, 6, 9017-9029.	5.5	50
110	Phthalimide and naphthalimide: Effect of end-capping groups on molecular properties and photovoltaic performance of 9-fluorenone based acceptors for organic solar cells. Organic Electronics, 2018, 62, 12-20.	2.6	10
111	Naphthalene flanked diketopyrrolopyrrole based organic semiconductors for high performance organic field effect transistors. New Journal of Chemistry, 2018, 42, 12374-12385.	2.8	29
112	Advanced Materials for Use in Soft Selfâ€Healing Devices. Advanced Materials, 2017, 29, 1604973.	21.0	362
113	9-Fluorenone and 9,10-anthraquinone potential fused aromatic building blocks to synthesize electron acceptors for organic solar cells. New Journal of Chemistry, 2017, 41, 2899-2909.	2.8	19
114	Diketopyrrolopyrrole-based polymer:fullerene nanoparticle films with thermally stable morphology for organic photovoltaic applications. MRS Communications, 2017, 7, 67-73.	1.8	11
115	A comparative study of electrochemical, optical properties and electropolymerization behavior of thiophene- and furan-substituted diketopyrrolopyrrole. Journal of Materials Research, 2017, 32, 810-821.	2.6	14
116	Effect of thermal annealing Super Yellow emissive layer on efficiency of OLEDs. Scientific Reports, 2017, 7, 40805.	3.3	54
117	Molecular Engineering Strategy for High Efficiency Fullerene-Free Organic Solar Cells Using Conjugated 1,8-Naphthalimide and Fluorenone Building Blocks. ACS Applied Materials & Interfaces, 2017, 9, 16967-16976.	8.0	56
118	Diketopyrrolopyrrole copolymers based chemical sensors for the detection and discrimination of volatile organic compounds. Sensors and Actuators B: Chemical, 2017, 251, 49-56.	7.8	22
119	Investigation of thiophene flanked diketopyrrolopyrrole monomers with straight and branched alkyl chains and their electropolymerization study. Journal of Materials Research, 2017, 32, 2707-2718.	2.6	8
120	An overview on basics of organic and dye sensitized solar cells, their mechanism and recent improvements. Renewable and Sustainable Energy Reviews, 2017, 78, 1262-1287.	16.4	98
121	Application of Hole-Transporting Materials as the Interlayer in Graphene Oxide/Single-Wall Carbon Nanotube Silicon Heterojunction Solar Cells. Australian Journal of Chemistry, 2017, 70, 1202.	0.9	7
122	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.	2.8	9
123	Thienylvinylenethienyl and Naphthalene Core Substituted with Triphenylaminesâ€"Highly Efficient Hole Transporting Materials and Their Comparative Study for Inverted Perovskite Solar Cells. Solar Rrl, 2017, 1, 1700105.	5.8	59
124	Lowâ€Cost Alternative Highâ€Performance Holeâ€Transport Material for Perovskite Solar Cells and Its Comparative Study with Conventional SPIROâ€OMeTAD. Advanced Electronic Materials, 2017, 3, 1700139.	5.1	60
125	Sensors: A Highly Sensitive Diketopyrrolopyrroleâ€Based Ambipolar Transistor for Selective Detection and Discrimination of Xylene Isomers (Adv. Mater. 21/2016). Advanced Materials, 2016, 28, 4163-4163.	21.0	0
126	Charge Generation and Recombination in Diketopyrrolopyrrole Polymer: Fullerene Bulk Heterojunctions Studied by Transient Absorption and Time-Resolved Microwave Conductivity. Journal of Physical Chemistry C, 2016, 120, 28398-28406.	3.1	6

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127	High-Mobility Ambipolar Organic Thin-Film Transistor Processed From a Nonchlorinated Solvent. ACS Applied Materials & Interfaces, 2016, 8, 24325-24330.	8.0	29
128	A Highly Sensitive Diketopyrrolopyrroleâ€Based Ambipolar Transistor for Selective Detection and Discrimination of Xylene Isomers. Advanced Materials, 2016, 28, 4012-4018.	21.0	129
129	Controlling aggregation and crystallization of solution processed diketopyrrolopyrrole based polymer for high performance thin film transistors by pre-metered slot die coating process. Organic Electronics, 2016, 36, 113-119.	2.6	20
130	Charge Transport in Deep and Shallow States in a High-Mobility Polymer FET. IEEE Transactions on Electron Devices, 2016, 63, 1254-1259.	3.0	10
131	Phenothiazine and carbazole substituted pyrene based electroluminescent organic semiconductors for OLED devices. Journal of Materials Chemistry C, 2016, 4, 1009-1018.	5.5	99
132	OFET based explosive sensors using diketopyrrolopyrrole and metal organic framework composite active channel material. Sensors and Actuators B: Chemical, 2016, 223, 114-122.	7.8	58
133	Charge transport studies in donor-acceptor block copolymer PDPP-TNT and PC71BM based inverted organic photovoltaic devices processed in room conditions. AIP Advances, 2015, 5, .	1.3	11
134	An Electronâ€Accepting Chromophore Based on Fluorene and Naphthalenediimide Building Blocks for Solutionâ€Processable Bulk Heterojunction Devices. Asian Journal of Organic Chemistry, 2015, 4, 800-807.	2.7	11
135	Conjoint use of Dibenzosilole and Indanâ€1,3â€dione Functionalities to Prepare an Efficient Nonâ€Fullerene Acceptor for Solutionâ€Processable Bulkâ€Heterojunction Solar Cells. Asian Journal of Organic Chemistry, 2015, 4, 1096-1102.	2.7	23
136	Isoindigo-Based Small Molecules with Varied Donor Components for Solution-Processable Organic Field Effect Transistor Devices. Molecules, 2015, 20, 17362-17377.	3.8	8
137	Significant Improvement of Optoelectronic and Photovoltaic Properties by Incorporating Thiophene in a Solution-Processable Dâ€“Aâ€“D Modular Chromophore. Molecules, 2015, 20, 21787-21801.	3.8	10
138	Defect analysis of sputter grown cupric oxide for optical and electronics application. Journal Physics D: Applied Physics, 2015, 48, 495104.	2.8	18
139	Thiopheneâ€“tetrafluorophenylâ€“thiophene: a promising building block for ambipolar organic field effect transistors. Journal of Materials Chemistry C, 2015, 3, 2080-2085.	5.5	29
140	Surface Engineering of Reduced Graphene Oxide for Controllable Ambipolar Flash Memories. ACS Applied Materials & Interfaces, 2015, 7, 1699-1708.	8.0	31
141	Optical Characterization of the Hole Polaron in a Series of Diketopyrrolopyrrole Polymers Used for Organic Photovoltaics. Polymers, 2015, 7, 69-90.	4.5	8
142	Ultra-flexible nonvolatile memory based on donor-acceptor diketopyrrolopyrrole polymer blends. Scientific Reports, 2015, 5, 10683.	3.3	43
143	Hole mobility of 3.56 cm² V^{â^'1} s^{â^'1} accomplished using more extended dithienothiophene with furan flanked diketopyrrolopyrrole polymer. Journal of Materials Chemistry C, 2015, 3, 9299-9305.	5.5	47
144	Crowning of dibenzosilole with a naphthalenediimide functional group to prepare an electron acceptor for organic solar cells. Dyes and Pigments, 2015, 120, 314-321.	3.7	12

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145	Reversible Conversion of Dominant Polarity in Ambipolar Polymer/Graphene Oxide Hybrids. Scientific Reports, 2015, 5, 9446.	3.3	19
146	Time-independent charge carrier mobility in a model polymer:fullerene organic solar cell. Organic Electronics, 2015, 16, 205-211.	2.6	11
147	Excited-state dynamics in diketopyrrolopyrrole-based copolymer for organic photovoltaics investigated by transient optical spectroscopy. Japanese Journal of Applied Physics, 2014, 53, 01AB11.	1.5	5
148	Density of trap states in a polymer field-effect transistor. Applied Physics Letters, 2014, 105, .	3.3	10
149	A Study of Diphenylfumaronitrile and Furanâ€Substituted Diketopyrrolopyrrole Alternating Copolymer and Its Thinâ€Film Transistors. Macromolecular Chemistry and Physics, 2014, 215, 725-732.	2.2	14
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