Mohammad Afsar Uddin

List of Publications by Year
in descending order

62	3,951	159585 30	133252 59
papers	citations	h-index	g-index

63	63	63	3765
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Backbone Configuration and Electronic Property Tuning of Imideâ€Functionalized Ladderâ€Type Heteroarenesâ€Based Polymer Acceptors for Efficient Allâ€Polymer Solar Cells. Advanced Functional Materials, 2022, 32, .	14.9	12
2	Germinant ZnO nanorods as a charge-selective layer in organic solar cells. Journal of Materials Science and Technology, 2020, 55, 89-94.	10.7	6
3	Improving the Photostability of Small-Molecule-Based Organic Photovoltaics by Providing a Charge Percolation Pathway of Crystalline Conjugated Polymer. Polymers, 2020, 12, 2598.	4.5	4
4	Ultranarrow Bandgap Naphthalenediimideâ€Dialkylbifuranâ€Based Copolymers with Highâ€Performance Organic Thinâ€Film Transistors and Allâ€Polymer Solar Cells. Macromolecular Rapid Communications, 2020, 41, 2000144.	3.9	11
5	Green-, Red-, and Near-Infrared-Emitting Polymer Dot Probes for Simultaneous Multicolor Cell Imaging with a Single Excitation Wavelength. Chemistry of Materials, 2020, 32, 6685-6696.	6.7	14
6	Fused Bithiophene Imide Oligomer and Diketopyrrolopyrrole Copolymers for nâ€Type Thinâ€Film Transistors. Macromolecular Rapid Communications, 2019, 40, e1900394.	3.9	9
7	Bichalcogenophene Imide-Based Homopolymers: Chalcogen-Atom Effects on the Optoelectronic Property and Device Performance in Organic Thin-Film Transistors. Macromolecules, 2019, 52, 7301-7312.	4.8	32
8	Triimideâ€Functionalized nâ€Type Polymer Semiconductors Enabling Allâ€Polymer Solar Cells with Power Conversion Efficiencies Approaching 9%. Solar Rrl, 2019, 3, 1900107.	5.8	43
9	Head-to-Head Linked Dialkylbifuran-Based Polymer Semiconductors for High-Performance Organic Thin-Film Transistors with Tunable Charge Carrier Polarity. Chemistry of Materials, 2019, 31, 1808-1817.	6.7	30
10	Cyano-Substituted Head-to-Head Polythiophenes: Enabling High-Performance n-Type Organic Thin-Film Transistors. ACS Applied Materials & Interfaces, 2019, 11, 10089-10098.	8.0	29
11	Backbone Conformation Tuning of Carboxylate-Functionalized Wide Band Gap Polymers for Efficient Non-Fullerene Organic Solar Cells. Macromolecules, 2019, 52, 341-353.	4.8	37
12	Fluorine Substituted Bithiophene Imideâ€Based nâ€Type Polymer Semiconductor for Highâ€Performance Organic Thinâ€Film Transistors and Allâ€Polymer Solar Cells. Solar Rrl, 2019, 3, 1800265.	5.8	42
13	Organic Electronics: Fluorinated Headâ€toâ€Head Dialkoxybithiophene: A New Electronâ€Donating Building Block for Highâ€Performance Polymer Semiconductors (Adv. Electron. Mater. 3/2018). Advanced Electronic Materials, 2018, 4, 1870019.	5.1	0
14	Drastic Effects of Fluorination on Backbone Conformation of Head-to-Head Bithiophene-Based Polymer Semiconductors. ACS Macro Letters, 2018, 7, 519-524.	4.8	22
15	(Semi)ladder-Type Bithiophene Imide-Based All-Acceptor Semiconductors: Synthesis, Structureâ€“Property Correlations, and Unipolar n-Type Transistor Performance. Journal of the American Chemical Society, 2018, 140, 6095-6108.	13.7	178
16	Fluorinated Headâ€toâ€Head Dialkoxybithiophene: A New Electronâ€Donating Building Block for Highâ€Performance Polymer Semiconductors. Advanced Electronic Materials, 2018, 4, 1700519.	5.1	16
17	A High Dielectric Nâ€Type Small Molecular Acceptor Containing Oligoethyleneglycol Sideâ€Chains for Organic Solar Cells. Chinese Journal of Chemistry, 2018, 36, 199-205.	4.9	22
18	Measuring the competition between bimolecular charge recombination and charge transport in organic solar cells under operating conditions. Energy and Environmental Science, 2018, 11, 3019-3032.	30.8	59

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19	1,4-Di(3-alkoxy-2-thienyl)-2,5-difluorophenylene: A Building Block Enabling High-Performance Polymer Semiconductors with Increased Open-Circuit Voltages. Macromolecules, 2018, 51, 5352-5363.	4.8	19
20	Morphology Control Enables Efficient Ternary Organic Solar Cells. Advanced Materials, 2018, 30, e1803045.	21.0	243
21	Cyano-substituted benzochalcogenadiazole-based polymer semiconductors for balanced ambipolar organic thin-film transistors. Polymer Chemistry, 2018, 9, 3873-3884.	3.9	24
22	Quinoxaline-Based Wide Band Gap Polymers for Efficient Nonfullerene Organic Solar Cells with Large Open-Circuit Voltages. ACS Applied Materials & Interfaces, 2018, 10, 23235-23246.	8.0	39
23	Synthesis and photovoltaic properties of three different types of terpolymers. Materials Chemistry Frontiers, 2017, 1, 1147-1155.	5.9	6
24	Excellent Long-Term Stability of Power Conversion Efficiency in Non-Fullerene-Based Polymer Solar Cells Bearing Tricyanovinylene-Functionalized n-Type Small Molecules. ACS Applied Materials & Interfaces, 2017, 9, 8838-8847.	8.0	46
25	Alkynyl-Functionalized Head-to-Head Linkage Containing Bithiophene as a Weak Donor Unit for High-Performance Polymer Semiconductors. Chemistry of Materials, 2017, 29, 4109-4121.	6.7	32
26	High-efficiency photovoltaic cells with wide optical band gap polymers based on fluorinated phenylene-alkoxybenzothiadiazole. Energy and Environmental Science, 2017, 10, 1443-1455.	30.8	84
27	Thiophene-benzothiadiazole based Dâ€“A₁â€“Dâ€“A₂ type alternating copolymers for polymer solar cells. Polymer Chemistry, 2017, 8, 3622-3631.	3.9	30
28	Effects of Bithiophene Imide Fusion on the Device Performance of Organic Thinâ€Film Transistors and Allâ€Polymer Solar Cells. Angewandte Chemie, 2017, 129, 15506-15510.	2.0	115
29	Effects of Bithiophene Imide Fusion on the Device Performance of Organic Thinâ€Film Transistors and Allâ€Polymer Solar Cells. Angewandte Chemie - International Edition, 2017, 56, 15304-15308.	13.8	152
30	Dithienylbenzodiimide: a new electron-deficient unit for n-type polymer semiconductors. Journal of Materials Chemistry C, 2017, 5, 9559-9569.	5.5	24
31	Enhanced Efficiency and Long-Term Stability of Perovskite Solar Cells by Synergistic Effect of Nonhygroscopic Doping in Conjugated Polymer-Based Hole-Transporting Layer. ACS Applied Materials & Interfaces, 2017, 9, 43846-43854.	8.0	51
32	2,1,3-Benzothiadiazole-5,6-dicarboxylicimide-Based Polymer Semiconductors for Organic Thin-Film Transistors and Polymer Solar Cells. ACS Applied Materials & Interfaces, 2017, 9, 42167-42178.	8.0	25
33	Difluorobenzoxadiazoleâ€Based Polymer Semiconductors for Highâ€Performance Organic Thinâ€Film Transistors with Tunable Charge Carrier Polarity. Advanced Electronic Materials, 2017, 3, 1700100.	5.1	13
34	Semi-crystalline A1â€“Dâ€“A2-type copolymers for efficient polymer solar cells. Polymer Journal, 2017, 49, 141-148.	2.7	6
35	Perylene diimide isomers containing a simple sp3-core for non-fullerene-based polymer solar cells. Journal of Materials Chemistry A, 2017, 5, 663-671.	10.3	22
36	A Wide Bandgap Polymer with Strong Ïâ€“Ï€ Interaction for Efficient Fullereneâ€Free Polymer Solar Cells. Advanced Energy Materials, 2016, 6, 1600742.	19.5	76

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37	A High Efficiency Nonfullerene Organic Solar Cell with Optimized Crystalline Organizations. Advanced Materials, 2016, 28, 910-916.	21.0	179
38	A Fluorinated Polythiophene Derivative with Stabilized Backbone Conformation for Highly Efficient Fullerene and Non-Fullerene Polymer Solar Cells. Macromolecules, 2016, 49, 2993-3000.	4.8	141
39	Highly Efficient Fullereneâ€Free Polymer Solar Cells Fabricated with Polythiophene Derivative. Advanced Materials, 2016, 28, 9416-9422.	21.0	303
40	Solar Cells: Investigation of Charge Carrier Behavior in High Performance Ternary Blend Polymer Solar Cells (Adv. Energy Mater. 19/2016). Advanced Energy Materials, 2016, 6, .	19.5	0
41	Controlling Energy Levels and Blend Morphology for All-Polymer Solar Cells via Fluorination of a Naphthalene Diimide-Based Copolymer Acceptor. Macromolecules, 2016, 49, 6374-6383.	4.8	66
42	2,1,3â€benzothiadiazoleâ€5,6â€dicarboxylicimide based semicrystalline polymers for photovoltaic cells. Journal of Polymer Science Part A, 2016, 54, 3826-3834.	2.3	5
43	Investigation of Charge Carrier Behavior in High Performance Ternary Blend Polymer Solar Cells. Advanced Energy Materials, 2016, 6, 1600637.	19.5	85
44	Photocurrent Extraction Efficiency near Unity in a Thick Polymer Bulk Heterojunction. Advanced Functional Materials, 2016, 26, 3324-3330.	14.9	48
45	Straight chain Dâ€“A copolymers based on thienothiophene and benzothiadiazole for efficient polymer field effect transistors and photovoltaic cells. Polymer Chemistry, 2016, 7, 4638-4646.	3.9	29
46	Quinoxalineâ€“thiophene based thick photovoltaic devices with an efficiency of â¼8%. Journal of Materials Chemistry A, 2016, 4, 9967-9976.	10.3	49
47	New M- and V-shaped perylene diimide small molecules for high-performance nonfullerene polymer solar cells. Chemical Communications, 2016, 52, 8873-8876.	4.1	48
48	Synthesis and characterization of fluorene-based copolymers as electron-transporting materials for PLEDs. Organic Electronics, 2015, 25, 206-211.	2.6	3
49	Density Functional Theoretical and Timeâ€dependent Density Functional Theoretical Study on Thiopheneâ€“Benzothiadiazoleâ€based Polymers. Bulletin of the Korean Chemical Society, 2015, 36, 427-430.	1.9	4
50	Determining the Role of Polymer Molecular Weight for High-Performance All-Polymer Solar Cells: Its Effect on Polymer Aggregation and Phase Separation. Journal of the American Chemical Society, 2015, 137, 2359-2365.	13.7	347
51	Optimization of side chains in alkylthiothiophene-substituted benzo[1,2-b:4,5-bâ€²]dithiophene-based photovoltaic polymers. Polymer Chemistry, 2015, 6, 2752-2760.	3.9	37
52	2,7-Carbazole and thieno[3,4-c]pyrrole-4,6-dione based copolymers with deep highest occupied molecular orbital for photovoltaic cells. Current Applied Physics, 2015, 15, 654-661.	2.4	4
53	Surfactant chemistry for fluorescence imaging of latent fingerprints using conjugated polyelectrolyte nanoparticles. Chemical Communications, 2015, 51, 13634-13637.	4.1	38
54	Spectroscopically tracking charge separation in polymerâ€‰:â€‰fullerene blends with a three-phase morphology. Energy and Environmental Science, 2015, 8, 2713-2724.	30.8	44

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55	Thermochromism, Franckâ€“Condon Analysis and Interfacial Dynamics of a Donorâ€“Acceptor Copolymer with a Low Band Gap. Chemistry of Materials, 2015, 27, 2770-2779.	6.7	4
56	Interplay of Intramolecular Noncovalent Coulomb Interactions for Semicrystalline Photovoltaic Polymers. Chemistry of Materials, 2015, 27, 5997-6007.	6.7	150
57	Thienothiophene-benzotriazole-based semicrystalline linear copolymers for organic field effect transistors. Pure and Applied Chemistry, 2014, 86, 1293-1302.	1.9	9
58	Semi-crystalline photovoltaic polymers with efficiency exceeding 9% in a â¼300 nm thick conventional single-cell device. Energy and Environmental Science, 2014, 7, 3040-3051.	30.8	600
59	Benzotriazole-Containing Planar Conjugated Polymers with Noncovalent Conformational Locks for Thermally Stable and Efficient Polymer Field-Effect Transistors. Chemistry of Materials, 2014, 26, 2147-2154.	6.7	167
60	Influence of Irradiation on Fenton Degradation of Brilliant Red X-3B. International Journal of Chemical Reactor Engineering, 2010, 8, .	1.1	3
61	Spectroscopic comparison of charge dynamics in fullerene and non fullerene acceptor-based organic photovoltaic cells. Journal of Materials Chemistry C, 0, , .	5.5	6
62	How Heteroatom Substitution in Donorâ€“Acceptor Copolymers Affects Excitonic and Charge Photogeneration Processes in Organic Photovoltaic Cells. Journal of Physical Chemistry C, 0, , .	3.1	2