

Akhil Gupta

List of Publications by Year in Descending Order

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

55
papers

984
citations

19
h-index

28
g-index

57
ext. papers

1,126
ext. citations

4.9
avg, IF

4.31
L-index

#	Paper	IF	Citations
55	Enhancement in room temperature ammonia sensing properties of naphthalene diimides through core expansion. <i>Journal of Materials Chemistry C</i> , 2022 , 10, 1326-1333	7.1	1
54	Nanoporous naphthalene diimide surface enhances humidity and ammonia sensing at room temperature. <i>Sensors and Actuators B: Chemical</i> , 2022 , 351, 130972	8.5	7
53	Enhanced Capacitive Humidity Sensing Performance at Room Temperature via Hydrogen Bonding of Cyanopyridone-Based Oligothiophene Donor. <i>Chemosensors</i> , 2021 , 9, 320	4	3
52	Capacitive humidity sensing performance of naphthalene diimide derivatives at ambient temperature. <i>Synthetic Metals</i> , 2021 , 275, 116739	3.6	11
51	Donor-acceptor-donor modelled donor targets based on indoline and naphthalene diimide functionalities for efficient bulk-heterojunction devices. <i>Dyes and Pigments</i> , 2021 , 184, 108808	4.6	1
50	Conjoint use of Naphthalene Diimide and Fullerene Derivatives to Generate Organic Semiconductors for n-type Organic Thin Film Transistors. <i>ChemistryOpen</i> , 2021 , 10, 414-420	2.3	2
49	Recent Advances in Perylene Diimide-Based Active Materials in Electrical Mode Gas Sensing. <i>Chemosensors</i> , 2021 , 9, 30	4	10
48	Enhanced Photovoltaic Efficiency via Control of Self-Assembly in Cyanopyridone-Based Oligothiophene Donors. <i>Journal of Physical Chemistry Letters</i> , 2021 , 12, 919-924	6.4	3
47	The first connection of carbonyl-bridged triarylamine and diketopyrrolopyrrole functionalities to generate a three-dimensional, non-fullerene electron acceptor. <i>Materials Chemistry Frontiers</i> , 2020 , 4, 2176-2183	7.8	5
46	Multianalyte azo dye as an on-site assay kit for colorimetric detection of Hg ions and electrochemical sensing of Zn ions. <i>Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy</i> , 2020 , 229, 117869	4.4	6
45	Impact of self-assembly on the photovoltaic properties of a small molecule oligothiophene donor. <i>Solar Energy</i> , 2020 , 195, 223-229	6.8	6
44	Functionalization of spiro[fluorene-9,9'-xanthene] with diketopyrrolopyrrole to generate a promising, three-dimensional non-fullerene acceptor. <i>Materials Chemistry Frontiers</i> , 2020 , 4, 3209-3215	7.8	2
43	Improvement of the optoelectronic and photovoltaic properties of a cyanopyrid-2,6-dione-based donor via molecular engineering. <i>Dyes and Pigments</i> , 2019 , 170, 107661	4.6	2
42	An efficient, three-dimensional non-fullerene electron acceptor: functionalizing tetraphenylethylene with naphthalene diimides. <i>Materials Chemistry Frontiers</i> , 2019 , 3, 1231-1237	7.8	14
41	A series of V-shaped small molecule non-fullerene electron acceptors for efficient bulk-heterojunction devices. <i>Dyes and Pigments</i> , 2019 , 171, 107677	4.6	12
40	Direct connection of an amine to oligothiophene to generate push-pull chromophores for organic photovoltaic applications. <i>Dyes and Pigments</i> , 2019 , 162, 315-323	4.6	3
39	An efficient non-fullerene acceptor based on central and peripheral naphthalene diimides. <i>Chemical Communications</i> , 2018 , 54, 5062-5065	5.8	21

38	Generating a three-dimensional non-fullerene electron acceptor by combining inexpensive spiro[fluorene-9,9'-xanthene] and cyanopyridone functionalities. <i>Materials Chemistry Frontiers</i> , 2018 , 2, 1090-1096	7.8	18
37	A Biomimetic Supramolecular Approach for Charge Transfer between Donor and Acceptor Chromophores with Aggregation-Induced Emission. <i>Chemistry - A European Journal</i> , 2018 , 24, 14668-14678	4.8	12
36	A Triphenylamine-Naphthalenediimide-Fullerene Triad: Synthesis, Photoinduced Charge Separation and Solution-Processable Bulk Heterojunction Solar Cells. <i>Asian Journal of Organic Chemistry</i> , 2018 , 7, 220-226	3	11
35	Small molecular non-fullerene acceptors based on naphthalenediimide and benzoisoquinoline-dione functionalities for efficient bulk-heterojunction devices. <i>Dyes and Pigments</i> , 2017 , 143, 1-9	4.6	16
34	Non-fullerene acceptors based on central naphthalene diimide flanked by rhodanine or 1,3-indanedione. <i>Chemical Communications</i> , 2017 , 53, 7080-7083	5.8	30
33	Linear and Angular Heteroacenes from Double-Electrophilic Cyclization (DEC) and DEC-Reductive Elimination of Dienes. <i>Organic Letters</i> , 2017 , 19, 1939-1941	6.2	15
32	An H-shaped, small molecular non-fullerene acceptor for efficient organic solar cells with an impressive open-circuit voltage of 1.17 V. <i>Materials Chemistry Frontiers</i> , 2017 , 1, 1600-1606	7.8	28
31	Naphthalene diimide-based non-fullerene acceptors flanked by open-ended and aromatizable acceptor functionalities. <i>Chemical Communications</i> , 2017 , 53, 11157-11160	5.8	20
30	Cyanopyridone flanked the tetraphenylethylene to generate an efficient, three-dimensional small molecule non-fullerene electron acceptor. <i>Materials Chemistry Frontiers</i> , 2017 , 1, 2511-2518	7.8	24
29	Donor-Acceptor-Acceptor-based non-fullerene acceptors comprising terminal chromen-2-one functionality for efficient bulk-heterojunction devices. <i>Dyes and Pigments</i> , 2017 , 146, 502-511	4.6	18
28	Enhancing the efficiency of solution-processable bulk-heterojunction devices via a three-dimensional molecular architecture comprising triphenylamine and cyanopyridone. <i>Dyes and Pigments</i> , 2017 , 137, 126-134	4.6	9
27	Synergistic Coassembly of Two Structurally Different Molecular Gelators. <i>Langmuir</i> , 2016 , 32, 12175-12183	4.3	9
26	A non-fullerene electron acceptor based on central carbazole and terminal diketopyrrolopyrrole functionalities for efficient, reproducible and solution-processable bulk-heterojunction devices. <i>RSC Advances</i> , 2016 , 6, 28103-28109	3.7	33
25	Funnel shaped molecules containing benzo/pyrido[1,2,5]thiadiazole functionalities as peripheral acceptors for organic photovoltaic applications. <i>RSC Advances</i> , 2016 , 6, 66978-66989	3.7	7
24	A four-directional non-fullerene acceptor based on tetraphenylethylene and diketopyrrolopyrrole functionalities for efficient photovoltaic devices with a high open-circuit voltage of 1.18 V. <i>Chemical Communications</i> , 2016 , 52, 8522-5	5.8	59
23	Naphthalene diimide-based non-fullerene acceptors for simple, efficient, and solution-processable bulk-heterojunction devices. <i>RSC Advances</i> , 2016 , 6, 38703-38708	3.7	15
22	Electrophilic Activation of P-Alkynes in the Synthesis of P-Substituted and P-Centered Heterocycles. <i>Journal of Organic Chemistry</i> , 2016 , 81, 4012-9	4.2	13
21	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

20	Small molecules containing rigidified thiophenes and a cyanopyridone acceptor unit for solution-processable bulk-heterojunction solar cells. <i>Dyes and Pigments</i> , 2015 , 119, 122-132	4.6	19
19	Improvement of optoelectronic and photovoltaic properties through the insertion of a naphthalenediimide unit in donor-acceptor oligothiophenes. <i>RSC Advances</i> , 2015 , 5, 4411-4415	3.7	14
18	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
17	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
16	Isoindigo-Based Small Molecules with Varied Donor Components for Solution-Processable Organic Field Effect Transistor Devices. <i>Molecules</i> , 2015 , 20, 17362-77	4.8	6
15	Significant Improvement of Optoelectronic and Photovoltaic Properties by Incorporating Thiophene in a Solution-Processable D-A-D Modular Chromophore. <i>Molecules</i> , 2015 , 20, 21787-801	4.8	5
14	A diketopyrrolopyrrole and benzothiadiazole based small molecule electron acceptor: design, synthesis, characterization and photovoltaic properties. <i>RSC Advances</i> , 2014 , 4, 57635-57638	3.7	38
13	A solution-processable electron acceptor based on diketopyrrolopyrrole and naphthalenediimide motifs for organic solar cells. <i>Tetrahedron Letters</i> , 2014 , 55, 4430-4432	2	32
12	Small band gap D-A-D benzothiadiazole derivatives with low-lying HOMO levels as potential donors for applications in organic photovoltaics: a combined experimental and theoretical investigation. <i>RSC Advances</i> , 2014 , 4, 35318-35331	3.7	29
11	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
10	Donor-Acceptor Donor Modular Small Organic Molecules Based on the Naphthalene Diimide Acceptor Unit for Solution-Processable Photovoltaic Devices. <i>Journal of Electronic Materials</i> , 2014 , 43, 3243-3254	1.9	16
9	Enhanced photovoltaic efficiency via light-triggered self-assembly. <i>Chemical Communications</i> , 2013 , 49, 6552-4	5.8	38
8	The effect of direct amine substituted push-pull oligothiophene chromophores on dye-sensitized and bulk heterojunction solar cells performance. <i>Tetrahedron</i> , 2013 , 69, 3584-3592	2.4	44
7	Cyanomethylbenzoic acid: an acceptor for donor-acceptor chromophores used in dye-sensitized solar cells. <i>ChemSusChem</i> , 2013 , 6, 256-60	8.3	45
6	Supramolecular Chemistry of Protoporphyrin IX and Its Derivatives. <i>European Journal of Organic Chemistry</i> , 2013 , 2013, 3939-3954	3.2	19
5	Molecular engineering for panchromatic absorbing oligothiophene donor-acceptor organic semiconductors. <i>Tetrahedron</i> , 2012 , 68, 9440-9447	2.4	32
4	Solvent induced ordered-supramolecular assembly of highly branched protoporphyrin IX derivative. <i>Supramolecular Chemistry</i> , 2012 , 24, 779-786	1.8	11
3	Absorption enhancement of oligothiophene dyes through the use of a cyanopyridone acceptor group in solution-processed organic solar cells. <i>Chemical Communications</i> , 2012 , 48, 1889-91	5.8	65

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| 2 | Band-gap tuning of pendant polymers for organic light-emitting devices and photovoltaic applications. <i>Synthetic Metals</i> , 2011 , 161, 856-863 | 3.6 | 23 |
| 1 | Naphthalene diimide-based electron transport materials for perovskite solar cells. <i>Journal of Materials Chemistry A</i> , | 13 | 2 |