Correlation of hole mobility, exciton diffusion length, an phthalocyanine/fullerene organic solar cells

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Citation Report

#	Article	IF	CITATIONS
1	Electronic Structures of Dyes and Phthalocyanines Estimated with "Photo-Electron Spectroscopy in Air (PESA)― Materials Research Society Symposia Proceedings, 2007, 1029, 1.	0.1	2
2	Effect of molecular packing on the exciton diffusion length in organic solar cells. Applied Physics Letters, 2007, 91, .	1.5	105
3	Improving efficiency of organic photovoltaic cells with pentacene-doped CuPc layer. Applied Physics Letters, 2007, 91, .	1.5	62
4	Electroâ€Optical Study of Subphthalocyanine in a Bilayer Organic Solar Cell. Advanced Functional Materials, 2007, 17, 2653-2658.	7.8	170
5	Photovoltaics from soluble small molecules. Materials Today, 2007, 10, 34-41.	8.3	363
6	Photovoltaics literature survey (No. 55). Progress in Photovoltaics: Research and Applications, 2007, 15, 461-468.	4.4	2
7	Solar cells utilizing small molecular weight organic semiconductors. Progress in Photovoltaics: Research and Applications, 2007, 15, 659-676.	4.4	439
8	Charge conduction process and photoelectrical properties of Schottky barrier device based on sulphonated nickel phthalocyanine. Synthetic Metals, 2008, 158, 620-629.	2.1	15
9	On the light intensity dependence of short-circuit current of bilayer organic photovoltaic cells. Journal of Non-Crystalline Solids, 2008, 354, 4465-4468.	1.5	9
10	Excitation Transport and Charge Separation in an Organic Photovoltaic Material:  Watching Excitations Diffuse to Interfaces. Journal of Physical Chemistry C, 2008, 112, 3926-3934.	1.5	32
11	Performance improvement of TiO2â^•P3HT solar cells using CuPc as a sensitizer. Applied Physics Letters, 2008, 92, 073307.	1.5	67
12	Method of determining the exciton diffusion length using optical interference effect in Schottky diode. Applied Physics Letters, 2009, 94, 223303.	1.5	38
13	Photovoltaic properties of pentacene/[6,6]-phenyl C61butyric acid methyl ester based bilayer hetero-junction solar cells. Journal Physics D: Applied Physics, 2009, 42, 145103.	1.3	13
14	Influence of nitro group substitution at molecular ligand on optical, structural, charge-transport and photovoltaic properties of Sn (II) phthalocyanine. Journal of Materials Science: Materials in Electronics, 2009, 20, 984-995.	1.1	5
15	Organic photovoltaic devices based on pentacene/N,N′-dioctyl-3,4,9,10-perylenedicarboximide heterojunctions. Organic Electronics, 2009, 10, 1006-1010.	1.4	26
16	Influence of dopant and polymeric matrix on Indium tin oxide/p-zinc phtalocyanine/n-Si hybrid solar cells. Thin Solid Films, 2009, 517, 1790-1793.	0.8	10
17	Charge conduction process and photoelectrical properties of bulk heterojunction device based on sulphonated nickel phthalocyanine and rose Bengal. Journal of Physics and Chemistry of Solids, 2009, 70, 1422-1431.	1.9	4
18	Measurement of the exciton diffusion length in discotic columnar liquid crystals: Comparison between homeotropically oriented and non-oriented samples. Chemical Physics Letters, 2009, 476, 89-91.	1.2	31

#	ARTICLE	IF	CITATIONS
19	Solution Processing of a Small Molecule, Subnaphthalocyanine, for Efficient Organic Photovoltaic Cells. Chemistry of Materials, 2009, 21, 1413-1417.	3.2	96
20	Efficient Organic Solar Cells Based on Planar Metallophthalocyanines. Chemistry of Materials, 2009, 21, 4256-4260.	3.2	78
21	Exciton Diffusion Length and Lifetime in Subphthalocyanine Films. Journal of Physical Chemistry C, 2009, 113, 2974-2979.	1.5	66
22	The characterization of chloroboron (iii) subnaphthalocyanine thin films and their application as a donor material for organic solar cells. Journal of Materials Chemistry, 2009, 19, 5295.	6.7	58
23	Ultrafast vibrational spectroscopy of charge-carrier dynamics in organic photovoltaic materials. Physical Chemistry Chemical Physics, 2009, 11, 2575.	1.3	62
24	Molecular Semiconductors in Organic Photovoltaic Cells. Chemical Reviews, 2010, 110, 6689-6735.	23.0	839
25	Organic Photovoltaic Cells Using Group 10 Metallophthalocyanine Electron Donors. IEEE Journal of Selected Topics in Quantum Electronics, 2010, 16, 1552-1559.	1.9	12
26	Relationship between Crystalline Order and Exciton Diffusion Length in Molecular Organic Semiconductors. Advanced Materials, 2010, 22, 1233-1236.	11.1	295
27	What determines the performance of metal phthalocyanines (MPc, M=Zn, Cu, Ni, Fe) in organic heterojunction solar cells? A combined experimental and theoretical investigation. Organic Electronics, 2010, 11, 377-387.	1.4	59
28	The structure optimization design of the organic solar cells using the FDTD method. Physica B: Condensed Matter, 2010, 405, 2061-2064.	1.3	5
29	Effect of monolayer-protected Ag nanoparticles and nature of self-assembled monolayers on organic hetero-junction solar cells. , 2010, , .		0
30	Exciton diffusion length analysis of mixed donor materials in organic solar cells by doping with phosphorescent iridium complex. Journal of Applied Physics, 2010, 108, 113111.	1.1	23
31	Correlation between morphology and performance of low bandgap oligothiophene:C60 mixed heterojunctions in organic solar cells. Journal of Applied Physics, 2010, 107, .	1.1	55
32	Enhancement of the short circuit current in organic photovoltaic devices with microcavity structures. Applied Physics Letters, 2010, 97, 083306.	1.5	37
33	Optimization of the structure of bilayer organic solar cells based on light intensity distribution and quantity of effective excitons. , 2010 , , .		1
34	Porous Silicon Layer Patterned from Anodic Aluminum Oxide and Application in ZnPc Hybrid Solar Cell. Electrochemical and Solid-State Letters, 2010, 13, H108.	2.2	8
35	Lighting porphyrins and phthalocyanines for molecular photovoltaics. Chemical Communications, 2010, 46, 7090.	2,2	600
36	Hydrogen Bond-Assisted Supramolecular Self-Assembly of Doubly Discotic Supermolecules Based on Porphyrin and Triphenylene. Chemistry of Materials, 2010, 22, 197-206.	3.2	76

3

#	Article	IF	CITATIONS
37	Covalent and Noncovalent Phthalocyanineâ 'Carbon Nanostructure Systems: Synthesis, Photoinduced Electron Transfer, and Application to Molecular Photovoltaics. Chemical Reviews, 2010, 110, 6768-6816.	23.0	748
38	New microscale vertically oriented organic photovoltaics cells. , 2010, , .		0
39	Direct Imaging of Anisotropic Exciton Diffusion and Triplet Diffusion Length in Rubrene Single Crystals. Physical Review Letters, 2011, 107, 017402.	2.9	163
40	Organic Photovoltaic Devices Based on Water-Soluble Copper Phthalocyanine. Journal of Physical Chemistry C, 2011, 115, 4916-4921.	1.5	55
41	Excited-State Photophysics in a Low Band Gap Polymer with High Photovoltaic Efficiency. Journal of Physical Chemistry C, 2011, 115, 2371-2380.	1.5	8
42	Influence of charge accumulation of photogenerated carriers in the vicinity of donor/acceptor interface on the open-circuit voltage of zinc-porphyrin/C ₆₀ heterojunction organic photovoltaic cells. Journal Physics D: Applied Physics, 2011, 44, 265102.	1.3	18
43	Effect of concentration gradients in ZnPc:C60 bulk heterojunction organic solar cells. Solar Energy Materials and Solar Cells, 2011 , , .	3.0	5
44	Heteromorphic chloroindium phthalocyanine films for improved photovoltaic performance. Solar Energy Materials and Solar Cells, 2011, 95, 2937-2940.	3.0	13
45	Solvent effects on ZnPc thin films and their role in fabrication of nanostructured organic solar cells. Organic Electronics, 2011, 12, 2111-2119.	1.4	28
46	Formation of Bulk Heterojunctions by Alternative Thermal Deposition and Its Structure Analysis for High Efficiency Small Molecular Organic Photovoltaics. Advanced Functional Materials, $2011, 21, 2067-2071$.	7.8	30
47	Assessing Possibilities and Limits for Solar Cells. Advanced Materials, 2011, 23, 2870-2876.	11.1	122
48	Quantitative estimation of electronic quality of zinc phthalocyanine thin films. Physical Review B, 2011, 84, .	1.1	10
49	Influence of surface morphology evolution of SubPc layers on the performance of SubPc/C60 organic photovoltaic cells. Applied Physics Letters, 2011, 99, .	1.5	27
50	Connecting physical properties of spin-casting solvents with morphology, nanoscale charge transport, and device performance of poly(3-hexylthiophene):phenyl-C ₆₁ -butyric acid methyl ester bulk heterojunction solar cells. Journal of Photonics for Energy, 2011, 1, 011124.	0.8	20
51	Organic-inorganic hybrid solar cells made fromÂhyperbranched phthalocyanines. Journal of Photonics for Energy, 2011, 1, 011115.	0.8	15
52	Performance Characteristics of Organic Photovoltaic Cells using Pentacene as a Hole Conducting Layer Material. Molecular Crystals and Liquid Crystals, 2012, 566, 175-181.	0.4	0
53	Analysis of Anomalous Discharging Processes in Pentacene/C ₆₀ Double-Layer Organic Solar Cell. Japanese Journal of Applied Physics, 2012, 51, 02BK01.	0.8	1
54	In situ Impedance Spectroscopic Study of Built-in Potentials in the Vicinity of the Donor/Acceptor Interface of Organic Solar Cells under Photo-irradiation. Hyomen Kagaku, 2012, 33, 93-99.	0.0	O

#	Article	IF	Citations
55	Probing the effect of relative molecular orientation on the photovoltaic device performance of an organic bilayer heterojunction using soft x-ray spectroscopies. Applied Physics Letters, 2012, 100, 263302 .	1.5	13
56	Energy band bending induced charge accumulation at fullerene/bathocuproine heterojunction interface. Applied Physics Letters, 2012, 100, 243301.	1.5	26
57	Organic photovoltaics based on 5-hexylthiophene-fused porphyrazines. Organic Electronics, 2012, 13, 1975-1980.	1.4	10
58	Performance characteristics of pentacene-based organic photovoltaic cells. Organic Electronics, 2012, 13, 1809-1818.	1.4	8
59	Comparison of short and long wavelength absorption electron donor materials in C60-based planar heterojunction organic photovoltaics. Organic Electronics, 2012, 13, 2118-2129.	1.4	15
60	Effects of germanium addition to copper phthalocyanine/fullerene-based solar cells. Open Engineering, 2012, 2, .	0.7	5
61	Exciton diffusion length in narrow bandgap polymers. Energy and Environmental Science, 2012, 5, 6960.	15.6	207
62	Charge transfer in the weak driving force limit in blends of MDMO-PPV and dithienylthiazolo[5,4-d]thiazoles towards organic photovoltaics with high VOC. Physical Chemistry Chemical Physics, 2012, 14, 15774.	1.3	13
63	Effect of thermal annealing on exciton diffusion in a diketopyrrolopyrrole derivative. Physical Chemistry Chemical Physics, 2012, 14, 14196.	1.3	47
64	Small molecule semiconductors for high-efficiency organic photovoltaics. Chemical Society Reviews, 2012, 41, 4245.	18.7	1,601
65	Organic photoresponse materials and devices. Chemical Society Reviews, 2012, 41, 1754-1808.	18.7	570
66	Photovoltaic properties of M-phthalocyanine/fullerene organic solar cells. Solar Energy, 2012, 86, 1683-1688.	2.9	58
67	Electric potential mapping by thickness variation: A new method for model-free mobility determination in organic semiconductor thin films. Organic Electronics, 2013, 14, 3460-3471.	1.4	22
68	Hybrid ZnO/Phthalocyanine Photovoltaic Device with Highly Resistive ZnO Intermediate Layer. ACS Applied Materials & Device with Highly Resistive ZnO Intermediate Layer. ACS Applied Materials & Device with Highly Resistive ZnO Intermediate Layer. ACS	4.0	14
69	Small molecule bulk heterojunction organic solar cells with coumarin-6 as donor material. Thin Solid Films, 2013, 536, 206-210.	0.8	8
70	Cascade-type excitation energy relay in organic thin-film solar cells. Organic Electronics, 2013, 14, 814-820.	1.4	11
71	Dual Role of Phthalocyanines in Carbon Nanostructure-Based Organic Photovoltaics. Structure and Bonding, 2013, , 145-191.	1.0	5
72	Measurement of exciton diffusion lengths of phthalocyanine derivatives based on interlayer excitation transfer. Thin Solid Films, 2013, 527, 239-243.	0.8	11

#	Article	IF	CITATIONS
73	Manipulating open-circuit voltage in an organic photovoltaic device via a phenylalkyl side chain. Chemical Communications, 2013, 49, 4543.	2.2	17
75	Improvement in light harvesting in a dye sensitized solar cell based on cascade charge transfer. Nanoscale, 2013, 5, 7493.	2.8	15
76	Effects of Deposition Rate on the Properties of CuPc Thin Films and Solar Cells. Japanese Journal of Applied Physics, 2013, 52, 05DB11.	0.8	1
77	Improvement of Open-Circuit Voltage in Organic Photovoltaic Cells with Chemically Modified Indium-Tin Oxide. World Journal of Nano Science and Engineering, 2013, 03, 113-120.	0.3	0
78	Basic aspects for improving the energy conversion efficiency of hetero-junction organic photovoltaic cells. Nano Reviews, 2013, 4, 21055.	3.7	8
79	Photoâ€generated Carrier Dynamics in the Vicinity of the Donor/Acceptor Interface of Organic Solar Cells. Electronics and Communications in Japan, 2013, 96, 1-8.	0.3	0
80	Organic Photovoltaics and Dye-Sensitized Solar Cells. , 2013, , 567-605.		2
81	Microstructures and photovoltaic properties of C ₆₀ based solar cells with copper oxides, CulnS ₂ , phthalocyanines, porphyrin, PVK, nanodiamond, germanium and exciton diffusion blocking layers. Materials Technology, 2013, 28, 21-39.	1.5	52
82	Irigenin – an isoflavone: a brief study on structural and optical properties. EPJ Applied Physics, 2013, 62, 31201.	0.3	7
83	Photoelectric properties of a novel MEH-PPV/F ₁₆ ZnPc heterojunction. Physica Status Solidi (A) Applications and Materials Science, 2013, 210, 2353-2358.	0.8	4
84	Improvement in the efficiency of organic solar cells using a low-temperature evaporable optical spacer. Japanese Journal of Applied Physics, 2014, 53, 08NJ04.	0.8	1
85	Encapsulation of phthalocyanine-C\$_{60}\$ fullerene conjugates into metallosupramolecular subphthalocyanine capsules: a turn of the screw. Turkish Journal of Chemistry, 2014, 38, 1006-1012.	0.5	9
86	Influence of the density of states on the open-circuit voltage in small-molecule solar cells. Organic Electronics, 2014, 15, 2553-2560.	1.4	14
87	Surface modification with MK-2 organic dye in a ZnO/P3HT hybrid solar cell: Impact on device performance. APL Materials, 2014, 2, .	2.2	10
88	Influence of Mg doping on electrical properties of Cu(In,Ga)Se2 bulk materials. Journal of Alloys and Compounds, 2014, 582, 547-551.	2.8	12
89	Templating Effects in Molecular Growth of Blended Films for Efficient Small-Molecule Photovoltaics. ACS Applied Materials & Samp; Interfaces, 2014, 6, 6369-6377.	4.0	28
90	Exploiting the potential of 2-((5-(4-(diphenylamino)phenyl)thiophen-2-yl)methylene)malononitrile as an efficient donor molecule in vacuum-processed bulk-heterojunction organic solar cells. RSC Advances, 2014, 4, 5236.	1.7	42
91	Hybrid zinc oxide:Cu-phthalocyanine bulk-heterojunction photovoltaic device. RSC Advances, 2014, 4, 14956-14961.	1.7	1

#	Article	IF	CITATIONS
92	Spontaneous formation of light-trapping nano-structures for top-illumination organic solar cells. Nanoscale, 2014, 6, 2316.	2.8	14
93	Efficient solvent-assisted external treatment for planar heterojunction small-molecule organic solar cells. Journal of Materials Chemistry A, 2014, 2, 10250-10256.	5.2	5
94	Photoinduced Injection Enhancement in Fullerene-Based Organic Solar Cell Originates from Exciton–Electron Interaction. Journal of Physical Chemistry C, 2014, 118, 11928-11934.	1.5	10
95	Nonthermally activated exciton transport in crystalline organic semiconductor thin films. Physical Review B, 2014, 89, .	1.1	21
96	In Situ Measurement of Energy Level Shifts and Recombination Rates in Subphthalocyanine/C ₆₀ Bilayer Solar Cells. Journal of Physical Chemistry C, 2014, 118, 22858-22864.	1.5	18
97	Photovoltaic response of dye-sensitized solar cell using 2′,7′-dichlorofluorescein as an organic dye. Materials Science in Semiconductor Processing, 2014, 28, 77-83.	1.9	12
98	Electronic structure of positive and negative polarons in functionalized dithienylthiazolo[5,4-d]thiazoles: a combined EPR and DFT study. Physical Chemistry Chemical Physics, 2014, 16, 10032.	1.3	15
99	Plasmonic Organic Solar Cells Employing Nanobump Assembly <i>via</i> Aerosol-Derived Nanoparticles. ACS Nano, 2014, 8, 2590-2601.	7.3	89
100	Systematic study of exciton diffusion length in organic semiconductors by six experimental methods. Materials Horizons, 2014, 1, 280-285.	6.4	144
101	Interfacial charging of copper phthalocyanine/C60 double-layer organic solar cells induced by photoillumination: Effect of photoconductivity change. Thin Solid Films, 2014, 554, 158-161.	0.8	4
102	Effects of Au nanoparticle addition to hole transfer layer in organic solar cells based on copper naphthalocyanine and fullerene. Progress in Natural Science: Materials International, 2014, 24, 179-183.	1.8	4
103	Principal processes of organic-inorganic hybrid solar cells using the example of ZnPc with ZnO. Physica Status Solidi (A) Applications and Materials Science, 2015, 212, 554-560.	0.8	2
104	Designing Efficient Nonâ€Fullerene Acceptors by Tailoring Extended Fusedâ€Rings with Electronâ€Deficient Groups. Advanced Energy Materials, 2015, 5, 1501063.	10.2	203
105	Exciton diffusion in organic semiconductors. Energy and Environmental Science, 2015, 8, 1867-1888.	15.6	670
106	Impact of the Crystallite Orientation Distribution on Exciton Transport in Donor–Acceptor Conjugated Polymers. ACS Applied Materials & Donor— Acceptor Conjugated Polymers. ACS Applied Materials & Donor†"Acceptor Conjugated Polymers" Acceptor Conjugated Polymers. ACS Applied Materials & Donor†"Acceptor Conjugated Polymers" Acceptor Conjugated Polymers Acc	4.0	20
107	The Effect of Gradual Fluorination on the Properties of $FnZnPc Thin Films and FnZnPc/C60 Bilayer Photovoltaic Cells. Advanced Functional Materials, 2015, 25, 1565-1573.$	7.8	35
108	Dependence of photocurrent generation on the crystalline phase of titanyl phthalocyanine film in heterojunction photovoltaic cells. Japanese Journal of Applied Physics, 2015, 54, 091601.	0.8	3
109	A preliminary investigation into hybrid photovoltaic cells with organic phthalocyanines and amorphous silicon heterojunction. Journal Physics D: Applied Physics, 2015, 48, 195102.	1.3	9

#	Article	IF	CITATIONS
110	The effects of heavy atoms on the exciton diffusion properties in photoactive thin films of tetrakis(4-carbomethoxyphenyl)porphyrins. Journal of Materials Chemistry C, 2015, 3, 1243-1249.	2.7	19
111	Towards a Unified Macroscopic Description of Exciton Diffusion in Organic Semiconductors. Communications in Computational Physics, 2016, 20, 754-772.	0.7	5
112	Enhancing exciton diffusion in porphyrin thin films using peripheral carboalkoxy groups to influence molecular assembly. Journal of Materials Chemistry C, 2016, 4, 5602-5609.	2.7	18
113	Exciton Delocalization in H ₂ OBPc _{1–<i>x</i>} MOBPc _{<i>x</i>} (M =) Tj E	TQq1 1 0.7 1.5	784314 rgET 4
114	Understanding the morphology of solution processed fullerene-free small molecule bulk heterojunction blends. Physical Chemistry Chemical Physics, 2016, 18, 12476-12485.	1.3	29
115	Simplified numerical simulation of organic photovoltaic devices. Journal of Computational Electronics, 2016, 15, 1095-1102.	1.3	8
116	Structural modifications to enhance the exciton diffusion in bilayer porphyrin fullerene thin films. , 2016, , .		0
117	Real-Time Tracking of Singlet Exciton Diffusion in Organic Semiconductors. Physical Review Letters, 2016, 116, 057402.	2.9	23
118	Charge generation in organic photovoltaics: a review of theory and computation. Molecular Systems Design and Engineering, 2016, $1, 10-24$.	1.7	86
119	Exciton Diffusion Length and Charge Extraction Yield in Organic Bilayer Solar Cells. Advanced Materials, 2017, 29, 1604424.	11.1	36
120	Organic heterostructures deposited by MAPLE on AZO substrate. Applied Surface Science, 2017, 417, 196-203.	3.1	11
121	Synthesis, structure, and optical properties of manganese phthalocyanine thin films and nanostructures. Progress in Natural Science: Materials International, 2017, 27, 329-332.	1.8	19
122	Phthalocyanines and Subphthalocyanines: Perfect Partners for Fullerenes and Carbon Nanotubes in Molecular Photovoltaics. Advanced Energy Materials, 2017, 7, 1601700.	10.2	88
123	Dependence of Exciton Diffusion Length and Diffusion Coefficient on Photophysical Parameters in Bulk Heterojunction Organic Solar Cells. Journal of Electronic Materials, 2017, 46, 6451-6460.	1.0	21
124	A Novel Solar Cell Shallow Emitter Formation Process by Ion-Implantation and Dopant Modulation Through Surface Chemical Etching. Journal of Solar Energy Engineering, Transactions of the ASME, 2017, 139, .	1.1	2
125	Molecular alignments of If phase in co-evaporated pentacene and perfluoropentacne film on SiO2 studied by grazing-incidence X-ray diffraction. Molecular Crystals and Liquid Crystals, 2017, 654, 47-52.	0.4	0
126	Achieving Weak Light Response with Plasmonic Nanogold-Decorated Organic Phototransistors. ACS Applied Materials & Decorated Organic Phototransistors.	4.0	14
127	Quantitative Evaluation of Molecular Diffusion in Organic Planar Heterojunctions by Time-of-Flight Secondary Ion Mass Spectroscopy. ACS Omega, 2018, 3, 1522-1528.	1.6	13

#	Article	IF	CITATIONS
128	Controlling molecular condensation/diffusion of copper phthalocyanine by local electric field induced with scanning tunneling microscope tip. Japanese Journal of Applied Physics, 2018, 57, 020301.	0.8	6
129	Decoupling Photocurrent Loss Mechanisms in Photovoltaic Cells Using Complementary Measurements of Exciton Diffusion. Advanced Energy Materials, 2018, 8, 1702339.	10.2	9
130	Tellurophene-Based Random Copolymers for High Responsivity and Detectivity Photodetectors. ACS Applied Materials & Detective Photodetectors. ACS Applied Photo	4.0	23
131	Emerging Role of the Bandâ€Structure Approach in Biohybrid Photovoltaics: A Path Beyond Bioelectrochemistry. Advanced Functional Materials, 2018, 28, 1705305.	7.8	48
132	Empowering the Future With Organic Solar Cell Devices. , 2018, , 325-350.		6
133	Imaging Intermolecular Exciton Coupling in Metal-Free Phthalocyanine Nanofilms Using Tip-Enhanced Near-Field Optical Microscopy. Journal of Physical Chemistry C, 2018, 122, 14796-14804.	1.5	2
134	Modulation of molecular orientation enabling high photovoltaic performance of block copolymer nanostructures. Materials Chemistry Frontiers, 2019, 3, 2627-2636.	3.2	4
135	Homocoupling Defects in a Conjugated Polymer Limit Exciton Diffusion. Advanced Functional Materials, 2019, 29, 1903936.	7.8	15
136	Unified Model for Exciton Diffusion and Dissociation in Organic Solar Cells. Physica Status Solidi - Rapid Research Letters, 2019, 13, 1900322.	1.2	1
137	Enhanced Photoresponsivity of Fullerene in the Presence of Phthalocyanine: A Time-Resolved X-ray Photoelectron Spectroscopy Study of Phthalocyanine/C ₆₀ /TiO ₂ (110). Journal of Physical Chemistry C, 2019, 123, 4388-4395.	1.5	10
138	Hybrid perovskite charge generation layer for highly efficient tandem organic light-emitting diodes. Organic Electronics, 2019, 73, 299-303.	1.4	11
139	Spectral Features of Zinc Phthalocyanine: Optics, Stark Spectroscopy, and Photovoltaics. Crystallography Reports, 2019, 64, 315-321.	0.1	2
140	Molecular-Orientation-Dependent Interfacial Charge Transfer in Phthalocyanine/MoS ₂ Mixed-Dimensional Heterojunctions. Journal of Physical Chemistry C, 2019, 123, 13337-13343.	1.5	54
141	Intrinsic measurements of exciton transport in photovoltaic cells. Nature Communications, 2019, 10, 1156.	5.8	28
142	Synthesis, characterization and photovoltaic behaviours of peripheral and non-peripheral tetra-[4-(4-octylpiperazin-1-yl)phenoxy] substituted zinc(II), cobalt(II), copper(II) and indium(III) phthalocyanines. Inorganica Chimica Acta, 2019, 490, 35-44.	1.2	6
143	Estimation of exciton diffusion lengths of organic semiconductors in random domains. Journal of Computational Physics, 2019, 376, 894-912.	1.9	3
144	Germinant ZnO nanorods as a charge-selective layer in organic solar cells. Journal of Materials Science and Technology, 2020, 55, 89-94.	5.6	6
145	Strong Chemical Interaction and Self-Demetalation of Zinc-Phthalocyanine on Al(100). Journal of Physical Chemistry C, 2020, 124, 22550-22558.	1.5	5

#	Article	IF	CITATIONS
146	Effect of charge-transfer states on the vibrationally resolved absorption spectra and exciton dynamics in ZnPc aggregates: Simulations from a non-Makovian stochastic SchrĶdinger equation. Journal of Chemical Physics, 2020, 153, 034116.	1.2	18
147	Supramolecular Self-Assembly of Discotic Liquid Crystalline LEGOs. Polymers and Polymeric Composites, 2020, , 217-248.	0.6	0
148	Orientation dependent molecular electrostatics drives efficient charge generation in homojunction organic solar cells. Nature Communications, 2020, 11, 4617.	5.8	60
149	Representing the Molecular Signatures of Disordered Molecular Semiconductors in Size-Extendable Models of Exciton Dynamics. Journal of Physical Chemistry B, 2020, 124, 5238-5245.	1.2	3
150	Effect of Annealing Induced Morphology on Mobility of Copper Phthalocyanine Thin Films. Journal of Inorganic and Organometallic Polymers and Materials, 2020, 30, 4408-4415.	1.9	4
151	Zinc phthalocyanine thin film as saturable absorber for Q-switched pulse generation. Optical Fiber Technology, 2020, 57, 102235.	1.4	5
152	Investigation of negative magneto-conductance properties of cobalt phthalocyanine thin films. SN Applied Sciences, 2020, 2, 1.	1.5	5
153	Roomâ€Temperature Operation of a pâ€Type Molecular Spin Photovoltaic Device on a Transparent Substrate. Advanced Materials, 2020, 32, e1906908.	11.1	20
154	Cobalt phthalocyanine-based nanodots as efficient catalysts for chemical conversion of CO2 under ambient conditions. Journal of Materials Science, 2021, 56, 10990-10999.	1.7	9
155	Vibrationally Resolved Absorption Spectra and Exciton Dynamics in Zinc Phthalocyanine Aggregates: Effects of Aggregation Lengths and Remote Exciton Transfer. Journal of Physical Chemistry A, 2021, 125, 2932-2943.	1.1	11
156	Hybrid Nanocomposite Thin Films for Photovoltaic Applications: A Review. Nanomaterials, 2021, 11, 1117.	1.9	18
157	Reduced non-radiative charge recombination enables organic photovoltaic cell approaching 19% efficiency. Joule, 2021, 5, 2408-2419.	11.7	419
158	Effect of oligothiophene π-bridge length in D-π-A star-shaped small molecules on properties and photovoltaic performance in single-component and bulk heterojunction organic solar cells and photodetectors. Materials Today Energy, 2021, 22, 100863.	2.5	11
159	Exploration of photophysics and presence of Long singlet exciton diffusion length in dibenz[a,h]anthracene nanoaggregates. Journal of Photochemistry and Photobiology A: Chemistry, 2020, 392, 112407.	2.0	8
160	Analysis of organic photovoltaic devices with MoOx doped 4,4,4-tris(N-(3-methylphenyl)-N- phenylamin) triphenylamine as hole transport layer. Wuli Xuebao/Acta Physica Sinica, 2012, 61, 088802.	0.2	1
161	Analysis of Anomalous Discharging Processes in Pentacene/C ₆₀ Double-Layer Organic Solar Cell. Japanese Journal of Applied Physics, 2012, 51, 02BK01.	0.8	4
162	Inserting various cathodic buffer layers to enhancethe performance of Pentacene/C60based organic solar cells. Wuli Xuebao/Acta Physica Sinica, 2011, 60, 058801.	0.2	5
163	Microstructures and Photovoltaic Properties of Polysilane/C ₆₀ -Based Solar Cells. Materials Sciences and Applications, 2012, 03, 557-561.	0.3	2

#	Article	IF	CITATIONS
164	Photo-generated Carrier Dynamics in the Vicinity of the Donor/acceptor Interface of Organic Solar Cells. IEEJ Transactions on Electronics, Information and Systems, 2012, 132, 1291-1296.	0.1	1
165	Supramolecular Self-assembly of Discotic Liquid Crystalline LEGOs. , 2018, , 1-32.		0
166	Photophysics of organic photovoltaic devices: a review. Journal of Photonics for Energy, 2018, 8, 1.	0.8	4
167	Viable Mixing Protocol Based on Formulated Equations for Achieving Desired Molecular Weight and Maximal Charge Separation of Photovoltaic Polymer. Advanced Energy Materials, 2021, 11, 2102594.	10.2	19
168	Role of Band-Structure Approach in Biohybrid Photovoltaics—A Path Beyond Bioelectrochemistry. Green Energy and Technology, 2020, , 79-110.	0.4	0
169	Electronic and Optical Properties of Carbon Nanotubes Directed to Their Applications in Solar Cells. Lecture Notes in Computer Science, 2020, , 341-349.	1.0	5
170	Narrowband organic photodetectors – towards miniaturized, spectroscopic sensing. Materials Horizons, 2022, 9, 220-251.	6.4	76
171	Action Plots in Action: In-Depth Insights into Photochemical Reactivity. Journal of the American Chemical Society, 2021, 143, 21113-21126.	6.6	60
173	Biomimetic advances in photovoltaics with potential aerospace applications. , 2022, , 291-329.		1
174	Unraveling the reasons behind lead phthalocyanine acting as a good absorber for near-infrared sensitive devices. Scientific Reports, 2022, 12, .	1.6	3
175	Understanding interfacial energy structures in organic solar cells using photoelectron spectroscopy: A review. Journal of Applied Physics, 2022, 132, .	1.1	3
176	Impact of charge character on anionic cyanine-based organic salt photovoltaics. Journal of Applied Physics, 2022, 132, 085501.	1.1	2
177	Theoretical study of carbon nanotubes as candidates for active layer in solar cells. Computational and Theoretical Chemistry, 2022, 1216, 113846.	1.1	1
178	Highly efficient layer-by-layer large-scale manufacturing of polymer solar cells with minimized device-to-device variations by employing benzothiadiazole-based solid additives. Journal of Materials Chemistry A, 2022, 10, 20606-20615.	5. 2	17
179	A Facile Method for Thermally, Light, and Mechanically Stable Organic Solar Cells Using Ultravioletâ€Initiated Crosslinkable Additive. Advanced Optical Materials, 2023, 11, .	3.6	1
180	High-level periodic conjugated terpolymers through AA/BB monomer pair-type terpolymerization improve performance of polymer solar cells. Nano Energy, 2023, 106, 108059.	8.2	11
181	Combining dithieno [3,2-f:2',3'-h] quinoxaline-based terpolymer and ternary strategies enabling high-efficiency organic solar cells. Chemical Communications, 0, , .	2.2	1
183	Recent progress in organic–metal complexes for organic photovoltaic applications. Materials Chemistry Frontiers, 2023, 7, 5063-5103.	3.2	2

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