Krishna Feron

List of Publications by Year
in descending order

59 papers	1,845 citations	236833 25 h-index	276775 41 g-index
62 all docs	62 docs citations	62 times ranked	2764 citing authors

#	Article	IF	Citations
1	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.	10.2	154
2	Organic Solar Cells: Understanding the Role of FÃ¶rster Resonance Energy Transfer. International Journal of Molecular Sciences, 2012, 13, 17019-17047.	1.8	111
3	Organic Bioelectronics: Materials and Biocompatibility. International Journal of Molecular Sciences, 2018, 19, 2382.	1.8	102
4	Phenothiazine and carbazole substituted pyrene based electroluminescent organic semiconductors for OLED devices. Journal of Materials Chemistry C, 2016, 4, 1009-1018.	2.7	99
5	Nano-pathways: Bridging the divide between water-processable nanoparticulate and bulk heterojunction organic photovoltaics. Nano Energy, 2016, 19, 495-510.	8.2	75
6	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.	2.6	72
7	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.	5.2	70
8	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.	5.2	62
9	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.	2.7	61
10	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.	2.6	60
11	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.	3.1	59
12	Spatially resolved photocurrent measurements of organic solar cells: Tracking water ingress at edges and pinholes. Solar Energy Materials and Solar Cells, 2013, 109, 169-177.	3.0	57
13	Acene-based organic semiconductors for organic light-emitting diodes and perovskite solar cells. Journal of Materials Chemistry C, 2018, 6, 9017-9029.	2.7	50
14	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.	7.8	45
15	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.	7.8	43
16	The origin of performance limitations in miniemulsion nanoparticulate organic photovoltaic devices. Solar Energy Materials and Solar Cells, 2018, 175, 77-88.	3.0	38
17	A low-cost mixed fullerene acceptor blend for printed electronics. Journal of Materials Chemistry A, 2016, 4, 10274-10281.	5.2	37
18	Probing the origin of photocurrent in nanoparticulate organic photovoltaics. Solar Energy Materials and Solar Cells, 2015, 140, 412-421.	3.0	35

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19	Fully roll-to-roll prepared organic solar cells in normal geometry with a sputter-coated aluminium top-electrode. Solar Energy Materials and Solar Cells, 2016, 149, 103-109.	3.0	35
20	Utilizing Energy Transfer in Binary and Ternary Bulk Heterojunction Organic Solar Cells. ACS Applied Materials & Interfaces, 2016, 8, 20928-20937.	4.0	32
21	Naphthalene flanked diketopyrrolopyrrole based organic semiconductors for high performance organic field effect transistors. New Journal of Chemistry, 2018, 42, 12374-12385.	1.4	29
22	Building intermixed donorâ€“acceptor architectures for water-processable organic photovoltaics. Physical Chemistry Chemical Physics, 2019, 21, 5705-5715.	1.3	27
23	Biowasteâ€Derived, Selfâ€Organized Arrays of Highâ€Performance 2D Carbon Emitters for Organic Lightâ€Emitting Diodes. Advanced Materials, 2020, 32, e1906176.	11.1	27
24	Highly compact and uniform CH3NH3Sn0.5Pb0.5I3 films for efficient panchromatic planar perovskite solar cells. Science Bulletin, 2016, 61, 1558-1562.	4.3	25
25	Engineering Two-Phase and Three-Phase Microstructures from Water-Based Dispersions of Nanoparticles for Eco-Friendly Polymer Solar Cell Applications. Chemistry of Materials, 2018, 30, 6521-6531.	3.2	25
26	Deducing transport properties of mobile vacancies from perovskite solar cell characteristics. Journal of Applied Physics, 2020, 128, .	1.1	25
27	Comparison of inorganic electron transport layers in fully roll-to-roll coated/printed organic photovoltaics in normal geometry. Journal of Materials Chemistry A, 2016, 4, 15986-15996.	5.2	23
28	Role of Stabilizing Surfactants on Capacitance, Charge, and Ion Transport in Organic Nanoparticle-Based Electronic Devices. ACS Applied Materials & Interfaces, 2019, 11, 10074-10088.	4.0	22
29	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.	2.0	21
30	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.	2.6	20
31	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.	1.4	19
32	Diketopyrrolopyrrole based organic semiconductors with different numbers of thiophene units: symmetry tuning effect on electronic devices. New Journal of Chemistry, 2018, 42, 4017-4028.	1.4	19
33	Switched Photocurrent on Tin Sulfideâ€Based Nanoplate Photoelectrodes. ChemSusChem, 2017, 10, 670-674.	3.6	18
34	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.	2.6	18
35	Enhanced regeneration of degraded polymer solar cells by thermal annealing. Applied Physics Letters, 2014, 104, .	1.5	17
36	Comparative Degradation and Regeneration of Polymer Solar Cells with Different Cathodes. ACS Applied Materials & Interfaces, 2014, 6, 5281-5289.	4.0	17

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37	The role of surface energy control in organic photovoltaics based on solar paints. Journal of Materials Chemistry A, 2019, 7, 9202-9214.	5.2	16
38	A nuanced approach for assessing OPV materials for large scale applications. Sustainable Energy and Fuels, 2020, 4, 940-949.	2.5	16
39	Towards the development of a virtual organic solar cell: An experimental and dynamic Monte Carlo study of the role of charge blocking layers and active layer thickness. Applied Physics Letters, 2012, 101, .	1.5	15
40	Tunable Crystallization and Nucleation of Planar CH₃NH₃PbI₃ through Solvent-Modified Interdiffusion. ACS Applied Materials & Interfaces, 2018, 10, 14673-14683.	4.0	14
41	Organic Semiconductors for Optically Triggered Neural Interfacing: The Impact of Device Architecture in Determining Response Magnitude and Polarity. IEEE Journal of Selected Topics in Quantum Electronics, 2021, 27, 1-12.	1.9	13
42	Developing a Portable Organic Solar Cell Kit Suitable for Students to Fabricate and Test Solar Cells in the Laboratory. Journal of Chemical Education, 2020, 97, 3751-3757.	1.1	12
43	Matrix assisted low temperature growth of graphene. Carbon, 2016, 107, 325-331.	5.4	11
44	A building-block approach to the development of an equivalent circuit model for organic photovoltaic cells. Organic Electronics, 2018, 58, 207-215.	1.4	10
45	Fluorination of pyrene-based organic semiconductors enhances the performance of light emitting diodes and halide perovskite solar cells. Organic Electronics, 2020, 77, 105524.	1.4	10
46	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.	1.4	9
47	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.	1.4	9
48	Versatile nature of anthanthrone based polymers as active multifunctional semiconductors for various organic electronic devices. Materials Advances, 2020, 1, 3428-3438.	2.6	9
49	Optimisation of purification techniques for the preparation of large-volume aqueous solar nanoparticle inks for organic photovoltaics. Beilstein Journal of Nanotechnology, 2018, 9, 649-659.	1.5	8
50	An applied light-beam induced current study of dye-sensitised solar cells: Photocurrent uniformity mapping and true photoactive area evaluation. Journal of Applied Physics, 2014, 116, 043104.	1.1	7
51	Solution processable interface materials for nanoparticulate organic photovoltaic devices. Applied Physics Letters, 2014, 104, 043902.	1.5	7
52	Advanced Control of Drug Delivery for <i>In Vivo</i> Health Applications via Highly Biocompatible Self-Assembled Organic Nanoparticles. ACS Applied Bio Materials, 2021, 4, 6338-6350.	2.3	6
53	The effect of calcium-induced fullerene migration on the performance of thermally stable nanoparticle organic solar cells. Journal of Applied Physics, 2014, 116, 124502.	1.1	5
54	Energy level engineering in ternary organic solar cells: Evaluating exciton dissociation at organic semiconductor interfaces. Applied Physics Letters, 2017, 110, .	1.5	5

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55	Low-Temperature CVD-Grown Graphene Thin Films as Transparent Electrode for Organic Photovoltaics. Coatings, 2022, 12, 681.	1.2	5
56	Role of Morphology of Surfactant-Free Nanoparticles in Organic Photovoltaics. Journal of Electronic Materials, 2020, 49, 4168-4179.	1.0	4
57	A dynamic Monte Carlo study of anomalous current voltage behaviour in organic solar cells. Journal of Applied Physics, 2014, 116, 214509.	1.1	2
58	Vinylene and benzo[<i>c</i>][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.	1.7	2
59	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.	2.6	1