Hongjian Peng

List of Publications by Year
in descending order

49 papers	6,033 citations	331259 21 h-index	214527 47 g-index
50 all docs	50 docs citations	50 times ranked	4295 citing authors

#	Article	IF	Citations
1	Single-Junction Organic Solar Cell with over 15% Efficiency Using Fused-Ring Acceptor with Electron-Deficient Core. Joule, 2019, 3, 1140-1151.	11.7	4,052
2	Tuning the electron-deficient core of a non-fullerene acceptor to achieve over 17% efficiency in a single-junction organic solar cell. Energy and Environmental Science, 2020, 13, 2459-2466.	15.6	324
3	Fused Benzothiadiazole: A Building Block for nâ€Type Organic Acceptor to Achieve Highâ€Performance Organic Solar Cells. Advanced Materials, 2019, 31, e1807577.	11.1	297
4	Garnet Solid Electrolyte for Advanced Allâ€Solidâ€State Li Batteries. Advanced Energy Materials, 2021, 11, 2000648.	10.2	182
5	Thieno[3,2-b]pyrrolo-Fused Pentacyclic Benzotriazole-Based Acceptor for Efficient Organic Photovoltaics. ACS Applied Materials & Interfaces, 2017, 9, 31985-31992.	4.0	161
6	Achieving over 10% efficiency in a new acceptor ITTC and its blends with hexafluoroquinoxaline based polymers. Journal of Materials Chemistry A, 2017, 5, 11286-11293.	5.2	102
7	Understanding energetic disorder in electron-deficient-core-based non-fullerene solar cells. Science China Chemistry, 2020, 63, 1159-1168.	4.2	92
8	Bi Dots Confined by Functional Carbon as Highâ€Performance Anode for Lithium Ion Batteries. Advanced Functional Materials, 2021, 31, 2000756.	7.8	84
9	Optimizing the conjugated side chains of quinoxaline based polymers for nonfullerene solar cells with 10.5% efficiency. Journal of Materials Chemistry A, 2018, 6, 3074-3083.	5.2	61
10	Semitransparent solar cells with over 12% efficiency based on a new low bandgap fluorinated small molecule acceptor. Materials Chemistry Frontiers, 2019, 3, 2483-2490.	3.2	55
11	Efficient organic solar cells based on a new â€œY-seriesâ€•non-fullerene acceptor with an asymmetric electron-deficient-core. Chemical Communications, 2020, 56, 4340-4343.	2.2	51
12	Hexafluoroquinoxaline Based Polymer for Nonfullerene Solar Cells Reaching 9.4% Efficiency. ACS Applied Materials & Interfaces, 2017, 9, 18816-18825.	4.0	47
13	A Medium Bandgap Dâ€“A Copolymer Based on 4-Alkyl-3,5-difluorophenyl Substituted Quinoxaline Unit for High Performance Solar Cells. Macromolecules, 2018, 51, 2838-2846.	2.2	47
14	Recent advances of composite electrolytes for solid-state Li batteries. Journal of Energy Chemistry, 2022, 67, 524-548.	7.1	47
15	Low temperature synthesis of Li5La3Nb2O12 with cubic garnet-type structure by solâ€“gel process. Journal of Sol-Gel Science and Technology, 2013, 66, 175-179.	1.1	41
16	A New Electron Acceptor with metaâ€Alkoxyphenyl Side Chain for Fullereneâ€Free Polymer Solar Cells with 9.3% Efficiency. Advanced Science, 2017, 4, 1700152.	5.6	40
17	An asymmetric small molecule acceptor for organic solar cells with a short circuit current density over 24 mA cm^{â^'2}. Journal of Materials Chemistry A, 2020, 8, 15984-15991.	5.2	37
18	Spin-coated 10.46% and blade-coated 9.52% of ternary semitransparent organic solar cells with 26.56% average visible transmittance. Solar Energy, 2020, 204, 660-666.	2.9	31

#	Article	IF	Citations
19	Low temperature synthesis and ion conductivity of Li7La3Zr2O12 garnets for solid state Li ion batteries. Solid State Ionics, 2017, 310, 129-133.	1.3	30
20	Use of B2O3 to improve Li+-ion transport in LiTi2(PO4)3-based ceramics. Journal of Power Sources, 2012, 197, 310-313.	4.0	28
21	A new non-fullerene acceptor based on the combination of a heptacyclic benzothiadiazole unit and a thiophene-fused end group achieving over 13% efficiency. Physical Chemistry Chemical Physics, 2019, 21, 26557-26563.	1.3	28
22	Synthesis and photovoltaic properties of two new alkoxylphenyl substituted thieno[2,3-f]benzofuran based polymers. Physical Chemistry Chemical Physics, 2015, 17, 17592-17600.	1.3	22
23	An asymmetric small molecule based on thieno[2,3-f]benzofuran for efficient organic solar cells. Organic Electronics, 2016, 35, 87-94.	1.4	20
24	Realizing 8.6% Efficiency from Nonâ€Halogenated Solvent Processed Additive Free All Polymer Solar Cells with a Quinoxaline Based Polymer. Solar Rrl, 2019, 3, 1800340.	3.1	20
25	Over 13% Efficient Organic Solar Cells Based on Lowâ€Cost Pentacyclic Aâ€Dâ€²Dâ€Aâ€Type Nonfullerene Acceptor. Solar Rrl, 2021, 5, 2100281.	3.1	17
26	Effect of quenching method on Li ion conductivity of Li5La3Bi2O12 solid state electrolyte. Solid State Ionics, 2017, 304, 71-74.	1.3	13
27	Synthesis of Li 5+x La 3 Hf x Nb 2-x O 12 (x = 0.2â€“1) ceramics with cubic garnet-type structure. Materials Letters, 2017, 194, 138-141.	1.3	10
28	New naphtho[1,2-b:5,6-bâ€²]difuran based two-dimensional conjugated small molecules for photovoltaic application. Optical Materials, 2017, 72, 147-155.	1.7	9
29	Low temperature, fast synthesis and ionic conductivity of Li6MLa2Nb2O12 (Mâ€‰=â€‰Ca, Sr, Ba) garnets. Journal of Sol-Gel Science and Technology, 2017, 83, 660-665.	1.1	9
30	Naphthodifuran-based zigzag-type polycyclic arene with conjugated side chains for efficient photovoltaics. Physical Chemistry Chemical Physics, 2017, 19, 14289-14295.	1.3	7
31	Effect of Ge substitution for Nb on Li ion conductivity of Li5La3Nb2O12 solid state electrolyte. Electrochimica Acta, 2017, 251, 482-487.	2.6	7
32	Fine-tuning blend morphology via alkylthio side chain engineering towards high performance non-fullerene polymer solar cells. Chemical Physics Letters, 2018, 696, 19-25.	1.2	7
33	Effect of fluorine substitution on photovoltaic properties of benzotriazole polymers. Chemical Physics, 2020, 528, 110529.	0.9	7
34	Fine-tuning of non-fullerene acceptor gives over 14% efficiency for organic solar cells. Dyes and Pigments, 2020, 181, 108559.	2.0	7
35	New 5-Octyl-thieno[3,4-c]pyrrole-4,6-dione Based Polymers: Synthesis and Photovoltaic Properties. Journal of Macromolecular Science - Pure and Applied Chemistry, 2015, 52, 752-760.	1.2	5
36	Synthesis and characterization of 5,6-bis(n-octyloxy)[2,1,3] selenadiazole-based polymers for photovoltaic applications. Polymer Bulletin, 2016, 73, 385-398.	1.7	5

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37	Characteristic atom arranging crystallogphy of alloy phases for Au-Cu system. Science China Technological Sciences, 2011, 54, 1560-1567.	2.0	4
38	Synthesis and photovoltaic properties of a non-fullerene acceptor with F-phenylalkoxy as a side chain. New Journal of Chemistry, 2018, 42, 19279-19284.	1.4	4
39	Synthesis and photovoltaic properties of alkylthiothiophene modified benzodithiophene polymer. Chemical Physics Letters, 2019, 730, 271-276.	1.2	4
40	Atomic states and properties of Pt-electrocatalyst. Science in China Series D: Earth Sciences, 2006, 49, 291-296.	0.9	3
41	A novel small molecule based on naphtho[1,2-b:5,6-bâ€²]difuran for efficient photovoltaics. Solar Energy, 2018, 173, 1107-1114.	2.9	3
42	Bromination and increasing the molecular conjugation length of the non-fullerene small-molecule acceptor based on benzotriazole for efficient organic photovoltaics. RSC Advances, 2021, 11, 13571-13578.	1.7	3
43	Computation of concentrations of characteristic atoms of alloys in BCC structure. Science China Technological Sciences, 2011, 54, 2363-2367.	2.0	2
44	Effect of Na substitution for La on Li ion conductivity of Li5La3Nb2O12 garnets by solâ€“gel process. Materials Research Bulletin, 2018, 99, 414-418.	2.7	2
45	Regulating the properties of small molecular acceptors with different end groups. Solar Energy, 2021, 223, 100-105.	2.9	2
46	Side chain engineering for the regulation of quinoxaline based D-A copolymers. Dyes and Pigments, 2019, 162, 487-493.	2.0	1
47	Research on atomic states, physical properties and catalytic performance of Ru metal. Science in China Series D: Earth Sciences, 2007, 50, 177-183.	0.9	0
48	Research on properties of DO3- and B2-type ordered alloys and disordered alloys in Nb-Mo alloy system in BCC structure. Science China Technological Sciences, 2011, 54, 2808-2814.	2.0	0
49	Fineâ€Tuning the Photovoltaic Performance of Organic Solar Cells by Collaborative Optimization of Structural Isomerism and Halogen Atom. Advanced Energy and Sustainability Research, 2022, 3, 2100138.	2.8	0