Dong Wook Chang

List of Publications by Year
in descending order

80 papers	7,322 citations	236612 25 h-index	74018 75 g-index
83 all docs	83 docs citations	83 times ranked	11705 citing authors

#	Article	IF	Citations
1	Strategic surface modification of ZnO interlayer for optimizing power conversion efficiency of solar cells based on quinoxaline-based polymer. Dyes and Pigments, 2022, 198, 110019.	2.0	1
2	Organic Photovoltaicsâ€™ New Renaissance: Advances Toward Rollâ€toâ€Roll Manufacturing of Nonâ€Fullerene Acceptor Organic Photovoltaics. Advanced Materials Technologies, 2022, 7, .	3.0	32
3	Effect of Electron-Withdrawing Chlorine Substituent on Morphological and Photovoltaic Properties of All Chlorinated Dâ€“A-Type Quinoxaline-Based Polymers. ACS Applied Materials & Interfaces, 2022, 14, 19785-19794.	4.0	4
4	Improved photovoltaic performance of quinoxaline-based polymers by systematic modulation of electron-withdrawing substituents. Journal of Materials Chemistry C, 2022, 10, 10338-10346.	2.7	10
5	A polymer/small-molecule binary-blend hole transport layer for enhancing charge balance in blue perovskite light emitting diodes. Journal of Materials Chemistry A, 2022, 10, 13928-13935.	5.2	15
6	Enhanced photovoltaic performance of quinoxaline-based donor-acceptor type polymers with monocyano substituent. Journal of Power Sources, 2021, 491, 229588.	4.0	15
7	Simple methoxy-substituted quinoxaline-based D-A type polymers for nonfullerene polymer solar cells. Dyes and Pigments, 2021, 192, 109346.	2.0	6
8	Effect of electron-withdrawing fluorine and cyano substituents on photovoltaic properties of two-dimensional quinoxaline-based polymers. Scientific Reports, 2021, 11, 24381.	1.6	6
9	Roll-to-roll compatible quinoxaline-based polymers toward high performance polymer solar cells. Journal of Materials Chemistry A, 2020, 8, 25208-25216.	5.2	14
10	Iron Phthalocyanine/Graphene Composites as Promising Electrocatalysts for the Oxygen Reduction Reaction. Energies, 2020, 13, 4073.	1.6	15
11	Synthesis of A-D-A type quinoxaline-based small molecules for organic photovoltaic cells. Molecular Crystals and Liquid Crystals, 2020, 705, 7-14.	0.4	1
12	Synthesis of quinoxaline-based D-A type conjugated polymers for photovoltaic applications. Molecular Crystals and Liquid Crystals, 2020, 705, 15-21.	0.4	1
13	High performance cyano-substituted quinoxaline-based polymers for both fullerene and nonfullerene polymer solar cells. Journal of Materials Chemistry A, 2020, 8, 19513-19521.	5.2	23
14	Solution processable small molecules as efficient electron transport layers in organic optoelectronic devices. Journal of Materials Chemistry A, 2020, 8, 13501-13508.	5.2	19
15	Effect of cyano substituent on photovoltaic properties of quinoxaline-based polymers. Journal of Industrial and Engineering Chemistry, 2020, 86, 244-250.	2.9	11
16	Effect of Fluorine Atom on Photovoltaic Properties of Triphenylamine-Substituted Quinoxaline-Based D-A Type Polymers. Macromolecular Research, 2020, 28, 1297-1303.	1.0	15
17	Synthesis of Quinoxaline-Based Small Molecules Possessing Multiple Electron-Withdrawing Moieties for Photovoltaic Applications. Macromolecular Research, 2019, 27, 1268-1274.	1.0	5
18	Effect of multiple electron-withdrawing substituents on photovoltaic properties of quinoxaline-based polymers. Molecular Crystals and Liquid Crystals, 2019, 685, 14-21.	0.4	2

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19	Enhanced photovoltaic performance of quinoxaline-based small molecules through incorporating trifluoromethyl substituents. Molecular Crystals and Liquid Crystals, 2019, 685, 22-28.	0.4	1
20	Synthesis of quinoxaline-based polymers with multiple electron-withdrawing groups for polymer solar cells. Journal of Industrial and Engineering Chemistry, 2019, 73, 192-197.	2.9	35
21	Effects of pyridine and pyrrole moieties on supercapacitive properties of imine-rich nitrogen-doped graphene. Carbon, 2019, 152, 915-923.	5.4	22
22	Synthesis of Cyano-Substituted Conjugated Polymers for Photovoltaic Applications. Polymers, 2019, 11, 746.	2.0	5
23	Enhanced open-circuit voltages of trifluoromethylated quinoxaline-based polymer solar cells. Organic Electronics, 2019, 65, 363-369.	1.4	8
24	Superior electrocatalytic performance of polyisobutylene-substituted metallophthalocyanines supported on single-walled carbon nanotubes for an oxygen reduction reaction. Dyes and Pigments, 2019, 162, 662-670.	2.0	14
25	Graphene-organic small molecule hybrid electrocatalyst for oxygen reduction reaction. Molecular Crystals and Liquid Crystals, 2018, 660, 98-103.	0.4	0
26	Influence of Acceptor Units with the Trifluoromethyl Group on Charge Transport in Donor–Acceptor Semiconducting Copolymer Films. Journal of Imaging Science and Technology, 2018, 62, 040404-1-040404-6.	0.3	1
27	Synthesis of Trifluoromethylated Quinoxalineâ€Based Polymers for Photovoltaic Applications. Macromolecular Rapid Communications, 2018, 39, e1800260.	2.0	10
28	Step-by-step improvement in photovoltaic properties of fluorinated quinoxaline-based low-band-gap polymers. Organic Electronics, 2017, 47, 14-23.	1.4	28
29	Charge transport in graphene oxide. Nano Today, 2017, 17, 38-53.	6.2	31
30	Synthesis of low bandgap small molecules containing fluorinated benzothiadiazole and phenothiazine for photovoltaic applications. Molecular Crystals and Liquid Crystals, 2017, 653, 27-32.	0.4	1
31	Synthesis and characterization conjugated oligomer based on phenothiazine derivative. Molecular Crystals and Liquid Crystals, 2017, 653, 78-83.	0.4	1
32	Facile synthesis of nitrogen-doped graphene containing azobenzene moieties for the oxygen reduction reaction. Molecular Crystals and Liquid Crystals, 2017, 653, 33-38.	0.4	1
33	A facile approach to tailoring electrocatalytic activities of imine-rich nitrogen-doped graphene for oxygen reduction reaction. Carbon, 2017, 122, 515-523.	5.4	25
34	Simple solution-based synthesis of pyridinic-rich nitrogen-doped graphene nanoplatelets for supercapacitors. Applied Energy, 2017, 195, 1071-1078.	5.1	60
35	Terpyridine-Containing Imine-Rich Graphene for the Oxygen Reduction Reaction. Catalysts, 2017, 7, 338.	1.6	5
36	Nitrogenâ€Doped Graphene for Photocatalytic Hydrogen Generation. Chemistry - an Asian Journal, 2016, 11, 1125-1137.	1.7	63

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37	Covalently functionalized graphene with organic semiconductors for energy and optoelectronic applications. Materials Research Express, 2016, 3, 044001.	0.8	10
38	Fluorinated benzothiadiazole-based small molecules for photovoltaic applications. Synthetic Metals, 2016, 220, 455-461.	2.1	17
39	Eco-friendly synthesis of graphene nanoplatelets. Journal of Materials Chemistry A, 2016, 4, 15281-15293.	5.2	24
40	Cathode modification of polymer solar cells by ultrahydrophobic polyelectrolyte. Molecular Crystals and Liquid Crystals, 2016, 635, 6-11.	0.4	1
41	Functionalized graphene nanoplatelets from ball milling for energy applications. Current Opinion in Chemical Engineering, 2016, 11, 52-58.	3.8	89
42	Wet-chemical nitrogen-doping of graphene nanoplatelets as electrocatalysts for the oxygen reduction reaction. Journal of Materials Chemistry A, 2015, 3, 7659-7665.	5.2	40
43	Graphene/Multi-Walled Carbon Nanotubes Hybrid Materials for Supercapacitors. Clean Technology, 2015, 21, 62-67.	0.1	1
44	Preparation of poly(vinyl alcohol)/silver-zeolite composite hydrogels by UV-irradiation. Fibers and Polymers, 2014, 15, 101-107.	1.1	8
45	Graphene in photovoltaic applications: organic photovoltaic cells (OPVs) and dye-sensitized solar cells (DSSCs). Journal of Materials Chemistry A, 2014, 2, 12136.	5.2	107
46	Solvent-free mechanochemical reduction of graphene oxide. Carbon, 2014, 77, 501-507.	5.4	43
47	Efficient energy transfer between amphiphilic dendrimers with oligo(<i>p</i>â€phenylenevinylene) core branches and oligo(ethylene oxide) termini in micelles. Journal of Polymer Science Part A, 2013, 51, 168-175.	2.5	5
48	Nitrogen-Doped Graphene Nanoplatelets from Simple Solution Edge-Functionalization for n-Type Field-Effect Transistors. Journal of the American Chemical Society, 2013, 135, 8981-8988.	6.6	113
49	Edgeâ€Selectively Functionalized Graphene Nanoplatelets. Chemical Record, 2013, 13, 224-238.	2.9	31
50	Co-Sensitized Mesoporous TiO2Solar Cells: Hybrid Sensitizer of SILAR-Grown CdS Quantum Dot (QD) and Molecular Dye (Z907) with a Metal Oxide Interlayer. Bulletin of the Korean Chemical Society, 2013, 34, 3183-3184.	1.0	2
51	Graphene for energy conversion and storage in fuel cells and supercapacitors. Nano Energy, 2012, 1, 534-551.	8.2	628
52	Large clusters and hollow microfibers by multicomponent self-assembly of citrate stabilized gold nanoparticles with temperature-responsive amphiphilic dendrimers. Journal of Materials Chemistry, 2012, 22, 13365.	6.7	5
53	Multifunctional quinoxaline containing small molecules with multiple electron-donating moieties: Solvatochromic and optoelectronic properties. Synthetic Metals, 2012, 162, 1169-1176.	2.1	31
54	Edge-carboxylated graphene nanosheets via ball milling. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, 5588-5593.	3.3	595

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55	Polyaniline-Grafted Reduced Graphene Oxide for Efficient Electrochemical Supercapacitors. ACS Nano, 2012, 6, 1715-1723.	7.3	807
56	Water-Dispersible, Sulfonated Hyperbranched Poly(ether-ketone) Grafted Multiwalled Carbon Nanotubes as Oxygen Reduction Catalysts. ACS Nano, 2012, 6, 6345-6355.	7.3	57
57	Molecular engineering of conjugated polymers for solar cells and fieldâ€effect transistors: Sideâ€chain versus mainâ€chain electron acceptors. Journal of Polymer Science Part A, 2012, 50, 271-279.	2.5	6
58	Carbon Nanomaterials for Advanced Energy Conversion and Storage. Small, 2012, 8, 1130-1166.	5.2	1,304
59	Carbon Nanomaterials: Carbon Nanomaterials for Advanced Energy Conversion and Storage (Small) Tj ETQq1 1 0.784314 rgBT /Overlo	5.2	14
60	Bistriphenylamine-based organic sensitizers with high molar extinction coefficients for dye-sensitized solar cells. RSC Advances, 2012, 2, 6209.	1.7	18
61	BCN Graphene as Efficient Metalâ€Free Electrocatalyst for the Oxygen Reduction Reaction. Angewandte Chemie - International Edition, 2012, 51, 4209-4212.	7.2	1,119
62	Reversible adsorption of conjugated amphiphilic dendrimers onto reduced graphene oxide (rGO) for fluorescence sensing. Soft Matter, 2011, 7, 8352.	1.2	16
63	Polyelectrolyte-Functionalized Graphene as Metal-Free Electrocatalysts for Oxygen Reduction. ACS Nano, 2011, 5, 6202-6209.	7.3	672
64	Formation of Large-Area Nitrogen-Doped Graphene Film Prepared from Simple Solution Casting of Edge-Selectively Functionalized Graphite and Its Electrocatalytic Activity. Chemistry of Materials, 2011, 23, 3987-3992.	3.2	171
65	Preparation and Electrocatalytic Activity of Gold Nanoparticles Immobilized on the Surface of 4-Mercaptobenzoyl-Functionalized Multiwalled Carbon Nanotubes. Journal of Physical Chemistry C, 2011, 115, 1746-1751.	1.5	20
66	Novel Quinoxaline-Based Organic Sensitizers for Dye-Sensitized Solar Cells. Organic Letters, 2011, 13, 3880-3883.	2.4	166
67	Wedging graphite into graphene and graphene-like platelets by dendritic macromolecules. Journal of Materials Chemistry, 2011, 21, 7820.	6.7	27
68	Multifunctional Conjugated Polymers with Mainâ€Chain Donors and Sideâ€Chain Acceptors for Dye Sensitized Solar Cells (DSSCs) and Organic Photovoltaic Cells (OPVs). Macromolecular Rapid Communications, 2011, 32, 1809-1814.	2.0	16
69	Assessment of Human Lung Macrophages After Exposure to Multi-Walled Carbon Nanotubes Part II. DNA Damage. Nanoscience and Nanotechnology Letters, 2011, 3, 94-98.	0.4	4
70	Assessment of Human Lung Macrophages After Exposure to Multi-Walled Carbon Nanotubes Part I. Cytotoxicity. Nanoscience and Nanotechnology Letters, 2011, 3, 88-93.	0.4	10
71	Efficient dispersion of singlewalled carbon nanotubes by novel amphiphilic dendrimers in water and substitution of the pre-adsorbed dendrimers with conventional surfactants and lipids. Chemical Communications, 2010, 46, 7924.	2.2	14
72	Multilayer white polymer light-emitting diodes with deoxyribonucleic acid-cetyltrimetylammonium complex as a hole-transporting/electron-blocking layer. Applied Physics Letters, 2008, 92, 251108.	1.5	49

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73	Photo-induced formation and self-assembling of gold nanoparticles in aqueous solution of amphiphilic dendrimers with oligo(p-phenylene vinylene) core branches and oligo(ethylene oxide) terminal chains. Nanotechnology, 2007, 18, 365605.	1.3	8
74	DNA Damage Induced by Multiwalled Carbon Nanotubes in Mouse Embryonic Stem Cells. Nano Letters, 2007, 7, 3592-3597.	4.5	351
75	Luminescent amphiphilic dendrimers with oligo(p-phenylene vinylene) core branches and oligo(ethylene oxide) terminal chains: syntheses and stimuli-responsive properties. Journal of Materials Chemistry, 2007, 17, 364-371.	6.7	44
76	Amphiphilic light-emitting dendrons with oligo(phenylene vinylene) branches and oligo(ethylene) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 6	2.1	2
77	Conjugated polymer electrolyte with nitrosonium tetrafluoroborate as the interlayer for polymer solar cells. Molecular Crystals and Liquid Crystals, 0, , 1-7.	0.4	1
78	Fluorine-substituted indolo-thiadiazoloquinoxaline-based D-A type polymers for photovoltaic applications. Molecular Crystals and Liquid Crystals, 0, , 1-8.	0.4	0
79	Effect of electron-donating methoxy groups on photovoltaic properties of triphenylamine-substituted quinoxaline-based polymers. Molecular Crystals and Liquid Crystals, 0, , 1-7.	0.4	1
80	Effect of fluorine substituents on photovoltaic properties of Dâ€“a type conjugated polymers with quinoxaline unit. Molecular Crystals and Liquid Crystals, 0, , 1-9.	0.4	2