

In Taek Choi

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/6827838/publications.pdf>

Version: 2024-02-01

30
papers

2,563
citations

270111

25
h-index

488211

31
g-index

31
all docs

31
docs citations

31
times ranked

4190
citing authors

#	ARTICLE	IF	CITATIONS
1	Significant light absorption enhancement by a single heterocyclic unit change in the π -bridge moiety from thieno[3,2-b]benzothiophene to thieno[3,2-b]indole for high performance dye-sensitized and tandem solar cells. <i>Journal of Materials Chemistry A</i> , 2017, 5, 2297-2308.	5.2	200
2	Porphyrin Sensitizers with Donor Structural Engineering for Superior Performance Dye-Sensitized Solar Cells and Tandem Solar Cells for Water Splitting Applications. <i>Advanced Energy Materials</i> , 2017, 7, 1602117.	10.2	193
3	Simple synthesis and molecular engineering of low-cost and star-shaped carbazole-based hole transporting materials for highly efficient perovskite solar cells. <i>Journal of Materials Chemistry A</i> , 2017, 5, 20263-20276.	5.2	92
4	Anchovy-derived nitrogen and sulfur co-doped porous carbon materials for high-performance supercapacitors and dye-sensitized solar cells. <i>RSC Advances</i> , 2017, 7, 35565-35574.	1.7	31
5	Edge-selectively antimony-doped graphene nanoplatelets as an outstanding counter electrode with an unusual electrochemical stability for dye-sensitized solar cells employing cobalt electrolytes. <i>Journal of Materials Chemistry A</i> , 2016, 4, 9029-9037.	5.2	33
6	Metalloid tellurium-doped graphene nanoplatelets as ultimately stable electrocatalysts for cobalt reduction reaction in dye-sensitized solar cells. <i>Nano Energy</i> , 2016, 30, 867-876.	8.2	49
7	Edge-selenated graphene nanoplatelets as durable metal-free catalysts for iodine reduction reaction in dye-sensitized solar cells. <i>Science Advances</i> , 2016, 2, e1501459.	4.7	88
8	Unassisted photoelectrochemical water splitting exceeding 7% solar-to-hydrogen conversion efficiency using photon recycling. <i>Nature Communications</i> , 2016, 7, 11943.	5.8	144
9	Two-terminal DSSC/silicon tandem solar cells exceeding 18% efficiency. <i>Energy and Environmental Science</i> , 2016, 9, 3657-3665.	15.6	41
10	Thieno[3,2-b][1]benzothiophene Derivative as a New π -Bridge Unit in Dye-Sensitized Solar Cells. <i>Advanced Energy Materials</i> , 2015, 5, 1500300.	10.2	138
11	Dye-Sensitized Tandem Solar Cells with Extremely High Open-Circuit Voltage Using Co(II)/Co(III) Electrolyte. <i>Israel Journal of Chemistry</i> , 2015, 55, 1002-1010.	1.0	3
12	Fluorine: Edge-Fluorinated Graphene Nanoplatelets as High Performance Electrodes for Dye-Sensitized Solar Cells and Lithium Ion Batteries (<i>Adv. Funct. Mater.</i> 8/2015). <i>Advanced Functional Materials</i> , 2015, 25, 1328-1328.	7.8	6
13	Copolymer-templated nitrogen-enriched nanocarbons as a low charge-transfer resistance and highly stable alternative to platinum cathodes in dye-sensitized solar cells. <i>Journal of Materials Chemistry A</i> , 2015, 3, 4413-4419.	5.2	45
14	Edge-Fluorinated Graphene Nanoplatelets as High Performance Electrodes for Dye-Sensitized Solar Cells and Lithium Ion Batteries. <i>Advanced Functional Materials</i> , 2015, 25, 1170-1179.	7.8	174
15	High-performance dye-sensitized solar cells using edge-halogenated graphene nanoplatelets as counter electrodes. <i>Nano Energy</i> , 2015, 13, 336-345.	8.2	85
16	Novel Carbazole-Based Hole-Transporting Materials with Star-Shaped Chemical Structures for Perovskite-Sensitized Solar Cells. <i>ACS Applied Materials & Interfaces</i> , 2015, 7, 22213-22217.	4.0	104
17	New thieno[3,2-b][1]benzothiophene-based organic sensitizers containing π -extended thiophene spacers for efficient dye-sensitized solar cells. <i>RSC Advances</i> , 2015, 5, 80859-80870.	1.7	16
18	Graphene Nanoplatelets Doped with N at its Edges as Metal-Free Cathodes for Organic Dye-Sensitized Solar Cells. <i>Advanced Materials</i> , 2014, 26, 3055-3062.	11.1	140

#	ARTICLE	IF	CITATIONS
19	B-Doped Graphene as an Electrochemically Superior Metal-Free Cathode Material As Compared to Pt over a Co(II)/Co(III) Electrolyte for Dye-Sensitized Solar Cell. <i>Chemistry of Materials</i> , 2014, 26, 3586-3591.	3.2	57
20	Edge-carboxylated graphene nanoplatelets as oxygen-rich metal-free cathodes for organic dye-sensitized solar cells. <i>Energy and Environmental Science</i> , 2014, 7, 1044-1052.	15.6	82
21	14.8% perovskite solar cells employing carbazole derivatives as hole transporting materials. <i>Chemical Communications</i> , 2014, 50, 14161-14163.	2.2	159
22	Design of a Structured Zn(II)-Porphyrin Dyes with Thiophene Moiety for Highly Efficient Dye-Sensitized Solar Cells. <i>ChemElectroChem</i> , 2014, 1, 637-644.	1.7	13
23	Nb-doped TiO ₂ nanoparticles for organic dye-sensitized solar cells. <i>RSC Advances</i> , 2013, 3, 16380.	1.7	75
24	Tailor-Made Hole-Conducting Coadsorbents for Highly Efficient Organic Dye-Sensitized Solar Cells. <i>Chemistry - A European Journal</i> , 2013, 19, 15545-15555.	1.7	20
25	Novel Design of a structured porphyrin dyes with diphenylamine derived electron-donating substituents for highly efficient dye-sensitized solar cells. <i>Journal of Materials Chemistry A</i> , 2013, 1, 3977.	5.2	75
26	Structural effect of carbazole-based coadsorbents on the photovoltaic performance of organic dye-sensitized solar cells. <i>Journal of Materials Chemistry A</i> , 2013, 1, 9114.	5.2	42
27	Novel Design of a structured Zn(ii)-porphyrin dyes with bulky fluorenyl substituted electron donor moieties for dye-sensitized solar cells. <i>Journal of Materials Chemistry A</i> , 2013, 1, 9848.	5.2	43
28	N-Doped Graphene Nanoplatelets as Superior Metal-Free Counter Electrodes for Organic Dye-Sensitized Solar Cells. <i>ACS Nano</i> , 2013, 7, 5243-5250.	7.3	238
29	Novel Design of a structured Zn(ii)-porphyrin dyes containing a bis(3,3-dimethylfluorenyl)amine moiety for dye-sensitized solar cells. <i>Chemical Communications</i> , 2012, 48, 9349.	2.2	91
30	A Desirable Hole-Conducting Coadsorbent for Highly Efficient Dye-Sensitized Solar Cells through an Organic Redox Cascade Strategy. <i>Chemistry - A European Journal</i> , 2011, 17, 11115-11121.	1.7	85