In Taek Choi

List of Publications by Year
in descending order

30 papers	2,563 citations	236912 25 h-index	434170 31 g-index
31 all docs	31 docs citations	31 times ranked	3589 citing authors

#	Article	IF	Citations
1	N-Doped Graphene Nanoplatelets as Superior Metal-Free Counter Electrodes for Organic Dye-Sensitized Solar Cells. ACS Nano, 2013, 7, 5243-5250.	14.6	238
2	Significant light absorption enhancement by a single heterocyclic unit change in the Ï€-bridge moiety from thieno[3,2-b]benzothiophene to thieno[3,2-b]indole for high performance dye-sensitized and tandem solar cells. Journal of Materials Chemistry A, 2017, 5, 2297-2308.	10.3	200
3	Porphyrin Sensitizers with Donor Structural Engineering for Superior Performance Dyeâ€Sensitized Solar Cells and Tandem Solar Cells for Water Splitting Applications. Advanced Energy Materials, 2017, 7, 1602117.	19.5	193
4	Edgeâ€Fluorinated Graphene Nanoplatelets as High Performance Electrodes for Dyeâ€Sensitized Solar Cells and Lithium Ion Batteries. Advanced Functional Materials, 2015, 25, 1170-1179.	14.9	174
5	14.8% perovskite solar cells employing carbazole derivatives as hole transporting materials. Chemical Communications, 2014, 50, 14161-14163.	4.1	159
6	Unassisted photoelectrochemical water splitting exceeding 7% solar-to-hydrogen conversion efficiency using photon recycling. Nature Communications, 2016, 7, 11943.	12.8	144
7	Graphene Nanoplatelets Doped with N at its Edges as Metalâ€Free Cathodes for Organic Dyeâ€Sensitized Solar Cells. Advanced Materials, 2014, 26, 3055-3062.	21.0	140
8	Thieno[3,2â€<i>b</i>][1]benzothiophene Derivative as a New Ï€â€Bridge Unit in Dâ€“Ï€â€“A Structural Organic Sensitizers with Over 10.47% Efficiency for Dyeâ€Sensitized Solar Cells. Advanced Energy Materials, 2015, 5, 1500300.	19.5	138
9	Novel Carbazole-Based Hole-Transporting Materials with Star-Shaped Chemical Structures for Perovskite-Sensitized Solar Cells. ACS Applied Materials & Interfaces, 2015, 7, 22213-22217.	8.0	104
10	Simple synthesis and molecular engineering of low-cost and star-shaped carbazole-based hole transporting materials for highly efficient perovskite solar cells. Journal of Materials Chemistry A, 2017, 5, 20263-20276.	10.3	92
11	Novel Dâ€“Ï€â€“A structured Zn(ii)-porphyrin dyes containing a bis(3,3-dimethylfluorenyl)amine moiety for dye-sensitised solar cells. Chemical Communications, 2012, 48, 9349.	4.1	91
12	Edge-selenated graphene nanoplatelets as durable metal-free catalysts for iodine reduction reaction in dye-sensitized solar cells. Science Advances, 2016, 2, e1501459.	10.3	88
13	A Desirable Holeâ€Conducting Coadsorbent for Highly Efficient Dyeâ€Sensitized Solar Cells through an Organic Redox Cascade Strategy. Chemistry - A European Journal, 2011, 17, 11115-11121.	3.3	85
14	High-performance dye-sensitized solar cells using edge-halogenated graphene nanoplatelets as counter electrodes. Nano Energy, 2015, 13, 336-345.	16.0	85
15	Edge-carboxylated graphene nanoplatelets as oxygen-rich metal-free cathodes for organic dye-sensitized solar cells. Energy and Environmental Science, 2014, 7, 1044-1052.	30.8	82
16	Nb-doped TiO2 nanoparticles for organic dye-sensitized solar cells. RSC Advances, 2013, 3, 16380.	3.6	75
17	Novel Dâ€“Ï€â€“A structured porphyrin dyes with diphenylamine derived electron-donating substituents for highly efficient dye-sensitized solar cells. Journal of Materials Chemistry A, 2013, 1, 3977.	10.3	75
18	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. Chemistry of Materials, 2014, 26, 3586-3591.	6.7	57

#	Article	IF	Citations
19	Metalloid tellurium-doped graphene nanoplatelets as ultimately stable electrocatalysts for cobalt reduction reaction in dye-sensitized solar cells. Nano Energy, 2016, 30, 867-876.	16.0	49
20	Copolymer-templated nitrogen-enriched nanocarbons as a low charge-transfer resistance and highly stable alternative to platinum cathodes in dye-sensitized solar cells. Journal of Materials Chemistry A, 2015, 3, 4413-4419.	10.3	45
21	Novel Dâ€“Ï€â€“A structured Zn(ii)â€“porphyrin dyes with bulky fluorenyl substituted electron donor moieties for dye-sensitized solar cells. Journal of Materials Chemistry A, 2013, 1, 9848.	10.3	43
22	Structural effect of carbazole-based coadsorbents on the photovoltaic performance of organic dye-sensitized solar cells. Journal of Materials Chemistry A, 2013, 1, 9114.	10.3	42
23	Two-terminal DSSC/silicon tandem solar cells exceeding 18% efficiency. Energy and Environmental Science, 2016, 9, 3657-3665.	30.8	41
24	Edge-selectively antimony-doped graphene nanoplatelets as an outstanding counter electrode with an unusual electrochemical stability for dye-sensitized solar cells employing cobalt electrolytes. Journal of Materials Chemistry A, 2016, 4, 9029-9037.	10.3	33
25	Anchovy-derived nitrogen and sulfur co-doped porous carbon materials for high-performance supercapacitors and dye-sensitized solar cells. RSC Advances, 2017, 7, 35565-35574.	3.6	31
26	Tailorâ€Made Holeâ€Conducting Coadsorbents for Highly Efficient Organic Dyeâ€Sensitized Solar Cells. Chemistry - A European Journal, 2013, 19, 15545-15555.	3.3	20
27	New thieno[3,2-b][1]benzothiophene-based organic sensitizers containing Ï€-extended thiophene spacers for efficient dye-sensitized solar cells. RSC Advances, 2015, 5, 80859-80870.	3.6	16
28	Dâ€“Ï€â€“A Structured Zn^{II}â€Porphyrin Dyes with Thiophene Moiety for Highly Efficient Dyeâ€Sensitized Solar Cells. ChemElectroChem, 2014, 1, 637-644.	3.4	13
29	Fluorine: Edge-Fluorinated Graphene Nanoplatelets as High Performance Electrodes for Dye-Sensitized Solar Cells and Lithium Ion Batteries (Adv. Funct. Mater. 8/2015). Advanced Functional Materials, 2015, 25, 1328-1328.	14.9	6
30	Dyeâ€Sensitized Tandem Solar Cells with Extremely High Openâ€Circuit Voltage Using Co(II)/Co(III) Electrolyte. Israel Journal of Chemistry, 2015, 55, 1002-1010.	2.3	3