Takayuki Kuwabara

List of Publications by Year
in descending order

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32	1,374	471509	434195
papers	citations	17	31
		h-index	g-index

32	32	32	2110
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Self-Assembly of Active IrO2Colloid Catalyst on an ITO Electrode for Efficient Electrochemical Water Oxidation. Journal of Physical Chemistry B, 2005, 109, 21489-21491.	2.6	177
2	Characterization of Inverted-Type Organic Solar Cells with a ZnO Layer as the Electron Collection Electrode by ac Impedance Spectroscopy. ACS Applied Materials & Interfaces, 2009, 1, 2107-2110.	8.0	166
3	Highly durable inverted-type organic solar cell using amorphous titanium oxide as electron collection electrode inserted between ITO and organic layer. Solar Energy Materials and Solar Cells, 2008, 92, 1476-1482.	6.2	159
4	Remarkably high activity of electrodeposited IrO2 film for electrocatalytic water oxidation. Journal of Electroanalytical Chemistry, 2005, 579, 83-88.	3.8	124
5	Inverted type bulk-heterojunction organic solar cell using electrodeposited titanium oxide thin films as electron collector electrode. Thin Solid Films, 2009, 517, 3766-3769.	1.8	94
6	Mechanistic Insights into UV-Induced Electron Transfer from PCBM to Titanium Oxide in Inverted-Type Organic Thin Film Solar Cells Using AC Impedance Spectroscopy. ACS Applied Materials & Interfaces, 2010, 2, 2254-2260.	8.0	91
7	Inverted bulk-heterojunction organic solar cell using chemical bath deposited titanium oxide as electron collection layer. Organic Electronics, 2010, 11, 1136-1140.	2.6	88
8	Characterization and Analysis of Self-Assembly of a Highly Active Colloidal Catalyst for Water Oxidation onto Transparent Conducting Oxide Substrates. Journal of Physical Chemistry C, 2008, 112, 3774-3779.	3.1	63
9	Improved Reproducibility and Intercalation Control of Efficient Planar Inorganic Perovskite Solar Cells by Simple Alternate Vacuum Deposition of PbI₂ and CsI. ACS Omega, 2017, 2, 4464-4469.	3.5	49
10	Characterization of ZnS-layer-inserted bulk-heterojunction organic solar cells by ac impedance spectroscopy. Journal of Applied Physics, 2009, 105, 124513.	2.5	44
11	Effect of UV light irradiation on photovoltaic characteristics of inverted polymer solar cells containing solâ€“gel zinc oxide electron collection layer. Organic Electronics, 2013, 14, 649-656.	2.6	38
12	Flexible inverted polymer solar cells on polyethylene terephthalate substrate containing zinc oxide electron-collection-layer prepared by novel solâ€“gel method and low-temperature treatments. Organic Electronics, 2012, 13, 1136-1140.	2.6	35
13	Annealing effects on CsPbI₃-based planar heterojunction perovskite solar cells formed by vacuum deposition method. Japanese Journal of Applied Physics, 2017, 56, 04CS11.	1.5	35
14	Enhanced Photovoltaic Performance of Perovskite Solar Cells via Modification of Surface Characteristics Using a Fullerene Interlayer. Chemistry Letters, 2015, 44, 1735-1737.	1.3	28
15	Fullerene acceptor for improving open-circuit voltage in inverted organic photovoltaic devices without accompanying decrease in short-circuit current density. Applied Physics Letters, 2012, 100, 063303.	3.3	23
16	Factors contributing to degradation of organic photovoltaic cells. Organic Electronics, 2020, 76, 105448.	2.6	22
17	Mechanistic Investigation into the Light Soaking Effect Observed in Inverted Polymer Solar Cells Containing Chemical Bath Deposited Titanium Oxide. Journal of Physical Chemistry C, 2015, 119, 5274-5280.	3.1	21
18	Sexithiophene-Based Photovoltaic Cells with High Light Absorption Coefficient via Crystalline Polymorph Control. Journal of Physical Chemistry C, 2017, 121, 19699-19704.	3.1	16

#	Article	IF	Citations
19	Effect of the solvent used to prepare the photoactive layer on the performance of inverted bulk heterojunction polymer solar cells. Japanese Journal of Applied Physics, 2014, 53, 02BE06.	1.5	15
20	Identifying Molecular Orientation in a Bulk Heterojunction Film by Infrared Reflection Absorption Spectroscopy. ACS Omega, 2018, 3, 5678-5684.	3.5	12
21	Molecular orientation control of semiconducting molecules using a metal layer formed by wet processing. Organic Electronics, 2018, 63, 47-51.	2.6	11
22	Mechanism of Light-Soaking Effect in Inverted Polymer Solar Cells with Open-Circuit Voltage Increase. ACS Omega, 2017, 2, 1617-1624.	3.5	10
23	Element-saving preparation of an efficient electrode catalyst based on self-assembly of Pt colloid nanoparticles onto an ITO electrode. Green Chemistry, 2010, 12, 2150.	9.0	9
24	Synthesis of Thieno[3,4-b]thiophene-Based Donor Molecules with Phenyl Ester Pendants for Organic Solar Cells: Control of Photovoltaic Properties via Single Substituent Replacement. ChemistrySelect, 2016, 1, 703-709.	1.5	9
25	Factors affecting the photovoltaic behavior of inverted polymer solar cells using various indium tin oxide electrodes modified by amines with simple chemical structures. Thin Solid Films, 2015, 591, 49-54.	1.8	7
26	Electrocatalytic activity of electrodeposited cobalt oxide films to produce oxygen gas from water. Journal of Electroanalytical Chemistry, 2015, 740, 14-20.	3.8	7
27	High performance photoanodic catalyst prepared from an active organic photovoltaic cell â€“ high potential gain from visible light. Chemical Communications, 2019, 55, 12491-12494.	4.1	6
28	Flexible inverted polymer solar cells fabricated in air at low temperatures. Japanese Journal of Applied Physics, 2016, 55, 086501.	1.5	5
29	Thin film deposition method for ZnO nanosheets using low-temperature microwave-excited atmospheric pressure plasma jet. Thin Solid Films, 2019, 674, 58-63.	1.8	4
30	Influence of 4â€fluorophenyl pendants in thieno[3,4â€b]thiopheneâ€benzo[1,2â€b:4,5â€bâ€²]dithiopheneâ€based polymers on the performance of photovoltaics. Journal of Polymer Science Part A, 2015, 53, 1586-1593.	2.3	3
31	Nanopore analysis of blended organic semiconducting films to clarify photovoltaic performance. Organic Electronics, 2019, 66, 76-80.	2.6	3
32	Effects of optical interference and optimized crystallinity in organic photovoltaic cells with a low-bandgap small molecule fabricated by dry process. Japanese Journal of Applied Physics, 2019, 58, SBBG12.	1.5	0