Seigo Ito

List of Publications by Year in descending order

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80 papers	8,550 citations	147801 31 h-index	91884 69 g-index
84 all docs	84 docs citations	84 times ranked	9684 citing authors

#	Article	IF	Citations
1	Face-on oriented hydrophobic conjugated polymers as dopant-free hole-transport materials for efficient and stable perovskite solar cells with a fill factor approaching 85%. Journal of Materials Chemistry A, 2022, 10, 3409-3417.	10.3	19
2	Pencil graphite rods decorated with nickel and nickelâ€“iron as low-cost oxygen evolution reaction electrodes. Sustainable Energy and Fuels, 2021, 5, 3929-3938.	4.9	7
3	Contactless Determination of Optimal Chloride Concentration for Power Conversion Efficiency in CH3NH3Pb(Cl,I)3 Using Photoluminescence Spectroscopy. Photonics, 2021, 8, 412.	2.0	0
4	Light-induced performance increase of carbon-based perovskite solar module for 20-year stability. Cell Reports Physical Science, 2021, 2, 100648.	5.6	25
5	Control of Molecular Orientation of Spiro-OMeTAD on Substrates. ACS Applied Materials & Interfaces, 2020, 12, 50187-50191.	8.0	10
6	Function of Porous Carbon Electrode during the Fabrication of Multiporous-Layered-Electrode Perovskite Solar Cells. Photonics, 2020, 7, 133.	2.0	11
7	Water Electrolysis Using Thin Pt and RuO_x Catalysts Deposited by a Flame-Annealing Method on Pencil-Lead Graphite-Rod Electrodes. ACS Omega, 2020, 5, 6090-6099.	3.5	8
8	Development of aluminum paste with/without boron content for crystalline silicon solar cells. Materials Research Express, 2020, 7, 035502.	1.6	2
9	Activation of Weak Monochromic Photocurrents by White Light Irradiation for Accurate IPCE Measurements of Carbon-Based Multi-Porous-Layered-Electrode Perovskite Solar Cells. Electrochemistry, 2020, 88, 418-422.	1.4	9
10	A new photoreflectance signal possibly due to midgap interface states in buried F-doped SnO₂/TiO₂ junctions. Japanese Journal of Applied Physics, 2020, 59, SCCB23.	1.5	3
11	Thermal Degradation Analysis of Sealed Perovskite Solar Cell with Porous Carbon Electrode at 100â€‰Â°C for 7000â€…h. Energy Technology, 2019, 7, 245-252.	3.8	29
12	H₂O/O₂ Vapor Annealing Effect on Spin Coating Alumina Thin Films for Passivation of Silicon Solar Cells. International Journal of Photoenergy, 2019, 2019, 1-7.	2.5	1
13	Design of BCP buffer layer for inverted perovskite solar cells using ideal factor. APL Materials, 2019, 7, .	5.1	44
14	Water Electrolysis using Flame-Annealed Pencil-Graphite Rods. ACS Sustainable Chemistry and Engineering, 2019, 7, 5681-5689.	6.7	11
15	How to use Synchrotron Soft X-Ray for Analysis of Perovskite Solar Cell. , 2019, , .		0
16	Facile fabrication method of small-sized crystal silicon solar cells for ubiquitous applications and tandem device with perovskite solar cells. Materials Today Energy, 2018, 7, 190-198.	4.7	19
17	Fabrication of fully non-vacuum processed perovskite solar cells using an inorganic CuSCN hole-transporting material and carbon-back contact. Sustainable Energy and Fuels, 2018, 2, 2778-2787.	4.9	27
18	Effect of Silicon Surface for Perovskite/Silicon Tandem Solar Cells: Flat or Textured?. ACS Applied Materials & Interfaces, 2018, 10, 35016-35024.	8.0	40

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19	Influence of transparent conductive oxide layer on the inverted perovskite solar cell using PEDOT: PSS for hole transport layer. Materials Research Bulletin, 2018, 106, 433-438.	5.2	20
20	Enhancement of the hole conducting effect of NiO by a N₂blow drying method in printable perovskite solar cells with low-temperature carbon as the counter electrode. Nanoscale, 2017, 9, 5475-5482.	5.6	33
21	Biotemplated Synthesis of TiO₂-Coated Gold Nanowire for Perovskite Solar Cells. ACS Omega, 2017, 2, 5478-5485.	3.5	6
22	All-inorganic inverse perovskite solar cells using zinc oxide nanocolloids on spin coated perovskite layer. Nano Convergence, 2017, 4, 18.	12.1	17
23	Non-Vacuum Process for Production of Crystalline Silicon Solar Cells. , 2017, , .		0
24	Totally Vacuum-Free Processed Crystalline Silicon Solar Cells over 17.5% Conversion Efficiency. Photonics, 2017, 4, 42.	2.0	7
25	Sprayed and Spin-Coated Multilayer Antireflection Coating Films for Nonvacuum Processed Crystalline Silicon Solar Cells. International Journal of Photoenergy, 2017, 2017, 1-5.	2.5	20
26	Lead-free perovskite solar cells using Sb and Bi-based A3B2X9 and A3BX6 crystals with normal and inverse cell structures. Nano Convergence, 2017, 4, 26.	12.1	67
27	Effect of Electrochemically Deposited MgO Coating on Printable Perovskite Solar Cell Performance. Coatings, 2017, 7, 36.	2.6	11
28	Non-Vacuum Processed Polymer Composite Antireflection Coating Films for Silicon Solar Cells. Energies, 2016, 9, 633.	3.1	10
29	Light stability tests of CH₃NH₃PbI₃ perovskite solar cells using porous carbon counter electrodes. Physical Chemistry Chemical Physics, 2016, 18, 27102-27108.	2.8	39
30	Effects of TiO2 Properties on Performance of CH3NH3PbI3 Perovskite Photovoltaic Cells. MRS Advances, 2016, 1, 3185-3190.	0.9	4
31	Research Update: Overview of progress about efficiency and stability on perovskite solar cells. APL Materials, 2016, 4, .	5.1	27
32	Perovskite/p-type crystal silicon tandem solar cells. , 2016, , .		1
33	Inorganic Hole-Transporting Materials for Perovskite Solar Cell. , 2016, , 343-366.		2
34	Al₂O₃/TiO₂ double layer antiâ€reflection coating film for crystalline silicon solar cells formed by spray pyrolysis. Energy Science and Engineering, 2016, 4, 269-276.	4.0	36
35	Characteristics of Perovskite Solar Cells under Low-Illuminance Conditions. Journal of Physical Chemistry C, 2016, 120, 18986-18990.	3.1	43
36	100â€‰Â°C Thermal Stability of Printable Perovskite Solar Cells Using Porous Carbon Counter Electrodes. ChemSusChem, 2016, 9, 2604-2608.	6.8	103

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37	Analysis of Sputtering Damage on Iâ€“V Curves for Perovskite Solar Cells and Simulation with Reversed Diode Model. Journal of Physical Chemistry C, 2016, 120, 28441-28447.	3.1	61
38	Interface Optoelectronics Engineering for Mechanically Stacked Tandem Solar Cells Based on Perovskite and Silicon. ACS Applied Materials & Interfaces, 2016, 8, 33553-33561.	8.0	36
39	Effects of Bulky Substituents of Pushâ€“Pull Porphyrins on Photovoltaic Properties of Dye-Sensitized Solar Cells. ACS Applied Materials & Interfaces, 2016, 8, 15379-15390.	8.0	61
40	Research into Perovskite Solar Cells and their Stability. Journal of the Japan Society of Colour Material, 2016, 89, 306-309.	0.1	0
41	Substrate-preheating Effects on PbI2 Spin Coating for Perovskite Solar Cells via Sequential Deposition. Chemistry Letters, 2015, 44, 849-851.	1.3	21
42	Boosting of the Performance of Perovskite Solar Cells through Systematic Introduction of Reduced Graphene Oxide in TiO2 Layers. Chemistry Letters, 2015, 44, 1410-1412.	1.3	39
43	Pushâ€“Pull Bacteriochlorin: Panchromatic Sensitizer for Dye-sensitized Solar Cell. Chemistry Letters, 2015, 44, 1395-1397.	1.3	6
44	Tropolone as a Highâ€Performance Robust Anchoring Group for Dyeâ€Sensitized Solar Cells. Angewandte Chemie - International Edition, 2015, 54, 9052-9056.	13.8	99
45	Material Exchange Property of Organo Lead Halide Perovskite with Hole-Transporting Materials. Photonics, 2015, 2, 1043-1053.	2.0	19
46	Water Soluble Aluminum Paste Using Polyvinyl Alcohol for Silicon Solar Cells. International Journal of Photoenergy, 2015, 2015, 1-6.	2.5	6
47	Lead-Halide Perovskite Solar Cells by CH₃NH₃I Dripping on PbI₂â€“CH₃NH₃Iâ€“DMSO Precursor Layer for Planar and Porous Structures Using CuSCN Hole-Transporting Material. Journal of Physical Chemistry Letters, 2015, 6, 881-886.	4.6	78
48	Effects of Porosity and Amount of Surface Hydroxyl Groups of a Porous TiO₂ Layer on the Performance of a CH₃NH₃PbI₃ Perovskite Photovoltaic Cell. Journal of Physical Chemistry C, 2015, 119, 22304-22309.	3.1	18
49	Polymer-Assisted Construction of Mesoporous TiO₂ Layers for Improving Perovskite Solar Cell Performance. Journal of Physical Chemistry C, 2015, 119, 22847-22854.	3.1	32
50	Printable solar cells. Wiley Interdisciplinary Reviews: Energy and Environment, 2015, 4, 51-73.	4.1	10
51	Electrochemical Deposition of Te and Se on Flat TiO₂for Solar Cell Application. International Journal of Photoenergy, 2014, 2014, 1-5.	2.5	7
52	Carbonâ€Doubleâ€Bondâ€Free Printed Solar Cells from TiO₂/CH₃NH₃PbI₃/CuSCN/Au: Structural Control and Photoaging Effects. ChemPhysChem, 2014, 15, 1194-1200.	2.1	148
53	Inorganic hole conductor-based lead halide perovskite solar cells with 12.4% conversion efficiency. Nature Communications, 2014, 5, 3834.	12.8	769
54	EFFECTS OF TiO₂ PARTICLE SIZE ON THE PERFORMANCE OF DYE-SENSITIZED SOLAR CELLS USING IONIC LIQUID ELECTROLYTES. Nano, 2014, 09, 1440010.	1.0	9

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55	Double functions of porous TiO2 electrodes on CH3NH3PbI3 perovskite solar cells: Enhancement of perovskite crystal transformation and prohibition of short circuiting. APL Materials, 2014, 2, .	5.1	52
56	Effects of Surface Blocking Layer of Sb₂S₃ on Nanocrystalline TiO₂ for CH₃NH₃PbI₃ Perovskite Solar Cells. Journal of Physical Chemistry C, 2014, 118, 16995-17000.	3.1	512
57	Silica-sol-based spin-coating barrier layer against phosphorous diffusion for crystalline silicon solar cells. Nanoscale Research Letters, 2014, 9, 659.	5.7	6
58	3-D solar cells by electrochemical-deposited Se layer as extremely-thin absorber and hole conducting layer on nanocrystalline TiO2 electrode. Nanoscale Research Letters, 2013, 8, 8.	5.7	33
59	The Effect of Annealing Temperature and KCN Etching on the Photovoltaic Properties of Cu(In,Ga)(S,Se)₂Solar Cells Using Nanoparticles. International Journal of Photoenergy, 2013, 2013, 1-7.	2.5	8
60	CuInS2 Superstrate Solar Cells with ZnO Compact Layer Fabricated by Totally Non-vacuum Methods. Journal of Advanced Oxidation Technologies, 2013, 16, .	0.5	0
61	Fabrication of Monolithic Dye-Sensitized Solar Cell Using Ionic Liquid Electrolyte. International Journal of Photoenergy, 2012, 2012, 1-6.	2.5	17
62	Segregation of Cu-In-S Elements in the Spray-Pyrolysis-Deposited Layer of CIS Solar Cells. Advances in Materials Science and Engineering, 2012, 2012, 1-6.	1.8	7
63	TiO₂ Surface Treatment Effects by Mg²⁺, Ba²⁺, and Al³⁺ on Sb₂S₃ Extremely Thin Absorber Solar Cells. Journal of Physical Chemistry C, 2012, 116, 13465-13471.	3.1	103
64	Porous carbon layers for counter electrodes in dye-sensitized solar cells: Recent advances and a new screen-printing method. Pure and Applied Chemistry, 2011, 83, 2089-2106.	1.9	20
65	Inside Cover: Bisquinoxaline-Fused Porphyrins for Dye-Sensitized Solar Cells (ChemSusChem 6/2011). ChemSusChem, 2011, 4, 670-670.	6.8	0
66	Influence of Titania Dispersivity on the Conversion Efficiency of Dye-Sensitized Solar Cells. International Journal of Photoenergy, 2011, 2011, 1-7.	2.5	2
67	Fabrication of dye-sensitized solar cells using natural dye for food pigment: Monascus yellow. Energy and Environmental Science, 2010, 3, 905.	30.8	67
68	Nanostructured materials for efficient solar energy conversion. , 2010, , .		4
69	Fabrication of thin film dye sensitized solar cells with solar to electric power conversion efficiency over 10%. Thin Solid Films, 2008, 516, 4613-4619.	1.8	1,702
70	Bifacial dye-sensitized solar cells based on an ionic liquid electrolyte. Nature Photonics, 2008, 2, 693-698.	31.4	279
71	High-conversion-efficiency organic dye-sensitized solar cells with a novel indoline dye. Chemical Communications, 2008, , 5194.	4.1	732
72	Fabrication of screen-printing pastes from TiO2 powders for dye-sensitised solar cells. Progress in Photovoltaics: Research and Applications, 2007, 15, 603-612.	8.1	938

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73	High Molar Extinction Coefficient Heteroleptic Ruthenium Complexes for Thin Film Dye-Sensitized Solar Cells. Journal of the American Chemical Society, 2006, 128, 4146-4154.	13.7	538
74	Stable Mesoscopic Dye-Sensitized Solar Cells Based on Tetracyanoborate Ionic Liquid Electrolyte. Journal of the American Chemical Society, 2006, 128, 7732-7733.	13.7	441
75	Highly Efficient Dye-Sensitized Solar Cells Based on Carbon Black Counter Electrodes. Journal of the Electrochemical Society, 2006, 153, A2255.	2.9	824
76	Calibration of solar simulator for evaluation of dye-sensitized solar cells. Solar Energy Materials and Solar Cells, 2004, 82, 421-429.	6.2	79
77	Dye-Sensitized Photocells with Meso-Macroporous TiO2Film Electrodes. Bulletin of the Chemical Society of Japan, 2000, 73, 2609-2614.	3.2	35
78	Fabrication and Characterization of Meso-Macroporous Anatase TiO2Films. Bulletin of the Chemical Society of Japan, 2000, 73, 1933-1938.	3.2	20
79	Studies of Tandem Solar Cells and Stability Issue of Perovskite Solar Cells. , 0, , .		0
80	Studies of Tandem Solar Cells and Stability Issue of Perovskite Solar Cells. , 0, , .		0