

# Takurou N Murakami

## List of Publications by Year in descending order

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69  
papers

15,036  
citations

172386

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110317

64  
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70  
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70  
docs citations

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times ranked

17297  
citing authors

#	ARTICLE	IF	CITATIONS
1	Germanium ion doping of CsPbI <sub>3</sub> to obtain inorganic perovskite solar cells with low temperature processing. Japanese Journal of Applied Physics, 2022, 61, 020904.	0.8	5
2	Highly Efficient Dopant-Free Cyano-Substituted Spiro-Type Hole-Transporting Materials for Perovskite Solar Cells. ACS Applied Energy Materials, 2022, 5, 6633-6641.	2.5	8
3	<i>In Situ</i> Grown Nanocrystalline Si Recombination Junction Layers for Efficient Perovskite/Si Monolithic Tandem Solar Cells: Toward a Simpler Multijunction Architecture. ACS Applied Materials & Interfaces, 2022, 14, 33505-33514.	4.0	6
4	A Sodium Chloride Modification of SnO <sub>2</sub> Electron Transport Layers to Enhance the Performance of Perovskite Solar Cells. ACS Omega, 2021, 6, 17880-17889.	1.6	29
5	Hot-injection and ultrasonic irradiation syntheses of Cs <sub>2</sub> SnI <sub>6</sub> quantum dot using Sn long-chain amino-complex. Journal of Nanoparticle Research, 2020, 22, 1.	0.8	5
6	Strain Relaxation and Light Management in Tin-Lead Perovskite Solar Cells to Achieve High Efficiencies. ACS Energy Letters, 2019, 4, 1991-1998.	8.8	114
7	Development of Next-Generation Organic-Based Solar Cells: Studies on Dye-Sensitized and Perovskite Solar Cells. Advanced Energy Materials, 2019, 9, 1802967.	10.2	36
8	Highly Efficient 17.6% Tin-Lead Mixed Perovskite Solar Cells Realized through Spike Structure. Nano Letters, 2018, 18, 3600-3607.	4.5	114
9	Organic-Inorganic Hybrid Perovskites. Springer Series in Optical Sciences, 2018, , 471-493.	0.5	1
10	Transparent Conductive Oxides. Springer Series in Optical Sciences, 2018, , 495-541.	0.5	1
11	Organic Semiconductors. Springer Series in Optical Sciences, 2018, , 427-469.	0.5	1
12	CH <sub>3</sub> NH <sub>3</sub> I Post-treatment of Organometal Halide Perovskite Crystals for Photovoltaic Performance Enhancement. Chemistry Letters, 2018, 47, 1399-1401.	0.7	7
13	Ultra-thin Cadmium Sulfide Electron-transporting Layer for Planar Perovskite Solar Cell. Chemistry Letters, 2018, 47, 1350-1353.	0.7	3
14	Effect of aromatic nitrogen heterocycle treatment on the performance of perovskite solar cells. Japanese Journal of Applied Physics, 2018, 57, 08RE08.	0.8	3
15	Investigation of Interfacial Charge Transfer in Solution Processed Cs <sub>2</sub> SnI <sub>6</sub> Thin Films. Journal of Physical Chemistry C, 2017, 121, 13092-13100.	1.5	66
16	Adjustment of Conduction Band Edge of Compact TiO <sub>2</sub> Layer in Perovskite Solar Cells Through TiCl <sub>4</sub> Treatment. ACS Applied Materials & Interfaces, 2017, 9, 36708-36714.	4.0	35
17	Hysteresis-free perovskite solar cells made of potassium-doped organometal halide perovskite. Scientific Reports, 2017, 7, 12183.	1.6	229
18	Novel Cobalt Complexes as a Dopant for Hole-transporting Material in Perovskite Solar Cells. Electrochemistry, 2017, 85, 226-230.	0.6	11

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19	Solution-processed tBu <sub>4</sub> -ZnPc:C61bulk heterojunction organic photovoltaic cells. Japanese Journal of Applied Physics, 2016, 55, 032301.	0.8	3
20	Optical Transitions in Hybrid Perovskite Solar Cells: Ellipsometry, Density Functional Theory, and Quantum Efficiency Analyses for $\text{CH}_3\text{NH}_3\text{PbI}_3$ . Physical Review Applied, 2016, 5, .	1.5	322
21	Synthesis of Oligo(thienylene-vinylene) by Regiocontrolled Deprotonative Cross-Coupling. Organic Letters, 2016, 18, 650-653.	2.4	7
22	An Alkyloxyphenyl Group as a Sterically Hindered Substituent on a Triphenylamine Donor Dye for Effective Recombination Inhibition in Dye-Sensitized Solar Cells. Langmuir, 2016, 32, 1178-1183.	1.6	22
23	Influence of the non-conjugated 5-position substituent of 1,3,5-triaryl-2-pyrazoline-based photosensitizers on the photophysical properties and performance of a dye-sensitized solar cell. RSC Advances, 2016, 6, 13964-13970.	1.7	21
24	Effect of Tween 20 Concentration on Macropore Formation in Spherical Diopside Particles. Journal of the Japan Society of Colour Material, 2015, 88, 2-7.	0.0	0
25	Modulation of Electron Injection Dynamics of Ru-Based Dye/TiO <sub>2</sub> System in the Presence of Three Different Organic Solvents: Role of Solvent Dipole Moment and Donor Number. ChemPhysChem, 2015, 16, 1657-1662.	1.0	7
26	Initial photooxidation mechanism leading to reactive radical formation of polythiophene derivatives. Polymer Journal, 2015, 47, 26-30.	1.3	23
27	Crystallization Dynamics of Organolead Halide Perovskite by Real-Time X-ray Diffraction. Nano Letters, 2015, 15, 5630-5634.	4.5	77
28	Near-infrared (NIR) imaging analysis of polylactic acid (PLA) nanocomposite by multiple-perturbation two-dimensional (2D) correlation spectroscopy. Journal of Molecular Structure, 2014, 1069, 171-175.	1.8	15
29	EFFECTS OF TiO <sub>2</sub> PARTICLE SIZE ON THE PERFORMANCE OF DYE-SENSITIZED SOLAR CELLS USING IONIC LIQUID ELECTROLYTES. Nano, 2014, 09, 1440010.	0.5	9
30	Structural Effect of Donor in Organic Dye on Recombination in Dye-Sensitized Solar Cells with Cobalt Complex Electrolyte. Langmuir, 2014, 30, 2274-2279.	1.6	44
31	Crystalline Si photovoltaic modules based on TiO <sub>2</sub> -coated cover glass against potential-induced degradation. RSC Advances, 2014, 4, 44291-44295.	1.7	57
32	Crown Ether-Substituted Carbazole Dye for Dye-Sensitized Solar Cells: Controlling the Local Ion Concentration at the TiO <sub>2</sub> /Dye/Electrolyte Interface. Journal of Physical Chemistry C, 2014, 118, 16749-16759.	1.5	21
33	Dye Aggregation Effect on Interfacial Electron-Transfer Dynamics in Zinc Phthalocyanine-Sensitized Solar Cells. Journal of Physical Chemistry C, 2014, 118, 17205-17212.	1.5	70
34	Carbazole dye with phosphonic acid anchoring groups for long-term heat stability of dye-sensitized solar cells. Electrochimica Acta, 2014, 131, 174-183.	2.6	34
35	Improvement of TiO <sub>2</sub> /Dye/Electrolyte Interface Conditions by Positional Change of Alkyl Chains in Modified Panchromatic Ru Complex Dyes. Chemistry - A European Journal, 2013, 19, 1028-1034.	1.7	37
36	Recombination inhibitive structure of organic dyes for cobalt complex redox electrolytes in dye-sensitized solar cells. Journal of Materials Chemistry A, 2013, 1, 792-798.	5.2	40

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37	Efficiency Enhancement of ZnO-Based Dye-Sensitized Solar Cells by Low-Temperature TiCl <sub>4</sub> Treatment and Dye Optimization. <i>Journal of Physical Chemistry C</i> , 2013, 117, 10949-10956.	1.5	80
38	An Increase in Energy Conversion Efficiency by Decreasing Cobalt Redox Electrolyte Diffusion Resistance in Dye-sensitized Solar Cells. <i>Chemistry Letters</i> , 2013, 42, 453-454.	0.7	10
39	Optimum Particle Size of ZnO for Dye-sensitized Solar Cells. <i>Chemistry Letters</i> , 2013, 42, 810-812.	0.7	6
40	Unraveling the Function of an MgO Interlayer in Both Electrolyte and Solid-State SnO <sub>2</sub> -Based Dye-Sensitized Solar Cells. <i>Journal of Physical Chemistry C</i> , 2012, 116, 22840-22846.	1.5	57
41	Electron Injection Efficiency in Ru-Dye Sensitized TiO <sub>2</sub> in the Presence of Room Temperature Ionic Liquid Solvents Probed by Femtosecond Transient Absorption Spectroscopy: Effect of Varying Anions. <i>Journal of Physical Chemistry C</i> , 2012, 116, 20213-20219.	1.5	21
42	Efficient Hybrid Solar Cells Based on Meso-Superstructured Organometal Halide Perovskites. <i>Science</i> , 2012, 338, 643-647.	6.0	9,249
43	Synthesis and photo-electrochemical properties of novel thienopyrazine and quinoxaline derivatives, and their dye-sensitized solar cell performance. <i>Organic Electronics</i> , 2012, 13, 3097-3101.	1.4	24
44	Effect of TiCl <sub>4</sub> Treatment on Porous ZnO Photoelectrodes for Dye-sensitized Solar Cells. <i>Chemistry Letters</i> , 2011, 40, 162-164.	0.7	11
45	Kinetic study of Nafion degradation by Fenton reaction. <i>Journal of Power Sources</i> , 2011, 196, 2615-2620.	4.0	52
46	Two-Dimensional Raman Correlation Analysis of Diseased Esophagus in a Rat. <i>Applied Physics Express</i> , 2010, 3, 077001.	1.1	2
47	色調特性の解析と評価. <i>Journal of the Japan Society of Colour Materials</i> , 2009, 82, 357-366.		
48	Fabrication of thin film dye sensitized solar cells with solar to electric power conversion efficiency over 10%. <i>Thin Solid Films</i> , 2008, 516, 4613-4619.	0.8	1,702
49	Counter electrodes for DSC: Application of functional materials as catalysts. <i>Inorganica Chimica Acta</i> , 2008, 361, 572-580.	1.2	561
50	Effect of surface modification of titanium substrate by anodic oxidation on hydrothermally synthesized PZT poly-crystalline film. , 2008, , .		1
51	Porous Films from TiO <sub>2</sub> (Anatase) with Bimodal Morphology. <i>Electrochemical and Solid-State Letters</i> , 2007, 10, A85.	2.2	12
52	Light Energy Conversion and Storage with Soft Carbonaceous Materials that Solidify Mesoscopic Electrochemical Interfaces. <i>Chemistry Letters</i> , 2007, 36, 480-487.	0.7	33
53	Highly Efficient Dye-Sensitized Solar Cells Based on Carbon Black Counter Electrodes. <i>Journal of the Electrochemical Society</i> , 2006, 153, A2255.	1.3	824
54	Immobilization and enzymatic activity of glucose oxidase on polystyrene surface modified with ozone aeration and UV irradiation in distilled water and/or aqueous ammonia solution. <i>Colloids and Surfaces B: Biointerfaces</i> , 2006, 48, 67-71.	2.5	19

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55	Modification of PS films by combined treatment of ozone aeration and UV irradiation in aqueous ammonia solution for the introduction of amine and amide groups on their surface. <i>Applied Surface Science</i> , 2005, 249, 425-432.	3.1	30
56	Response to "Comment on "The photocapacitor: An efficient self-charging capacitor for direct storage of solar energy" [Appl. Phys. Lett. 86, 196101 (2005)]. <i>Applied Physics Letters</i> , 2005, 86, 196102.	1.5	8
57	A high-voltage dye-sensitized photocapacitor of a three-electrode system. <i>Chemical Communications</i> , 2005, , 3346.	2.2	148
58	Fabrication and Efficiency Enhancement of Water-based Dye-Sensitized Solar Cells by Interfacial Activation of TiO <sub>2</sub> Mesopores. <i>Electrochemistry</i> , 2004, 72, 310-316.	0.6	24
59	Rapid dissociation of merocyanine dye aggregates by reduced pressure in mixed Langmuir-Blodgett films. <i>Journal of Applied Physics</i> , 2004, 96, 5528-5533.	1.1	10
60	Fabrication of dye-sensitized plastic film electrodes for flexible solar cells based on electrophoretic deposition techniques. , 2004, 5215, 219.		5
61	Low temperature preparation of mesoporous TiO <sub>2</sub> films for efficient dye-sensitized photoelectrode by chemical vapor deposition combined with UV light irradiation. <i>Journal of Photochemistry and Photobiology A: Chemistry</i> , 2004, 164, 187-191.	2.0	149
62	Modification of optical characteristics in langmuir-blodgett films of merocyanine dye by reduced pressure treatment. <i>Molecular Crystals and Liquid Crystals</i> , 2004, 425, 265-271.	0.4	0
63	The photocapacitor: An efficient self-charging capacitor for direct storage of solar energy. <i>Applied Physics Letters</i> , 2004, 85, 3932-3934.	1.5	218
64	Preparation of Porous Diopside Microspheres from Spherical Silica Gels Impregnated with Ca(NO <sub>3</sub> ) <sub>2</sub> and MgCl <sub>2</sub> . <i>Journal of the Ceramic Society of Japan</i> , 2004, 112, 133-137.	1.3	3
65	Surface modification of polystyrene and poly(methyl methacrylate) by active oxygen treatment. <i>Colloids and Surfaces B: Biointerfaces</i> , 2003, 29, 171-179.	2.5	72
66	UV Light-assisted Chemical Vapor Deposition of TiO <sub>2</sub> for Efficiency Development at Dye-sensitized Mesoporous Layers on Plastic Film Electrodes. <i>Chemistry Letters</i> , 2003, 32, 1076-1077.	0.7	62
67	Water-based Dye-sensitized Solar Cells: Interfacial Activation of TiO <sub>2</sub> Mesopores in Contact with Aqueous Electrolyte for Efficiency Development. <i>Chemistry Letters</i> , 2003, 32, 1154-1155.	0.7	37
68	Efficient Nonsintering Type Dye-sensitized Photocells Based on Electrophoretically Deposited TiO <sub>2</sub> Layers. <i>Chemistry Letters</i> , 2002, 31, 1250-1251.	0.7	110
69	Decomposition of Aromatic Compounds by Active Oxygen Generator. <i>Chemistry Letters</i> , 2000, 29, 1312-1313.	0.7	13