

# Masato M Maitani

## List of Publications by Year in descending order

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67  
papers

1,658  
citations

361045

20  
h-index

301761

39  
g-index

69  
all docs

69  
docs citations

69  
times ranked

2696  
citing authors

#	ARTICLE	IF	CITATIONS
1	Controlling the Schottky Barrier at the Pt/TiO <sub>2</sub> Interface by Intercalation of a Self-Assembled Monolayer with Oriented Dipole Moments. <i>Journal of Physical Chemistry C</i> , 2021, 125, 13984-13989.	1.5	7
2	Drastic Microwave Heating of Percolated Pt Metal Nanoparticles Supported on Al <sub>2</sub> O <sub>3</sub> Substrate. <i>Processes</i> , 2020, 8, 72.	1.3	8
3	Effects of energetics with {001} facet-dominant anatase TiO <sub>2</sub> scaffold on electron transport in CH <sub>3</sub> NH <sub>3</sub> PbI <sub>3</sub> perovskite solar cells. <i>Electrochimica Acta</i> , 2019, 300, 445-454.	2.6	16
4	Enhancement of Fixed-bed Flow Reactions under Microwave Irradiation by Local Heating at the Vicinal Contact Points of Catalyst Particles. <i>Scientific Reports</i> , 2019, 9, 222.	1.6	62
5	Remote Control of Electron Transfer Reaction by Microwave Irradiation: Kinetic Demonstration of Reduction of Bipyridine Derivatives on Surface of Nickel Particle. <i>Journal of Physical Chemistry Letters</i> , 2019, 10, 3390-3394.	2.1	12
6	Kinetics of Photoinduced Electron Transfer in Alternately Stacked Eu <sup>3+</sup> :LaNb <sub>2</sub> O <sub>7</sub> and W <sub>2</sub> O <sub>7</sub> Nanosheets As Demonstrated by f <sup>4</sup> Radiative Transition of Doped Eu <sup>3+</sup> . <i>Journal of Physical Chemistry C</i> , 2019, 123, 30029-30038.	1.5	0
7	Modulations of various alkali metal cations on organometal halide perovskites and their influence on photovoltaic performance. <i>Nano Energy</i> , 2018, 45, 184-192.	8.2	142
8	Dyes that Contain New Hydantoin Anchoring Groups for Dye-Sensitized Solar Cells. <i>Asian Journal of Organic Chemistry</i> , 2018, 7, 458-464.	1.3	12
9	Physical Insight to Microwave Special Effects: Nonequilibrium Local Heating and Acceleration of Electron Transfer. <i>Journal of the Japan Petroleum Institute</i> , 2018, 61, 98-105.	0.4	15
10	Construction of Highly Hierarchical Layered Structure Consisting of Titanate Nanosheets, Tungstate Nanosheets, Ru(bpy) <sub>3</sub> <sup>2+</sup> , and Pt(terpy) for Vectorial Photoinduced Z-Scheme Electron Transfer. <i>ACS Applied Materials &amp; Interfaces</i> , 2018, 10, 37150-37162.	4.0	12
11	Smelting Magnesium Metal using a Microwave Pidgeon Method. <i>Scientific Reports</i> , 2017, 7, 46512.	1.6	37
12	Hetero-epitaxial growth control of single-crystalline anatase TiO <sub>2</sub> nanosheets predominantly exposing the {001} facet on oriented crystalline substrates. <i>CrystEngComm</i> , 2017, 19, 4734-4741.	1.3	4
13	Microwave Effects on Co <sup>II</sup> Cocatalysts Deposited on $\pm$ -Fe <sub>2</sub> O <sub>3</sub> for Application to Photocatalytic Oxygen Evolution. <i>ACS Applied Materials &amp; Interfaces</i> , 2017, 9, 10349-10354.	4.0	36
14	Hysteresis-free perovskite solar cells made of potassium-doped organometal halide perovskite. <i>Scientific Reports</i> , 2017, 7, 12183.	1.6	229
15	Self-oriented TiO <sub>2</sub> nanosheets in films for enhancement of electron transport in nanoporous semiconductor networks. <i>Materials Chemistry Frontiers</i> , 2017, 1, 2094-2102.	3.2	6
16	Electron transport properties in dye-sensitized solar cells with {001} facet-dominant TiO <sub>2</sub> nanoparticles. <i>Physical Chemistry Chemical Physics</i> , 2017, 19, 22129-22140.	1.3	12
17	Crystalline orientation control using self-assembled TiO <sub>2</sub> nanosheet scaffold to improve CH <sub>3</sub> NH <sub>3</sub> PbI <sub>3</sub> perovskite solar cells. <i>Japanese Journal of Applied Physics</i> , 2017, 56, 08MC17.	0.8	6
18	Effects of Embedded Dipole Layers on Electrostatic Properties of Alkanethiolate Self-Assembled Monolayers. <i>Journal of Physical Chemistry C</i> , 2017, 121, 15815-15830.	1.5	45

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19	Electromagnetic and Heat-Transfer Simulation of the Catalytic Dehydrogenation of Ethylbenzene under Microwave Irradiation. <i>Industrial &amp; Engineering Chemistry Research</i> , 2017, 56, 7685-7692.	1.8	27
20	Microwave Application to Efficient Annealing Process of CH <sub>3</sub> NH <sub>3</sub> PbI <sub>3</sub> Perovskite Crystalline Films. <i>Electrochemistry</i> , 2017, 85, 236-240.	0.6	8
21	7. Chemical reactions on the interfaces of solids under microwaves. , 2017, , 113-126.		0
22	Effects of {001} Facet of Anatase TiO <sub>2</sub> Single-crystalline Nanosheets on Photoexcited Electron Transfer from Near-infrared Dye-sensitizer. <i>Chemistry Letters</i> , 2017, 46, 1624-1627.	0.7	2
23	Rapid Synthesis of Dye Dyes through a One-Pot Three-Component Suzuki-Miyaura Coupling and an Evaluation of their Photovoltaic Properties for Use in Dye-Sensitized Solar Cells. <i>Chemistry - A European Journal</i> , 2016, 22, 2507-2514.	1.7	17
24	Catalysis of polyoxometalates under microwave irradiation and their dielectric properties. , 2016, , .		0
25	In situ temperature measurements of reaction spaces under microwave irradiation using photoluminescent probes. <i>Physical Chemistry Chemical Physics</i> , 2016, 18, 13173-13179.	1.3	20
26	Specific electronic absorptions of alternate layered nanostructures of two metal oxides synthesized via a thiol-ene click reaction. <i>RSC Advances</i> , 2016, 6, 73830-73841.	1.7	7
27	Distance-depending Photoinduced Electron Transfer at Two-dimensional Interface in Alternate Stacked Structures of Tantalate Nanosheets and Tungstate Nanosheets. <i>Chemistry Letters</i> , 2016, 45, 1111-1113.	0.7	4
28	Injection-Locked Magnetron Using a Cross-Domain Analyzer. <i>IEEE Microwave and Wireless Components Letters</i> , 2016, 26, 966-968.	2.0	11
29	Enhancement of anodic current attributed to oxygen evolution on $\hat{\pm}$ -Fe <sub>2</sub> O <sub>3</sub> electrode by microwave oscillating electric field. <i>Scientific Reports</i> , 2016, 6, 35554.	1.6	8
30	Synthesis and Evaluation of Thiophene-Based Organic Dyes Containing a Rigid and Nonplanar Donor with Secondary Electron Donors for Use in Dye-Sensitized Solar Cells. <i>European Journal of Organic Chemistry</i> , 2016, 2016, 508-517.	1.2	15
31	Low-temperature annealing of mesoscopic TiO <sub>2</sub> films by interfacial microwave heating applied to efficiency improvement of dye-sensitized solar cells. <i>Solar Energy Materials and Solar Cells</i> , 2016, 147, 198-202.	3.0	21
32	Microwave sintering of Ag-nanoparticle thin films on a polyimide substrate. <i>AIP Advances</i> , 2015, 5, .	0.6	20
33	Catalytic reactions enhanced under microwave-induced local thermal non-equilibrium in a core-shell, carbon-filled zeolite@zeolite. <i>Journal of Catalysis</i> , 2015, 323, 1-9.	3.1	34
34	Microwave-enhanced photocatalysis on CdS quantum dots - Evidence of acceleration of photoinduced electron transfer. <i>Scientific Reports</i> , 2015, 5, 11308.	1.6	25
35	Rapid Synthesis of Thiophene-Based, Organic Dyes for Dye-Sensitized Solar Cells (DSSCs) by a One-Pot, Four-Component Coupling Approach. <i>Chemistry - A European Journal</i> , 2015, 21, 9742-9747.	1.7	29
36	Microwave assisted synthesis of high-surface area WO <sub>3</sub> particles decorated with mosaic patterns via hydrochloric acid treatment of Bi <sub>2</sub> WO <sub>9</sub> . <i>RSC Advances</i> , 2015, 5, 77839-77846.	1.7	8

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37	Electron Transfer from Excited [Ir(2-phenylpyridyl) <sub>3</sub> ] through a Coexisting Electron Relay in Zeolite. <i>European Journal of Inorganic Chemistry</i> , 2014, 2014, 1470-1476.	1.0	6
38	Visible-light-induced electron transfer between alternating stacked layers of tungstate and titanate mediated by excitation of intercalated dye molecules. <i>Physical Chemistry Chemical Physics</i> , 2014, 16, 872-875.	1.3	6
39	Influence of co-existing species on charge transfer in dye-sensitized nanocrystalline oxide semiconductors in aqueous suspension for H <sub>2</sub> evolution under visible light. <i>Applied Catalysis B: Environmental</i> , 2014, 147, 770-778.	10.8	19
40	Synthesis of EDOT-containing organic dyes via one-pot, four-component Suzuki-Miyaura coupling and the evaluation of their photovoltaic properties. <i>Tetrahedron</i> , 2014, 70, 8690-8695.	1.0	17
41	The pH-depending enhancement of electron transfer by {001} facet-dominating TiO <sub>2</sub> nanoparticles for photocatalytic H <sub>2</sub> evolution under visible irradiation. <i>Catalysis Science and Technology</i> , 2014, 4, 871.	2.1	9
42	Elucidating the Structure-Property Relationships of Donor-Acceptor Dyes for Dye-Sensitized Solar Cells (DSSCs) through Rapid Library Synthesis by a One-Pot Procedure. <i>Chemistry - A European Journal</i> , 2014, 20, 10685-10694.	1.7	48
43	Precise Control of Photoinduced Electron Transfer in Alternate Layered Nanostructures of Titanium Oxide-Tungsten Oxide. <i>Journal of Physical Chemistry C</i> , 2014, 118, 22968-22974.	1.5	12
44	Chemical Reaction under Highly Precise Microwave Irradiation. <i>Journal of Microwave Power and Electromagnetic Energy</i> , 2014, 48, 89-103.	0.4	7
45	Dye-sensitized Solar Cells Based on 1,3-Dithiol-2-ylidene Derivatives: Substituent and $\pi$ -Spacer Effects on the Efficiency. <i>Chemistry Letters</i> , 2014, 43, 296-298.	0.7	5
46	Collaborational effect of heterolytic layered configuration for enhancement of microwave heating. <i>Chemical Communications</i> , 2013, 49, 10841.	2.2	17
47	Influence of co-existing alcohol on charge transfer of H <sub>2</sub> evolution under visible light with dye-sensitized nanocrystalline TiO <sub>2</sub> . <i>Applied Catalysis B: Environmental</i> , 2013, 140-141, 406-411.	10.8	19
48	Facile synthesis of bimetallic Cu-Ag nanoparticles under microwave irradiation and their oxidation resistance. <i>Nanotechnology</i> , 2013, 24, 265602.	1.3	61
49	Rigidochromic Phosphorescence of [Ir(2-phenylpyridine) <sub>2</sub> (2,2'-bipyridine)] <sup>+</sup> in C <sub>16</sub> TMA: Layered Silicate and Its Förster Resonance Energy Transfer. <i>European Journal of Inorganic Chemistry</i> , 2013, 2013, 2324-2329.	1.0	13
50	Methanol decomposition reaction using Pd/C as solid catalyst under highly precise microwave irradiation. , 2012, , .		2
51	Local Thermal Nonequilibrium on Solid and Liquid Interface Generated in a Microwave Magnetic Field. <i>Chemistry Letters</i> , 2012, 41, 1409-1411.	0.7	9
52	Influence of Coexisting Electron Donor Species on Charge Transfer in Dye-Sensitized Nanocrystalline TiO <sub>2</sub> for H <sub>2</sub> Evolution under Visible Light. <i>Bulletin of the Chemical Society of Japan</i> , 2012, 85, 1268-1276.	2.0	6
53	Dye-sensitized H <sub>2</sub> Evolution over TiO <sub>2</sub> and SnO <sub>2</sub> Nanoparticles Depending on Electron Donors. <i>Chemistry Letters</i> , 2012, 41, 423-424.	0.7	7
54	Sequential Coupling Approach to the Synthesis of Nickel(II) Complexes with N-aryl-2-amino Phenolates. <i>ACS Combinatorial Science</i> , 2012, 14, 545-550.	3.8	17

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55	Alternate Layered Nanostructures of Metal Oxides by a Click Reaction. <i>Angewandte Chemie - International Edition</i> , 2012, 51, 5452-5455.	7.2	20
56	Enhancement of Photoexcited Charge Transfer by {001} Facet-Dominating TiO <sub>2</sub> Nanoparticles. <i>Journal of Physical Chemistry Letters</i> , 2011, 2, 2655-2659.	2.1	77
57	Quasi-gel-state ionic liquid electrolyte with alkyl-pyrazolium iodide for dye-sensitized solar cells. <i>Materials Science and Engineering B: Solid-State Materials for Advanced Technology</i> , 2011, 176, 996-1001.	1.7	19
58	Issues and Challenges in Vapor-Deposited Top Metal Contacts for Molecule-Based Electronic Devices. <i>Topics in Current Chemistry</i> , 2011, 312, 239-273.	4.0	11
59	Moth olfactory trichoid sensilla exhibit nanoscale-level heterogeneity in surface lipid properties. <i>Arthropod Structure and Development</i> , 2010, 39, 1-16.	0.8	26
60	High integrity metal/organic device interfaces via low temperature buffer layer assisted metal atom nucleation. <i>Applied Physics Letters</i> , 2010, 96, .	1.5	16
61	Crossed-Nanowire Molecular Junctions: A New Multispectroscopy Platform for Conduction~Structure Correlations. <i>Nano Letters</i> , 2010, 10, 2897-2902.	4.5	51
62	Study of SERS Chemical Enhancement Factors Using Buffer Layer Assisted Growth of Metal Nanoparticles on Self-Assembled Monolayers. <i>Journal of the American Chemical Society</i> , 2009, 131, 6310-6311.	6.6	62
63	Nascent Metal Atom Condensation in Self-Assembled Monolayer Matrices: Coverage-Driven Morphology Transitions from Buried Adlayers to Electrically Active Metal Atom Nanofilaments to Overlayer Clusters during Aluminum Atom Deposition on Alkanethiolate/Gold Monolayers. <i>Journal of the American Chemical Society</i> , 2009, 131, 8016-8029.	6.6	19
64	Direct In-junction Characterization of Molecular Switching Devices Based on Self-Assembled Monolayer Embedded in Nanowire Junction. , 2007, , .		0
65	In-Situ Inelastic Electron Tunneling Spectroscopy of Bistable Molecular Junction Devices. <i>Device Research Conference, IEEE Annual</i> , 2007, , .	0.0	0
66	Controlling Gold Atom Penetration through Alkanethiolate Self-Assembled Monolayers on Au{111} by Adjusting Terminal Group Intermolecular Interactions. <i>Journal of the American Chemical Society</i> , 2006, 128, 13710-13719.	6.6	60
67	Improved Solid-State Dye Solar Cells with Polypyrrole using a Carbon-Based Counter Electrode. <i>Chemistry Letters</i> , 2001, 30, 1054-1055.	0.7	97