Yuji Wada

List of Publications by Year
in descending order

111 papers	6,582 citations	134610 34 h-index	71088 80 g-index
116 all docs	116 docs citations	116 times ranked	7687 citing authors

#	Article	IF	Citations
1	Hydrothermal synthesis of nanosized anatase and rutile TiO2 using amorphous phase TiO2. Journal of Materials Chemistry, 2001, 11, 1694-1703.	6.7	519
2	Quasi-solid-state dye-sensitized solar cells using room temperature molten salts and a low molecular weight gelator. Chemical Communications, 2002, , 374-375.	2.2	472
3	Photocurrent-Determining Processes in Quasi-Solid-State Dye-Sensitized Solar Cells Using Ionic Gel Electrolytes. Journal of Physical Chemistry B, 2003, 107, 4374-4381.	1.2	433
4	Quasi-Solid-State Dye-Sensitized TiO2 Solar Cells:â€‰ Effective Charge Transport in Mesoporous Space Filled with Gel Electrolytes Containing Iodide and Iodine. Journal of Physical Chemistry B, 2001, 105, 12809-12815.	1.2	358
5	Dependence of TiO2Nanoparticle Preparation Methods and Annealing Temperature on the Efficiency of Dye-Sensitized Solar Cells. Journal of Physical Chemistry B, 2002, 106, 10004-10010.	1.2	333
6	Importance of binding states between photosensitizing molecules and the TiO2 surface for efficiency in a dye-sensitized solar cell. Journal of Electroanalytical Chemistry, 1995, 396, 27-34.	1.9	299
7	Luminescent Polymer Containing the Eu(III) Complex Having Fast Radiation Rate and High Emission Quantum Efficiency. Journal of Physical Chemistry A, 2003, 107, 1697-1702.	1.1	281
8	Stepped Light-Induced Transient Measurements of Photocurrent and Voltage in Dye-Sensitized Solar Cells:Â Application for Highly Viscous Electrolyte Systems. Langmuir, 2005, 21, 10803-10807.	1.6	250
9	Dye-Sensitized TiO2Solar Cells Using Imidazolium-Type Ionic Liquid Crystal Systems as Effective Electrolytesâ€. Journal of Physical Chemistry B, 2007, 111, 4763-4769.	1.2	211
10	Ionic liquid crystal as a hole transport layer of dye-sensitized solar cells. Chemical Communications, 2005, , 740.	2.2	199
11	Enhanced Emission of Deuterated Tris(hexafluoroacetylacetonato)neodymium(III) Complex in Solution by Suppression of Radiationless Transition via Vibrational Excitation. The Journal of Physical Chemistry, 1996, 100, 10201-10205.	2.9	185
12	Surface Characteristics of ZnS Nanocrystallites Relating to Their Photocatalysis for CO2Reduction1. Langmuir, 1998, 14, 5154-5159.	1.6	182
13	Photoreductive Dehalogenation of Halogenated Benzene Derivatives Using ZnS or CdS Nanocrystallites as Photocatalysts. Environmental Science & Technology, 2001, 35, 227-231.	4.6	181
14	Solid State Dye-Sensitized TiO2Solar Cell with Polypyrrole as Hole Transport Layer. Chemistry Letters, 1997, 26, 471-472.	0.7	161
15	Fabrication of solid-state dye-sensitized TiO2 solar cells combined with polypyrrole. Solar Energy Materials and Solar Cells, 1998, 55, 113-125.	3.0	157
16	Effects of Lithium Ion Density on Electron Transport in Nanoporous TiO2 Electrodes. Journal of Physical Chemistry B, 2001, 105, 9150-9152.	1.2	153
17	Effects of crystal structure, size, shape and surface structural differences on photo-induced electron transport in TiO2 mesoporous electrodes. Journal of Materials Chemistry, 2002, 12, 723-728.	6.7	134
18	Microwave-assisted size control of CdS nanocrystallites. Journal of Materials Chemistry, 2001, 11, 1936-1940.	6.7	131

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19	Fine Control of Redâ€“Greenâ€“Blue Photoluminescence in Zeolites Incorporated with Rare-Earth Ions and a Photosensitizer. Angewandte Chemie - International Edition, 2006, 45, 1925-1928.	7.2	124
20	Novel synthesis of phase-pure nano-particulate anatase and rutile TiO2 using TiCl4 aqueous solutions. Journal of Materials Chemistry, 2002, 12, 378-383.	6.7	122
21	In Situ Observation of Nonequilibrium Local Heating as an Origin of Special Effect of Microwave on Chemistry. Journal of Physical Chemistry C, 2010, 114, 8965-8970.	1.5	116
22	Observation of neodymium electroluminescence. Applied Physics Letters, 1999, 74, 3245-3247.	1.5	114
23	Poly(3,4-ethylenedioxythiophene) as a hole conductor in solid state dye sensitized solar cells. Synthetic Metals, 2002, 131, 185-187.	2.1	100
24	Electrochemical preparation of macroporous polypyrrole films with regular arrays of interconnected spherical voids. Chemical Communications, 2000, , 1613-1614.	2.2	83
25	Conductive and Transparent Multilayer Films for Low-Temperature-Sintered Mesoporous TiO2Electrodes of Dye-Sensitized Solar Cells. Chemistry of Materials, 2003, 15, 2824-2828.	3.2	83
26	Enhancement of Photoexcited Charge Transfer by {001} Facet-Dominating TiO2 Nanoparticles. Journal of Physical Chemistry Letters, 2011, 2, 2655-2659.	2.1	77
27	Enhancement of Fixed-bed Flow Reactions under Microwave Irradiation by Local Heating at the Vicinal Contact Points of Catalyst Particles. Scientific Reports, 2019, 9, 222.	1.6	62
28	Photosensitized luminescence of novel Î²-diketonato Nd(III) complexes in solution. Physical Chemistry Chemical Physics, 2000, 2, 2291-2296.	1.3	45
29	Spectroscopic study on strongly luminescent Nd(iii) exchanged zeolite: TMA+-containing FAU type zeolite as a suitable host for ship-in-bottle synthesis. Journal of Materials Chemistry, 2002, 12, 1748-1753.	6.7	41
30	Photocrosslinking reaction of vinyl-functional polyphenylsilsesquioxane sensitized with aromatic bisazide compounds. Journal of Polymer Science Part A, 2001, 39, 4196-4205.	2.5	37
31	Intrazeolite Nanostructure of Nd(III) Complex Giving Strong Near-Infrared Luminescence. Journal of Physical Chemistry B, 2003, 107, 11302-11306.	1.2	37
32	Smelting Magnesium Metal using a Microwave Pidgeon Method. Scientific Reports, 2017, 7, 46512.	1.6	37
33	Microwave Effects on Coâ€“Pi Cocatalysts Deposited on Î±-Fe₂O₃ for Application to Photocatalytic Oxygen Evolution. ACS Applied Materials & Interfaces, 2017, 9, 10349-10354.	4.0	36
34	Organization of supramolecular assembly of 9-mesityl-10-carboxymethylacridinium ion and fullerene clusters on TiO2 nanoparticles for light energy conversion. Journal of Materials Chemistry, 2005, 15, 372.	6.7	35
35	Catalytic reactions enhanced under microwave-induced local thermal non-equilibrium in a coreâ€“shell, carbon-filled zeolite@zeolite. Journal of Catalysis, 2015, 323, 1-9.	3.1	34
36	Rapid Synthesis of Thiopheneâ€Based, Organic Dyes for Dyeâ€Sensitized Solar Cells (DSSCs) by a Oneâ€Pot, Fourâ€Component Coupling Approach. Chemistry - A European Journal, 2015, 21, 9742-9747.	1.7	29

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37	Electromagnetic and Heat-Transfer Simulation of the Catalytic Dehydrogenation of Ethylbenzene under Microwave Irradiation. Industrial & Engineering Chemistry Research, 2017, 56, 7685-7692.	1.8	27
38	Ultra-fast pyrolysis of lignocellulose using highly tuned microwaves: synergistic effect of a cylindrical cavity resonator and a frequency-auto-tracking solid-state microwave generator. Green Chemistry, 2020, 22, 342-351.	4.6	26
39	Probing the temperature of supported platinum nanoparticles under microwave irradiation by in situ and operando XAFS. Communications Chemistry, 2020, 3, .	2.0	26
40	Microwave-enhanced photocatalysis on CdS quantum dots - Evidence of acceleration of photoinduced electron transfer. Scientific Reports, 2015, 5, 11308.	1.6	25
41	Low-temperature annealing of mesoscopic TiO 2 films by interfacial microwave heating applied to efficiency improvement of dye-sensitized solar cells. Solar Energy Materials and Solar Cells, 2016, 147, 198-202.	3.0	21
42	Kinetic analysis of microwave-enhanced cellulose dissolution in ionic solvents. Physical Chemistry Chemical Physics, 2020, 22, 1003-1010.	1.3	21
43	Microwave sintering of Ag-nanoparticle thin films on a polyimide substrate. AIP Advances, 2015, 5, .	0.6	20
44	In situ temperature measurements of reaction spaces under microwave irradiation using photoluminescent probes. Physical Chemistry Chemical Physics, 2016, 18, 13173-13179.	1.3	20
45	Quasi-gel-state ionic liquid electrolyte with alkyl-pyrazolium iodide for dye-sensitized solar cells. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2011, 176, 996-1001.	1.7	19
46	Influence of co-existing alcohol on charge transfer of H2 evolution under visible light with dye-sensitized nanocrystalline TiO2. Applied Catalysis B: Environmental, 2013, 140-141, 406-411.	10.8	19
47	Influence of co-existing species on charge transfer in dye-sensitized nanocrystalline oxide semiconductors in aqueous suspension for H2 evolution under visible light. Applied Catalysis B: Environmental, 2014, 147, 770-778.	10.8	19
48	Production of Bio Hydrofined Diesel, Jet Fuel, and Carbon Monoxide from Fatty Acids Using a Silicon Nanowire Array-Supported Rhodium Nanoparticle Catalyst under Microwave Conditions. ACS Catalysis, 2020, 10, 2148-2156.	5.5	18
49	Collaborational effect of heterolytic layered configuration for enhancement of microwave heating. Chemical Communications, 2013, 49, 10841.	2.2	17
50	Rapid Synthesis of Dâ€Aâ€²â€Ï€â€A Dyes through a Oneâ€Pot Threeâ€Component Suzukiâ€"Miyaura Coupling and an Evaluation of their Photovoltaic Properties for Use in Dyeâ€Sensitized Solar Cells. Chemistry - A European Journal, 2016, 22, 2507-2514.	1.7	17
51	Effects of energetics with {001} facet-dominant anatase TiO2 scaffold on electron transport in CH3NH3PbI3 perovskite solar cells. Electrochimica Acta, 2019, 300, 445-454.	2.6	16
52	Synthesis and Evaluation of Thiopheneâ€Based Organic Dyes ContainÂing a Rigid and Nonplanar Donor with Secondary Electron Donors for Use in Dyeâ€Sensitized Solar Cells. European Journal of Organic Chemistry, 2016, 2016, 508-517.	1.2	15
53	Physical Insight to Microwave Special Effects: Nonequilibrium Local Heating and Acceleration of Electron Transfer. Journal of the Japan Petroleum Institute, 2018, 61, 98-105.	0.4	15
54	Environmental Remediation Using Catalysis Driven Under Electromagnetic Irradiation. Catalysis Surveys From Asia, 2002, 5, 127-138.	1.2	13

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55	Rigidochromic Phosphorescence of [Ir(2â€phenylpyridine)₂(2,2â€²â€bipyridine)]⁺ in C16TMA⁺: Layered Silicate and Its FÃ¶rster Resonance Energy Transfer. European Journal of Inorganic Chemistry, 2013, 2013, 2324-2329.	1.0	13
56	Precise Control of Photoinduced Electron Transfer in Alternate Layered Nanostructures of Titanium Oxideâ€"Tungsten Oxide. Journal of Physical Chemistry C, 2014, 118, 22968-22974.	1.5	12
57	Electron transport properties in dye-sensitized solar cells with {001} facet-dominant TiO₂ nanoparticles. Physical Chemistry Chemical Physics, 2017, 19, 22129-22140.	1.3	12
58	Dâ€"Ï€â€"A Dyes that Contain New Hydantoin Anchoring Groups for Dyeâ€Sensitized Solar Cells. Asian Journal of Organic Chemistry, 2018, 7, 458-464.	1.3	12
59	Construction of Highly Hierarchical Layered Structure Consisting of Titanate Nanosheets, Tungstate Nanosheets, Ru(bpy)₃²⁺, and Pt(terpy) for Vectorial Photoinduced Z-Scheme Electron Transfer. ACS Applied Materials & Interfaces, 2018, 10, 37150-37162.	4.0	12
60	Remote Control of Electron Transfer Reaction by Microwave Irradiation: Kinetic Demonstration of Reduction of Bipyridine Derivatives on Surface of Nickel Particle. Journal of Physical Chemistry Letters, 2019, 10, 3390-3394.	2.1	12
61	Onium Salt Effects onp-Terphenyl-Sensitized Photoreduction of Water to Hydrogen. Journal of Physical Chemistry A, 1999, 103, 4874-4878.	1.1	11
62	Microwave-assisted solvent-free instantaneous Claisen rearrangement for synthesis of bis(3-allyl-4-hydroxyphenyl) sulfone. Green Chemistry, 2003, 5, 690.	4.6	11
63	Enhanced debromination of brominated flame retardant plastics under microwave irradiation. Green Chemistry, 2008, 10, 739.	4.6	11
64	Hole Accumulation at the Grain Boundary Enhances Water Oxidation at Î±-Fe₂O₃ Electrodes under a Microwave Electric Field. Journal of Physical Chemistry C, 2020, 124, 7749-7759.	1.5	10
65	Designing Local Microwave Heating of Metal Nanoparticles/Metal Oxide Substrate Composites. Journal of Physical Chemistry C, 2021, 125, 23720-23728.	1.5	10
66	Local Thermal Nonequilibrium on Solid and Liquid Interface Generated in a Microwave Magnetic Field. Chemistry Letters, 2012, 41, 1409-1411.	0.7	9
67	The pH-depending enhancement of electron transfer by {001} facet-dominating TiO2 nanoparticles for photocatalytic H2 evolution under visible irradiation. Catalysis Science and Technology, 2014, 4, 871.	2.1	9
68	Proton-Enhanced Dielectric Properties of Polyoxometalates in Water under Radio-Frequency Electromagnetic Waves. Materials, 2018, 11, 1202.	1.3	9
69	Preparation of nano-sized YAG:Eu3+ particles by a microwave-assisted polyol process and their luminescence properties. Research on Chemical Intermediates, 2006, 32, 331-339.	1.3	8
70	Preparation of luminescent nanosized NaEu(MoO4)2 incorporated in amorphous matrix originated from zeolite. Journal of Materials Science, 2007, 42, 5991-5998.	1.7	8
71	Luminescence of <i>ortho</i>â€Metalated Iridium Complexes Encapsulated in Zeolite Supercages by the Shipâ€inâ€aâ€Bottle Method. European Journal of Inorganic Chemistry, 2012, 2012, 3113-3120.	1.0	8
72	Microwave assisted synthesis of high-surface area WO₃ particles decorated with mosaic patterns via hydrochloric acid treatment of Bi₂W₂O₉. RSC Advances, 2015, 5, 77839-77846.	1.7	8

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73	Enhancement of anodic current attributed to oxygen evolution on Î±-Fe2O3 electrode by microwave oscillating electric field. Scientific Reports, 2016, 6, 35554.	1.6	8
74	Microwave Application to Efficient Annealing Process of CH₃NH₃PbI₃ Perovskite Crystalline Films. Electrochemistry, 2017, 85, 236-240.	0.6	8
75	Radio frequency alternating electromagnetic field enhanced tetraruthenium polyoxometalate electrocatalytic water oxidation. Chemical Communications, 2019, 55, 1032-1035.	2.2	8
76	Operando Raman Spectroscopy of the Microwave-Enhanced Catalytic Dehydration of 2-Propanol by WO3. Industrial & Engineering Chemistry Research, 2020, 59, 1781-1788.	1.8	8
77	Microwave Irradiation Process for Alâ€“Sc Alloy Production. Scientific Reports, 2020, 10, 2689.	1.6	8
78	Drastic Microwave Heating of Percolated Pt Metal Nanoparticles Supported on Al2O3 Substrate. Processes, 2020, 8, 72.	1.3	8
79	Determining the influence of microwave-induced thermal unevenness on vanadium oxide catalyst particles. Chemical Engineering Journal, 2022, 433, 133603.	6.6	8
80	Development of Bi-Luminophore Pressure-Sensitive Paint Systems. , 2007, , .		7
81	Dye-sensitized H2 Evolution over TiO2 and SnO2 Nanoparticles Depending on Electron Donors. Chemistry Letters, 2012, 41, 423-424.	0.7	7
82	Specific electronic absorptions of alternate layered nanostructures of two metal oxides synthesized via a thiolâ€“ene click reaction. RSC Advances, 2016, 6, 73830-73841.	1.7	7
83	Acceleration of Water Electrolysis by Accumulation of Microwave Energy at a Pt Disk Electrode. Chemistry Letters, 2017, 46, 1593-1596.	0.7	7
84	Influence of Coexisting Electron Donor Species on Charge Transfer in Dye-Sensitized Nanocrystalline TiO2 for H2 Evolution under Visible Light. Bulletin of the Chemical Society of Japan, 2012, 85, 1268-1276.	2.0	6
85	Electron Transfer from Excited [Ir(2-phenylpyridyl)3] through a Coexisting Electron Relay in Zeolite. European Journal of Inorganic Chemistry, 2014, 2014, 1470-1476.	1.0	6
86	Visible-light-induced electron transfer between alternating stacked layers of tungstate and titanate mediated by excitation of intercalated dye molecules. Physical Chemistry Chemical Physics, 2014, 16, 872-875.	1.3	6
87	Self-oriented TiO₂ nanosheets in films for enhancement of electron transport in nanoporous semiconductor networks. Materials Chemistry Frontiers, 2017, 1, 2094-2102.	3.2	6
88	Crystalline orientation control using self-assembled TiO₂ nanosheet scaffold to improve CH₃NH₃PbI₃ perovskite solar cells. Japanese Journal of Applied Physics, 2017, 56, 08MC17.	0.8	6
89	Real-Time Facile Detection of the WO₃ Catalyst Oxidation State under Microwaves Using a Resonance Frequency. ACS Omega, 2020, 5, 31957-31962.	1.6	6
90	A Facile Formation of Vanadium(0) by the Reduction of Vanadium Pentoxide Pelletized with Magnesium Oxide Enabled by Microwave Irradiation. ChemistrySelect, 2020, 5, 2949-2953.	0.7	5

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91	Distance-depending Photoinduced Electron Transfer at Two-dimensional Interface in Alternate Stacked Structures of Tantalate Nanosheets and Tungstate Nanosheets. Chemistry Letters, 2016, 45, 1111-1113.	0.7	4
92	Hetero-epitaxial growth control of single-crystalline anatase TiO₂ nanosheets predominantly exposing the {001} facet on oriented crystalline substrates. CrystEngComm, 2017, 19, 4734-4741.	1.3	4
93	Effect of Functional Groups in Organic Chlorides on Radical Reduction with Hydrostannane under Microwave Irradiation. Chemistry Letters, 2017, 46, 1116-1118.	0.7	4
94	Effect of Aspect Ratio on the Permittivity of Graphite Fiber in Microwave Heating. Materials, 2018, 11, 169.	1.3	4
95	Manipulation of the Magnetic Properties of Coâ€•and Feâ€Doped Layered Titanates by Alkyl Ammonium Intercalation. Advanced Materials Interfaces, 2016, 3, 1600509.	1.9	3
96	Reduction of metal oxides using thermogravimetry under microwave irradiation. AIP Advances, 2021, 11, .	0.6	3
97	Methanol decomposition reaction using Pd/C as solid catalyst under highly precise microwave irradiation. , 2012, , .		2
98	Smelting of Scandium by Microwave Irradiation. Materials, 2017, 10, 1138.	1.3	2
99	Effects of {001} Facet of Anatase TiO₂ Single-crystalline Nanosheets on Photoexcited Electron Transfer from Near-infrared Dye-sensitizer. Chemistry Letters, 2017, 46, 1624-1627.	0.7	2
100	High Efficiency Chemical Reactions Induced by Concentrated Microwave Heating Using GaN Amplifier Modules. Journal of the Japan Petroleum Institute, 2018, 61, 163-170.	0.4	2
101	Activation of chemical reactions on solid catalysts under microwave irradiation. , 2021, , 27-69.		1
102	Key Technologies for Next Generation Thin Film Silicon Solar Cells. Dye-sensitized Solar Cells for the Next Generation.. Hyomen Kagaku, 2000, 21, 288-293.	0.0	1
103	Microwave Boosting of Interfacial Tunneling Electron Transfer in a Quantum Dot-Sensitized Photoelectrode. Bulletin of the Chemical Society of Japan, 2022, 95, 288-295.	2.0	1
104	Interlayer-expanded MWW-type zeolite catalysts with carbon filler in expanded micropores for efficient microwave heating. Journal of Materials Chemistry A, 2022, 10, 14585-14593.	5.2	1
105	Study on metal refining process of Sc metal using by microwave irradiation. , 2016, , .		0
106	7. Chemical reactions on the interfaces of solids under microwaves. , 2017, , 113-126.		0
107	New Aspects Towards Application of Microwave Heating in Solid Systems. , 2018, , .		0
108	Kinetics of Photoinduced Electron Transfer in Alternately Stacked Eu³⁺:LaNb₂O₇^{â€“} and W₂O₇^{2â€“} Nanosheets As Demonstrated by fâ€“f Radiative Transition of Doped Eu³⁺. Journal of Physical Chemistry C, 2019, 123, 30029-30038.	1.5	0

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109	Microwave-assisted Pulverization of Perylene Pigment and Fabrication of Pigment-Sensitized Mesoporous TiO₂ Solar Cells. Electrochemistry, 2004, 72, 490-494.	0.6	0
110	Precise Structural Control of Magnetic Nanoparticles under Microwave Irradiation. Journal of the Society of Powder Technology, Japan, 2011, 48, 625-631.	0.0	0
111	Photocatalytic Reaction and Surface Photoreaction on Ultra-Fine Semiconductor Particles. Photocatalysis of Metal Sulfide Nanocrystallites in Organic Solvent. Quantum Box Photocatalysis.. Hyomen Kagaku, 1995, 16, 180-187.	0.0	0