Shuntaro Tsubaki

List of Publications by Year in Descending Order

72 papers	1,157 citations	19 h-index	31 g-index
77 ext. papers	1,372 ext. citations	5.7 avg, IF	4.51 L-index

#	Paper	IF	Citations
72	Determining the influence of microwave-induced thermal unevenness on vanadium oxide catalyst particles. *Chemical Engineering Journal*, **2021**, 433, 133603	14.7	1
71	Controlling the Schottky Barrier at the Pt/TiO2 Interface by Intercalation of a Self-Assembled Monolayer with Oriented Dipole Moments. *Journal of Physical Chemistry C*, **2021**, 125, 13984-13989	3.8	1
70	Reduction of metal oxides using thermogravimetry under microwave irradiation. *AIP Advances*, **2021**, 11, 065207	1.5	1
69	Activation of chemical reactions on solid catalysts under microwave irradiation **2021**, 27-69		
68	Hole Accumulation at the Grain Boundary Enhances Water Oxidation at □Fe2O3 Electrodes under a Microwave Electric Field. *Journal of Physical Chemistry C*, **2020**, 124, 7749-7759	3.8	4
67	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	1.8	3
66	Microwave Irradiation Process for Al-Sc Alloy Production. *Scientific Reports*, **2020**, 10, 2689	4.9	4
65	Drastic Microwave Heating of Percolated Pt Metal Nanoparticles Supported on Al2O3 Substrate. *Processes*, **2020**, 8, 72	2.9	4
64	Kinetic analysis of microwave-enhanced cellulose dissolution in ionic solvents. *Physical Chemistry Chemical Physics*, **2020**, 22, 1003-1010	3.6	14
63	Operando Raman Spectroscopy of the Microwave-Enhanced Catalytic Dehydration of 2-Propanol by WO3. *Industrial & Engineering Chemistry Research*, **2020**, 59, 1781-1788	3.9	6
62	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	13.1	9
61	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	10	18
60	Probing the temperature of supported platinum nanoparticles under microwave irradiation by in situ and operando XAFS. *Communications Chemistry*, **2020**, 3,	6.3	7
59	Real-Time Facile Detection of the WO Catalyst Oxidation State under Microwaves Using a Resonance Frequency. *ACS Omega*, **2020**, 5, 31957-31962	3.9	3
58	Insights into the Dielectric-Heating-Enhanced Regeneration of CO2-Rich Aqueous Amine Solutions. *ACS Sustainable Chemistry and Engineering*, **2020**, 8, 13593-13599	8.3	2
57	Fourfold daily growth rate in multicellular marine alga Ulva meridionalis. *Scientific Reports*, **2020**, 10, 12606	4.9	9
56	Probing rapid carbon fixation in fast-growing seaweed Ulva meridionalis using stable isotope C-labelling. *Scientific Reports*, **2020**, 10, 20399	4.9	5

55	Microwave-assisted solubilization of microalgae in high-temperature ethylene glycol. *Biomass and Bioenergy*, **2019**, 130, 105360	5.3	1
54	Radio frequency alternating electromagnetic field enhanced tetraruthenium polyoxometalate electrocatalytic water oxidation. *Chemical Communications*, **2019**, 55, 1032-1035	5.8	6
53	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	4.9	33
52	Fractionation of plant-cuticle-based bio-oils by microwave-assisted methanolysis combined with hydrothermal pretreatment and enzymatic hydrolysis. *Heliyon*, **2019**, 5, e01887	3.6	2
51	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	6.4	8
50	Raman monitoring of dielectric-heating-enhanced freeze-drying under different electromagnetic wave frequencies.. *RSC Advances*, **2019**, 9, 9001-9005	3.7	3
49	Proton-Enhanced Dielectric Properties of Polyoxometalates in Water under Radio-Frequency Electromagnetic Waves. *Materials*, **2018**, 11,	3.5	7
48	Reversible Mechanochromic Luminescence of a Heteroatom-Free Helically Chiral Hydrocarbon. *Chemistry Letters*, **2018**, 47, 1228-1231	1.7	2
47	Physical Insight to Microwave Special Effects: Nonequilibrium Local Heating and Acceleration of Electron Transfer. *Journal of the Japan Petroleum Institute*, **2018**, 61, 98-105	1	9
46	Effect of Aspect Ratio on the Permittivity of Graphite Fiber in Microwave Heating. *Materials*, **2018**, 11,	3.5	4
45	Microwave-Driven Biorefinery for Utilization of Food and Agricultural Waste Biomass **2018**, 393-408		6
44	Microwave-assisted hydrolysis of biomass over activated carbon supported polyoxometalates. *RSC Advances*, **2017**, 7, 12346-12350	3.7	10
43	Catalytic Hydrolysis of Polysaccharides Derived from Fast-Growing Green Macroalgae. *ChemCatChem*, **2017**, 9, 2638-2641	5.2	11
42	Smelting Magnesium Metal using a Microwave Pidgeon Method. *Scientific Reports*, **2017**, 7, 46512	4.9	23
41	Examination of species delimitation of ambiguous DNA-based Ulva (Ulvophyceae, Chlorophyta) clades by culturing and hybridisation. *Phycologia*, **2017**, 56, 517-532	2.7	12
40	Production and Conversion of Green Macroalgae (Ulva spp.) **2017**, 19-41		4
39	Acceleration of Water Electrolysis by Accumulation of Microwave Energy at a Pt Disk Electrode. *Chemistry Letters*, **2017**, 46, 1593-1596	1.7	6
38	Crystalline orientation control using self-assembled TiO2 nanosheet scaffold to improve CH3NH3PbI3 perovskite solar cells. *Japanese Journal of Applied Physics*, **2017**, 56, 08MC17	1.4	5

37	Electromagnetic and Heat-Transfer Simulation of the Catalytic Dehydrogenation of Ethylbenzene under Microwave Irradiation. *Industrial & Engineering Chemistry Research*, **2017**, 56, 7685-7692	3.9	20
36	Microwave-Assisted Water Extraction of Carbohydrates From Unutilized Biomass **2017**, 199-219		2
35	Microwave Application to Efficient Annealing Process of CH3NH3PbI3 Perovskite Crystalline Films. *Electrochemistry*, **2017**, 85, 236-240	1.2	5
34	7. Chemical reactions on the interfaces of solids under microwaves **2017**, 113-126		
33	Smelting of Scandium by Microwave Irradiation. *Materials*, **2017**, 10,	3.5	2
32	Is Selective Heating of the Sulfonic Acid Catalyst AC-SO3H by Microwave Radiation Crucial in the Acid Hydrolysis of Cellulose to Glucose in Aqueous Media?. *Catalysts*, **2017**, 7, 231	4	6
31	Microwave-Assisted Hydrothermal Processing of Seaweed Biomass **2017**, 443-460		2
30	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	1.7	4
29	Enhancement of anodic current attributed to oxygen evolution on □FeO electrode by microwave oscillating electric field. *Scientific Reports*, **2016**, 6, 35554	4.9	7
28	Microwave-assisted hydrothermal extraction of sulfated polysaccharides from Ulva spp. and Monostroma latissimum. *Food Chemistry*, **2016**, 210, 311-6	8.5	80
27	Effects of ionic conduction on hydrothermal hydrolysis of corn starch and crystalline cellulose induced by microwave irradiation. *Carbohydrate Polymers*, **2016**, 137, 594-599	10.3	16
26	Microwave-Induced Biomass Fractionation **2016**, 103-126		4
25	In situ temperature measurements of reaction spaces under microwave irradiation using photoluminescent probes. *Physical Chemistry Chemical Physics*, **2016**, 18, 13173-9	3.6	17
24	Effects of acidic functional groups on dielectric properties of sodium alginates and carrageenans in water. *Carbohydrate Polymers*, **2015**, 115, 78-87	10.3	19
23	Algal Biomass Conversion under Microwave Irradiation **2015**, 301-322		
22	Hydrolysis of green-tide forming Ulva spp. by microwave irradiation with polyoxometalate clusters. *Green Chemistry*, **2014**, 16, 2227	10	28
21	Functional group dependent dielectric properties of sulfated hydrocolloids extracted from green macroalgal biomass. *Carbohydrate Polymers*, **2014**, 107, 192-7	10.3	19
20	Cassava Pulp Hydrolysis under Microwave Irradiation with Oxalic Acid Catalyst for Ethanol Production. *Journal of Mathematical and Fundamental Sciences*, **2014**, 46, 125-139	1.7	12

19	Microwave-assisted hydrolysis of polysaccharides over polyoxometalate clusters. *Bioresource Technology*, **2013**, 144, 67-73	11	31
18	Compositional analysis of leaf cuticular membranes isolated from tea plants (Camellia sinensis L.). *Food Chemistry*, **2013**, 138, 286-90	8.5	14
17	Comparative decomposition kinetics of neutral monosaccharides by microwave and induction heating treatments. *Carbohydrate Research*, **2013**, 375, 1-4	2.9	19
16	Total fractionation of green tea residue by microwave-assisted alkaline pretreatment and enzymatic hydrolysis. *Bioresource Technology*, **2013**, 131, 485-91	11	24
15	Cuticular membrane of Fuyu persimmon fruit is strengthened by triterpenoid nano-fillers. *PLoS ONE*, **2013**, 8, e75275	3.7	42
14	Microwave-assisted hydrothermal hydrolysis of cellobiose and effects of additions of halide salts. *Bioresource Technology*, **2012**, 123, 703-6	11	44
13	Refinery of Biomass by Utilization of Specific Effects of Microwave Irradiation. *Procedia Chemistry*, **2012**, 4, 17-25		4
12	Microwave-assisted Hydrothermal Hydrolysis of Maltose with Addition of Microwave Absorbing Agents. *Procedia Chemistry*, **2012**, 4, 288-293		9
11	Growth-dependent chemical and mechanical properties of cuticular membranes from leaves of Sonneratia alba. *Plant, Cell and Environment*, **2012**, 35, 1201-10	8.4	22
10	Improvement of microwave-assisted hydrolysis of cassava pulp and tapioca flour by addition of activated carbon. *Carbohydrate Polymers*, **2012**, 87, 939-942	10.3	29
9	Mechanical properties of fruit-cuticular membranes isolated from 27 cultivars of Diospyros kaki Thunb.. *Food Chemistry*, **2012**, 132, 2135-2139	8.5	27
8	Application of Microwave Technology for Utilization of Recalcitrant Biomass **2011**,		11
7	A novel saccharification method of starch using microwave irradiation with addition of activated carbon. *Bioresource Technology*, **2011**, 102, 3985-8	11	28
6	Microwave-assisted autohydrolysis of Prunus mume stone for extraction of polysaccharides and phenolic compounds. *Journal of Food Science*, **2010**, 75, C152-9	3.4	42
5	Isolation of hesperidin from peels of thinned Citrus unshiu fruits by microwave-assisted extraction. *Food Chemistry*, **2010**, 123, 542-547	8.5	82
4	Microwave-assisted extraction of phenolic compounds from tea residues under autohydrolytic conditions. *Food Chemistry*, **2010**, 123, 1255-1258	8.5	67
3	Optimization of microwave-assisted extraction of carbohydrates from industrial waste of corn starch production using response surface methodology. *Bioresource Technology*, **2010**, 101, 7820-6	11	93
2	Microwave Heating for Solubilization of Polysaccharide and Polyphenol from Soybean Residue (Okara). *Food Science and Technology Research*, **2009**, 15, 307-314	0.8	18

1	Microwave heating of tea residue yields polysaccharides, polyphenols, and plant biopolyester. *Journal of Agricultural and Food Chemistry*, **2008**, 56, 11293-9	5.7	64