Tadafumi Adschiri

List of Publications by Year
in descending order

58 papers	5,237 citations	159585 30 h-index	155660 55 g-index
58 all docs	58 docs citations	58 times ranked	4129 citing authors

#	Article	IF	Citations
1	Dissolution and Hydrolysis of Cellulose in Subcritical and Supercritical Water. Industrial & Engineering Chemistry Research, 2000, 39, 2883-2890.	3.7	609
2	Glucose and Fructose Decomposition in Subcritical and Supercritical Water:Â Detailed Reaction Pathway, Mechanisms, and Kinetics. Industrial & Engineering Chemistry Research, 1999, 38, 2888-2895.	3.7	523
3	Rapid and Continuous Hydrothermal Crystallization of Metal Oxide Particles in Supercritical Water. Journal of the American Ceramic Society, 1992, 75, 1019-1022.	3.8	441
4	Hydrothermal Synthesis of Metal Oxide Fine Particles at Supercritical Conditions. Industrial & Engineering Chemistry Research, 2000, 39, 4901-4907.	3.7	391
5	Conversion of Lignin with Supercritical Waterâˆ'Phenol Mixtures. Energy & Fuels, 2003, 17, 922-928.	5.1	287
6	Green materials synthesis with supercritical water. Green Chemistry, 2011, 13, 1380.	9.0	267
7	Hydrothermal Synthesis of Metal Oxide Nanoparticles at Supercritical Conditions. Journal of Nanoparticle Research, 2001, 3, 227-235.	1.9	258
8	Extra-Low-Temperature Oxygen Storage Capacity of CeO₂Nanocrystals with Cubic Facets. Nano Letters, 2011, 11, 361-364.	9.1	222
9	Rapid and Continuous Hydrothermal Synthesis of Boehmite Particles in Subcritical and Supercritical Water. Journal of the American Ceramic Society, 1992, 75, 2615-2618.	3.8	200
10	Noncatalytic Conversion of Cellulose in Supercritical and Subcritical Water.. Journal of Chemical Engineering of Japan, 1993, 26, 676-680.	0.6	172
11	Rapid and selective retro-aldol condensation of glucose to glycolaldehyde in supercritical water. Green Chemistry, 2002, 4, 285-287.	9.0	170
12	Rapid and Selective Conversion of Glucose to Erythrose in Supercritical Water. Industrial & Engineering Chemistry Research, 1997, 36, 5063-5067.	3.7	125
13	Catalytic Hydrodesulfurization of Dibenzothiophene through Partial Oxidation and a Waterâˆ'Gas Shift Reaction in Supercritical Water. Industrial & Engineering Chemistry Research, 1998, 37, 2634-2638.	3.7	121
14	Degradation Kinetics of Dihydroxyacetone and Glyceraldehyde in Subcritical and Supercritical Water. Industrial & Engineering Chemistry Research, 1997, 36, 2025-2030.	3.7	106
15	Solubility of Lead(II) Oxide and Copper(II) Oxide in Subcritical and Supercritical Water. Journal of Chemical & Engineering Data, 1999, 44, 1422-1426.	1.9	97
16	Supercritical Hydrothermal Synthesis of Organicâ€"Inorganic Hybrid Nanoparticles. Chemistry Letters, 2007, 36, 1188-1193.	1.3	94
17	Ruthenium/Graphene-like Layered Carbon Composite as an Efficient Hydrogen Evolution Reaction Electrocatalyst. ACS Applied Materials & Interfaces, 2016, 8, 35132-35137.	8.0	92
18	Hydrogenation of Hydrocarbons through Partial Oxidation in Supercritical Water. Industrial & Engineering Chemistry Research, 2000, 39, 4697-4701.	3.7	81

#	Article	IF	Citations
19	Flow Method for Rapidly Producing Barium Hexaferrite Particles in Supercritical Water. Journal of the American Ceramic Society, 1998, 81, 2461-2464.	3.8	81
20	Atomicâ€Scale Valence State Distribution inside Ultrafine CeO₂ Nanocubes and Its Size Dependence. Small, 2018, 14, e1802915.	10.0	77
21	Recovery of Terephthalic Acid by Decomposition of PET in Supercritical Water.. Kagaku Kogaku Ronbunshu, 1997, 23, 505-511.	0.3	75
22	Predictive Model for Equilibrium Constants of Aqueous Inorganic Species at Subcritical and Supercritical Conditions. Industrial & Engineering Chemistry Research, 2002, 41, 3298-3306.	3.7	66
23	Non-catalytic and selective alkylation of phenol with propan-2-ol in supercritical water. Chemical Communications, 2001, , 1566-1567.	4.1	55
24	Kinetics and product distribution ofn-hexadecane pyrolysis. AICHE Journal, 2000, 46, 843-856.	3.6	52
25	Supercritical fluids for nanotechnology. Journal of Supercritical Fluids, 2018, 134, 167-175.	3.2	51
26	Synthesis of surface-modified monoclinic ZrO2 nanoparticles using supercritical water. CrystEngComm, 2012, 14, 2132.	2.6	44
27	A kinetic study of catalytic hydrothermal reactions of acetaldehyde with cubic CeO2 nanoparticles. Applied Catalysis A: General, 2018, 550, 284-296.	4.3	44
28	Size and Form Control of Titanylphthalocyanine Microcrystals by Supercritical Fluid Crystallization Method. Molecular Crystals and Liquid Crystals, 1998, 322, 167-172.	0.3	42
29	Lipase-catalyzed interesterification of triglyceride with supercritical carbon dioxide extraction.. Journal of Chemical Engineering of Japan, 1992, 25, 104-105.	0.6	32
30	Kinetics study to identify reaction-controlled conditions for supercritical hydrothermal nanoparticle synthesis with flow-type reactors. Journal of Supercritical Fluids, 2016, 110, 161-166.	3.2	31
31	Estimation of the degree of hydrogen bonding between quinoline and water by ultravioletâ€“visible absorbance spectroscopy in sub- and supercritical water. Journal of Chemical Physics, 2003, 118, 4573-4577.	3.0	29
32	Continuous Flow Synthesis of Nanoparticles Using Supercritical Water: Process Design, Surface Control, and Nanohybrid Materials. KONA Powder and Particle Journal, 2020, 37, 28-41.	1.7	29
33	Phenol Recovery by BPA Tar Hydrolysis in Supercritical Water.. Sekiyu Gakkaishi (Journal of the Japan) Tj ETQq1 1 0.784314 rgBT /Overlo	0.1	27
34	Control of methanol oxidation by ionic behavior in supercritical water. Chemical Communications, 2001, , 2270-2271.	4.1	23
35	Exploitation of Surfaceâ€Sensitive Electrons in Scanning Electron Microscopy Reveals the Formation Mechanism of New Cubic and Truncated Octahedral CeO₂ Nanoparticles. ChemCatChem, 2011, 3, 1038-1044.	3.7	21
36	Overall Rate Constant of Pyrolysis of n-Alkanes at a Low Conversion Level. Industrial & Engineering Chemistry Research, 2001, 40, 2027-2036.	3.7	20

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37	Characterization of coal char gasification rate. AIChE Journal, 1991, 37, 897-904.	3.6	19
38	Regioselectivity of phenol alkylation in supercritical water. Green Chemistry, 2002, 4, 449-451.	9.0	16
39	Highly Cr-Substituted CeO₂Nanoparticles Synthesized Using a Non-equilibrium Supercritical Hydrothermal Process: High Oxygen Storage Capacity Materials Designed for a Low-Temperature Bitumen Upgrading Process. ACS Applied Energy Materials, 2020, 3, 4305-4319.	5.1	16
40	Potentiometric cell for measuringpH of supercritical aqueous solutions. Review of Scientific Instruments, 2001, 72, 4442-4448.	1.3	14
41	Interconnected 3D Framework of CeO₂ with High Oxygen Storage Capacity: High-Resolution Scanning Electron Microscopic Observation. ACS Applied Nano Materials, 2020, 3, 2346-2353.	5.0	12
42	Selective chemical recovery from biomass under hydrothermal conditions using metal oxide nanocatalyst. Journal of Supercritical Fluids, 2018, 133, 726-737.	3.2	11
43	Alkylation of Phenol with Carbonyl Compounds in Supercritical Water.. Journal of Chemical Engineering of Japan, 2003, 36, 339-342.	0.6	11
44	Kinetics of the Water-Gas Shift Reaction in Supercritical Water.. Kagaku Kogaku Ronbunshu, 1999, 25, 993-997.	0.3	10
45	Mechanism of supercritical fluid extraction of coal.. Journal of Chemical Engineering of Japan, 1991, 24, 715-720.	0.6	9
46	A new HRSEM approach to observe fine structures of novel nanostructured materials. Microporous and Mesoporous Materials, 2011, 146, 11-17.	4.4	9
47	Process assessments for low-temperature methane reforming using oxygen carrier metal oxide nanoparticles. Chemical Engineering and Processing: Process Intensification, 2019, 142, 107531.	3.6	9
48	Mixing and Solvent Effects on Kinetics of Supercritical Hydrothermal Synthesis: Reaction of Nickel Nitrate to Nickel Oxide. Journal of Physical Chemistry C, 2020, 124, 4772-4780.	3.1	9
49	Conversion of the hydroxyl group in 1-hexyl alcohol to an amide group in supercritical water without catalyst. Green Chemistry, 2003, 5, 95-97.	9.0	8
50	Granular Barium Titanate Nanowire-Based Adsorbents for the Removal of Strontium Ions from Contaminated Water. ACS Applied Nano Materials, 2019, 2, 6793-6797.	5.0	7
51	Mechanisms of the surface reaction and crystal growth of cerium oxide by supercritical hydrothermal treatment with carboxylic acids. CrystEngComm, 2021, 23, 5353-5361.	2.6	7
52	Supercritical Hydrothermal Synthesis of Nanoparticles. , 2018, , 683-689.		5
53	Supercritical Hydrothermal Synthesis of Organicâ€Modified Ce_{1â€<i>x</i>}Zr_{<i>x</i>}O_{2<i>â€Î´</i>} (0â‰<i>x</i>â‰1) Nanoparticles a Lowâ€Temperature Oxygen Carrier. ChemNanoMat, 2022, 8, .	2.8	4
54	Utilization of Sub- and Supercritical Water for Nano-Catalyst Synthesis and Waste and Biomass Processing. Waste and Biomass Valorization, 2022, 13, 51-66.	3.4	3

#	Article	IF	Citations
55	Fossil Energy. Catalytic Hydrotreating for Nitrogen Removal from Coal Tar Pitch in Supercritical Fluid.. Kagaku Kogaku Ronbunshu, 1994, 20, 965-970.	0.3	2
56	Dealloying-oxidation Technique as a Powerful Synthetic Tool for Sodium Titanate Nanowires with High Ion-exchange Ability. Chemistry Letters, 2017, 46, 1825-1827.	1.3	1
57	Kinetics of Immobilized Enzyme with Nonuniform Activity Distribution.. Kagaku Kogaku Ronbunshu, 1999, 25, 331-337.	0.3	0
58	Supercritical Fluid as a Reaction Medium.. Review of High Pressure Science and Technology/Koatsuryoku No Kagaku To Gijutsu, 1993, 2, 287-294.	0.0	0