Tatsuo Kimura

List of Publications by Year
in descending order

104 papers	3,652 citations	117625 34 h-index	144013 57 g-index
107 all docs	107 docs citations	107 times ranked	3553 citing authors

#	Article	IF	Citations
1	Nanoarchitectured Structure and Surface Biofunctionality of Mesoporous Silica Nanoparticles. Advanced Materials, 2020, 32, e1907035.	21.0	336
2	Tailored design of functional nanoporous carbon materials toward fuel cell applications. Nano Today, 2014, 9, 305-323.	11.9	254
3	Electrochemical synthesis of mesoporous gold films toward mesospace-stimulated optical properties. Nature Communications, 2015, 6, 6608.	12.8	178
4	Adsorption of Taxol into Ordered Mesoporous Silicas with Various Pore Diameters. Chemistry of Materials, 1999, 11, 1110-1119.	6.7	170
5	Synthesis and Characterization of Lamellar and Hexagonal Mesostructured Aluminophosphates Using Alkyltrimethylammonium Cations as Structure-Directing Agents. Chemistry of Materials, 1999, 11, 508-518.	6.7	111
6	Synthesis of Novel Mesoporous Aluminum Organophosphonate by Using Organically Bridged Diphosphonic Acid. Chemistry of Materials, 2003, 15, 3742-3744.	6.7	97
7	Surfactant-templated mesoporous aluminophosphate-based materials and the recent progress. Microporous and Mesoporous Materials, 2005, 77, 97-107.	4.4	95
8	Formation of Novel Ordered Mesoporous Silicas with Square Channels and Their Direct Observation by Transmission Electron Microscopy. Angewandte Chemie - International Edition, 2000, 39, 3855-3859.	13.8	93
9	Synthesis of Mesostructured and Mesoporous Aluminum Organophosphonates Prepared by Using Diphosphonic Acids with Alkylene Groups. Chemistry of Materials, 2005, 17, 337-344.	6.7	93
10	Synthesis of mesoporous aluminophosphates and their adsorption properties. Microporous and Mesoporous Materials, 1998, 22, 115-126.	4.4	90
11	Organic Modification of FSM-Type Mesoporous Silicas Derived from Kanemite by Silylation. Langmuir, 1999, 15, 2794-2798.	3.5	84
12	Oligomeric Surfactant and Triblock Copolymer Syntheses of Aluminum Organophosphonates with Ordered Mesoporous Structures. Chemistry of Materials, 2005, 17, 5521-5528.	6.7	83
13	Synthesis of mesoporous aluminophosphates using surfactants with long alkyl chain lengths and triisopropylbenzene as a solubilizing agent. Chemical Communications, 1998, , 559-560.	4.1	79
14	Advanced Nanoporous Materialâ€“Based QCM Devices: A New Horizon of Interfacial Mass Sensing Technology. Advanced Materials Interfaces, 2019, 6, 1900849.	3.7	69
15	Esterification of the Silanol Groups in the Mesoporous Silica Derived from Kanemite. Journal of Porous Materials, 1998, 5, 127-132.	2.6	66
16	Ordered Mesoporous Silica Derived from Layered Silicates. Advanced Functional Materials, 2009, 19, 511-527.	14.9	63
17	Asymmetric Block Copolymers for Supramolecular Templating of Inorganic Nanospace Materials. Small, 2015, 11, 1992-2002.	10.0	52
18	Triblock copolymer templated semi-crystalline mesoporous titania films containing emulsion-induced macropores. Journal of Materials Chemistry, 2009, 19, 1894.	6.7	51

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19	Amino acid containing amorphous calcium phosphates and the rapid transformation into apatite. Journal of Materials Chemistry, 2009, 19, 4906.	6.7	51
20	Connectivity of PS-b-PEO templated spherical pores in titanium oxide films. Physical Chemistry Chemical Physics, 2011, 13, 12529.	2.8	46
21	Rapid Fabrication of Mesoporous Titania Films with Controlled Macroporosity to Improve Photocatalytic Property. Chemistry - an Asian Journal, 2009, 4, 1486-1493.	3.3	44
22	Self-assembly of mesoporous silicas hollow microspheres via food grade emulsifiers for delivery systems. Microporous and Mesoporous Materials, 2010, 128, 187-193.	4.4	44
23	General synthesis of fibrous mesoporous metal oxides in polycarbonate membrane. Journal of Materials Chemistry, 2010, 20, 5294.	6.7	43
24	Effective Adsorption of Chlorophyll a by FSM-Type Mesoporous Silica Modified with 1,4-Butanediol. Langmuir, 2000, 16, 7106-7108.	3.5	40
25	Predictable Shrinkage during the Precise Design of Porous Materials and Nanomaterials. Chemistry of Materials, 2015, 27, 6918-6928.	6.7	40
26	Temperature-controlled and aerosol-assisted synthesis of aluminium organophosphonate spherical particles with uniform mesopores. Chemical Communications, 2009, , 4938.	4.1	39
27	Mesoporous Bimetallic RhCu Alloy Nanospheres Using a Sophisticated Soft-Templating Strategy. Chemistry of Materials, 2018, 30, 428-435.	6.7	39
28	Synthesis of a Hexagonal Mesostructured Aluminophosphate. Chemistry Letters, 1997, 26, 983-984.	1.3	38
29	Lamellar Hexadecyltrimethylammonium Silicates Derived from Kanemite. Langmuir, 2000, 16, 7624-7628.	3.5	38
30	Formation of mesoporous oxide fibers in polycarbonate confined spaces. Chemical Communications, 2009, , 5689.	4.1	38
31	Dye-sensitized biosystem sensing using macroporous semiconducting metal oxide films. Journal of Materials Chemistry, 2011, 21, 5738.	6.7	37
32	Water adsorption behavior of ordered mesoporous silicas modified with an organosilane composed of hydrophobic alkyl chain and hydrophilic polyethylene oxide groups. Microporous and Mesoporous Materials, 2006, 95, 213-219.	4.4	36
33	Highly Photoactive Porous Anatase Films Obtained by Deformation of 3D Mesostructures. Chemistry - A European Journal, 2011, 17, 4005-4011.	3.3	36
34	Electron Microscopic Study on Aerosol-Assisted Synthesis of Aluminum Organophosphonates Using Flexible Colloidal PS-b-PEO Templates. Langmuir, 2012, 28, 12901-12908.	3.5	36
35	Towards Vaporized Molecular Discrimination: A Quartz Crystal Microbalance (QCM) Sensor System Using Cobaltâ€Containing Mesoporous Graphitic Carbon. Chemistry - an Asian Journal, 2014, 9, 3238-3244.	3.3	33
36	Synthesis of Thermally Stable and 2-D Hexagonal Super-Microporous Silica from Hydrated Î±-Sodium Disilicate. Chemistry of Materials, 2005, 17, 6416-6421.	6.7	29

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37	Aerosol-assisted synthesis of mesoporous organosilica microspheres with controlled organic contents. Science and Technology of Advanced Materials, 2009, 10, 025005.	6.1	29
38	Condensationâ€•and Crystallinityâ€Controlled Synthesis of Titanium Oxide Films with Assessed Mesopores. Chemistry - A European Journal, 2010, 16, 12069-12073.	3.3	27
39	Shape selective alkylation of biphenyl with propene on SAPO-11 catalysts. Applied Catalysis A: General, 1996, 136, 19-28.	4.3	26
40	Novel block copolymer templates for tuning mesopore connectivity in cage-type mesoporous silica films. Journal of Materials Chemistry, 2012, 22, 20008.	6.7	26
41	Evaporation-induced Self-assembly Process Controlled for Obtaining Highly Ordered Mesoporous Materials with Demanded Morphologies. Chemical Record, 2016, 16, 445-457.	5.8	26
42	Transformation of Layered Docosyltrimethyl- and Docosyltriethylammonium Silicates Derived from Kanemite into Precursors for Ordered Mesoporous Silicas. Langmuir, 2002, 18, 9574-9577.	3.5	24
43	A New Family of Nonsiliceous Porous Hybrids from Bisphosphonates. Journal of Nanoscience and Nanotechnology, 2013, 13, 2461-2470.	0.9	23
44	Direct Silylation of a Mesostructured Precursor for Novel Mesoporous Silica KSW-2. Langmuir, 2002, 18, 8102-8107.	3.5	22
45	Synthesis of ordered mesoporous aluminium alkylenediphosphonates with integrated inorganicâ€“organic hybrid frameworks. Journal of Materials Chemistry, 2007, 17, 559-566.	6.7	22
46	Simple removal of oligomeric surfactants and triblock copolymers from mesostructured precursors of ordered mesoporous aluminum organophosphonates. Microporous and Mesoporous Materials, 2007, 101, 207-213.	4.4	21
47	Synthesis of lamellar mesostructured calcium phosphates using n-alkylamines as structure-directing agents in alcohol/water mixed solvent systems. Journal of Materials Science, 2008, 43, 4198-4207.	3.7	21
48	Mesopore Connectivity Improving Aerosol-Assisted Synthesis of Mesoporous Alumina Powders with High Surface Area. Langmuir, 2018, 34, 13781-13787.	3.5	21
49	Synthesis of hexagonal mesostructured aluminophosphate-based materials combined with organically bridged silsesquioxanesElectronic supplementary information (ESI) available: powder XRD patterns of BTSE-, BTME- and BTMH-BTSE-modified APW-2, low magnification TEM image of as-synthesized BTME-modified APW-2, and SEM images of APW-2 modified with alkyltrimethoxysilanes and with BTMH. See http://www.rsc.org/suppdata/jm/b3/b307360b/. Journal of Materials Chemistry, 2003, 13, 3072.	6.7	20
50	Design of Molecularly Ordered Framework of Mesoporous Silica with Squared One-Dimensional Channels. Journal of the American Chemical Society, 2008, 130, 201-209.	13.7	20
51	Synthesis of Al-containing mesoporous silica (KSW-2) with semi-squared channels by incorporation of Al into the framework of kanemiteElectronic supplementary information (ESI) available: powder XRD patterns and 29Si MAS NMR spectra of kanemite and Al-kanemite, N2 adsorption isotherm of Al-KSW-2, TEM images of Al-KSW-2. See http://www.rsc.org/suppdata/jm/b2/b211073c/. Journal of Materials Chemistry, 2003, 13, 883-887.	6.7	19
52	Templating Route for Mesostructured Calcium Phosphates with Carboxylic Acid- and Amine-Type Surfactants. Langmuir, 2008, 24, 13113-13120.	3.5	19
53	Mesostructural control of non-silica-based hybrid mesoporous film composed of aluminium ethylenediphosphonate using triblock copolymer and their TEM observation. New Journal of Chemistry, 2007, 31, 1488.	2.8	18
54	Effective mesopore tuning using aromatic compounds in the aerosol-assisted system of aluminium organophosphonate spherical particles. Dalton Transactions, 2010, 39, 5139.	3.3	18

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55	Self-standing mesoporous membranes toward highly selective molecular transportation. Chemical Communications, 2013, 49, 11424.	4.1	18
56	Silica-based mesoporous materials derived from Ti containing layered polysilicate kanemite. Microporous and Mesoporous Materials, 2006, 95, 146-153.	4.4	17
57	Environmental friendly rapid mass production synthetic process of highly ordered nanometer sized mesoporous silica using a combination of acidâ€“base and evaporation approach. Microporous and Mesoporous Materials, 2008, 116, 370-377.	4.4	17
58	Colloidal Templating Fabrication of Aluminumâ€Organophosphonate Films Using High Molecular Weight PSâ€bâ€PEO. Chemistry - an Asian Journal, 2011, 6, 3236-3242.	3.3	17
59	Trace-level gravimetric detection promoted by surface interactions of mesoporous materials with chemical vapors. Journal of Materials Chemistry A, 2014, 2, 8196.	10.3	17
60	Silica-Based Mesostructured Materials Induced by Surfactant Assemblies in the Two-Dimensionally Limited Space of a Layered Polysilicate Kanemite. Bulletin of the Chemical Society of Japan, 2004, 77, 585-590.	3.2	16
61	Phenol resin carbonized films with anisotropic shrinkage driven ordered mesoporous structures. Journal of Materials Chemistry A, 2013, 1, 15135.	10.3	16
62	Influence of the Kind of Layered Disodium Disilicates on the Formation of Silicaâ^'Organic Mesostructured Materials. Chemistry of Materials, 2004, 16, 3224-3230.	6.7	15
63	Macroporous Oxide Platforms Templated by Nonâ€Closeâ€Packed Spherical Copolymer Aggregates. Macromolecular Rapid Communications, 2013, 34, 423-430.	3.9	15
64	Immobilization of Photosynthetic Pigments into Silica-Surfactant Nanocomposite Films. Journal of Sol-Gel Science and Technology, 2000, 19, 543-547.	2.4	14
65	Synthesis of Thermally Stable Hexagonal Mesostructured Aluminophosphate-based Materials Modified with Organoalkoxysilanes. Chemistry Letters, 2002, 31, 770-771.	1.3	14
66	Lamellar Mesostructured Aluminum Organophosphonate with Unique Crystalline Framework. Chemistry Letters, 2009, 38, 916-917.	1.3	14
67	Molecular Design of Bisphosphonates To Adjust Their Reactivity toward Metal Sources for the Surfactantâ€Assisted Synthesis of Mesoporous Films. Angewandte Chemie - International Edition, 2017, 56, 13459-13463.	13.8	14
68	Analytical Understanding of the Materials Design with Wellâ€Described Shrinkages on Multiscale. Chemistry - A European Journal, 2018, 24, 6886-6904.	3.3	14
69	Rapid Micropatterning of Mesoporous Silica Film by Site-Selective Low-Energy Electron Beam Irradiation. Langmuir, 2008, 24, 11141-11146.	3.5	13
70	Aerosol-assisted Rapid Fabrication of Well-dispersed and Highly Doped Titanium-containing Mesoporous Silica Microspheres. Chemistry Letters, 2008, 37, 892-893.	1.3	13
71	Ligand-Assisted Fabrication of Small Mesopores in Semi-Crystalline Titanium Oxide Films for High Loading of Ru(II) Dyes. Langmuir, 2011, 27, 11436-11443.	3.5	13
72	General Information to Obtain Spherical Particles with Ordered Mesoporous Structures. Chemistry - an Asian Journal, 2013, 8, 160-167.	3.3	13

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73	The rational synthesis of aerosol-assisted alumina powders having uniform mesopores and highly accessible surfaces. New Journal of Chemistry, 2019, 43, 7269-7274.	2.8	13
74	Relationship between penta-coordinated Al³⁺ sites in the Al₂O₃ supports and CH₄ combustion activity of Pd/Al₂O₃ catalysts. Catalysis Science and Technology, 2021, 11, 2374-2378.	4.1	13
75	Surface Modification of Ordered Mesoporous Silica with an Organosilane Containing Polyethylene Oxide Groups to Retain the Hydrophilic Nature. Chemistry Letters, 2003, 32, 188-189.	1.3	12
76	Intercalation of Poly(oxyethylene) Alkyl Ether into a Layered Silicate Kanemite. Langmuir, 2007, 23, 10765-10771.	3.5	11
77	Understanding of NOx storage property of impregnated Ba species after crystallization of mesoporous alumina powders. Journal of Hazardous Materials, 2020, 398, 122791.	12.4	11
78	SYNTHESIS OF A LAMELLAR MESOSTRUCTURED ALUMINOPHOSPHATE. Phosphorus Research Bulletin, 1996, 6, 205-208.	0.6	10
79	Solubility and Crystallization-controlled Synthesis of Lamellar Mesostructured Calcium Phosphate in the Ethanol/Water System. Chemistry Letters, 2006, 35, 948-949.	1.3	10
80	Formation of Mesoporous Silica from a Layered Polysilicate Makatite. Chemistry Letters, 2007, 36, 444-445.	1.3	10
81	Water adsorption properties controlled by coating/filling ordered mesoporous silica inside cellulose membranes. Physical Chemistry Chemical Physics, 2013, 15, 15056.	2.8	10
82	Macrostructure-dependent photocatalytic property of high-surface-area porous titania films. APL Materials, 2014, 2, 113301.	5.1	10
83	In situ observation of the evaporation-induced self-assembling process of PS-b-PEO diblock copolymers for the fabrication of titania films by confocal laser scanning microscopy. Chemical Communications, 2015, 51, 1230-1233.	4.1	10
84	Properties of metal species in square-shape mesopores of KSW-2-based silica. Journal of Materials Chemistry, 2009, 19, 3859.	6.7	9
85	Unique surface property of surfactant-assisted mesoporous calcium phosphate. Microporous and Mesoporous Materials, 2011, 141, 56-60.	4.4	9
86	Highly porous Î±-alumina powders prepared with the self-assembly of an asymmetric PS-b-PEO diblock copolymer. Chemical Communications, 2019, 55, 10003-10006.	4.1	9
87	Artificial reticular structure by continuous titanium oxide frameworks. Journal of Materials Chemistry A, 2014, 2, 10688.	10.3	8
88	Further Understanding of the Reactivity Control of Bisphosphonates to a Metal Source for Fabricating Highly Ordered Mesoporous Films. Chemistry - A European Journal, 2019, 25, 5971-5977.	3.3	7
89	An Effective Strategy to Obtain Highly Porous Alumina Powders Having Robust and Designable Extra-Large Pores. Bulletin of the Chemical Society of Japan, 2019, 92, 1859-1866.	3.2	6
90	Molecular Design of Bisphosphonates To Adjust Their Reactivity toward Metal Sources for the Surfactantâ€Assisted Synthesis of Mesoporous Films. Angewandte Chemie, 2017, 129, 13644-13648.	2.0	5

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91	Synthesis of a lamellar mesostructured calcium phosphate using hexadecylamine as a structure-directing agent in the ethanol/water solvent system. Studies in Surface Science and Catalysis, 2007, 165, 253-256.	1.5	4
92	Understanding of the Formation of Mesostructured Alkylammonium-Alkaline Earth Metal Phosphates Composed of Ionic Frameworks. Journal of Nanoscience and Nanotechnology, 2009, 9, 627-633.	0.9	4
93	Water Sorption Property Controlled by Nanoscale Pore Connectivity of Large-Sized Cage-Type Mesopores. Journal of Nanoscience and Nanotechnology, 2016, 16, 9307-9310.	0.9	4
94	An opportunity for utilizing earth-abundant metals through the mesostructural design of metal phosphate-based materials. Journal of Materials Chemistry A, 2020, 8, 25528-25547.	10.3	4
95	Structural design in the silicate framework of ordered mesoporous silica derived from kanemite. Studies in Surface Science and Catalysis, 2007, , 1740-1747.	1.5	3
96	Enhanced Î³-phase crystallinity of Al₂O₃ frameworks at the concave surface of PS-b-PEO templated spherical pores. Dalton Transactions, 2021, 50, 7191-7197.	3.3	3
97	A Robust Mesoporous Al 2 O 3 â€Based Nanocomposite Catalyst for Abundant NO x Storage with Rational Design of Pt and Ba Species. Chemistry - A European Journal, 2021, 27, 6706-6712.	3.3	3
98	Synthesis of transparent mesoporous aluminum organophosphonate films through triblock copolymer templating. Studies in Surface Science and Catalysis, 2007, 165, 579-582.	1.5	2
99	Toward compositional design of reticular type porous films by mixing and coating titania-based frameworks with silica. APL Materials, 2015, 3, .	5.1	2
100	Adsorption Property of Dye Molecule over Semi-Crystalline Mesoporous Titania Films. Key Engineering Materials, 2008, 388, 145-148.	0.4	1
101	Enlargement of mesopores of 2-D orthorhombic KSW-2 type silica by the addition of poly(oxyethylene) alkyl ether during the mesostructural formation. Solid State Sciences, 2011, 13, 714-720.	3.2	1
102	Frontispiece: Analytical Understanding of the Materials Design with Well-Described Shrinkages on Multiscale. Chemistry - A European Journal, 2018, 24, .	3.3	0
103	Challenge towards synthesis of non-silica-based hybrid mesoporous materials. Synthesiology, 2019, 11, 111-123.	0.2	0
104	Surfactant-Assisted Mesostructural Variation by the Molecular Structure of Frameworks. Journal of Nanoscience and Nanotechnology, 2020, 20, 3078-3083.	0.9	0