Makoto Kobayashi

List of Publications by Year
in descending order

84	2,305	257450 24	223800 46
papers	citations	h-index	g-index

89	89	89	2857
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Morphology-Controlled Synthesis of W₁₈O₄₉ Nanostructures and Their Near-Infrared Absorption Properties. Inorganic Chemistry, 2012, 51, 4763-4771.	4.0	250
2	A Water-Soluble Titanium Complex for the Selective Synthesis of Nanocrystalline Brookite, Rutile, and Anatase by a Hydrothermal Method. Angewandte Chemie - International Edition, 2006, 45, 2378-2381.	13.8	224
3	Tailoring of Deepâ€Red Luminescence in Ca₂SiO₄:Eu²⁺. Angewandte Chemie - International Edition, 2014, 53, 7756-7759.	13.8	202
4	One-Step Synthesis of TiO₂(B) Nanoparticles from a Water-Soluble Titanium Complex. Chemistry of Materials, 2007, 19, 5373-5376.	6.7	122
5	Application of Water-Soluble Titanium Complexes as Precursors for Synthesis of Titanium-Containing Oxides via Aqueous Solution Processes. Bulletin of the Chemical Society of Japan, 2010, 83, 1285-1308.	3.2	111
6	Fabrication of SrTiO3 exposing characteristic facets using molten salt flux and improvement of photocatalytic activity for water splitting. Catalysis Science and Technology, 2013, 3, 1733.	4.1	86
7	Anomalous Orange Light-Emitting (Sr,Ba)₂SiO₄:Eu²⁺ Phosphors for Warm White LEDs. ACS Applied Materials & Interfaces, 2016, 8, 11615-11620.	8.0	83
8	Photoluminescence Properties of Mn⁴⁺-activated Perovskite-type Titanates, La₂MTiO₆:Mn⁴⁺(M = Mg and Zn). Chemistry Letters, 2015, 44, 1541-1543.	1.3	71
9	Control of valence band potential and photocatalytic properties of NaxLa1â^'xTaO1+2xN2â^'2x oxynitride solid solutions. Journal of Materials Chemistry A, 2013, 1, 3667.	10.3	65
10	Direct synthesis of brookite-type titanium oxide by hydrothermal method using water-soluble titanium complexes. Journal of Materials Science, 2008, 43, 2158-2162.	3.7	59
11	Hydrothermal Synthesis and Photocatalytic Activity of Whiskerâ€Like Rutileâ€Type Titanium Dioxide. Journal of the American Ceramic Society, 2009, 92, S21.	3.8	46
12	A carbon modified NaTaO₃ mesocrystal nanoparticle with excellent efficiency of visible light induced photocatalysis. Journal of Materials Chemistry A, 2014, 2, 20832-20840.	10.3	38
13	Site occupancy and luminescence properties of Ca₃Ln(AlO)₃(BO₃)₄:Ce³⁺,Tb³⁺,Mn²⁺ (Ln = Y, Gd). Journal of Materials Chemistry C, 2017, 5, 4578-4583.	3.5	38
14	Hydrothermal synthesis of magnetite particles with uncommon crystal facets. Journal of Asian Ceramic Societies, 2014, 2, 258-262.	2.3	37
15	Photocatalytic water oxidation under visible light by valence band controlled oxynitride solid solutions LaTaON₂â€“SrTiO₃. Journal of Materials Chemistry A, 2015, 3, 11824-11829.	10.3	37
16	Hydrothermal synthesis of brookite-type titanium dioxide with snowflake-like nanostructures using a water-soluble citratoperoxotitanate complex. Journal of Crystal Growth, 2011, 337, 30-37.	1.5	36
17	Hydrothermal synthesis of TiO2 nano-particles using novel water-soluble titanium complexes. Journal of Materials Science, 2008, 43, 2217-2221.	3.7	35
18	Photoluminescence Properties of Double Perovskite Tantalates Activated with Mn⁴⁺, AE₂LaTaO₆:Mn⁴⁺ (AE = Ca, Sr, and Ba). Journal of Physical Chemistry C, 2017, 121, 18837-18844.	3.1	35

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19	High temperature hydrogen gas sensing property of GaN prepared from Î±-GaOOH. Sensors and Actuators B: Chemical, 2018, 276, 388-396.	7.8	35
20	Hydrothermal synthesis of brookite type TiO2 photocatalysts using a water-soluble Ti-complex coordinated by ethylenediaminetetraacetic acid. Journal of the Ceramic Society of Japan, 2009, 117, 320-325.	1.1	31
21	Synthesis of Titanium Dioxide Nanocrystals with Controlled Crystal- and Micro-Structures from Titanium Complexes. Nanomaterials and Nanotechnology, 2013, 3, 23.	3.0	31
22	Z-scheme water splitting by microspherical Rh-doped SrTiO3 photocatalysts prepared by a spray drying method. Applied Catalysis B: Environmental, 2019, 252, 222-229.	20.2	31
23	New water-soluble complexes of titanium with amino acids and their application for synthesis of TiO2 nanoparticles. Journal of the Ceramic Society of Japan, 2008, 116, 578-583.	1.1	28
24	Morphology Control of Rutile Nanoparticles in a Hydrothermal Synthesis from Water-Soluble Titanium Complex Aqueous Solution. Journal of the Ceramic Society of Japan, 2007, 115, 835-839.	1.1	24
25	Synthesis of TiO2(B) using glycolato titanium complex and post-synthetic hydrothermal crystal growth of TiO2(B). Journal of Crystal Growth, 2009, 311, 619-622.	1.5	23
26	Enhancement of luminescence properties of a KSrPO4:Eu2+ phosphor prepared using a solution method with a water-soluble phosphate oligomer. Journal of Materials Chemistry C, 2013, 1, 5741.	5.5	21
27	Exploration of New Phosphors Using a Mineral-Inspired Approach in Combination with Solution Parallel Synthesis. Optics and Photonics Journal, 2013, 03, 5-12.	0.4	21
28	Large Redshifts in Emission and Excitation from Eu²⁺-Activated Sr₂SiO₄ and Ba₂SiO₄ Phosphors Induced by Controlling Eu²⁺ Occupancy on the Basis on Crystal-Site Engineering. Optics and Photonics Journal, 2015, 05, 326-333.	0.4	20
29	A Highly Luminous LiCaPO₄:Eu²⁺ Phosphor Synthesized by a Solution Method Employing a Water-Soluble Phosphate Ester. Optics and Photonics Journal, 2013, 03, 13-18.	0.4	19
30	Hydrothermal Synthesis of Nanosized Titania Photocatalysts Using Novel Water-Soluble Titanium Complexes. Solid State Phenomena, 2007, 124-126, 723-726.	0.3	17
31	Photocatalytic activity of nanocrystalline TiO2(B) synthesized from titanium glycolate complex by hydrothermal method. Journal of the Ceramic Society of Japan, 2009, 117, 347-350.	1.1	17
32	Photocatalytic activities of Cu3xLa1â€“xTa7O19 solid solutions for H2 evolution under visible light irradiation. Catalysis Science and Technology, 2013, 3, 3147.	4.1	17
33	Design of crystal structures, morphologies and functionalities of titanium oxide using water-soluble complexes and molecular control agents. Polymer Journal, 2015, 47, 78-83.	2.7	16
34	Microwave-Assisted Hydrothermal Synthesis of Brookite Nanoparticles from a Water-Soluble Titanium Complex and Their Photocatalytic Activity. Journal of the Ceramic Society of Japan, 2007, 115, 826-830.	1.1	15
35	Graphene/MxWO3 (M=Na, K) nanohybrids with excellent electrical properties. Carbon, 2015, 94, 309-316.	10.3	15
36	Crystal structures and luminescence properties of Eu²⁺-activated new NaBa_{0.5}Ca_{0.5}PO₄ and Na₃Ba₂Ca(PO₄)₃. Dalton Transactions, 2015, 44, 1900-1904.	3.3	15

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37	Synthesis of spindle and square bipyramid-shaped anatase-type titanium dioxide crystals by a solvothermal method using ethylenediamine. Journal of the Ceramic Society of Japan, 2012, 120, 494-499.	1.1	14
38	Hierarchical structures of rutile exposing high-index facets. Journal of Crystal Growth, 2015, 418, 86-91.	1.5	14
39	Synthesis and photocatalytic properties of tetragonal tungsten bronze type oxynitrides. Applied Catalysis B: Environmental, 2017, 206, 444-448.	20.2	13
40	Expansion of the photoresponse window of a BiVO₄ photocatalyst by doping with chromium(<scp>vi</scp>). RSC Advances, 2018, 8, 38140-38145.	3.6	13
41	Photoluminescence Properties of Layered Perovskite-Type Strontium Scandium Oxyfluoride Activated With Mn4+. Frontiers in Chemistry, 2018, 6, 467.	3.6	13
42	Hydrothermal synthesis of hierarchical TiO2 microspheres using a novel titanium complex coordinated by picolinic acid. Journal of the Ceramic Society of Japan, 2011, 119, 513-516.	1.1	12
43	Orange Emission from (Ba_{1-X}Sr_X)₄Al₂S₇:Eu²⁺Thioaluminate Phosphors with Visible Light Excitation. ECS Journal of Solid State Science and Technology, 2013, 2, R3107-R3111.	1.8	12
44	Insights into a selective synthesis of anatase, rutile, and brookite-type titanium dioxides by a hydrothermal treatment of titanium complexes. Journal of Materials Research, 2014, 29, 90-97.	2.6	12
45	Enhanced dielectric response induced by controlled morphology in rutile TiO₂ nanocrystals. Journal of the Ceramic Society of Japan, 2013, 121, 593-597.	1.1	11
46	Improvement of hydrogen evolution under visible light over Zn1â^'2x(CuGa)xGa2S4 photocatalysts by synthesis utilizing a polymerizable complex method. Journal of Materials Chemistry A, 2015, 3, 14239-14244.	10.3	11
47	Synthesis of NaMoO3F and Na5W3O9F5 with Morphological Controllability in Non-Aqueous Solvents. Inorganic Chemistry, 2020, 59, 10707-10716.	4.0	11
48	Discovery of Novel Delafossite-type Compounds Composed of Copper(I) Lithium Titanium with Photocatalytic Activity for H2 Evolution under Visible Light. Chemistry Letters, 2015, 44, 973-975.	1.3	10
49	Anisotropy in Conformation and Dynamics of a Glycolate Ion Near the Surface of a TiO₂ Rutile Crystal Between Its {001} and {110} Planes: A Molecular Dynamics Study. Journal of Physical Chemistry C, 2016, 120, 6502-6514.	3.1	10
50	Ce⁴⁺-Based Compounds Capable of Photoluminescence by Charge Transfer Excitation under Near-Ultravioletâ€“Visible Light. Inorganic Chemistry, 2018, 57, 14524-14531.	4.0	10
51	Synthesis and development of titania with controlled structures. Journal of the Ceramic Society of Japan, 2016, 124, 863-869.	1.1	9
52	Effect of hydroxy and carboxy groups on anisotropic growth of rutile-type titania under hydrothermal conditions. Journal of Asian Ceramic Societies, 2017, 5, 320-325.	2.3	8
53	Sodium titanium oxide bronze nanoparticles synthesized via concurrent reduction and Na⁺-doping into TiO₂(B). Nanoscale, 2019, 11, 1442-1450.	5.6	8
54	Selective Synthesis and Photocatalytic Oxygen Evolution Activities of Tantalum/Nitrogen-Codoped Anatase, Brookite and Rutile Titanium Dioxide. Bulletin of the Chemical Society of Japan, 2019, 92, 1032-1038.	3.2	8

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55	Preparation of Hollow TiO₂ Spheres of the Desired Polymorphs by Layerâ€byâ€Layer Assembly of a Waterâ€Soluble Titanium Complex and Hydrothermal Treatment. European Journal of Inorganic Chemistry, 2012, 2012, 3267-3272.	2.0	7
56	Photocatalytic Water Splitting over LaTa7O19 Composed of TaO7 Pentagonal Bipyramids and TaO6 Octahedra. Chemistry Letters, 2013, 42, 744-746.	1.3	7
57	Synthesis, Structure, and Photoluminescence of a Novel Oxynitride BaYSi₂O₅N Activated by Eu²⁺ and Ce³⁺. Chemistry Letters, 2017, 46, 795-797.	1.3	7
58	Hydrothermal Synthesis of Pseudocubic Rutile-Type Titania Particles. Ceramics, 2019, 2, 56-63.	2.6	7
59	Effect of carboxyl group on the visible-light photocatalytic activity of SrTiO3 nanoparticles. Research on Chemical Intermediates, 2013, 39, 1615-1621.	2.7	6
60	The significance of phosphate source in the preparation of functional luminescent phosphate materials. Journal of the Ceramic Society of Japan, 2014, 122, 626-629.	1.1	6
61	Effect of Site Occupancies on Deep-red Emission from Eu²⁺-activated Ca₂SiO₄ Phosphor. Chemistry Letters, 2016, 45, 321-323.	1.3	6
62	Synthesis of Rare Earth Niobate and Tantalate Powders via a Peroxo Complex Route. Chemistry Letters, 2017, 46, 1515-1517.	1.3	6
63	Investigation of the Up-conversion Properties of Er-Yb-doped Calcium Tantalates with Various Ca/Ta Ratios. Journal of Photopolymer Science and Technology = [Fotoporima Konwakai Shi], 2017, 30, 507-512.	0.3	6
64	Selective Synthesis of TiO2 Polymorphs by Hydrothermal Method using New Water-Soluble Titanium Complexes. Funtai Oyobi Fummatsu Yakin/Journal of the Japan Society of Powder and Powder Metallurgy, 2009, 56, 188-193.	0.2	5
65	Development of two novel Eu2+-activated phosphors in the Naâ€“Scâ€“Siâ€“O system and their photoluminescence properties. Journal of Luminescence, 2014, 154, 285-289.	3.1	5
66	Growth of TiO₂ microspheres with a radially oriented configuration. CrystEngComm, 2017, 19, 4832-4837.	2.6	5
67	Anisotropy in Stable Conformations of Hydroxylate Ions between the {001} and {110} Planes of TiO₂ Rutile Crystals for Glycolate, Lactate, and 2-Hydroxybutyrate Ions Studied by Metadynamics Method. ACS Omega, 2019, 4, 11014-11024.	3.5	5
68	Synthesis of a Novel Bluish-Green Emitting Oxynitride Ca₃Al₈Si<sub>4</sub&amp Phosphor in a CaAl_{4-x}Si_xO<sub>7-x</sub Solid Solution Sy. Optics and Photonics Journal, 2013, 03, 29-33.	0.4	4
69	Novel Titanium Complexes with a Reversible Structural Change on Solvent Adsorption and Desorption. Chemistry Letters, 2015, 44, 1050-1052.	1.3	3
70	A Facile One-Step Solvothermal Synthesis and Electrical Properties of Reduced Graphene Oxide/Rod-Shaped Potassium Tungsten Bronze Nanocomposite. Journal of Nanoscience and Nanotechnology, 2015, 15, 7305-7310.	0.9	3
71	Screening of Er³⁺/Yb³⁺Codoped REâ€“Taâ€“O and REâ€“Nbâ€“O (RE = Y, La, or Gd) Upconversion Phosphors. Chemistry Letters, 2016, 45, 890-891.	1.3	3
72	Structural Change in SrSiO₃ Induced by Introduction of Nitrogen. Chemistry Letters, 2018, 47, 1327-1329.	1.3	3

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73	Synthesis of Ba1â^'Sr YSi2O5N and discussion based on structure analysis and DFT calculation. Journal of Solid State Chemistry, 2019, 276, 266-271.	2.9	3
74	Influences of pulverization and annealing treatment on the photocatalytic activity of BiVO₄ for oxygen evolution. Sustainable Energy and Fuels, 2022, 6, 1698-1707.	4.9	3
75	Syntheses of Silicate Phosphors by Aqueous Solution Techniques using Water-Dispersible Inorganic Si Cluster. Funtai Oyobi Fummatsu Yakin/Journal of the Japan Society of Powder and Powder Metallurgy, 2015, 62, 127-133.	0.2	2
76	Controlled radical polymerization of styrene with magnetic iron oxides prepared through hydrothermal, bioinspired, and bacterial processes. RSC Advances, 2015, 5, 51122-51129.	3.6	2
77	Exploration of New Phosphors Using a Mineral-Inspired Approach in Combination with Solution Parallel Synthesis. , 2016, , 1-40.		2
78	Crystal structures of Ca_{4+x}Y_{3â€“x}Si₇O_{15+x}N_{5â€“x}(0 â‰¤ x â‰¤ 1) comprising of an isolated [Si₇(O,N)₁₉] unit. Acta Crystallographica Section E: Crystallographic Communications, 2019, 75, 260-263.	0.5	2
79	Synthesis of brookite-type TiO₂ nanoparticles by emulsion-assisted hydrothermal method using titanium glycolate complex. Journal of the Ceramic Society of Japan, 2021, 129, 720-724.	1.1	2
80	Synthesis of (Ca_{1â^'}_xSr_x)₄Si₂O₇F₂ oxyfluoride solid solutions and their photoluminescence properties activated by Eu²⁺ ions. Journal of the Ceramic Society of Japan, 2014, 122, 630-633.	1.1	1
81	Synthesis of picolinate-iron(III) compounds through an aqueous solution process. Journal of the Ceramic Society of Japan, 2015, 123, 751-755.	1.1	1
82	Self-assembly of polyethyleneamine-intercalated H₂Ti₂O₅ nanoparticles into spherical agglomerates. Journal of Materials Research, 2016, 31, 564-572.	2.6	1
83	Waterâ€“Dispersed Silicates and Waterâ€“Soluble Phosphates, and Their Use in Solâ€“Gel Synthesis of Silicateâ€“and Phosphateâ€“Based Materials. , 2016, , 1-27.		1
84	Waterâ€Dispersed Silicates and Waterâ€Soluble Phosphates, and Their Use in Solâ€Gel Synthesis of Silicateâ€• and Phosphateâ€Based Materials. , 2018, , 205-231.		0