

Makoto Kobayashi

List of Publications by Year in descending order

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papers

2,305
citations

257450

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89
docs citations

89
times ranked

2857
citing authors

#	ARTICLE	IF	CITATIONS
1	Influences of pulverization and annealing treatment on the photocatalytic activity of BiVO ₄ for oxygen evolution. Sustainable Energy and Fuels, 2022, 6, 1698-1707.	4.9	3
2	Synthesis of brookite-type TiO ₂ nanoparticles by emulsion-assisted hydrothermal method using titanium glycolate complex. Journal of the Ceramic Society of Japan, 2021, 129, 720-724.	1.1	2
3	Synthesis of NaMoO ₃ F and Na ₅ W ₃ O ₉ F ₅ with Morphological Controllability in Non-Aqueous Solvents. Inorganic Chemistry, 2020, 59, 10707-10716.	4.0	11
4	Anisotropy in Stable Conformations of Hydroxylate Ions between the {001} and {110} Planes of TiO ₂ Rutile Crystals for Glycolate, Lactate, and 2-Hydroxybutyrate Ions Studied by Metadynamics Method. ACS Omega, 2019, 4, 11014-11024.	3.5	5
5	Sodium titanium oxide bronze nanoparticles synthesized <i>via</i> concurrent reduction and Na ⁺ -doping into TiO ₂ (B). Nanoscale, 2019, 11, 1442-1450.	5.6	8
6	Synthesis of Ba _{1-x} Sr _x YSi ₂ O ₅ N and discussion based on structure analysis and DFT calculation. Journal of Solid State Chemistry, 2019, 276, 266-271.	2.9	3
7	Z-scheme water splitting by microspherical Rh-doped SrTiO ₃ photocatalysts prepared by a spray drying method. Applied Catalysis B: Environmental, 2019, 252, 222-229.	20.2	31
8	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
9	Hydrothermal Synthesis of Pseudocubic Rutile-Type Titania Particles. Ceramics, 2019, 2, 56-63.	2.6	7
10	Crystal structures of Ca _{4-x} Y ₃ Si ₇ O ₁₅ N ₅ (0 ≤ x ≤ 1) comprising of an isolated [Si ₇ (O,N) ₁₉] unit. Acta Crystallographica Section E: Crystallographic Communications, 2019, 75, 260-263.	0.5	2
11	Expansion of the photoresponse window of a BiVO ₄ photocatalyst by doping with chromium(<i>scpv</i>). RSC Advances, 2018, 8, 38140-38145.	3.6	13
12	Ce ⁴⁺ -Based Compounds Capable of Photoluminescence by Charge Transfer Excitation under Near-Ultraviolet-Visible Light. Inorganic Chemistry, 2018, 57, 14524-14531.	4.0	10
13	Structural Change in SrSiO ₃ Induced by Introduction of Nitrogen. Chemistry Letters, 2018, 47, 1327-1329.	1.3	3
14	Photoluminescence Properties of Layered Perovskite-Type Strontium Scandium Oxyfluoride Activated With Mn ⁴⁺ . Frontiers in Chemistry, 2018, 6, 467.	3.6	13
15	Water-Dispersed Silicates and Water-Soluble Phosphates, and Their Use in Sol-Gel Synthesis of Silicate- and Phosphate-Based Materials. , 2018, , 205-231.		0
16	High temperature hydrogen gas sensing property of GaN prepared from $\frac{1}{2}$ -GaOOH. Sensors and Actuators B: Chemical, 2018, 276, 388-396.	7.8	35
17	Synthesis and photocatalytic properties of tetragonal tungsten bronze type oxynitrides. Applied Catalysis B: Environmental, 2017, 206, 444-448.	20.2	13
18	Site occupancy and luminescence properties of Ca ₃ Ln(AlO) ₃ (BO ₃) ₄ :Ce ³⁺ , Tb ³⁺ , Mn ²⁺ (Ln = Y, Gd). Journal of Materials Chemistry C, 2017, 5, 4578-4583.		38

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19	Synthesis, Structure, and Photoluminescence of a Novel Oxynitride BaYSi ₂ O ₅ N Activated by Eu ²⁺ and Ce ³⁺ . Chemistry Letters, 2017, 46, 795-797.	1.3	7
20	Growth of TiO ₂ microspheres with a radially oriented configuration. CrystEngComm, 2017, 19, 4832-4837.	2.6	5
21	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
22	Synthesis of Rare Earth Niobate and Tantalate Powders via a Peroxo Complex Route. Chemistry Letters, 2017, 46, 1515-1517.	1.3	6
23	Photoluminescence Properties of Double Perovskite Tantalates Activated with Mn ⁴⁺ , AE ₂ LaTaO ₆ :Mn ⁴⁺ (AE = Ca, Sr, and Ba). Journal of Physical Chemistry C, 2017, 121, 18837-18844.	3.1	35
24	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
25	Self-assembly of polyethyleneamine-intercalated H ₂ Ti ₂ O ₅ nanoparticles into spherical agglomerates. Journal of Materials Research, 2016, 31, 564-572.	2.6	1
26	Anomalous Orange Light-Emitting (Sr,Ba) ₂ SiO ₄ :Eu ²⁺ Phosphors for Warm White LEDs. ACS Applied Materials & Interfaces, 2016, 8, 11615-11620.	8.0	83
27	Synthesis and development of titania with controlled structures. Journal of the Ceramic Society of Japan, 2016, 124, 863-869.	1.1	9
28	Screening of Er ³⁺ /Yb ³⁺ Codoped REâ€“Taâ€“O and REâ€“Nbâ€“O (RE = Y, La, or Gd) Upconversion Phosphors. Chemistry Letters, 2016, 45, 890-891.	1.3	3
29	Exploration of New Phosphors Using a Mineral-Inspired Approach in Combination with Solution Parallel Synthesis. , 2016, , 1-40.		2
30	Effect of Site Occupancies on Deep-red Emission from Eu ²⁺ -activated Ca ₂ SiO ₄ Phosphor. Chemistry Letters, 2016, 45, 321-323.	1.3	6
31	Anisotropy in Conformation and Dynamics of a Glycolate Ion Near the Surface of a TiO ₂ Rutile Crystal Between Its {001} and {110} Planes: A Molecular Dynamics Study. Journal of Physical Chemistry C, 2016, 120, 6502-6514.	3.1	10
32	Waterâ€“Dispersed Silicates and Waterâ€“Soluble Phosphates, and Their Use in Solâ€“Gel Synthesis of Silicateâ€“and Phosphateâ€“Based Materials. , 2016, , 1-27.		1
33	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
34	Photoluminescence Properties of Mn ⁴⁺ -activated Perovskite-type Titanates, La ₂ MTiO ₆ :Mn ⁴⁺ (M = Mg and Zn). Chemistry Letters, 2015, 44, 1541-1543.	1.3	71
35	Novel Titanium Complexes with a Reversible Structural Change on Solvent Adsorption and Desorption. Chemistry Letters, 2015, 44, 1050-1052.	1.3	3
36	Discovery of Novel Delafossite-type Compounds Composed of Copper(I) Lithium Titanium with Photocatalytic Activity for H ₂ Evolution under Visible Light. Chemistry Letters, 2015, 44, 973-975.	1.3	10

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37	Syntheses of Silicate Phosphors by Aqueous Solution Techniques using Water-Dispersible Inorganic Si Cluster. <i>Funtai Oyobi Fumatsu Yakin/Journal of the Japan Society of Powder and Powder Metallurgy</i> , 2015, 62, 127-133.	0.2	2
38	Hierarchical structures of rutile exposing high-index facets. <i>Journal of Crystal Growth</i> , 2015, 418, 86-91.	1.5	14
39	Graphene/MxWO ₃ (M=Na, K) nanohybrids with excellent electrical properties. <i>Carbon</i> , 2015, 94, 309-316.	10.3	15
40	Controlled radical polymerization of styrene with magnetic iron oxides prepared through hydrothermal, bioinspired, and bacterial processes. <i>RSC Advances</i> , 2015, 5, 51122-51129.	3.6	2
41	Improvement of hydrogen evolution under visible light over Zn ^{1~2} (CuGa) _x Ga ₂ S ₄ photocatalysts by synthesis utilizing a polymerizable complex method. <i>Journal of Materials Chemistry A</i> , 2015, 3, 14239-14244.	10.3	11
42	Photocatalytic water oxidation under visible light by valence band controlled oxynitride solid solutions LaTaON ₂ ·SrTiO ₃ . <i>Journal of Materials Chemistry A</i> , 2015, 3, 11824-11829.	10.3	37
43	A Facile One-Step Solvothermal Synthesis and Electrical Properties of Reduced Graphene Oxide/Rod-Shaped Potassium Tungsten Bronze Nanocomposite. <i>Journal of Nanoscience and Nanotechnology</i> , 2015, 15, 7305-7310.	0.9	3
44	Crystal structures and luminescence properties of Eu ²⁺ -activated new NaBa _{0.5} Ca _{0.5} PO ₄ and Na ₃ Ba ₂ Ca(PO ₄) ₃ . <i>Dalton Transactions</i> , 2015, 44, 1900-1904.	3.3	15
45	Design of crystal structures, morphologies and functionalities of titanium oxide using water-soluble complexes and molecular control agents. <i>Polymer Journal</i> , 2015, 47, 78-83.	2.7	16
46	Large Redshifts in Emission and Excitation from Eu ²⁺ -Activated Sr ₂ SiO ₄ and Ba ₂ SiO ₄ Phosphors Induced by Controlling Eu ²⁺ Occupancy on the Basis on Crystal-Site Engineering. <i>Optics and Photonics Journal</i> , 2015, 05, 326-333.	0.4	20
47	A carbon modified NaTaO ₃ mesocrystal nanoparticle with excellent efficiency of visible light induced photocatalysis. <i>Journal of Materials Chemistry A</i> , 2014, 2, 20832-20840.	10.3	38
48	Insights into a selective synthesis of anatase, rutile, and brookite-type titanium dioxides by a hydrothermal treatment of titanium complexes. <i>Journal of Materials Research</i> , 2014, 29, 90-97.	2.6	12
49	Development of two novel Eu ²⁺ -activated phosphors in the Na·Sc·Si·O system and their photoluminescence properties. <i>Journal of Luminescence</i> , 2014, 154, 285-289.	3.1	5
50	Tailoring of Deep-Red Luminescence in Ca ₂ SiO ₄ :Eu ²⁺ . <i>Angewandte Chemie - International Edition</i> , 2014, 53, 7756-7759.	13.8	202
51	Hydrothermal synthesis of magnetite particles with uncommon crystal facets. <i>Journal of Asian Ceramic Societies</i> , 2014, 2, 258-262.	2.3	37
52	The significance of phosphate source in the preparation of functional luminescent phosphate materials. <i>Journal of the Ceramic Society of Japan</i> , 2014, 122, 626-629.	1.1	6
53	Synthesis of (Ca ^{1~2}) _x (Sr) _x (Si ₂ O ₇) ₂ F ₁ oxyfluoride solid solutions and their photoluminescence properties activated by Eu ²⁺ ions. <i>Journal of the Ceramic Society of Japan</i> , 2014, 122, 630-633.	1.1	1
54	Effect of carboxyl group on the visible-light photocatalytic activity of SrTiO ₃ nanoparticles. <i>Research on Chemical Intermediates</i> , 2013, 39, 1615-1621.	2.7	6

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55	Photocatalytic activities of $\text{Cu}_3\text{La}_x\text{Ta}_{7-x}\text{O}_{19}$ solid solutions for H_2 evolution under visible light irradiation. <i>Catalysis Science and Technology</i> , 2013, 3, 3147.	4.1	17
56	Enhancement of luminescence properties of a $\text{KSrPO}_4:\text{Eu}^{2+}$ phosphor prepared using a solution method with a water-soluble phosphate oligomer. <i>Journal of Materials Chemistry C</i> , 2013, 1, 5741.	5.5	21
57	Control of valence band potential and photocatalytic properties of $\text{Na}_x\text{La}_{1-x}\text{TaO}_{1+2x}\text{N}_{2x}$ oxynitride solid solutions. <i>Journal of Materials Chemistry A</i> , 2013, 1, 3667.	10.3	65
58	Fabrication of SrTiO_3 exposing characteristic facets using molten salt flux and improvement of photocatalytic activity for water splitting. <i>Catalysis Science and Technology</i> , 2013, 3, 1733.	4.1	86
59	Orange Emission from $(\text{Ba}_{1-x}\text{Sr}_x)_4\text{Al}_2\text{S}_7:\text{Eu}^{2+}$ Thioaluminate Phosphors with Visible Light Excitation. <i>ECS Journal of Solid State Science and Technology</i> , 2013, 2, R3107-R3111.	1.8	12
60	Enhanced dielectric response induced by controlled morphology in rutile TiO_2 nanocrystals. <i>Journal of the Ceramic Society of Japan</i> , 2013, 121, 593-597.	1.1	11
61	Photocatalytic Water Splitting over $\text{LaTa}_7\text{O}_{19}$ Composed of TaO_7 Pentagonal Bipyramids and TaO_6 Octahedra. <i>Chemistry Letters</i> , 2013, 42, 744-746.	1.3	7
62	Synthesis of Titanium Dioxide Nanocrystals with Controlled Crystal- and Micro-Structures from Titanium Complexes. <i>Nanomaterials and Nanotechnology</i> , 2013, 3, 23.	3.0	31
63	Exploration of New Phosphors Using a Mineral-Inspired Approach in Combination with Solution Parallel Synthesis. <i>Optics and Photonics Journal</i> , 2013, 03, 5-12.	0.4	21
64	A Highly Luminous $\text{LiCa}_4\text{PO}_7:\text{Eu}^{2+}$ Phosphor Synthesized by a Solution Method Employing a Water-Soluble Phosphate Ester. <i>Optics and Photonics Journal</i> , 2013, 03, 13-18.	0.4	19
65	Synthesis of a Novel Bluish-Green Emitting Oxynitride $\text{Ca}_3\text{Al}_8\text{Si}_4\text{O}_{27-x}\text{N}_x$ Phosphor in a Solid Solution System. <i>Optics and Photonics Journal</i> , 2013, 03, 29-33.	0.4	4
66	Synthesis of spindle and square bipyramid-shaped anatase-type titanium dioxide crystals by a solvothermal method using ethylenediamine. <i>Journal of the Ceramic Society of Japan</i> , 2012, 120, 494-499.	1.1	14
67	Morphology-Controlled Synthesis of $\text{W}_{18}\text{O}_{49}$ Nanostructures and Their Near-Infrared Absorption Properties. <i>Inorganic Chemistry</i> , 2012, 51, 4763-4771.	4.0	250
68	Preparation of Hollow TiO_2 Spheres of the Desired Polymorphs by Layer-by-Layer Assembly of a Water-Soluble Titanium Complex and Hydrothermal Treatment. <i>European Journal of Inorganic Chemistry</i> , 2012, 2012, 3267-3272.	2.0	7
69	Hydrothermal synthesis of brookite-type titanium dioxide with snowflake-like nanostructures using a water-soluble citratoperoxotitanate complex. <i>Journal of Crystal Growth</i> , 2011, 337, 30-37.	1.5	36
70	Hydrothermal synthesis of hierarchical TiO_2 microspheres using a novel titanium complex coordinated by picolinic acid. <i>Journal of the Ceramic Society of Japan</i> , 2011, 119, 513-516.	1.1	12
71	Application of Water-Soluble Titanium Complexes as Precursors for Synthesis of Titanium-Containing Oxides via Aqueous Solution Processes. <i>Bulletin of the Chemical Society of Japan</i> , 2010, 83, 1285-1308.	3.2	111
72	Selective Synthesis of TiO_2 Polymorphs by Hydrothermal Method using New Water-Soluble Titanium Complexes. <i>Funtai Oyobi Fummtsu Yakin/Journal of the Japan Society of Powder and Powder Metallurgy</i> , 2009, 56, 188-193.	0.2	5

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73	Hydrothermal Synthesis and Photocatalytic Activity of Whisker-Like Rutile-Type Titanium Dioxide. <i>Journal of the American Ceramic Society</i> , 2009, 92, S21.	3.8	46
74	Synthesis of TiO ₂ (B) using glycolato titanium complex and post-synthetic hydrothermal crystal growth of TiO ₂ (B). <i>Journal of Crystal Growth</i> , 2009, 311, 619-622.	1.5	23
75	Hydrothermal synthesis of brookite type TiO ₂ photocatalysts using a water-soluble Ti-complex coordinated by ethylenediaminetetraacetic acid. <i>Journal of the Ceramic Society of Japan</i> , 2009, 117, 320-325.	1.1	31
76	Photocatalytic activity of nanocrystalline TiO ₂ (B) synthesized from titanium glycolate complex by hydrothermal method. <i>Journal of the Ceramic Society of Japan</i> , 2009, 117, 347-350.	1.1	17
77	Direct synthesis of brookite-type titanium oxide by hydrothermal method using water-soluble titanium complexes. <i>Journal of Materials Science</i> , 2008, 43, 2158-2162.	3.7	59
78	Hydrothermal synthesis of TiO ₂ nano-particles using novel water-soluble titanium complexes. <i>Journal of Materials Science</i> , 2008, 43, 2217-2221.	3.7	35
79	New water-soluble complexes of titanium with amino acids and their application for synthesis of TiO ₂ nanoparticles. <i>Journal of the Ceramic Society of Japan</i> , 2008, 116, 578-583.	1.1	28
80	Microwave-Assisted Hydrothermal Synthesis of Brookite Nanoparticles from a Water-Soluble Titanium Complex and Their Photocatalytic Activity. <i>Journal of the Ceramic Society of Japan</i> , 2007, 115, 826-830.	1.1	15
81	Morphology Control of Rutile Nanoparticles in a Hydrothermal Synthesis from Water-Soluble Titanium Complex Aqueous Solution. <i>Journal of the Ceramic Society of Japan</i> , 2007, 115, 835-839.	1.1	24
82	One-Step Synthesis of TiO ₂ (B) Nanoparticles from a Water-Soluble Titanium Complex. <i>Chemistry of Materials</i> , 2007, 19, 5373-5376.	6.7	122
83	Hydrothermal Synthesis of Nanosized Titania Photocatalysts Using Novel Water-Soluble Titanium Complexes. <i>Solid State Phenomena</i> , 2007, 124-126, 723-726.	0.3	17
84	A Water-Soluble Titanium Complex for the Selective Synthesis of Nanocrystalline Brookite, Rutile, and Anatase by a Hydrothermal Method. <i>Angewandte Chemie - International Edition</i> , 2006, 45, 2378-2381.	13.8	224