Koji Tomita

List of Publications by Year in descending order

73 papers	1,763 citations	257450 24 h-index	276875 41 g-index
76 all docs	76 docs citations	76 times ranked	1812 citing authors

#	Article	IF	Citations
1	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
2	One-Step Synthesis of TiO₂(B) Nanoparticles from a Water-Soluble Titanium Complex. Chemistry of Materials, 2007, 19, 5373-5376.	6.7	122
3	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
4	Chelating of Titanium by Lactic Acid in the Water-Soluble Diammonium Tris(2-hydroxypropionato)titanate(IV). Inorganic Chemistry, 2004, 43, 4546-4548.	4.0	90
5	Low-Temperature-Processed Brookite-Based TiO₂ Heterophase Junction Enhances Performance of Planar Perovskite Solar Cells. Nano Letters, 2019, 19, 598-604.	9.1	61
6	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
7	Growth of single-crystalline Bi2Te3 hexagonal nanoplates with and without single nanopores during temperature-controlled solvothermal synthesis. Scientific Reports, 2019, 9, 10790.	3.3	52
8	Pseudo-Cube Shaped Brookite (TiO2) Nanocrystals Synthesized by an Oleate-Modified Hydrothermal Growth Method. Crystal Growth and Design, 2011, 11, 4831-4836.	3.0	50
9	Synthesis of Amphiphilic Brookite Nanoparticles with High Photocatalytic Performance for Wide Range of Application. ACS Applied Materials & Interfaces, 2012, 4, 4846-4852.	8.0	50
10	Spray Pyrolyzed TiO2 Embedded Multi-Layer Front Contact Design for High-Efficiency Perovskite Solar Cells. Nano-Micro Letters, 2021, 13, 36.	27.0	50
11	Ionic Liquid-Assisted MAPbI₃ Nanoparticle-Seeded Growth for Efficient and Stable Perovskite Solar Cells. ACS Applied Materials & Interfaces, 2021, 13, 21194-21206.	8.0	47
12	Hydrothermal Synthesis and Photocatalytic Activity of Whiskerâ€Like Rutileâ€Type Titanium Dioxide. Journal of the American Ceramic Society, 2009, 92, S21.	3.8	46
13	Role of stirring assist during solvothermal synthesis for preparing single-crystal bismuth telluride hexagonal nanoplates. Materials Chemistry and Physics, 2016, 173, 213-218.	4.0	40
14	Compact TiO₂/Anatase TiO₂ Single-Crystalline Nanoparticle Electron-Transport Bilayer for Efficient Planar Perovskite Solar Cells. ACS Sustainable Chemistry and Engineering, 2018, 6, 12070-12078.	6.7	39
15	Synthesis and Structure of New Water-Soluble and Stable Tantalum Compound:â€‰ Ammonium Tetralactatodiperoxo-Î¼-oxo-ditantalate(V). Inorganic Chemistry, 2006, 45, 9251-9256.	4.0	38
16	Fabrication of bismuth telluride nanoplates via solvothermal synthesis using different alkalis and nanoplate thin films by printing method. Journal of Crystal Growth, 2017, 468, 194-198.	1.5	38
17	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
18	Hydrothermal synthesis of TiO2 nano-particles using novel water-soluble titanium complexes. Journal of Materials Science, 2008, 43, 2217-2221.	3.7	35

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19	Thermal annealing effect on structural and thermoelectric properties of hexagonal Bi₂Te₃ nanoplate thin films by drop-casting technique. Japanese Journal of Applied Physics, 2018, 57, 02CC02.	1.5	33
20	Double-layer CsI intercalation into an MAPbI3 framework for efficient and stable perovskite solar cells. Nano Energy, 2021, 86, 106135.	16.0	33
21	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
22	Oblique Electrostatic Inkjet-Deposited TiO2 Electron Transport Layers for Efficient Planar Perovskite Solar Cells. Scientific Reports, 2019, 9, 19494.	3.3	29
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	The hydrothermal and solvothermal synthesis of LiTaO 3 photocatalyst: Suppressing the deterioration of the water splitting activity without using a cocatalyst. International Journal of Hydrogen Energy, 2015, 40, 5638-5643.	7.1	26
25	A single-phase brookite TiO₂ nanoparticle bridge enhances the stability of perovskite solar cells. Sustainable Energy and Fuels, 2020, 4, 2009-2017.	4.9	25
26	Preparation and characterization of citratoperoxotitanate barium compound for BaTiO3 synthesis. Solid State Ionics, 2002, 151, 293-297.	2.7	24
27	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
28	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
29	NIR-excited NIR and visible luminescent properties of amphipathic YVO4: Er3+/Yb3+ nanoparticles. Journal of Materials Science, 2012, 47, 2241-2247.	3.7	22
30	Low-temperature treated anatase TiO2 nanophotonic-structured contact design for efficient triple-cation perovskite solar cells. Chemical Engineering Journal, 2021, 426, 131831.	12.7	22
31	Enhancing upconversion photoluminescence by plasmonic-photonic hybrid mode. Optics Express, 2020, 28, 886.	3.4	21
32	Hydrothermal Synthesis of Nanosized Titania Photocatalysts Using Novel Water-Soluble Titanium Complexes. Solid State Phenomena, 2007, 124-126, 723-726.	0.3	17
33	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
34	Polyoxovanadateâ€“Surfactant Hybrid Layered Crystal Containing One-Dimensional Hydrogen-Bonded Cluster Chain. Bulletin of the Chemical Society of Japan, 2012, 85, 1222-1224.	3.2	17
35	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
36	A novel Eu2+-activated calcium zirconium silicate phosphor: Ca3ZrSi2O9:Eu2+. Journal of Luminescence, 2021, 231, 117752.	3.1	15

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37	Emission properties of Ln (Eu, Tb, Dy, Er)-doped Y2O3 nanoparticles synthesized by surfactant-assembly and their applications in visible color-tuning. Journal of Photochemistry and Photobiology A: Chemistry, 2015, 299, 87-93.	3.9	14
38	Synthesis of K3Ta3B2O12 photocatalytic material by aqueous solution-based process using a novel water soluble tantalum complex. Journal of the Ceramic Society of Japan, 2009, 117, 308-312.	1.1	10
39	Preparation of TiO₂ Thin Films Using Waterâ€soluble Titanium Complexes and Their Photoinduced Properties. Photochemistry and Photobiology, 2011, 87, 988-994.	2.5	10
40	B-site-ordered Double-perovskite Oxide Up-conversion Phosphors Doped with Yb and Ho, Er, or Tm. Journal of Photopolymer Science and Technology = [Fotoporima Konwakai Shi], 2019, 32, 593-596.	0.3	9
41	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
42	Thermoelectric properties of bismuth telluride nanoplate thin films determined using combined infrared spectroscopy and first-principles calculation. Japanese Journal of Applied Physics, 2018, 57, 06HC02.	1.5	7
43	Synthesis of K3Ta3B2O12 photocatalyst by solution based method and effect of co-catalyst and phase purity to water splitting activity. Journal of the Ceramic Society of Japan, 2009, 117, 1191-1194.	1.1	6
44	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
45	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
46	Plasmon enhanced luminescence in hierarchically structured Ag@ (Y0.95Eu0.05)2O3 nanocomposites synthesized by ultrasonic spray pyrolysis. Advanced Powder Technology, 2019, 30, 1409-1418.	4.1	5
47	Size Effect on Crystal Structure and Phase Transition of Potassium Niobate. Ferroelectrics, 2012, 433, 45-52.	0.6	4
48	Synthesis and morphology control of YBO₃:Tb³⁺ green phosphor by precipitation from homogeneous solution. Journal of the Ceramic Society of Japan, 2013, 121, 502-505.	1.1	4
49	Synthesis of photofunctional ceramics by various solution processes. Journal of the Ceramic Society of Japan, 2013, 121, 841-846.	1.1	4
50	Morphology control and synthesis of afterglow materials with a SrAl2O4 framework synthesized by Surfactant-Template and hydrothermal methods. Chemical Physics Letters, 2021, 780, 138916.	2.6	4
51	Dopant-Free Mexylaminotriazine Molecular Glass Hole Transport Layer for Perovskite Solar Cells. ACS Applied Energy Materials, 0, , .	5.1	4
52	Development of new solution method using citric acid and ethylenediamine for borate compounds. Journal of the Ceramic Society of Japan, 2011, 119, 486-489.	1.1	3
53	Synthesis of titanium-based ceramics by a new synthetic route of water-soluble titanium complexes. Journal of the Ceramic Society of Japan, 2011, 119, 494-497.	1.1	3
54	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

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55	Synthesis of green emission upconversion phosphor nanosheets (LaNb2O7) doped with Er3+ and Yb3+. Journal of Luminescence, 2016, 173, 130-134.	3.1	3
56	Paste Aging Spontaneously Tunes TiO₂ Nanoparticles into Reproducible Electrosprayed Photoelectrodes. ACS Applied Materials & Interfaces, 2021, 13, 53758-53766.	8.0	3
57	Exploration of New Phosphors Using a Mineral-Inspired Approach in Combination with Solution Parallel Synthesis. , 2016, , 1-40.		2
58	Possible size control and emission characteristics of Eu3+â€“doped Y2O3 nanoparticles synthesized by surfactant-assembly. Chemical Physics Letters, 2016, 659, 121-125.	2.6	2
59	Effects of Crystal Structure on Up-conversion Luminescence in Er³⁺/Yb³⁺ Co-doped SrTa₄O₁₁. Chemistry Letters, 2018, 47, 1282-1284.	1.3	2
60	Low-cost molecular glass hole transport material for perovskite solar cells. Japanese Journal of Applied Physics, 2021, 60, SBBF12.	1.5	2
61	Plasmonic Enhancement of Upconversion Photoluminescence from CaF₂: Er³⁺, Yb³⁺ Nanoparticles on TiN Nanoantennas. Funtai Oyobi Fummatsu Yakin/Journal of the Japan Society of Powder and Powder Metallurgy, 2020, 67, 140-145.	0.2	2
62	Low Temperature Synthesis of Tunnel Structure Ba₂Ti₉O₂₀ using Citratoperoxotitanic Acid Tetranuclear Complex. Transactions of the Materials Research Society of Japan, 2008, 33, 1321-1324.	0.2	2
63	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
64	Synthesis and photoluminescence properties of Ca₃MgSi₂O₈ with high Eu²⁺ concentration. Journal of the Ceramic Society of Japan, 2022, 130, 49-54.	1.1	2
65	Photocatalytic Patterning using Nano-Colloidal Anatase in Aqueous Solution Process. Transactions of the Materials Research Society of Japan, 2009, 34, 279-281.	0.2	1
66	Fabrication of Dye-sensitized Solar Cells Using Ellipsoid Titanium Dioxide Nanoparticles. Journal of Photopolymer Science and Technology = [Fotoporima Konwakai Shi], 2015, 28, 399-401.	0.3	1
67	Low Temperature Synthesis of Titanium Complex Oxides by a New Synthetic Route of Water-soluble Titanium Complex from Titanium Chloride and Titanium Sulfate as Starting Materials. Funtai Oyobi Fummatsu Yakin/Journal of the Japan Society of Powder and Powder Metallurgy, 2011, 58, 584-590.	0.2	0
68	Synthesis and Water Splitting Activity of NaTaO3 Photocatalyst by Hydrothermal Method and Solvothermal Method. Funtai Oyobi Fummatsu Yakin/Journal of the Japan Society of Powder and Powder Metallurgy, 2011, 58, 578-583.	0.2	0
69	Highly Efficient Planar Perovskite Solar Cells Exploiting a Compact TiO<inf>2</inf>/Anatase TiO<inf>2</inf> Single Crystalline Nanoparticles Electron Transport Bilayer. , 2018, , .		0
70	Improvement of dispersibility and film formability of TiO₂ nanoparticles by surfactant modification. Journal of Advanced Science, 2019, 31, n/a.	0.1	0
71	Enhancement of up- and downconversion photoluminescence from Yb3+, Er3+ co-doped CaF2â€‚nanoparticles deposited on two-dimensional plasmonic arrays. , 2019, , .		0
72	Infrared-Visible Wavelength Conversion by Upconversion Phosphors and Materials Development. Oleoscience, 2022, 22, 203-209.	0.0	0

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73	Optimization of Brookite TiO₂ NPs Solution for Preparing the Electron Transport Layer of Flexible Perovskite Solar Cells. Journal of Advanced Science, 2022, 34, n/a.	0.1	0