

Takahiro Gunji

List of Publications by Year in descending order

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105
papers

1,577
citations

471509

17
h-index

361022

35
g-index

105
all docs

105
docs citations

105
times ranked

1298
citing authors

#	ARTICLE	IF	CITATIONS
1	Oligo- and polysiloxanes. <i>Progress in Polymer Science</i> , 2004, 29, 149-182.	24.7	342
2	Enhanced Oxidative Hydrogen Peroxide Production on Conducting Glass Anodes Modified with Metal Oxides. <i>ChemistrySelect</i> , 2016, 1, 5721-5726.	1.5	110
3	Preparation and properties of polysilsesquioxanes: Polysilsesquioxanes and flexible thin films by acid-catalyzed controlled hydrolytic polycondensation of methyl- and vinyltrimethoxysilane. <i>Journal of Polymer Science Part A</i> , 1999, 37, 1017-1026.	2.3	83
4	Preparation of continuous zirconia fibres from polyzirconoxane synthesized by the facile one-pot reaction. <i>Journal of Materials Science</i> , 1998, 33, 1863-1870.	3.7	64
5	Photocatalytic Z-Scheme Water Splitting for Independent H ₂ /O ₂ Production via a Stepwise Operation Employing a Vanadate Redox Mediator under Visible Light. <i>Journal of Physical Chemistry C</i> , 2017, 121, 9691-9697.	3.1	64
6	Preparation and properties of alkoxy(methyl)silsesquioxanes as coating agents. <i>Journal of Polymer Science Part A</i> , 2004, 42, 3676-3684.	2.3	51
7	Gas permeation properties of silica membranes with uniform pore sizes derived from polyhedral oligomeric silsesquioxane. <i>AIChE Journal</i> , 2012, 58, 1733-1743.	3.6	45
8	Preparation and properties of silicon-containing polymer hybrids from 3-methacryloxypropyltrimethoxysilane. <i>Applied Organometallic Chemistry</i> , 1998, 12, 749-753.	3.5	41
9	Preparation and characterization of organic-inorganic hybrids and coating films from 3-methacryloxypropylpolysilsesquioxane. <i>Applied Organometallic Chemistry</i> , 2001, 15, 683-692.	3.5	39
10	Tailoring the microstructure and permeation properties of bridged organosilica membranes via control of the bond angles. <i>Journal of Membrane Science</i> , 2019, 584, 56-65.	8.2	35
11	Preparation and properties of high molecular weight polyethoxysiloxanes stable to self-condensation by acid-catalyzed hydrolytic polycondensation of tetraethoxysilane. <i>Journal of Polymer Science Part A</i> , 2003, 41, 2250-2255.	2.3	27
12	Preparation and properties of organic-inorganic hybrid gel films based on polyvinylpolysilsesquioxane synthesized from trimethoxy(vinyl)silane. <i>Applied Organometallic Chemistry</i> , 2003, 17, 580-588.	3.5	22
13	Efficient H ₂ O ₂ Production via H ₂ O Oxidation on an Anode Modified with Sb-Containing Mixed Metal Oxides. <i>ChemElectroChem</i> , 2020, 7, 2448-2455.	3.4	22
14	Synthesis of polytitanosiloxanes and their transformation to SiO ₂ -TiO ₂ ceramic fibers. <i>Journal of Polymer Science Part A</i> , 1994, 32, 3133-3139.	2.3	21
15	Preparation and properties of polyhedral oligomeric silsesquioxane-polysiloxane copolymers. <i>Applied Organometallic Chemistry</i> , 2010, 24, 545-550.	3.5	21
16	Preparation and properties of organic-inorganic hybrid materials using titanium phosphonate cluster. <i>Polymer Journal</i> , 2017, 49, 665-669.	2.7	21
17	Zinc-diethanolamine complex: synthesis, characterization, and formation mechanism of zinc oxide via thermal decomposition. <i>Journal of Sol-Gel Science and Technology</i> , 2018, 87, 743-748.	2.4	18
18	Condensation and structure of silicic acid in tetrahydrofuran. <i>Journal of Polymer Science Part A</i> , 1992, 30, 1779-1787.	2.3	17

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19	Hydrolytic polycondensation of vinyltrimethoxysilane and formation of vinylpolysiloxane films. Journal of Sol-Gel Science and Technology, 1994, 2, 131-134.	2.4	17
20	Preparation and Properties of Organic-Inorganic Hybrid Gel Films Based on Polyvinylpolysilsesquioxane Synthesized from Trimethoxy(vinyl)silane. Journal of Sol-Gel Science and Technology, 2005, 33, 9-13.	2.4	16
21	Preparation of Continuous ZrO_2 - Y_2O_3 Fibers by Precursor Method Using Polyzirconoxane. Journal of the Ceramic Society of Japan, 1993, 101, 336-341.	1.3	15
22	Preparation of SiO_2 - TiO_2 Fibers from Polytitanosiloxanes. Journal of the Ceramic Association Japan, 1986, 94, 1243-1245.	0.2	14
23	Fine-tuned, molecular-composite, organosilica membranes for highly efficient propylene/propane separation via suitable pore size. AIChE Journal, 2020, 66, e16850.	3.6	14
24	Syntheses of linear ethoxysiloxanes by the oxidative condensation of triethoxysilane. Journal of Sol-Gel Science and Technology, 2008, 48, 163-167.	2.4	13
25	Preparation and properties of flexible free-standing films via polyalkoxysiloxanes by acid-catalyzed controlled hydrolytic polycondensation of tetraethoxysilane and tetramethoxysilane. Applied Organometallic Chemistry, 2012, 26, 32-36.	3.5	13
26	Synthesis, characterization and properties of titanium phosphonate clusters. Polyhedron, 2018, 147, 1-8.	2.2	13
27	Diethylenedioxane-bridged microporous organosilica membrane for gas and water separation. Separation and Purification Technology, 2018, 207, 370-376.	7.9	13
28	Studies on the syntheses of polymetalloxanes and their properties as a precursor for amorphous oxide. V. Preparation and properties of polytitanosiloxanes from silicic acid and bis(2,4-pentanedionato)titanium diisopropoxide. Journal of Polymer Science Part A, 1991, 29, 941-947.	2.3	12
29	Preparation of C60-Silica Hybrid Monolith by Sol-Gel Process. Journal of Sol-Gel Science and Technology, 2001, 22, 219-224.	2.4	12
30	Preparation and properties of polyethoxysilsesquioxane-C60 hybrids. Journal of Polymer Science Part A, 2007, 45, 3273-3279.	2.3	12
31	Preparation and properties of organic-inorganic hybrid polymer films using $[Ti_4(\frac{1}{4}O)(OiPr)_5(\frac{1}{4}OiPr)_3(PhPO_3)_3] \cdot thf$. Polymer Journal, 2017, 49, 223-228.	2.7	12
32	Preparation of SiO_2 - Al_2O_3 and SiO_2 - ZrO_2 Fibers from Polyaluminosiloxanes and Polyzirconosiloxanes. Journal of the Ceramic Society of Japan, 1988, 96, 221-224.	1.3	11
33	Preparation of free-standing films with sulfonyl group from 3-mercaptopropyl(trimethoxy)silane/1,2-bis(triethoxysilyl)ethane copolymer. Polymer Journal, 2010, 42, 684-688.	2.7	11
34	Silsesquioxanes: Recent Advancement and Novel Applications. International Journal of Polymer Science, 2012, 2012, 1-2.	2.7	11
35	Preparation of <i>co</i> - <i>i</i> -polymethyl(alkoxy)siloxanes by acid-catalyzed controlled hydrolytic copolycondensation of methyl(trialkoxysilane and tetraalkoxysilane. Journal of Polymer Science Part A, 2013, 51, 4732-4741.	2.3	11
36	Carbon Monoxide Addition to Ruthenium-Dithiolene Complex and Polysiloxane Hybrid Film Formation. Chemistry - an Asian Journal, 2015, 10, 1881-1883.	3.3	11

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37	Preparation, properties, and structure of polysiloxanes by acid-catalyzed controlled hydrolytic co-polycondensation of polymethyl(methoxy)siloxane and polymethoxysiloxane. <i>Journal of Sol-Gel Science and Technology</i> , 2015, 75, 564-573.	2.4	10
38	Preparation and water desalination properties of bridged polysilsesquioxane membranes with divinylbenzene and divinylpyridine units. <i>Polymer Journal</i> , 2020, 52, 1367-1374.	2.7	10
39	Preparation of Polymetalloxanes as a Precursor for Oxide Fibers from Metal Chelate Complex. <i>Journal of the Ceramic Society of Japan</i> , 1989, 97, 596-597.	1.3	9
40	Studies on the syntheses of polymetalloxanes and their properties as a precursor for amorphous oxide. VII. Preparation and properties of polyzirconoxanes as a precursor for zirconia fibers by the hydrolysis of bis (ethyl acetoacetato) zirconium dialkoxide. <i>Journal of Polymer Science Part A</i> , 1992, 30, 2295-2301.	2.3	9
41	Preparation and Properties of C60-Polysiloxane Hybrids. <i>Journal of Sol-Gel Science and Technology</i> , 2004, 32, 43-46.	2.4	9
42	Soluble ethane-bridged silsesquioxane polymer by hydrolysis&condensation of bis(trimethoxysilyl)ethane: characterization and mixing in organic polymers. <i>Journal of Polymer Research</i> , 2020, 27, 1.	2.4	9
43	Preparation and Properties of Polysilsesquioxanes-Preparation and Properties of Polymer Hybrids from Vinyltrimethoxysilane.. <i>Kobunshi Ronbunshu</i> , 2000, 57, 198-207.	0.2	8
44	Syntheses and properties of sila-functional oligosiloxanes: Synthesis, structure, and spectra of linear and cyclic isocyanato(methyl)oligosiloxanes. <i>Silicon Chemistry</i> , 2002, 1, 367-375.	0.8	8
45	Preparation of polymethylsilsesquioxanes by the base-catalyzed hydrolytic polycondensation of triisopropoxy(methyl)silane. <i>Journal of Polymer Science Part A</i> , 2005, 43, 3623-3630.	2.3	8
46	Preparation and characterization of mesoporous silica thin films from polyethoxysiloxanes. <i>Journal of Polymer Science Part A</i> , 2006, 44, 2542-2550.	2.3	8
47	Preparation and Properties of Siloxane/Epoxy Organic-Inorganic Hybrid Thin Films, Self-Standing Films, and Bulk Bodies. <i>Polymer Journal</i> , 2009, 41, 541-546.	2.7	8
48	Base-amplifying silicone resins with photobase-generating side chains and their application to negative-working photoresists. <i>Journal of Polymer Science Part A</i> , 2015, 53, 1205-1212.	2.3	8
49	Preparation and characterization of stable DQ silicone polymer sols. <i>Journal of Sol-Gel Science and Technology</i> , 2018, 88, 660-670.	2.4	8
50	Preparation of Hybrid Organosilica Reverse Osmosis Membranes by Interfacial Polymerization of Bis[(trialkoxysilyl)propyl]amine. <i>Chemistry Letters</i> , 2018, 47, 1210-1212.	1.3	8
51	Properties and surface morphologies of organic&inorganic hybrid thin films containing titanium phosphonate clusters. <i>Polymer Journal</i> , 2018, 50, 1169-1177.	2.7	8
52	Characterization of a flexible self-cleaning film with photoinduced hydrophilicity comprising phosphonic-acid-modified polysilsesquioxane-anchored titanium dioxide. <i>Thin Solid Films</i> , 2020, 714, 138395.	1.8	8
53	Preparation and properties of methyl- and cyclohexylsilsesquioxane oligomers as organic&inorganic fillers. <i>Journal of Sol-Gel Science and Technology</i> , 2020, 95, 474-481.	2.4	8
54	Pore size tuning of bis(triethoxysilyl)propane (BTESP)-derived membrane for gas separation: Effects of the acid molar ratio in the sol and of the calcination temperature. <i>Separation and Purification Technology</i> , 2020, 242, 116742.	7.9	8

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55	Development of PSQ-RO membranes with high water permeability by copolymerization of bis[3-(triethoxysilyl)propyl]amine and triethoxy(3-glycidyoxypropyl)silane. <i>Journal of Membrane Science</i> , 2022, 644, 120162.	8.2	8
56	Studies on the Synthesis of Polymetalloxanes and Their Properties as a Precursor for Amorphous Oxide (Part 6). <i>Journal of the Ceramic Society of Japan</i> , 1991, 99, 178-179.	1.3	7
57	Preparation and properties of polyhedral oligomeric silsesquioxane polymers. <i>Applied Organometallic Chemistry</i> , 2011, 25, 661-664.	3.5	7
58	Codoping Effect of Sr and Ti for Fe_2O_3 Photocatalyst on Water Oxidation Utilizing IO_3^- as a Reversible Redox Ion under Visible Light. <i>Chemistry Letters</i> , 2014, 43, 1560-1562.	1.3	7
59	A review of phosphorus(V)-substituted titanium-oxo clusters. <i>Journal of Sol-Gel Science and Technology</i> , 2021, 100, 205-223.	2.4	7
60	Studies on the syntheses of polymetalloxanes and their properties as a precursor for amorphous oxide. IV. Properties of $\text{SiO}_2\text{-TiO}_2$ oxide fibers from polytitanosiloxane. <i>Journal of Polymer Science Part A</i> , 1992, 30, 371-377.	2.3	6
61	Preparation of POSS derivatives by the dehydrogenative condensation of $\text{Ti}(\text{OR})_4$ with alcohols. <i>Journal of the Ceramic Society of Japan</i> , 2015, 123, 739-743.	1.1	6
62	ZnO formation through decomposition of zinc bis(ethyl acetoacetate) by steaming treatment. <i>Journal of Sol-Gel Science and Technology</i> , 2019, 91, 255-260.	2.4	6
63	In-Fe mixed oxide as an oxygen-evolution photocatalyst for visible-light-driven Z-scheme water splitting. <i>Sustainable Energy and Fuels</i> , 2020, 4, 2686-2690.	4.9	6
64	Preparation of Polysiloxazanes and Their Transformation to Silicon Oxynitride. <i>Journal of the Ceramic Society of Japan</i> , 2006, 114, 492-496.	1.3	5
65	Development of Photobase Generator with Benzoin Derivatives and Its Application to Photosensitive Materials. <i>Chemistry Letters</i> , 2014, 43, 612-614.	1.3	5
66	2-Triethoxysilylazulene derivatives: Syntheses and optical properties, and hydrolysis/condensation of 2-triethoxysilylazulene. <i>Journal of Sol-Gel Science and Technology</i> , 2019, 91, 399-406.	2.4	5
67	Preparation of polysilsesquioxane reverse osmosis membranes for water desalination from tris[(ethoxysilyl)alkyl]amines by sol-gel process and interfacial polymerization. <i>Applied Organometallic Chemistry</i> , 2021, 35, e6374.	3.5	5
68	Preparation and Properties of Polysilsesquioxanes - Polysilsesquioxanes as a Candidate to a Low Dielectrics for Electronic Devices -. <i>Materials Research Society Symposia Proceedings</i> , 1999, 565, 247.	0.1	4
69	Synthesis, isolation, and characterization of polytitanasiloxanes and zirconasiloxanes by the hydrolytic cocondensation of tetraethoxysilane and titanium or zirconium tetraisopropoxide. <i>Journal of Polymer Science Part A</i> , 2005, 43, 763-772.	2.3	4
70	Preparation of platinum nanoparticles that are dispersible in water over a wide pH range. <i>Polymer Journal</i> , 2013, 45, 540-544.	2.7	4
71	Organic-inorganic hybrids based on poly(bisphenol A-co-epichlorohydrin) containing titanium phosphonate clusters. <i>Polymer Journal</i> , 2019, 51, 1265-1271.	2.7	4
72	Synthesis of indium tin oxide films from ethyl acetoacetato complexes at low temperatures. <i>Journal of Sol-Gel Science and Technology</i> , 2021, 100, 68-73.	2.4	4

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73	A Z-scheme system constructed from WO ₃ modified TiO ₂ doped with Cr and Sb for visible light-driven overall water splitting. <i>Applied Physics Letters</i> , 2021, 119, 113901.	3.3	4
74	Bridged organosilica membranes incorporating carboxyl-functionalized cage silsesquioxanes for water desalination. <i>Journal of Sol-Gel Science and Technology</i> , 2022, 101, 315-322.	2.4	4
75	Development of Highly Water-Permeable Robust PSQ-Based RO Membranes by Introducing Hydroxyethylurea-Based Hydrophilic Water Channels. <i>ACS Applied Materials & Interfaces</i> , 2022, 14, 21426-21435.	8.0	4
76	Preparation and film properties of polysiloxanes consisting of di- and quadra-functional hybrid units. <i>Journal of Sol-Gel Science and Technology</i> , 2022, 104, 724-734.	2.4	4
77	Development of robust and high-performance polysilsesquioxane reverse osmosis membranes modified by SiO ₂ nanoparticles for water desalination. <i>Separation and Purification Technology</i> , 2022, 296, 121421.	7.9	4
78	Photosensitivity Characteristics of UV Curable Organic-Inorganic Hybrids Sensitized with Benzoin Derivatives as Photobase Generators. <i>Journal of Photopolymer Science and Technology</i> = [Fotoporima Konwakai Shi], 2014, 27, 223-225.	0.3	3
79	Syntheses of cage octasilicate polymers. <i>Journal of Sol-Gel Science and Technology</i> , 2017, 81, 21-26.	2.4	3
80	Behavior of zinc- and aluminum β^2 -ketoesterate complexes during steaming treatment. <i>Journal of Sol-Gel Science and Technology</i> , 2021, 99, 263-272.	2.4	3
81	Effect of fluorine doping on the network pore structure of non-porous organosilica bis(triethoxysilyl)propane (BTESP) membranes for use in molecular separation. <i>Journal of Membrane Science</i> , 2022, 644, 120083.	8.2	3
82	Steam treatment of metal acetylacetonate and ethyl acetoacetate complexes at 90°C for preparation of metal oxides. <i>Inorganica Chimica Acta</i> , 2022, 535, 120864.	2.4	3
83	Preparation and Properties of YBCO Superconducting Precursor Using Ethyl Acetoacetate Complexes of Metals. <i>Journal of the Ceramic Society of Japan</i> , 1994, 102, 765-771.	1.3	2
84	Preparation and properties of a fullerene/polysiloxane hybrid from chemically modified fullerene and polymethoxysiloxane. <i>Journal of Sol-Gel Science and Technology</i> , 2014, 72, 80-84.	2.4	2
85	Structural and Electrochemical Properties of a Ruthenium Diiron Dithiolene Complex. <i>European Journal of Inorganic Chemistry</i> , 2017, 2017, 3823-3828.	2.0	2
86	Preparation of Ruthenium Dithiolene Complex/Polysiloxane Films and Their Responses to CO Gas. <i>Molecules</i> , 2018, 23, 845.	3.8	2
87	Syntheses and properties of Cu(II), Al(III), and Ti(IV) coordination polymers using an acetylacetonato-terminated polyhedral oligomeric silsesquioxane. <i>Polymer Journal</i> , 2022, 54, 985-993.	2.7	2
88	Studies on the Synthesis and Characterization of Zirconium Containing Organic-Inorganic Hybrid from High Molecular Weight Styrene/Maleic Anhydride Alternating Copolymers. <i>Journal of the Japan Society of Colour Material</i> , 2002, 75, 463-469.	0.1	1
89	Preparation of polymer-protected NiMoPt alloy nanoparticles dispersible in water over a wide pH range by a hot-soap method and ligand-exchange reaction. <i>Polymer Journal</i> , 2013, 45, 993-996.	2.7	1
90	Synthesis of poly(3-(4-ethoxysulfonylphenoxy)-2-methylpropyl)silsesquioxane and its application as a proton-conducting membrane. <i>Polymer Journal</i> , 2015, 47, 287-293.	2.7	1

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91	Preparation of Organic-Inorganic Hybrid Polymer Films Using [Ti ₄ (1/4 ₃ -O)(O ⁱ Pr) ₅ (1/4-O ⁱ Pr) ₃ (PhPO ₃) ₃] Funtai Oyobi Fummtsu Yakin/Journal of the Japan Society of Powder and Powder Metallurgy, 2017, 64, 130-133.	0.2	1
92	Sol-gel reaction of titanium phosphonate alkoxide cluster. Applied Organometallic Chemistry, 0, , .	3.5	1
93	Low-temperature synthesis of AMoO ₄ (A = Ba, Ca, Co, Ni) by steam treatment of acetylacetonate and ethyl acetoacetate complexes. Journal of Sol-Gel Science and Technology, 2022, 103, 576-583.	2.4	1
94	Synthesis and Thermal Decomposition of Titanium Chelates Having Azo or Azomethine Ligand. Journal of the Japan Society of Colour Material, 1997, 70, 753-759.	0.1	0
95	Synthesis and Characterization of Zr-Containing Organic-Inorganic Hybrids from Styrene/Maleic Anhydride Copolymer. Journal of the Japan Society of Colour Material, 2000, 73, 421-428.	0.1	0
96	Syntheses and Properties of Organic-Inorganic Hybrids from Zirconium Chelate and Acrylic Acids. Journal of the Japan Society of Colour Material, 2002, 75, 49-55.	0.1	0
97	Studies on the Synthesis and Characterization of Titanium Containing Organic-Inorganic Hybrid from Styrene/Maleic Anhydride Alternating Copolymers. Journal of the Japan Society of Colour Material, 2004, 77, 345-349.	0.1	0
98	Application of Novel Base Amplifiers with 3-Nitropentan-2-yl Group to Photoreactive Materials. Materials Research Society Symposia Proceedings, 2006, 961, 1.	0.1	0
99	Photoimaging Materials Based on Base-amplifying Silicone Resins Having Phenylsulfonyl ethyl Groups. Materials Research Society Symposia Proceedings, 2006, 961, 1.	0.1	0
100	Preparation of Pt Nanoparticles Dispersed in Mesoporous Silica. Materials Research Society Symposia Proceedings, 2009, 1217, 1.	0.1	0
101	Preparation of Platinum Nanoparticles Using Linear Polyethyleneimine as a Stabilizer by Liquid-phase Reduction Method. Materials Research Society Symposia Proceedings, 2009, 1217, 1.	0.1	0
102	In situ preparation of platinum nanoparticles in mesoporous silica using linear polyethyleneimine as a protective agent. Journal of the Ceramic Society of Japan, 2019, 127, 531-537.	1.1	0
103	Preparation, characterization, and desulfurization ability of bulk porous silica-supported ZnO. Journal of Sol-Gel Science and Technology, 2020, 95, 482-491.	2.4	0
104	Easy and environmentally friendly synthesis method for T8H (HSiO _{3/2}) ₈ . Phosphorus, Sulfur and Silicon and the Related Elements, 2021, 196, 316-320.	1.6	0
105	Preparation of Polysilsesquioxanes via Hydrolysis-Condensation Using Formic Acid and their Application to Organic-Inorganic Hybrid Coating Films. Journal of the Japan Society of Colour Material, 2019, 92, 262-267.	0.1	0