

# Koichi Kajihara

## List of Publications by Year in descending order

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122  
papers

2,947  
citations

147566

31  
h-index

197535

49  
g-index

124  
all docs

124  
docs citations

124  
times ranked

2427  
citing authors

| #  | ARTICLE  | IF  | CITATIONS |
|----|--|-----|-----------|
| 1  | Energy Transfer and Quenching in Sol-gel-Derived Silica Glass Green Phosphors Doped with Tb <sup>3+</sup> and Ce <sup>3+</sup> Ions: Distinct Difference between P <sub>6</sub> and Al-Codoped Glasses. <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2022, 219, .       | 0.8 | 0         |
| 2  | Cosolvent-free synthesis of macroporous silica gels and monolithic silica glasses from tetraalkoxysilane-water binary systems: comparison between tetramethoxysilane and tetraethoxysilane. <i>Journal of Sol-Gel Science and Technology</i> , 2022, 104, 497-502.                               | 1.1 | 2         |
| 3  | Lithium Chloroborate Li <sub>4</sub> B <sub>4</sub> M <sub>3</sub> O <sub>12</sub> Cl (M = Al, Ga): Glass-Ceramic Synthesis and Application to Solid-State Rechargeable Lithium Batteries. , 2021, , 231-238.  |     | 0         |
| 4  | High-Temperature Conductivity Measurements of Magnesium-Ion-Conducting Solid Oxide Using Mg Metal Electrodes. , 2021, , 521-524.   |     | 0         |
| 5  | Negligible concentration quenching in photoluminescent nanocrystals with high photoactive rare-earth concentrations: silica-(Tb,Ce)PO <sub>4</sub> transparent glass-ceramic green phosphors. <i>Journal of Materials Chemistry C</i> , 2021, 9, 2701-2705.                                      | 2.7 | 6         |
| 6  | Solid-State Rechargeable Lithium Metal Battery with Li <sub>4</sub> B <sub>4</sub> Al <sub>3</sub> O <sub>12</sub> Cl-based Water-Resistant Lithium-Ion-Conducting Oxychloride Glass-Ceramic Electrolyte. <i>Journal of the Electrochemical Society</i> , 2021, 168, 040524.                     | 1.3 | 6         |
| 7  | Optical Absorption of Excimer Laser-Induced Dichlorine Monoxide in Silica Glass and Excitation of Singlet Oxygen Luminescence by Energy Transfer from Chlorine Molecules. <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2021, 218, 2100009.                              | 0.8 | 1         |
| 8  | Low-Refractive-Index Deep-Ultraviolet Transparent Poly(fluoroalkyl-co-methylsilsesquioxane) Resins Synthesized by Cosolvent-Free Hydrolytic Polycondensation of Organotrimethoxysilanes. <i>Journal of Physical Chemistry B</i> , 2021, 125, 8238-8242.  | 1.2 | 0         |
| 9  | Phenylphosphonate surface functionalisation of MgMn <sub>2</sub> O <sub>4</sub> with 3D open-channel nanostructures for composite slurry-coated cathodes of rechargeable magnesium batteries operated at room temperature. <i>RSC Advances</i> , 2021, 11, 19076-19082.                          | 1.7 | 14        |
| 10 | Luminescence of non-bridging oxygen hole centers as a marker of particle irradiation of $\alpha$ -quartz. <i>Radiation Measurements</i> , 2020, 135, 106373.   | 0.7 | 13        |
| 11 | Twinning by Merohedry and Thermal Expansion of Zeolitic Clathrasil Deca-dodecasil 3R. <i>Inorganic Chemistry</i> , 2020, 59, 5600-5609.  | 1.9 | 0         |
| 12 | Cosolvent-free synthesis and characterisation of poly(phenyl-co-alkylsilsesquioxane) and poly(phenyl-vinylsilsesquioxane) glasses with low melting temperatures. <i>Dalton Transactions</i> , 2020, 49, 2487-2495.   | 1.6 | 2         |
| 13 | Cosolvent-free sol-gel dip-coating of silica films from tetraalkoxysilane-water binary systems: precursor solutions of long pot life and their characterization by nuclear magnetic resonance spectroscopy. <i>Journal of the Ceramic Society of Japan</i> , 2020, 128, 772-782.                 | 0.5 | 3         |
| 14 | Computational investigation of the Mg-ion conductivity and phase stability of MgZr <sub>4</sub> (PO <sub>4</sub> ) <sub>6</sub> . <i>RSC Advances</i> , 2019, 9, 12590-12595.  | 1.7 | 24        |
| 15 | Structure, Microscopic Ordering, and Viscous Properties of Amorphous Poly(alkylsilsesquioxane) Liquids and Solids Synthesized by Cosolvent-Free Hydrolytic Polycondensation of Alkyltrimethoxysilanes. <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2019, 216, 1800475. | 0.8 | 4         |
| 16 | Creation of glass-characteristic point defects in crystalline SiO <sub>2</sub> by 2.5-MeV electrons and by fast neutrons. <i>Journal of Non-Crystalline Solids</i> , 2019, 505, 252-259.   | 1.5 | 11        |
| 17 | Seed-free hydrothermal synthesis of all-silica deca-dodecasil 3R with essential reagents. <i>Journal of the Ceramic Society of Japan</i> , 2018, 126, 221-229.   | 0.5 | 3         |
| 18 | Sol-gel-derived transparent silica-(Gd,Pr)PO <sub>4</sub> glass-ceramic narrow-band UVB phosphors. <i>Dalton Transactions</i> , 2018, 47, 12085-12091.   | 1.6 | 6         |

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|----|--|-----|-----------|
| 19 | Luminescence and Raman Detection of Molecular Cl <sub>2</sub> and ClClO Molecules in Amorphous SiO <sub>2</sub> Matrix. Journal of Physical Chemistry C, 2017, 121, 5261-5266.   | 1.5 | 19        |
| 20 | High-Temperature Conductivity Measurements of Magnesium-Ion-Conducting Solid Oxide Mg <sub>0.5</sub> x(Zr <sub>1-x</sub> Nb <sub>x</sub> ) <sub>2</sub> O <sub>8</sub> (0 < x < 4).  | 1.2 | 8         |
| 21 | Li <sub>4</sub> B <sub>4</sub> M <sub>3</sub> O <sub>12</sub> Cl (M = Al, Ga): An Electrochemically Stable, Lithium-Ion-Conducting Cubic Boracite with Substituted Boron Sites. Bulletin of the Chemical Society of Japan, 2017, 90, 1279-1286.                              | 2.0 | 10        |
| 22 | Synthesis and characterization of lithium-ion-conductive glass-ceramics of lithium chloroboracite Li <sub>4</sub> B <sub>4</sub> O <sub>12</sub> Cl <sub>1-x</sub> (x = 0 and 1). Journal of the Ceramic Society of Japan, 2017, 125, 348-352.                               | 1.4 | 11        |
| 23 | Luminescence properties of chlorine molecules in glassy SiO <sub>2</sub> and optical fibre waveguides. Proceedings of the Estonian Academy of Sciences, 2017, 66, 455.   | 0.9 | 1         |
| 24 | Poly(n-alkylsilsesquioxane) liquids prepared by cosolvent-free hydrolytic polycondensation of n-alkyltrialkoxysilanes: effects of liquid-liquid phase separation during aging and alkyl chain length on structure and viscosity. Dalton Transactions, 2016, 45, 15532-15540. | 1.6 | 5         |
| 25 | Synthesis of silanol-rich long-life polysilsesquioxane liquids by cosolvent-free hydrolytic polycondensation of organotrimethoxysilanes followed by aging. Dalton Transactions, 2016, 45, 3151-3157.   | 1.6 | 8         |
| 26 | Deep-ultraviolet transparent monolithic sol-gel derived silica-REPO <sub>4</sub> (RE = Y, La, Lu) Tj ETQq0 0 0 rgBT / Overlock 10 and application to narrow-band UVB phosphors. Journal of Materials Chemistry C, 2015, 3, 9894-9901.  | 2.7 | 19        |
| 27 | Inhomogeneous broadening and peak shift of the 7.6 eV optical absorption band of oxygen vacancies in SiO <sub>2</sub> . , 2014, , .  |     | 2         |
| 28 | Luminescence of non-bridging oxygen hole centers in crystalline SiO <sub>2</sub> . AIP Conference Proceedings, 2014, , .   | 0.3 | 7         |
| 29 | Highly transparent, bright green, sol-gel-derived monolithic silica-(Tb,Ce)PO <sub>4</sub> glass-ceramic phosphors. RSC Advances, 2014, 4, 26692-26696.  | 1.7 | 10        |
| 30 | Diffusion and Reactions of Photoinduced Interstitial Oxygen Atoms in Amorphous SiO <sub>2</sub> Impregnated with <sup>18</sup> O-Labeled Interstitial Oxygen Molecules. Journal of Physical Chemistry C, 2014, 118, 4282-4286.   | 1.5 | 12        |
| 31 | Characteristic Coordination Structure around Nd Ions in Sol-Gel-Derived Nd-Al-Codoped Silica Glasses. Journal of Physical Chemistry B, 2014, 118, 8792-8797.   | 1.2 | 8         |
| 32 | Cosolvent-Free Sol-Gel Synthesis and Optical Characterization of Silica Glasses Containing LaF <sub>3</sub> and (La,Er)F <sub>3</sub> Nanocrystals. Bulletin of the Chemical Society of Japan, 2014, 87, 765-772.  | 2.0 | 5         |
| 33 | Indium-Based Ultraviolet-Transparent Electroconductive Oxyfluoride InOF: Ambient-Pressure Synthesis and Unique Electronic Properties in Comparison with In <sub>2</sub> O <sub>3</sub> . Journal of the American Chemical Society, 2013, 135, 13080-13088.                   | 6.6 | 15        |
| 34 | Temperature dependence of O <sub>2</sub> singlet photoluminescence in silica nanoparticles. Journal of Non-Crystalline Solids, 2013, 379, 220-223.   | 1.5 | 4         |
| 35 | Recent advances in sol-gel synthesis of monolithic silica and silica-based glasses. Journal of Asian Ceramic Societies, 2013, 1, 121-133.  | 1.0 | 123       |
| 36 | Formation and annihilation of intrinsic defects induced by electronic excitation in high-purity crystalline SiO <sub>2</sub> . Journal of Applied Physics, 2013, 113, 143511.  | 1.1 | 5         |

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|----|---|-----|-----------|
| 37 | Thiol-Containing Polysilsesquioxane Liquid and Photocurable Sulfur-Containing Transparent Organic-Inorganic Hybrid Monoliths Obtained via Cosolvent-Free Hydrolytic Polycondensation. Bulletin of the Chemical Society of Japan, 2013, 86, 880-883. | 2.0 | 7         |
| 38 | Hydrothermal Synthesis of Manganese Dioxide Nanoparticles as Cathode Material for Rechargeable Batteries. Electrochemistry, 2013, 81, 2-6.  | 0.6 | 9         |
| 39 | Cosolvent-free sol-gel synthesis of rare-earth and aluminum codoped monolithic silica glasses. Journal of the Ceramic Society of Japan, 2013, 121, 299-302.   | 0.5 | 10        |
| 40 | Sol-Gel Synthesis of Rare-Earth and Phosphorus Codoped Monolithic Silica Glasses from a Cosolvent-Free Phase-Separating System. Applied Physics Express, 2012, 5, 012601.   | 1.1 | 16        |
| 41 | Oxygen-excess-related point defects in glassy/amorphous SiO <sub>2</sub> and related materials. Nuclear Instruments & Methods in Physics Research B, 2012, 286, 159-168.  | 0.6 | 65        |
| 42 | <sup>18</sup> O-labeled interstitial oxygen molecules as probes to study reactions involving oxygen-related species in amorphous SiO <sub>2</sub> . Journal of Non-Crystalline Solids, 2012, 358, 3524-3530.  | 1.5 | 0         |
| 43 | Synthesis of monolithic deep-ultraviolet-transparent polysilsesquioxane glasses from organotrimethoxysilane-water binary system. RSC Advances, 2012, 2, 8946.   | 1.7 | 7         |
| 44 | Synthesis of nanocrystalline LaF <sub>3</sub> doped silica glasses by hydrofluoric acid catalyzed sol-gel process. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2012, 177, 510-514.                          | 1.7 | 9         |
| 45 | Frenkel defect process in amorphous silica. , 2011, , .   |     | 3         |
| 46 | Visible to vacuum-UV range optical absorption of oxygen dangling bonds in amorphous SiO <sub>2</sub> . Physical Review B, 2011, 84, .   | 1.1 | 54        |
| 47 | Oxygen-excess amorphous SiO <sub>2</sub> with <sup>18</sup> O-labeled interstitial oxygen molecules. Journal of Non-Crystalline Solids, 2011, 357, 1842-1845.   | 1.5 | 3         |
| 48 | Crucial dependence of excimer laser toughness of wet-silica on excess oxygen. Journal of Non-Crystalline Solids, 2011, 357, 1875-1878.  | 1.5 | 4         |
| 49 | Effects of temperature on electron paramagnetic resonance of dangling oxygen bonds in amorphous silicon dioxide. IOP Conference Series: Materials Science and Engineering, 2011, 23, 012016.  | 0.3 | 2         |
| 50 | Exchange between interstitial oxygen molecules and network oxygen atoms in amorphous SiO <sub>2</sub> studied by <sup>18</sup> O isotope labeling and infrared photoluminescence spectroscopy. Physical Review B, 2011, 83, .                       | 1.1 | 8         |
| 51 | Sol-gel synthesis of fluorine-doped silica glasses with low SiOH concentrations. Journal of the Ceramic Society of Japan, 2011, 119, 393-396.   | 0.5 | 11        |
| 52 | Amine-buffered Phase Separating Tetraethoxysilane-Water Binary Mixture: A Simple Precursor of Sol-Gel Derived Monolithic Silica Gels and Glasses. Chemistry Letters, 2010, 39, 712-713.   | 0.7 | 16        |
| 53 | Diffusion of oxygen molecules in fluorine-doped amorphous SiO <sub>2</sub> . Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2010, 173, 158-161.  | 1.7 | 7         |
| 54 | Highly patterned cylindrical Ni-Sn alloys with 3-dimensionally ordered macroporous structure as anodes for lithium batteries. Electrochimica Acta, 2010, 55, 8030-8035.   | 2.6 | 45        |

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|----|--|-----|-----------|
| 55 | Evaluation of Electrochemical Characteristics of $\text{Li}_7\text{La}_3\text{Zr}_2\text{O}_{12}$ Solid Electrolyte. ECS Transactions, 2009, 16, 175-180.  | 0.3 | 21        |
| 56 | Photoluminescence Study of Diffusion and Reactions of $^{18}\text{O}$ -labeled Interstitial Oxygen Molecules in Amorphous $\text{SiO}_2$ . ECS Transactions, 2009, 25, 277-285.  | 0.3 | 0         |
| 57 | Fabrication of Three-Dimensional Battery Using Ceramic Electrolyte with Honeycomb Structure by Sol-gel Process. ECS Transactions, 2009, 16, 37-43.   | 0.3 | 7         |
| 58 | Oxygen ion conduction in $12\text{CaO}\cdot 7\text{Al}_2\text{O}_3$ : $\text{O}_2^{\cdot-}$ conduction mechanism and possibility of $\text{O}_2^{\cdot-}$ fast conduction†. Solid State Ionics, 2009, 180, 550-555.                    | 1.3 | 57        |
| 59 | -ray-induced intrinsic defect processes in fluorine-doped synthetic $\text{SiO}_2$ glasses of different fluorine concentrations. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2009, 161, 96-99. | 1.7 | 15        |
| 60 | Oxygen Exchange at the Internal Surface of Amorphous $\text{SiO}_2$ Studied by Photoluminescence of Isotopically Labeled Oxygen Molecules. Physical Review Letters, 2009, 102, 175502.   | 2.9 | 14        |
| 61 | Sol-gel synthesis of monolithic silica gels and glasses from phase-separating tetraethoxysilane-water binary system. Chemical Communications, 2009, , 2580.  | 2.2 | 44        |
| 62 | Isotope Effect on the Infrared Photoluminescence Decay of Interstitial Oxygen Molecules in Amorphous $\text{SiO}_2$ . Applied Physics Express, 2009, 2, 056502.  | 1.1 | 9         |
| 63 | Macroscopic Phase Separation in a Tetraethoxysilane-Water Binary Sol-Gel System. Bulletin of the Chemical Society of Japan, 2009, 82, 1470-1476.   | 2.0 | 27        |
| 64 | Hydrogen-related radiation defects in $\text{SiO}_2$ -based glasses. Nuclear Instruments & Methods in Physics Research B, 2008, 266, 2971-2975.  | 0.6 | 14        |
| 65 | Intrinsic defect formation in amorphous $\text{SiO}_2$ by electronic excitation: Bond dissociation versus Frenkel mechanisms. Physical Review B, 2008, 78, .   | 1.1 | 55        |
| 66 | Diffusion and reactions of interstitial oxygen species in amorphous $\text{SiO}_2$ : A review. Journal of Non-Crystalline Solids, 2008, 354, 224-232.  | 1.5 | 64        |
| 67 | Photoluminescence from Epitaxial Films of Perovskite-type Alkaline-earth Stannates. Applied Physics Express, 2008, 1, 015003.  | 1.1 | 29        |
| 68 | Diffusion of nitrogen molecules in amorphous $\text{SiO}_2$ . Applied Physics Letters, 2007, 91, .   | 1.5 | 13        |
| 69 | Improvement of Vacuum-Ultraviolet Transparency of Silica Glass by Modification of Point Defects(Review). Journal of the Ceramic Society of Japan, 2007, 115, 85-91.  | 1.3 | 19        |
| 70 | Formation of Intrinsic Point Defects in Fluorine-doped Synthetic $\text{SiO}_2$ Glass by $^{60}\text{Co}$ $\gamma$ -ray Irradiation. Chemistry Letters, 2007, 36, 266-267.   | 0.7 | 8         |
| 71 | Fluorine laser-induced silicon hydride $\text{Si-H}$ groups in silica. Journal of Non-Crystalline Solids, 2007, 353, 526-529.  | 1.5 | 15        |
| 72 | Reactivity of $\text{SiCl}$ and $\text{SiF}$ groups in $\text{SiO}_2$ glass with mobile interstitial $\text{O}_2$ and $\text{H}_2\text{O}$ molecules. Journal of Non-Crystalline Solids, 2007, 353, 514-517.                           | 1.5 | 8         |

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|----|---|-----|-----------|
| 73 | Vibrational Dynamics and Oxygen Diffusion in a Nanoporous Oxide Ion Conductor $12\text{CaO}\cdot 7\text{Al}_2\text{O}_3$ Studied by $^{18}\text{O}$ Labeling and Micro-Raman Spectroscopy. <i>Journal of Physical Chemistry C</i> , 2007, 111, 14855-14861.                                 | 1.5 | 53        |
| 74 | Interstitial OH Radicals in F2-Laser-Irradiated Bulk Amorphous $\text{SiO}_2$ . <i>Journal of Physical Chemistry B</i> , 2006, 110, 10224-10227.  | 1.2 | 4         |
| 75 | In situ observation of the formation, diffusion, and reactions of hydrogenous species in F2-laser-irradiated $\text{SiO}_2$ glass using a pump-and-probe technique. <i>Physical Review B</i> , 2006, 74, .  | 1.1 | 31        |
| 76 | Role of Interstitial Voids in Oxides on Formation and Stabilization of Reactive Radicals: $\dot{\text{O}}$ Interstitial $\text{HO}_2$ Radicals in F2-Laser-Irradiated Amorphous $\text{SiO}_2$ . <i>Journal of the American Chemical Society</i> , 2006, 128, 5371-5374.                    | 6.6 | 11        |
| 77 | An increased F2-laser damage in $\text{SiO}_2$ silica glass due to atomic hydrogen: A new hydrogen-related $\text{E}'$ -center. <i>Journal of Non-Crystalline Solids</i> , 2006, 352, 2297-2302.  | 1.5 | 36        |
| 78 | Vacuum-ultraviolet absorption of interstitial $\text{O}_2$ and $\text{H}_2\text{O}$ molecules in $\text{SiO}_2$ glass. <i>Journal of Non-Crystalline Solids</i> , 2006, 352, 2303-2306.   | 1.5 | 6         |
| 79 | Modification of vacuum-ultraviolet absorption of $\text{SiOH}$ groups in $\text{SiO}_2$ glass with temperature, F2 laser irradiation, and $\text{H}^2$ isotope exchange. <i>Journal of Non-Crystalline Solids</i> , 2006, 352, 2307-2310.   | 1.5 | 13        |
| 80 | Vacuum-ultraviolet absorption of hydrogenated and deuterated silanol groups and interstitial water molecules in amorphous $\text{SiO}_2$ . <i>Physical Review B</i> , 2005, 72, .   | 1.1 | 23        |
| 81 | Defects in oxide glasses. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , 2005, 2, 15-24.   | 0.8 | 222       |
| 82 | Decomposition of peroxy radicals in $\text{SiO}_2$ glass with X-rays or KrF laser light. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , 2005, 2, 314-317.  | 0.8 | 2         |
| 83 | Interstitial oxygen molecules in amorphous $\text{SiO}_2$ . II. The influence of common dopants ( $\text{SiOH}$ , $\text{SiF}$ , and) $\text{Ti}$ . <i>Journal of Applied Physics</i> , 2005, 98, 013528.   | 1.1 | 21        |
| 84 | Interstitial oxygen molecules in amorphous $\text{SiO}_2$ . III. Measurements of dissolution kinetics, diffusion coefficient, and solubility by infrared photoluminescence. <i>Journal of Applied Physics</i> , 2005, 98, 013529.   | 1.1 | 51        |
| 85 | Interstitial oxygen molecules in amorphous $\text{SiO}_2$ . I. Quantitative concentration analysis by thermal desorption, infrared photoluminescence, and vacuum-ultraviolet optical absorption. <i>Journal of Applied Physics</i> , 2005, 98, 013527.                                      | 1.1 | 36        |
| 86 | Reactions of $\text{SiCl}$ groups in amorphous $\text{SiO}_2$ with mobile interstitial chemical species: Formation of interstitial $\text{Cl}_2$ and $\text{HCl}$ molecules, and role of interstitial $\text{H}_2\text{O}$ molecules. <i>Journal of Applied Physics</i> , 2005, 98, 043515. | 1.1 | 16        |
| 87 | UV laser induced phenomena in $\text{SiO}_2$ glass. <i>Nuclear Instruments &amp; Methods in Physics Research B</i> , 2004, 218, 323-331.  | 0.6 | 38        |
| 88 | Role of Mobile Interstitial Oxygen Atoms in Defect Processes in Oxides: Interconversion between Oxygen-Associated Defects in $\text{SiO}_2$ Glass. <i>Physical Review Letters</i> , 2004, 92, 015504.   | 2.9 | 44        |
| 89 | Interconversion between non-bridging oxygen hole center and peroxy radical in F2-laser-irradiated $\text{SiO}_2$ glass. <i>Journal of Non-Crystalline Solids</i> , 2004, 345-346, 219-223.  | 1.5 | 9         |
| 90 | Urbach absorption edge of silica: reduction of glassy disorder by fluorine doping. <i>Journal of Non-Crystalline Solids</i> , 2004, 345-346, 328-331.   | 1.5 | 48        |

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|-----|---|-----|-----------|
| 91  | Spontaneous oxygen loading into SiO <sub>2</sub> glass by thermal anneal. Journal of Non-Crystalline Solids, 2004, 349, 205-208.  | 1.5 | 18        |
| 92  | Correlation between oxygen-deficient center formation and volume compaction in synthetic SiO <sub>2</sub> glass upon ArF or F <sub>2</sub> excimer-laser irradiation. Applied Optics, 2004, 43, 2332.                               | 2.1 | 14        |
| 93  | Surface Dissolution and Diffusion of Oxygen Molecules in SiO <sub>2</sub> Glass. Journal of the Ceramic Society of Japan, 2004, 112, 559-562.   | 1.3 | 44        |
| 94  | Electronic Structure of Oxygen Dangling Bond in GlassySiO <sub>2</sub> : The Role of Hyperconjugation. Physical Review Letters, 2003, 90, 186404.   | 2.9 | 76        |
| 95  | Effect of F <sub>2</sub> laser power on defect formation in high-purity SiO <sub>2</sub> glass. Journal of Non-Crystalline Solids, 2003, 322, 73-77.  | 1.5 | 15        |
| 96  | <title>Advances in silica-based glasses for UV and vacuum UV laser optics</title>. , 2003, 5122, 1.   |     | 7         |
| 97  | Publisher's Note: Diffusion and Reactions of Hydrogen inF <sub>2</sub> -Laser-IrradiatedSiO <sub>2</sub> Glass [Phys. Rev. Lett.89, 135507 (2002)]. Physical Review Letters, 2002, 89, .  | 2.9 | 1         |
| 98  | Power dependence of defect formation in SiO <sub>2</sub> glass by F <sub>2</sub> laser irradiation. Applied Physics Letters, 2002, 81, 3164-3166.   | 1.5 | 36        |
| 99  | Effects of H <sub>2</sub> impregnation on excimer-laser-induced oxygen-deficient center formation in synthetic SiO <sub>2</sub> glass. Applied Physics Letters, 2002, 80, 3916-3918.  | 1.5 | 28        |
| 100 | Photochemistry in phosphorus-doped silica glass by ArF excimer laser irradiation: Crucial effect of H <sub>2</sub> loading. Journal of Applied Physics, 2002, 91, 4121-4124.  | 1.1 | 16        |
| 101 | Diffusion and Reactions of Hydrogen inF <sub>2</sub> -Laser-IrradiatedSiO <sub>2</sub> Glass. Physical Review Letters, 2002, 89, 135507.  | 2.9 | 59        |
| 102 | Decomposition of water by a CaTiO <sub>3</sub> photocatalyst under UV light irradiation. Materials Research Bulletin, 2002, 37, 2401-2406.  | 2.7 | 112       |
| 103 | The behavior of interstitial oxygen atoms induced by F <sub>2</sub> laser irradiation of oxygen-rich glassy SiO <sub>2</sub> . Nuclear Instruments & Methods in Physics Research B, 2002, 191, 127-130.                             | 0.6 | 26        |
| 104 | Vacuum ultraviolet optical absorption band of non-bridging oxygen hole centers in SiO <sub>2</sub> glass. Solid State Communications, 2002, 122, 117-120.   | 0.9 | 92        |
| 105 | Physical Disorder and Optical Properties in the Vacuum Ultraviolet Region of AmorphousSiO <sub>2</sub> . Physical Review Letters, 2001, 87, 175501.   | 2.9 | 141       |
| 106 | Formation and decay of nonbridging oxygen hole centers in SiO <sub>2</sub> glasses induced by F <sub>2</sub> laser irradiation: In situ observation using a pump and probe technique. Applied Physics Letters, 2001, 79, 1757-1759. | 1.5 | 74        |
| 107 | Optical transparency of SiO <sub>2</sub> glass in vacuum ultraviolet region and defect formation by F <sub>2</sub> laser. , 2001, 4347, 223.  |     | 0         |
| 108 | Macroporous morphology of titania films prepared by sol-gel dip-coating method from a system containing poly(ethylene glycol) and poly(vinylpyrrolidone). Journal of Materials Research, 2001, 16, 58-66.                           | 1.2 | 26        |

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|-----|--|-----|-----------|
| 109 | Interaction of F2 excimer laser pulses with hydroxy groups in SiO <sub>2</sub> glass: Hydrogen bond formation and bleaching of vacuum ultraviolet absorption edge. Journal of Chemical Physics, 2001, 115, 9473-9476.  | 1.2 | 24        |
| 110 | Title is missing!. Journal of Sol-Gel Science and Technology, 2000, 19, 219-222.   | 1.1 | 36        |
| 111 | Title is missing!. Journal of Sol-Gel Science and Technology, 2000, 17, 173-184.   | 1.1 | 55        |
| 112 | Title is missing!. Journal of Sol-Gel Science and Technology, 2000, 17, 239-245.   | 1.1 | 19        |
| 113 | Title is missing!. Journal of Sol-Gel Science and Technology, 1999, 16, 257-266.   | 1.1 | 25        |
| 114 | Oxygen detection in sol-gel derived titania thin films doped with tantalum. Physical Chemistry Chemical Physics, 1999, 1, 1979-1983.   | 1.3 | 11        |
| 115 | Macroporous Morphology of the Titania Films Prepared by a Sol-Gel Dip-Coating Method from the System Containing Poly(Ethylene Glycol). I. Effect of Humidity. Journal of Sol-Gel Science and Technology, 1998, 12, 185-192.  | 1.1 | 42        |
| 116 | Macroporous Morphology of the Titania Films Prepared by a Sol-Gel Dip-Coating Method from the System Containing Poly(Ethylene Glycol). II. Effect of Solution Composition. Journal of Sol-Gel Science and Technology, 1998, 12, 193-201.   | 1.1 | 33        |
| 117 | Preparation of Macroporous Titania Films by a Sol-Gel Dip-Coating Method from the System Containing Poly(ethylene glycol). Journal of the American Ceramic Society, 1998, 81, 2670-2676.   | 1.9 | 107       |
| 118 | Photovoltaic Effect in Titanium Dioxide/Polythiophene Cell. Japanese Journal of Applied Physics, 1997, 36, 5537-5542.  | 0.8 | 30        |
| 119 | Photovoltaic Effect in Titanium Dioxide/Zinc Phthalocyanine Cell. Japanese Journal of Applied Physics, 1996, 35, 6110-6116.  | 0.8 | 35        |
| 120 | Optical Second-order Nonlinearity and Glass Structure of Poled Tellurite Glasses.. Funtai Oyobi Fumatsu Yakin/Journal of the Japan Society of Powder and Powder Metallurgy, 1995, 42, 55-60.   | 0.1 | 1         |
| 121 | <title>Second harmonic generation in electrically poled TeO <sub>2</sub> -based glasses</title>. , 1994, 2289, 167.  |     | 16        |
| 122 | Energy transfer and quenching in sol-gel derived silica glass green phosphors doped with Tb <sup>3+</sup> and Ce <sup>3+</sup> ions: distinct difference between Al <sup>3+</sup> and P <sup>5+</sup> doped glasses. Physica Status Solidi (A) Applications and Materials Science, 0, , 2100494. | 0.8 | 2         |