# Hiroyuki Miyazaki

List of Publications by Year
in descending order

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| 68 | 898 | 516561 16 | 501076 28 |
|---|---|---|---|
| papers | citations | h-index | g-index |

| 71 | 71 | 71 | 707 |
|---|---|---|---|
| all docs | docs citations | times ranked | citing authors |

| # | Article | IF | Citations |
|---|---|---|---|
| 1 | Microstructural Characterization of Porous Silicon Carbide Membrane Support With and Without Alumina Additive. Journal of the American Ceramic Society, 2006, 89, 1523-1529. | 1.9 | 114 |
| 2 | Preparation and characterization of tubular porous silicon carbide membrane supports. Journal of Membrane Science, 2011, 369, 112-118. | 4.1 | 72 |
| 3 | X-ray diffractometry and high-resolution electron microscopy of neutron-irradiated SiC to a fluence of 1.9Ã—1027 n/m2. Journal of Nuclear Materials, 1998, 253, 78-86. | 1.3 | 60 |
| 4 | Neutron Irradiation Damage of Silicon Carbide. Fusion Science and Technology, 1995, 27, 314-325. | 0.6 | 45 |
| 5 | Correlation of wear behavior and indentation fracture resistance in silicon nitride ceramics hot-pressed with alumina and yttria. Journal of the European Ceramic Society, 2009, 29, 1535-1542. | 2.8 | 38 |
| 6 | Comparison of fracture resistance as measured by the indentation fracture method and fracture toughness determined by the single-edge-precracked beam technique using silicon nitrides with different microstructures. Journal of the European Ceramic Society, 2007, 27, 2347-2354. | 2.8 | 36 |
| 7 | Effects of Thermal Annealing on the Macroscopic Dimension and Lattice Parameter of Heavily Neutron-Irradiated Silicon Carbide. Journal of Nuclear Science and Technology, 1992, 29, 656-663. | 0.7 | 33 |
| 8 | Improved resistance to thermal fatigue of active metal brazing substrates for silicon carbide power modules using tough silicon nitrides with high thermal conductivity. Ceramics International, 2018, 44, 8870-8876. | 2.3 | 32 |
| 9 | Relationship between fracture toughness determined by surface crack in flexure and fracture resistance measured by indentation fracture for silicon nitride ceramics with various microstructures. Ceramics International, 2009, 35, 493-501. | 2.3 | 26 |
| 10 | Joining of alumina with a porous alumina interlayer. Ceramics International, 2012, 38, 1149-1155. | 2.3 | 23 |
| 11 | A reinvestigation of the validity of the indentation fracture (IF) method as applied to ceramics. Journal of the European Ceramic Society, 2017, 37, 4437-4441. | 2.8 | 23 |
| 12 | Pressureless sintering of boron carbide ceramics. Journal of the Ceramic Society of Japan, 2008, 116, 1319-1321. | 0.5 | 22 |
| 13 | Effects of MgO addition on the microwave dielectric properties of high thermal-conductive silicon nitride ceramics sintered with ytterbia as sintering additives. Journal of the European Ceramic Society, 2012, 32, 3297-3301. | 2.8 | 22 |
| 14 | Effect of crystallization of intergranular glassy phases on the dielectric properties of silicon nitride ceramics. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2008, 148, 257-260. | 1.7 | 19 |
| 15 | Microstructure of boron carbide pressureless sintered in an Ar atmosphere containing gaseous metal species. Journal of the European Ceramic Society, 2010, 30, 999-1005. | 2.8 | 18 |
| 16 | Effects of Thermal Annealing on the Macroscopic Dimension and Lattice Parameter of Heavily Neutron-Irradiated Silicon Carbide.. Journal of Nuclear Science and Technology, 1992, 29, 656-663. | 0.7 | 17 |
| 17 | Preparation and mechanical properties of 10 vol.% zirconia/alumina composite with fine-scale fibrous microstructure by co-extrusion process. Materials Letters, 2004, 58, 1410-1414. | 1.3 | 16 |
| 18 | Refined measurements of indentation fracture resistance of alumina using powerful optical microscopy. Ceramics International, 2014, 40, 2777-2783. | 2.3 | 16 |

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|---|---|---|---|
| 19 | Preparation of Mesoporous Silicon Carbide from Nano-Sized SiC Particle and Polycarbosilane. Journal of the Ceramic Society of Japan, 2006, 114, 571-574. | 1.3 | 15 |
| 20 | Fabrication of high thermal-conductive silicon nitride ceramics with low dielectric loss. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2009, 161, 198-201. | 1.7 | 15 |
| 21 | Crack profiles under a Vickers indent in silicon nitride ceramics with various microstructures. Ceramics International, 2010, 36, 173-179. | 2.3 | 15 |
| 22 | Indentation fracture resistance test round robin on silicon nitride ceramics. Ceramics International, 2010, 36, 899-907. | 2.3 | 15 |
| 23 | Evaluation of fracture toughness of ceramic thin plates through modified single edge-precracked plate method. Scripta Materialia, 2015, 103, 34-36. | 2.6 | 15 |
| 24 | Correlation of the indentation fracture resistance measured using high-resolution optics and the fracture toughness obtained by the single edge-notched beam (SEPB) method for typical structural ceramics with various microstructures. Ceramics International, 2016, 42, 7873-7876. | 2.3 | 15 |
| 25 | Round robin on indentation fracture resistance of silicon carbide ceramics by using a powerful optical microscope. Ceramics International, 2013, 39, 611-617. | 2.3 | 14 |
| 26 | Effect of isochronal annealing on thermal diffusivity of neutron-irradiated AlN. Journal of Nuclear Materials, 1996, 230, 74-77. | 1.3 | 12 |
| 27 | Effect of the volume ratio of zirconia and alumina on the mechanical properties of fibrous zirconia/alumina bi-phase composites prepared by co-extrusion. Journal of the European Ceramic Society, 2006, 26, 3539-3546. | 2.8 | 12 |
| 28 | Improved accuracy of the measurements of indentation fracture resistance for silicon nitride ceramics by the powerful optical microscopy. Ceramics International, 2013, 39, 9499-9504. | 2.3 | 12 |
| 29 | Round-robin test on the fracture toughness of ceramic thin plates through modified single edge-precracked plate method. Journal of the European Ceramic Society, 2016, 36, 3245-3248. | 2.8 | 10 |
| 30 | X-ray line broadening in neutron irradiated silicon carbide. Journal of Nuclear Materials, 1992, 191-194, 588-591. | 1.3 | 9 |
| 31 | Crack generation in electroless nickel plating layers on copper-metallized silicon nitride substrates during thermal cycling. Journal of Materials Science: Materials in Electronics, 2017, 28, 8278-8285. | 1.1 | 9 |
| 32 | Effects of nonstoichiometry on physical properties in neutron-irradiated spinel ceramics. Journal of Nuclear Materials, 1994, 212-215, 1046-1049. | 1.3 | 8 |
| 33 | Effect of neutron irradiation on passive oxidation of silicon carbide. Journal of Nuclear Materials, 1996, 233-237, 1275-1278. | 1.3 | 7 |
| 34 | Recovery of neutron-induced defects in near-stoichiometric spinel ceramics irradiated at around 500Â°C. Nuclear Instruments & Methods in Physics Research B, 1996, 116, 131-135. | 0.6 | 6 |
| 35 | Measurement of Indentation Fracture Toughness of Silicon Nitride Ceramics: II, Effect of the Experimental Conditions. Key Engineering Materials, 2007, 352, 45-48. | 0.4 | 6 |
| 36 | Measurements of fracture toughness of ceramic thin plates through single-edge V-notch plate method. Journal of the European Ceramic Society, 2016, 36, 4327-4331. | 2.8 | 6 |

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|---|---|---|---|
| 37 | Physical property changes of crystalline and non-crystalline SiO2 due to neutron irradiation and recovery by subsequent annealing. Journal of Nuclear Materials, 2007, 367-370, 730-735. | 1.3 | 5 |
| 38 | Effect of mechanical properties of the ceramic substrate on the thermal fatigue of Cu metallized ceramic substrates. , 2016, , . | | 5 |
| 39 | Densification and Thermal, Mechanical and Electrical Properties of SiC Ceramics Sintered with Addition of MgO.. Journal of the Ceramic Society of Japan, 2001, 109, 227-231. | 1.3 | 4 |
| 40 | Concentration gradient of solute ions within Î±-SiAlON grains. Materials Letters, 2005, 59, 44-47. | 1.3 | 4 |
| 41 | Measurement of Indentation Fracture Toughness of Silicon Nitride Ceramics: I, Effect of Microstructure of Materials. Key Engineering Materials, 2007, 352, 41-44. | 0.4 | 4 |
| 42 | The application of automated image analysis to dense heterogeneities in partially sintered alumina. Journal of the European Ceramic Society, 2007, 27, 1927-1933. | 2.8 | 4 |
| 43 | Novel measurement technique of crack length for indentation fracture (IF) method using high contrast image of crack tips through thin film coating. Journal of the European Ceramic Society, 2015, 35, 2943-2948. | 2.8 | 4 |
| 44 | Thermal-cycling-induced surface roughening and structural change of a metal layer bonded to silicon nitride by active metal brazing. Journal of Materials Science: Materials in Electronics, 2017, 28, 12168-12175. | 1.1 | 4 |
| 45 | Tensile Deformation of Both ZrO<sub>2</sub>/TiC Composite and Al<sub>2</sub>O<sub>3</sub>/TiC Composite at High Temperature. Key Engineering Materials, 2000, 171-174, 771-778. | 0.4 | 3 |
| 46 | Effects of phosphorus content on generation and growth of cracks in nickelâ€“phosphorus platings owing to thermal cycling. Journal of Materials Science: Materials in Electronics, 2018, 29, 11688-11698. | 1.1 | 3 |
| 47 | Substrate. , 2018, , 81-94. | | 3 |
| 48 | Relationship between the thermal stress and structures of thermal-cycling-induced cracks in electroless nickel plating on metalized substrates. Journal of Materials Science: Materials in Electronics, 2019, 30, 5820-5832. | 1.1 | 3 |
| 49 | Effect of Sintering Method on Densification and Mechanical Properties of Si<sub>3</sub>N<sub>4</sub>/SiC Composites with Nitrates as Sintering Additives. Journal of the Ceramic Society of Japan, 1998, 106, 559-564. | 1.3 | 2 |
| 50 | Solidification of GaSb on a Ceramic Substrate in Short-Duration Microgravity. Japanese Journal of Applied Physics, 2003, 42, 6265-6268. | 0.8 | 2 |
| 51 | International round-robin test on an improved indentation fracture (IF) method performed through high-magnification microscopy with a traveling stage. Ceramics International, 2015, 41, 13271-13276. | 2.3 | 2 |
| 52 | Defects in nickel plating layers on copper-metallized substrates induced by thermal cycles. , 2016, , . | | 2 |
| 53 | Effect of repeated thermal cycles on thermal stress in copper paste films on alumina substrates. Journal of Materials Science: Materials in Electronics, 2016, 27, 8440-8445. | 1.1 | 2 |
| 54 | Roundâ€robin exercise on the threeâ€and fourâ€point flexural strength of thin ceramic plates for power modules. International Journal of Applied Ceramic Technology, 2019, 16, 2121-2130. | 1.1 | 2 |

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|---|---|---|---|
| 55 | Strength Evaluation of Ceramics Using Miniature Specimens. Journal of the Ceramic Society of Japan, 1995, 103, 177-181. | 1.3 | 1 |
| 56 | Measurement of Strength of Ceramic Materials Using a Miniaturized Bending Method. Key Engineering Materials, 1998, 159-160, 263-268. | 0.4 | 1 |
| 57 | Estimation of Standard-Size Strength in Silicon Carbide Ceramics Using Miniature Specimens. Journal of the Ceramic Society of Japan, 1998, 106, 592-595. | 1.3 | 1 |
| 58 | Grain Boundary Geometry of Superplastic Silicon Carbide Ceramic. Materials Science Forum, 1999, 304-306, 573-578. | 0.3 | 1 |
| 59 | New constitutive equation, including grain coarsening effect, for superplastic ceramics. Advances in Applied Ceramics, 2001, 100, 93-99. | 0.4 | 1 |
| 60 | Accelerated thermal fatigue test of metallized ceramic substrates for SiC power modules by repeated four-point bending. , 2018, , . | | 1 |
| 61 | Fracture-Toughness Test of Silicon Nitrides with Different Microstructures Using Vickers Indentation. , 0, , 433-442. | | 1 |
| 62 | Determination of Nitrogen Content in Vanadium Powder by Inert-Gas Fusion of Graphite-Added Pellets. Nippon Kinzoku Gakkaishi/Journal of the Japan Institute of Metals, 1998, 62, 427-435. | 0.2 | 0 |
| 63 | Influence of the Measuring Method for Crack Length on the Fracture Toughness of Silicon Nitride Ceramics Obtained by the Indentation Fracture Technique. Journal of the Ceramic Society of Japan, 2006, 114, 787-790. | 1.3 | 0 |
| 64 | Microstructures and Mechanical Properties of Fine-Scale Fibrous Alumina / Zirconia Bi-Phase Composite Fabricated by Co-Extrusion Process. Key Engineering Materials, 2006, 317-318, 619-622. | 0.4 | 0 |
| 65 | Preparation of Mesoporous Silicon Carbide. Key Engineering Materials, 2007, 352, 95-99. | 0.4 | 0 |
| 66 | Fracture Resistance and Wear Properties of Silicon Nitride Ceramics. Key Engineering Materials, 0, 403, 53-56. | 0.4 | 0 |
| 67 | Rolling Contact Fatigue Properties and Fracture Resistance for Silicon Nitride Ceramics with Various Microstructures. Ceramic Engineering and Science Proceedings, 0, , 90-99. | 0.1 | 0 |
| 68 | Study of Factors Affecting the Lengths of Surface Cracks in Silicon Nitride Introduced by Vickers Indentation. , 0, , 389-398. | | 0 |