

Kang Guan

List of Publications by Year in descending order

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32
papers

502
citations

933447

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h-index

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docs citations

33
times ranked

482
citing authors

#	ARTICLE	IF	CITATIONS
1	Fracture toughness of 3Yâ€ZrO ₂ ceramic determined by modified SCF method based on femtosecond laser. Journal of the American Ceramic Society, 2022, 105, 614-625.	3.8	1
2	Preparation of porous fused silica support with high UV transmittance for photocatalytic membrane reactors. Ceramics International, 2022, 48, 2898-2901.	4.8	1
3	First-principles study on predicting the crystal structures, mechanical properties and electronic structures of HfC _x N _{1-x} . Journal of the European Ceramic Society, 2021, 41, 3037-3044.	5.7	7
4	First-principles calculation of interfacial stability, energy, electronic properties, ideal tensile strength and fracture toughness of SiC/BN interface. Applied Physics A: Materials Science and Processing, 2021, 127, 1.	2.3	8
5	Machine learning and a computational fluid dynamic approach to estimate phase composition of chemical vapor deposition boron carbide. Journal of Advanced Ceramics, 2021, 10, 537-550.	17.4	6
6	Design and optimization of ceramic membrane structure: From the perspective of flux matching between support and membrane. Ceramics International, 2021, 47, 12357-12365.	4.8	14
7	Numerical Study of Thermal Shock Damage Mechanism of Polycrystalline Ceramics. Frontiers in Materials, 2021, 8, .	2.4	2
8	Evaluation of fracture toughness of zirconia ceramics with heterogeneous yttrium distribution microstructures. Journal of the Australian Ceramic Society, 2020, 56, 1229-1235.	1.9	1
9	Influence of grain boundary and grain size on the mechanical properties of polycrystalline ceramics: Grainâ€scale simulations. Journal of the American Ceramic Society, 2020, 103, 5900-5913.	3.8	37
10	Numerical modeling of SiC by low-pressure chemical vapor deposition from methyltrichlorosilane. Chinese Journal of Chemical Engineering, 2020, 28, 1733-1743.	3.5	8
11	Preparation of ZrO ₂ fiber modified Al ₂ O ₃ membrane supports with enhanced strength and permeability. Journal of the European Ceramic Society, 2019, 39, 1712-1716.	5.7	21
12	Estimating thermal conductivities and elastic moduli of porous ceramics using a new microstructural parameter. Journal of the European Ceramic Society, 2019, 39, 647-651.	5.7	3
13	Loadâ€deflection behavior of fracture toughness testing of ceramics by <sc>SEVNB</sc> method. International Journal of Applied Ceramic Technology, 2018, 15, 1310-1315.	2.1	1
14	Effect of ZnO/MgO ratio on the crystallization and optical properties of spinel opaque glazes. Journal of the American Ceramic Society, 2018, 101, 1754-1764.	3.8	10
15	Preparation and mechanism analysis of high performance ceramic membrane by spray coating. RSC Advances, 2018, 8, 39884-39892.	3.6	7
16	A Numerical Study of Densification Behavior of Silicon Carbide Matrix Composites in Isothermal Chemical Vapor Infiltration. Journal Wuhan University of Technology, Materials Science Edition, 2018, 33, 1365-1371.	1.0	1
17	Effects of channel modification on microstructure and mechanical properties of C/SiC composites prepared by LA-CVI process. Ceramics International, 2018, 44, 16414-16420.	4.8	23
18	Fabrication of super flux and high thermal shock resistance ceramic membrane support. Ceramics International, 2018, 44, 21221-21228.	4.8	10

#	ARTICLE	IF	CITATIONS
19	Influence of microstructure properties and layer thickness on strength and permeance of ceramic membranes. International Journal of Applied Ceramic Technology, 2017, 14, 562-573.	2.1	2
20	Modeling of Thermal Conductivity of CVI-Densified Composites at Fiber and Bundle Level. Materials, 2016, 9, 1011.	2.9	4
21	Evolution of porosity, pore size and permeate flux of ceramic membranes during sintering process. Journal of Membrane Science, 2016, 520, 166-175.	8.2	25
22	One-step coating and characterization of Al_2O_3 microfiltration membrane. Journal of Membrane Science, 2015, 490, 160-168.	8.2	60
23	The comparison of microstructure and oxidation behaviors of (SiC-C)/PyC/SiC and C/PyC/SiC composites in air. Science and Engineering of Composite Materials, 2015, 22, .	1.4	3
24	Thermodynamics investigation of the gas-phase reactions in the chemical vapor deposition of silicon borides with BCl_3 and SiCl_4 precursors. Structural Chemistry, 2014, 25, 1369-1384.	2.0	3
25	Modeling of Pore Structure Evolution Between Bundles of Plain Woven Fabrics During Chemical Vapor Infiltration Process: The Influence of Preform Geometry. Journal of the American Ceramic Society, 2013, 96, 51-61.	3.8	10
26	Prediction of Permeability for Chemical Vapor Infiltration. Journal of the American Ceramic Society, 2013, 96, 2445-2453.	3.8	12
27	Modeling of pore structure evolution within the fiber bundle during chemical vapor infiltration process. Chemical Engineering Science, 2011, 66, 5852-5861.	3.8	10
28	First-principles study of the structural, vibrational, phonon and thermodynamic properties of transition metal carbides TMC (Ti, Zr and Hf). Solid State Communications, 2011, 151, 61-66.	1.9	36
29	Structural, elastic and electronic properties of transition metal carbides TMC (TM=Ti, Zr, Hf and Ta) from first-principles calculations. Solid State Communications, 2011, 151, 602-606.	1.9	92
30	Crystal structure and elastic properties of ZrB compared with ZrB ₂ : A first-principles study. Computational Materials Science, 2010, 49, 814-819.	3.0	79
31	Influence of La_2O_3 addition on microstructure and mechanical properties of alumina-dispersed zirconia. Journal of the Australian Ceramic Society, 0, , 1.	1.9	1
32	A Dual-scale Model for Estimating the Ablation Rate of C/C Composite Nozzle. Applied Composite Materials, 0, , .	2.5	3