Luchao Sun

List of Publications by Year
in descending order

18	402	840776 11	839539 18
papers	citations	h-index	g-index

19	19	19	474
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	(<scp><scp>Cr</scp></scp>_{2/3}<scp><scp>Ti</scp></scp>_{1/3})₃<scp><scp>AlC</scp></scp> and (<scp><scp>Cr</scp></scp>_{5/8}<scp><scp>Ti</scp></scp>_{3/8})₄<scp><scp>AlC</scp></scp> New <scp>MAX</scp>â€phase Compounds in <scp><scp>Ti</scp></scp>â€“<scp><scp>Cr</scp></scp>â€“<scp><scp>Al</scp></scp>â€“<scp><scp>C</scp></scp> Surface Journal of the American Ceramic Society, 2014, 97, 67-69.	3.8	120
2	A multicomponent Î³-type (Gd_{1/6}Tb_{1/6}Dy_{1/6}Tm_{1/6}Yb_{1/6}Lu_{1/6})₂₂Si₂O₇ disilicate with outstanding thermal stability. Materials Research Letters, 2020, 8, 424-430.	8.7	45
3	Mechanism of Intrinsic Point Defects and Oxygen Diffusion in Yttrium Aluminum Garnet: Firstâ€Principles Investigation. Journal of the American Ceramic Society, 2012, 95, 3628-3633.	3.8	32
4	Robust hydrophobicity and evaporation inertness of rareâ€earth monosilicates in hot steam at very high temperature. Journal of the American Ceramic Society, 2019, 102, 3076-3080.	3.8	30
5	Investigation of Native Point Defects and Nonstoichiometry Mechanisms of Two Yttrium Silicates by Firstâ€Principles Calculations. Journal of the American Ceramic Society, 2013, 96, 3304-3311.	3.8	26
6	<scp><scp>Y</scp></scp>₄<scp><scp>Si</scp></scp>₂<scp><scp>O</scp></scp>₇<scp><scp> A New Oxynitride with Low Thermal Conductivity. Journal of the American Ceramic Society, 2012, 95, 3278-3284.	3.8	23
7	Effect of interfacial energy on microstructure of a directionally solidified Al₂O₃/YAG eutectic ceramic. Journal of the American Ceramic Society, 2018, 101, 1029-1035.	3.8	19
8	Crystal structure determination of nanolaminated Ti5Al2C3 by combined techniques of XRPD, TEM and ab initio calculations. Journal of Advanced Ceramics, 2012, 1, 268-273.	17.4	18
9	Theoretical Study on the Relationship Between Crystal Chemistry and Properties of Quaternary Yâ€“Siâ€“Oâ€“N Oxynitrides. Journal of the American Ceramic Society, 2016, 99, 2442-2450.	3.8	16
10	Tunable properties of (HoxY1-x)2SiO5 as damage self-monitoring environmental/thermal barrier coating candidates. Scientific Reports, 2019, 9, 415.	3.3	16
11	Effect of Ti Dopant on the Mechanical Properties and Oxidation Behavior of Zr2[Al(Si)]4C5 Ceramics. Journal of the American Ceramic Society, 2011, 94, 1872-1877.	3.8	12
12	Mechanical and thermal properties of light weight boronâ€mullite Al₅BO₉. Journal of the American Ceramic Society, 2020, 103, 5939-5951.	3.8	11
13	Mechanisms of ultralow and anisotropic thermal expansion in cordierite Mg₂Al₄Si₅O₁₈: Insight from phonon behaviors. Journal of the American Ceramic Society, 2018, 101, 1708-1718.	3.8	9
14	Pressure-induced lowering phonon modes softening and enhanced thermal resistance in<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:mi>Î²</mml:mi><mml:mtext>â€“</mml:mtext><mml:mi mathvariant="normal">M</mml:mi><mml:msub><mml:mi mathvariant="normal">g</mml:mi><mml:mn>2</mml:mn></mml:msub><mml:mi mathvariant="normal">A</mml:mi><mml:msub><mml:mi mathvariant="normal">l</mml:mi><mml:mn>4</mml:mn></mml:msub><mml:mi	3.2	5
15	Preparation, microstructures, and mechanical properties of directionally solidified Al₂O₃/Lu₃Al₅O₁₂ eutectic ceramics. International Journal of Applied Ceramic Technology, 2022, 19, 695-702.	2.1	3
16	Synthesis of nonâ€agglomerating submicron/nanoâ€Yb₂Si₂O₇ powders by a carbonâ€coated coprecipitation method. Journal of the American Ceramic Society, 2022, 105, 5548-5554.	3.8	3
17	Reaction Synthesis and Mechanical Properties of <scp><scp>Lu</scp></scp>₄<scp><scp>Si</scp></scp>₂<scp><scp>O</scp></scp>₇<scp><scp> Journal of the American Ceramic Society, 2013, 96, 2264-2268.	3.8	1
18	Unique chemical activity in porous YbB2C2 ceramics with high porosity and high compressive strength. Scientific Reports, 2020, 10, 20227.	3.3	1