Yanchun Zhou

List of Publications by Year in Descending Order

450 papers	16,198 citations	64 h-index	100 g-index
458 ext. papers	18,587 ext. citations	4.8 avg, IF	6.99 L-index

#	Paper	IF	Citations
450	Punch-shear tests and size effects for evaluating the shear strength of machinable ceramics. *International Journal of Materials Research*, **2022**, 95, 372-376	0.5	
449	Interfacial reaction between Cu and Ti2SnC during processing of CuTi2SnC composite. *International Journal of Materials Research*, **2022**, 96, 1314-1320	0.5	2
448	Improved thermal stability and infrared emissivity of high-entropy REMgAl11O19 and LaMAl11O19 (RE=La, Nd, Gd, Sm, Pr, Dy; M=Mg, Fe, Co, Ni, Zn). *Journal of Materials Science and Technology*, **2022**, 104, 131-144	9.1	3
447	Segregation of solute atoms in ZrC grain boundaries and their effects on grain boundary strengths. *Journal of Materials Science and Technology*, **2022**, 101, 234-241	9.1	2
446	Theoretical predictions and experimental verification on the phase stability of enthalpy-stabilized HE TMREB2s. *Journal of Materials Science and Technology*, **2022**, 121, 154-162	9.1	0
445	Medium-entropy (Me,Ti)0.1(Zr,Hf,Ce)0.9O2 (Me = Y and Ta): Promising thermal barrier materials for high-temperature thermal radiation shielding and CMAS blocking. *Journal of Materials Science and Technology*, **2022**, 123, 144-153	9.1	0
444	Grain boundary segregation induced strong UHTCs at elevated temperatures: A universal mechanism from conventional UHTCs to high entropy UHTCs. *Journal of Materials Science and Technology*, **2022**, 123, 26-33	9.1	0
443	High-entropy spinel ferrites MFe2O4 (M = Mg, Mn, Fe, Co, Ni, Cu, Zn) with tunable electromagnetic properties and strong microwave absorption. *Journal of Advanced Ceramics*, **2022**, 11, 754-768	10.7	6
442	Failure-mode dependence of the strengthening effect in Ti3AlC2/10 vol.% Al2O3 composite. *International Journal of Materials Research*, **2022**, 97, 1115-1118	0.5	0
441	Preparation and properties of CMAS resistant bixbyite structured high-entropy oxides RE2O3 (RE = Sm, Eu, Er, Lu, Y, and Yb): Promising environmental barrier coating materials for Al2O3f/Al2O3 composites. *Journal of Advanced Ceramics*, **2021**, 10, 596-613	10.7	20
440	High-entropy ceramics: Present status, challenges, and a look forward. *Journal of Advanced Ceramics*, **2021**, 10, 385-441	10.7	95
439	Theoretical insight into the solar thermal absorption property of ultra-high temperature ceramics TMB2 (TM = Ti, Zr, and Hf). *Solar Energy Materials and Solar Cells*, **2021**, 225, 111032	6.4	1
438	(Ca,Sr,Ba)ZrO3: A promising entropy-stabilized ceramic for titanium alloys smelting. *Journal of Materials Science and Technology*, **2021**, 65, 82-88	9.1	9
437	Temperature Dependent Thermal and Elastic Properties of High Entropy (Ti0.2Zr0.2Hf0.2Nb0.2Ta0.2)B2: Molecular Dynamics Simulation by Deep Learning Potential. *Journal of Materials Science and Technology*, **2021**, 72, 8-15	9.1	12
436	(Cr0.2Mn0.2Fe0.2Co0.2Mo0.2)B: A novel high-entropy monoboride with good electromagnetic interference shielding performance in K-band. *Journal of Materials Science and Technology*, **2021**, 77, 58-65	9.1	11
435	Electromagnetic wave absorbing properties of Cr2AlB2 powders and the effect of high-temperature oxidation. *Journal of the American Ceramic Society*, **2021**, 104, 2213-2224	3.8	5
434	One-step synthesis and electromagnetic absorption properties of high entropy rare earth hexaborides (HE REB6) and high entropy rare earth hexaborides/borates (HE REB6/HE REBO3) composite powders. *Journal of Advanced Ceramics*, **2021**, 10, 62-77	10.7	38

433	Fine-grained and electrically conductive NdB6/SiO2: A promising electromagnetic interference shielding material with good thermal and mechanical properties. *Journal of the European Ceramic Society*, **2021**, 41, 4794-4805	6	3
432	Enabling highly efficient and broadband electromagnetic wave absorption by tuning impedance match in high-entropy transition metal diborides (HE TMB2). *Journal of Advanced Ceramics*, **2021**, 10, 1299	10.7	6
431	Synthesis and characterization of ternary layered Nb2SB ceramics fabricated by spark plasma sintering. *Journal of Alloys and Compounds*, **2021**, 878, 160344	5.7	1
430	Application of high-throughput first-principles calculations in ceramic innovation. *Journal of Materials Science and Technology*, **2021**, 88, 143-157	9.1	8
429	High entropy rare earth hexaborides/tetraborides (HE REB6/HE REB4) composite powders with enhanced electromagnetic wave absorption performance. *Journal of Materials Science and Technology*, **2021**, 87, 155-166	9.1	14
428	Unraveling surface functionalization of Cr2B2T2 (T□=□OH, O, Cl, H) MBene by first-principles calculations. *Computational Materials Science*, **2021**, 199, 110810	3.2	0
427	Discovery of ABO4 scheelites with the extra low thermal conductivity through high-throughput calculations. *Journal of Materiomics*, **2020**, 6, 702-711	6.7	8
426	High temperature mechanical and thermal properties of CaxBa1-xZrO3 solid solutions. *Ceramics International*, **2020**, 46, 17416-17422	5.1	0
425	Grain boundary strengthening in ZrB2 by segregation of W: Atomistic simulations with deep learning potential. *Journal of the European Ceramic Society*, **2020**, 40, 5029-5036	6	9
424	Mechanical and thermal properties of light weight boron-mullite Al5BO9. *Journal of the American Ceramic Society*, **2020**, 103, 5939-5951	3.8	2
423	High entropy (Y0.2Yb0.2Lu0.2Eu0.2Er0.2)3Al5O12: A novel high temperature stable thermal barrier material. *Journal of Materials Science and Technology*, **2020**, 48, 57-62	9.1	32
422	High-entropy (Y0.2Nd0.2Sm0.2Eu0.2Er0.2)AlO3: A promising thermal/environmental barrier material for oxide/oxide composites. *Journal of Materials Science and Technology*, **2020**, 47, 45-51	9.1	27
421	Strategy to design high performance TiB2-based materials: Strengthen grain boundaries by solid solute segregation. *Journal of the American Ceramic Society*, **2020**, 103, 3311-3320	3.8	4
420	Anti-perovskite carbides and nitrides A3BX: A new family of damage tolerant ceramics. *Journal of Materials Science and Technology*, **2020**, 40, 64-71	9.1	9
419	On the potential of porous ZrP2O7 ceramics for thermal insulating and wave-transmitting applications at high temperatures. *Journal of the European Ceramic Society*, **2020**, 40, 789-797	6	8
418	Phonon engineering in tuning the thermal conductivity of alkaline-earth hexaborides. *Journal of the European Ceramic Society*, **2020**, 40, 1352-1360	6	4
417	Oxidation behavior and thermal stability of Cr2AlB2 powders. *Corrosion Science*, **2020**, 176, 108941	6.8	8
416	A novel high-entropy monoboride (Mo0.2Ta0.2Ni0.2Cr0.2W0.2)B with superhardness and low thermal conductivity. *Ceramics International*, **2020**, 46, 26626-26631	5.1	12

415	Theoretical prediction, synthesis, and crystal structure determination of new MAX phase compound V2SnC. *Journal of Advanced Ceramics*, **2020**, 9, 481-492	10.7	23
414	Zn0.1Ca0.1Sr0.4Ba0.4ZrO3: A non-equimolar multicomponent perovskite ceramic with low thermal conductivity. *Journal of the European Ceramic Society*, **2020**, 40, 6272-6277	6	17
413	High-entropy (Nd0.2Sm0.2Eu0.2Y0.2Yb0.2)4Al2O9 with good high temperature stability, low thermal conductivity, and anisotropic thermal expansivity. *Journal of Advanced Ceramics*, **2020**, 9, 595-605	10.7	31
412	Theoretical investigation on the stability, mechanical and thermal properties of the newly discovered MAB phase Cr4AlB4. *Journal of Materials Science and Technology*, **2020**, 39, 161-166	9.1	8
411	Preparation and mechanical properties of □Zr2O(PO4)2: A soft and damage tolerant ceramic with machinability and good thermal shock resistance. *Journal of the European Ceramic Society*, **2020**, 40, 155-164	6	0
410	Structural defects in MAX phases and their derivative MXenes: A look forward. *Journal of Materials Science and Technology*, **2020**, 38, 205-220	9.1	27
409	(Y0.25Yb0.25Er0.25Lu0.25)2(Zr0.5Hf0.5)2O7: A defective fluorite structured high entropy ceramic with low thermal conductivity and close thermal expansion coefficient to Al2O3. *Journal of Materials Science and Technology*, **2020**, 39, 167-172	9.1	38
408	Effect of reaction routes on the porosity and permeability of porous high entropy (Y0.2Yb0.2Sm0.2Nd0.2Eu0.2)B6 for transpiration cooling. *Journal of Materials Science and Technology*, **2020**, 38, 80-85	9.1	30
407	High entropy (Yb0.25Y0.25Lu0.25Er0.25)2SiO5 with strong anisotropy in thermal expansion. *Journal of Materials Science and Technology*, **2020**, 36, 134-139	9.1	49
406	Discovery of ABO3 perovskites as thermal barrier coatings through high-throughput first principles calculations. *Materials Research Letters*, **2019**, 7, 145-151	7.4	36
405	High strength and high porosity YB2C2 ceramics prepared by a new high temperature reaction/ partial sintering process. *Journal of Materials Science and Technology*, **2019**, 35, 2883-2891	9.1	6
404	(La0.2Ce0.2Nd0.2Sm0.2Eu0.2)2Zr2O7: A novel high-entropy ceramic with low thermal conductivity and sluggish grain growth rate. *Journal of Materials Science and Technology*, **2019**, 35, 2647-2651	9.1	99
403	Porous high entropy (Zr0.2Hf0.2Ti0.2Nb0.2Ta0.2)B2: A novel strategy towards making ultrahigh temperature ceramics thermal insulating. *Journal of Materials Science and Technology*, **2019**, 35, 2404-2408	9.1	47
402	Low thermal conductivity and high porosity ZrC and HfC ceramics prepared by in-situ reduction reaction/partial sintering method for ultrahigh temperature applications. *Journal of Materials Science and Technology*, **2019**, 35, 2778-2784	9.1	20
401	(TiZrHf)P2O7: An equimolar multicomponent or high entropy ceramic with good thermal stability and low thermal conductivity. *Journal of Materials Science and Technology*, **2019**, 35, 2227-2231	9.1	39
400	Phase pure and well crystalline Cr2AlB2: A key precursor for two-dimensional CrB. *Journal of Materials Science and Technology*, **2019**, 35, 1593-1600	9.1	44
399	M2M'AlB4 (M = Mn, Fe, Co, M' = Cr, Mo, W): Theoretical predicted ordered MAB phases with Cr3AlB4 crystal structure. *Journal of Materials Science and Technology*, **2019**, 35, 1432-1438	9.1	8
398	Theoretical predictions on intrinsic lattice thermal conductivity of ZrB2. *Journal of the European Ceramic Society*, **2019**, 39, 2982-2988	6	10

397	High porosity and low thermal conductivity high entropy (Zr0.2Hf0.2Ti0.2Nb0.2Ta0.2)C. *Journal of Materials Science and Technology*, **2019**, 35, 1700-1705	9.1	78
396	Theoretical prediction on the stability, electronic structure, room and elevated temperature properties of a new MAB phase Mo2AlB2. *Journal of Materials Science and Technology*, **2019**, 35, 2926-2934	9.1	7
395	(La0.2Ce0.2Nd0.2Sm0.2Eu0.2)PO4: A high-entropy rare-earth phosphate monazite ceramic with low thermal conductivity and good compatibility with Al2O3. *Journal of Materials Science and Technology*, **2019**, 35, 2892-2896	9.1	38
394	Advances on strategies for searching for next generation thermal barrier coating materials. *Journal of Materials Science and Technology*, **2019**, 35, 833-851	9.1	120
393	Crystal structure of Cr4AlB4: A new MAB phase compound discovered in Cr-Al-B system. *Journal of Materials Science and Technology*, **2019**, 35, 530-534	9.1	33
392	General trends in surface stability and oxygen adsorption behavior of transition metal diborides (TMB2). *Journal of Materials Science and Technology*, **2019**, 35, 584-590	9.1	1
391	Y5Si3C and Y3Si2C2: Theoretically predicted MAX phase like damage tolerant ceramics and promising interphase materials for SiCf/SiC composites. *Journal of Materials Science and Technology* , **2019**, 35, 313-322	9.1	7
390	First demonstration of possible two-dimensional MBene CrB derived from MAB phase Cr2AlB2. *Journal of Materials Science and Technology*, **2018**, 34, 2022-2026	9.1	62
389	Theoretical investigation of anisotropic mechanical and thermal properties of ABO3 (A=Sr, Ba; B=Ti, Zr, Hf) perovskites. *Journal of the American Ceramic Society*, **2018**, 101, 3527-3540	3.8	34
388	Y5Si2B8: A theoretically predicted new damage-tolerant MAB phase with layered crystal structure. *Journal of the American Ceramic Society*, **2018**, 101, 2459-2470	3.8	16
387	Cr5Si3B and Hf5Si3B: New MAB phases with anisotropic electrical, mechanical properties and damage tolerance. *Journal of Materials Science and Technology*, **2018**, 34, 1441-1448	9.1	20
386	Theoretical investigations on mechanical and dynamical properties of MAlB (M = Mo, W) nanolaminated borides at ground-states and elevated temperatures. *Journal of Alloys and Compounds*, **2018**, 738, 461-472	5.7	22
385	First-principles investigation on the chemical bonding, elastic properties and ideal strengths of MoAlB and WAlB nanolaminated MAB phases. *Computational Materials Science*, **2018**, 147, 331-337	3.2	25
384	Partial dislocation in carbon-vacancy-ordered Nb12Al3C8. *Scripta Materialia*, **2018**, 145, 85-89	5.6	3
383	M2YSi (M=Rh, Ir): Theoretically predicted damage-tolerant MAX phase-like layered silicides. *Journal of the American Ceramic Society*, **2018**, 101, 365-375	3.8	10
382	Theoretical predicted high-thermal-conductivity cubic SiN and GeN: promising substrate materials for high-power electronic devices. *Scientific Reports*, **2018**, 8, 14374	4.9	8
381	First principles investigation on mechanical and thermal properties of □and □YAlB4 ultra-high temperature ceramics. *Journal of the American Ceramic Society*, **2018**, 101, 5694-5704	3.8	8
380	Electronic structure and mechanical properties of layered compound YB2C2: A promising precursor for making two dimensional (2D) B2C2 nets. *Journal of Materials Science and Technology*, **2017**, 33, 1044-1054	9.1	17

379	Shear anisotropy: Tuning high temperature metal hexaborides from soft to extremely hard. *Journal of Materials Science and Technology*, **2017**, 33, 1371-1377	9.1	14
378	Segregation of solute atoms (Y, Nb, Ta, Mo and W) in ZrB2 grain boundaries and their effects on grain boundary strengths: A first-principles investigation. *Acta Materialia*, **2017**, 127, 312-318	8.4	36
377	Crystal structure, mechanical and thermal properties of Yb4Al2O9: A combination of experimental and theoretical investigations. *Journal of the European Ceramic Society*, **2017**, 37, 2491-2499	6	13
376	MAX Phase Materials for Nuclear Applications. *Ceramic Engineering and Science Proceedings*, **2017**, 223-233	0.1	4
375	Nb doping in Ti 3 AlC 2 : Effects on phase stability, high-temperature compressive properties, and oxidation resistance. *Journal of the European Ceramic Society*, **2017**, 37, 3641-3645	6	13
374	First-principles investigations on elevated temperature elastic and thermodynamic properties of ZrB2 and HfB2. *Journal of the American Ceramic Society*, **2017**, 100, 3662-3672	3.8	13
373	Electrical conductive and damage-tolerant nanolaminated MAB phases Cr2AlB2, Cr3AlB4 and Cr4AlB6. *Materials Research Letters*, **2017**, 5, 440-448	7.4	48
372	Anisotropic surface stability of TiB2: A theoretical explanation for the easy grain coarsening. *Journal of Materials Research*, **2017**, 32, 2755-2763	2.5	3
371	Reducing the Ideal Shear Strengths of ZrB by High Efficient Alloying Elements (Ag, Au, Pd and Pt). *Scientific Reports*, **2017**, 7, 43416	4.9	7
370	Near-isotropic elastic properties and high shear deformation resistance: Making low symmetry and open structured YbAlB14, LuAlB14 and ScMgB14 superhard. *Acta Materialia*, **2017**, 135, 44-53	8.4	5
369	Y2B3C2: A strain-stiffening ceramic for ultra-high temperature applications. *Ceramics International*, **2017**, 43, 14031-14036	5.1	1
368	Easily tiltable BAlB linear chain: The origin of unusual mechanical properties of nanolaminated MAB phases (CrB2)nCrAl. *Journal of Alloys and Compounds*, **2017**, 723, 462-466	5.7	14
367	Influence of ordered carbon-vacancy networks on the electronic structures and elastic properties of Nb4AlC3□. *Journal of the American Ceramic Society*, **2017**, 100, 724-731	3.8	7
366	Gelcasting of Yb3Al5O12 using a nontoxic water-soluble copolymer as both dispersant and gelling agent. *Ceramics International*, **2016**, 42, 421-427	5.1	8
365	A Theoretical Investigation on the Anisotropic Surface Stability and Oxygen Adsorption Behavior of ZrB2. *Journal of the American Ceramic Society*, **2016**, 99, 4113-4120	3.8	11
364	A Modified Theoretical Model of Intrinsic Hardness of Crystalline Solids. *Scientific Reports*, **2016**, 6, 33085	4.9	15
363	Fabrication of TiO 2 nanowhiskers by the heat treatment of bulk Ti 3 Si 0.9 Al 0.1 C 2 in rough vacuum. *Ceramics International*, **2016**, 42, 6868-6873	5.1	1
362	Effects of transition metal (TM = Zr, Hf, Nb, Ta, Mo, W) elements on the shear properties of TMB2s: A first-principles investigation. *Computational Materials Science*, **2016**, 117, 266-269	3.2	21

361	Theoretical prediction, preparation, and mechanical properties of YbB6, a candidate interphase material for future UHTCf/UHTC composites. *Journal of the European Ceramic Society*, **2016**, 36, 3571-3579	6	13
360	Mechanical and Thermal Properties of Yb2SiO5: A Promising Material for T/EBCs Applications. *Journal of the American Ceramic Society*, **2016**, 99, 1404-1411	3.8	54
359	Electronic Structure and Mechanical Properties of NiB: A Promising Interphase Material for Future UHTCf/UHTC Composites. *Journal of the American Ceramic Society*, **2016**, 99, 2110-2119	3.8	22
358	Al5BO9: A Wide Band Gap, Damage-Tolerant, and Thermal Insulating Lightweight Material for High-Temperature Applications. *Journal of the American Ceramic Society*, **2016**, 99, 2742-2751	3.8	7
357	On the small angle twist sub-grain boundaries in Ti3AlC2. *Scientific Reports*, **2016**, 6, 23943	4.9	8
356	A green fabrication strategy for porous Yb3Al5O12 ceramics with high strength and tunable gas permeability. *Journal of Materials Research*, **2016**, 31, 3078-3087	2.5	5
355	General Trends in Electronic Structure, Stability, Chemical Bonding and Mechanical Properties of Ultrahigh Temperature Ceramics TMB2 (TM□□transition metal). *Journal of Materials Science and Technology*, **2015**, 31, 285-294	9.1	71
354	Mechanical Properties and Damage Tolerance of Bulk Yb3Al5O12 Ceramic. *Journal of Materials Science and Technology*, **2015**, 31, 369-374	9.1	48
353	Growth of rutile TiO2 nanosheets with {0 1 0} exposed facets on bulk Ti3Si0.9Al0.1C2 solid solution. *Scripta Materialia*, **2015**, 108, 92-95	5.6	2
352	Preparation of porous YB4 ceramics using a combination of in-situ borothermal reaction and high temperature partial sintering. *Journal of the European Ceramic Society*, **2015**, 35, 3411-3418	6	14
351	Synthesis of ZrC□SiC Powders from Hybrid Liquid Precursors with Improved Oxidation Resistance. *Journal of the American Ceramic Society*, **2015**, 98, 197-204	3.8	27
350	Theoretical investigation of thermodynamic stability and mobility of the intrinsic point defects in Ti3AC2 (A = Si, Al). *Physical Chemistry Chemical Physics*, **2015**, 17, 8927-34	3.6	32
349	Temperature-dependence of structural and mechanical properties of TiB2: A first principle investigation. *Journal of Applied Physics*, **2015**, 117, 225902	2.5	25
348	High-temperature mechanical and thermal properties of h-BN/30vol%Y2SiO5 composite. *Ceramics International*, **2015**, 41, 10891-10896	5.1	20
347	Theoretical prediction on electronic structure, mechanical properties and lattice dynamics of YB4 for ultrahigh temperature applications. *Journal of the European Ceramic Society*, **2015**, 35, 4437-4445	6	13
346	Theoretical prediction on mechanical and thermal properties of a promising thermal barrier material: Y4Al2O9. *Journal of Advanced Ceramics*, **2015**, 4, 83-93	10.7	43
345	Electrically Conductive Honeycomb Monolith of Nanolaminated Ti3AlC2: Preparation and Characterization. *Journal of Materials Science and Technology*, **2015**, 31, 125-128	9.1	8
344	Synthesis, characterization, and sintering behavior of Yb3Al5O12 powders. *Ceramics International*, **2015**, 41, 1735-1742	5.1	7

343	Microstructure and mechanical properties of h-BN/Y2SiO5 composites. *Ceramics International*, **2015**, 41, 1279-1283	5.1	24
342	Theoretical investigations on mechanical and thermal properties of MSiO4 (M = Zr, Hf). *Journal of Materials Research*, **2015**, 30, 2030-2039	2.5	18
341	Discovery of carbon-vacancy ordering in Nb4AlC3-x under the guidance of first-principles calculations. *Scientific Reports*, **2015**, 5, 14192	4.9	29
340	Preparation, mechanical, and thermal properties of a promising thermal barrier material: Y4Al2O9. *Journal of Advanced Ceramics*, **2015**, 4, 94-102	10.7	34
339	Porous YbB6 Ceramics Prepared by In Situ Reaction between Yb2O3 and B4C Combined with Partial Sintering. *Journal of the American Ceramic Society*, **2015**, 98, 2234-2239	3.8	22
338	Insights into High-Temperature Uniaxial Compression Deformation Behavior of Ti3AlC2. *Journal of the American Ceramic Society*, **2015**, 98, 3332-3337	3.8	16
337	A Cost-Efficient Fabrication Strategy for Conductive Ti2AlC Honeycomb Monolith Using Elemental Powders. *Advanced Engineering Materials*, **2015**, 17, 1344-1350	3.5	5
336	On the Faceted and Inclined Twin Boundary of Titanium Carbide Derived from Nanolaminated Ti3AlC2. *Journal of the American Ceramic Society*, **2015**, 98, 1664-1667	3.8	3
335	YB6: A Ductile and Soft Ceramic with Strong Heterogeneous Chemical Bonding for Ultrahigh-Temperature Applications. *Materials Research Letters*, **2015**, 3, 210-215	7.4	19
334	Theoretical investigations on mechanical anisotropy and intrinsic thermal conductivity of YbAlO 3. *Journal of the European Ceramic Society*, **2015**, 35, 1549-1557	6	13
333	Manufacture of porous SiC/C ceramics with excellent damage tolerance by impregnation of LPCS into carbonized pinewood. *Journal of the European Ceramic Society*, **2015**, 35, 1751-1759	6	8
332	Ab initio computations of electronic, mechanical, lattice dynamical and thermal properties of ZrP2O7. *Journal of the European Ceramic Society*, **2014**, 34, 1809-1818	6	33
331	A novel Ni2AlTi-containing composite with excellent wear resistance and anomalous flexural strength. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2014**, 597, 70-74	5.3	17
330	Micro-Raman spectroscopic study of nanolaminated Ti5Al2C3. *Applied Physics Letters*, **2014**, 104, 131903	3.4	4
329	Dynamical and dielectric properties of MP2O7 (M=Ti, Zr, and Hf): A first-principles investigation. *Computational Materials Science*, **2014**, 95, 371-376	3.2	6
328	Prediction of superconductivity of Ta2AlC: in situ Raman spectrometry and density functional investigations. *Journal of Raman Spectroscopy*, **2014**, 45, 202-207	2.3	2
327	Developments in hot pressing (HP) and hot isostatic pressing (HIP) of ceramic matrix composites **2014**, 164-189		10
326	Recent progress on synthesis, multi-scale structure, and properties of YSiO oxides. *International Materials Reviews*, **2014**, 59, 357-383	16.1	64

325	Theoretical Investigation on Mechanical and Thermal Properties of a Promising Thermal Barrier Material: Yb3Al5O12. *Journal of Materials Science and Technology*, **2014**, 30, 631-638	9.1	40
324	Influence of carbon on phase stability of tetragonal ZrO2. *Ceramics International*, **2014**, 40, 5645-5651	5.1	17
323	Developments in hot pressing (HP) and hot isostatic pressing (HIP) of ceramic matrix composites **2014**, 177-202		2
322	**2014**,		58
321	First-Principles Investigation on the Chemical Bonding and Intrinsic Elastic Properties of Transition Metal Diborides TMB2 (TM=Zr, Hf, Nb, Ta, and Y) **2014**, 60-82		3
320	Thermal properties of a prospective thermal barrier material: Yb3Al5O12. *Journal of Materials Research*, **2014**, 29, 2673-2681	2.5	24
319	Improving the High-Temperature Oxidation Resistance of Nb4AlC3 by Silicon Pack Cementation. *Journal of the American Ceramic Society*, **2014**, 97, 552-561	3.8	8
318	Mechanical and thermal properties of Yb2SiO5: First-principles calculations and chemical bond theory investigations. *Journal of Materials Research*, **2014**, 29, 1609-1619	2.5	27
317	Theoretical Study on the Mechanism of Anisotropic Thermal Properties of Ti2AlC and Cr2AlC. *Journal of the American Ceramic Society*, **2014**, 97, 1202-1208	3.8	23
316	Theoretical Investigations on the Structural, Electronic, Mechanical, and Thermal Properties of MP2O7 (M□=□Ti, Hf). *Journal of the American Ceramic Society*, **2014**, 97, 2484-2490	3.8	11
315	Al stabilized TiC twinning platelets. *Journal of Materials Research*, **2014**, 29, 1113-1121	2.5	15
314	Investigation of Native Point Defects and Nonstoichiometry Mechanisms of Two Yttrium Silicates by First-Principles Calculations. *Journal of the American Ceramic Society*, **2013**, 96, 3304-3311	3.8	21
313	Theoretical investigation of mechanical and thermal properties of MPO4 (M=Al, Ga). *Journal of the European Ceramic Society*, **2013**, 33, 2817-2821	6	27
312	Synthesis and structure□property relationships of a new family of layered carbides in Zr-Al(Si)-C and Hf-Al(Si)-C systems. *Journal of the European Ceramic Society*, **2013**, 33, 2831-2865	6	74
311	Preparation of Y2Si2O7/ZrO2 Composites and Their Composition□Mechanical Properties□Tribology Relationships. *Journal of the American Ceramic Society*, **2013**, 96, 3228-3238	3.8	8
310	First-principles Study of Point Defects in Stoichiometric and Non-stoichiometric Y4Al2O9. *Journal of Materials Science and Technology*, **2013**, 29, 1161-1165	9.1	7
309	Synthesis and characterization of□Yb2Si2O7 powders. *Ceramics International*, **2013**, 39, 5805-5811	5.1	23
308	Physical insight of superconductivity of Nb2AlC: in situ Raman spectrometry investigation. *Journal of Raman Spectroscopy*, **2013**, 44, 485-488	2.3	10

307	Role of Nanolaminated Crystal Structure on the Radiation Damage Tolerance of Ti3SiC2: Theoretical Investigation of Native Point Defects. *Journal of Nanomaterials*, **2013**, 2013, 1-5	3.2	9
306	Theoretical Prediction and Experimental Investigation on the Thermal and Mechanical Properties of Bulk Yb2Si2O7. *Journal of the American Ceramic Society*, **2013**, 96, 3891-3900	3.8	79
305	Preparation, Microstructure, and Mechanical Properties of Nb4AlC3Nb5(Si, Al)3 Composites. *Journal of the American Ceramic Society*, **2013**, 96, 365-368	3.8	9
304	Strengthening Ti3AlC2 by In Situ Synthesizing Ti3AlC2Y4Al2O9 Composites. *Journal of the American Ceramic Society*, **2012**, 95, 2314-2321	3.8	6
303	Y4Si2O7N2: A New Oxynitride with Low Thermal Conductivity. *Journal of the American Ceramic Society*, **2012**, 95, 3278-3284	3.8	21
302	Mechanism of Intrinsic Point Defects and Oxygen Diffusion in Yttrium Aluminum Garnet: First-Principles Investigation. *Journal of the American Ceramic Society*, **2012**, 95, 3628-3633	3.8	21
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