

# Yuelel Bai

## List of Publications by Year in descending order

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34  
papers

1,600  
citations

279487

23  
h-index

377514

34  
g-index

35  
all docs

35  
docs citations

35  
times ranked

1466  
citing authors

#	ARTICLE	IF	CITATIONS
1	Kinetic Monte Carlo simulation of ZrO <sub>2</sub> coating deposited by EB-PVD. Journal of the American Ceramic Society, 2022, 105, 830-841.	1.9	4
2	Density-functional-theory predictions of mechanical behaviour and thermal properties as well as experimental hardness of the Ga-bilayer Mo <sub>2</sub> Ga <sub>2</sub> C. Journal of Advanced Ceramics, 2022, 11, 273-282.	8.9	26
3	Ruthenium on Alkali-exfoliated Ti <sub>3</sub> (Al <sub>0.8</sub> Sn <sub>0.2</sub> )C <sub>2</sub> MAX Phase Catalyses Reduction of 4-Nitroaniline with Ammonia Borane. ChemCatChem, 2021, 13, 3470-3478.	1.8	6
4	Experimental and DFT insights into elastic, magnetic, electrical, and thermodynamic properties of MAB-phase Fe <sub>2</sub> AlB <sub>2</sub> . Journal of the American Ceramic Society, 2020, 103, 5837-5851.	1.9	22
5	Friction and wear behavior of Fe <sub>2</sub> AlB <sub>2</sub> nanolaminates against GCr15 steel counterpart. Ceramics International, 2020, 46, 19912-19918.	2.3	11
6	Phase stability and weak metallic bonding within ternary-layered borides CrAlB, Cr <sub>2</sub> AlB <sub>2</sub> , Cr <sub>3</sub> AlB <sub>4</sub> , and Cr <sub>4</sub> AlB <sub>6</sub> . Journal of the American Ceramic Society, 2019, 102, 3715-3727.	1.9	55
7	High-temperature mechanical properties and thermal shock behavior of ternary-layered MAB phases Fe <sub>2</sub> AlB <sub>2</sub> . International Journal of Refractory Metals and Hard Materials, 2019, 80, 151-160.	1.7	45
8	Density Functional Theory Study of M <sub>n</sub> +1AX <sub>n</sub> Phases: A Review. Critical Reviews in Solid State and Materials Sciences, 2019, 44, 56-107.	6.8	46
9	Improving the electrochemical properties of MXene Ti <sub>3</sub> C <sub>2</sub> multilayer for Li-ion batteries by vacuum calcination. Electrochimica Acta, 2018, 265, 140-150.	2.6	99
10	Effect of Ti <sub>3</sub> AlC <sub>2</sub> precursor on the electrochemical properties of the resulting MXene Ti <sub>3</sub> C <sub>2</sub> for Li-ion batteries. Ceramics International, 2018, 44, 11591-11596.	2.3	58
11	Enhanced reversible Li-ion storage in Si@Ti <sub>3</sub> C <sub>2</sub> MXene nanocomposite. Electrochemistry Communications, 2018, 97, 16-21.	2.3	66
12	Further surface modification by carbon coating for in-situ growth of Fe <sub>3</sub> O <sub>4</sub> nanoparticles on MXene Ti <sub>3</sub> C <sub>2</sub> multilayers for advanced Li-ion storage. Electrochimica Acta, 2018, 289, 228-237.	2.6	51
13	Density functional theory insights into ternary layered boride MoAlB. Acta Materialia, 2017, 132, 69-81.	3.8	113
14	Oxidation behavior of high-purity nonstoichiometric Ti <sub>2</sub> AlC powders in flowing air. Journal of Materials Research, 2017, 32, 2747-2754.	1.2	11
15	Rapid synthesis, electrical, and mechanical properties of polycrystalline Fe <sub>2</sub> AlB <sub>2</sub> bulk from elemental powders. Journal of the American Ceramic Society, 2017, 100, 4407-4411.	1.9	59
16	Thermal shock behavior of Ti <sub>2</sub> AlC from 200°C to 1400°C. Journal of the American Ceramic Society, 2017, 100, 4190-4198.	1.9	22
17	DFT Predictions of Crystal Structure, Electronic Structure, Compressibility, and Elastic Properties of Hf-Al-C Carbides. Journal of the American Ceramic Society, 2016, 99, 3449-3457.	1.9	22
18	Dependence of elastic and optical properties on surface terminated groups in two-dimensional MXene monolayers: a first-principles study. RSC Advances, 2016, 6, 35731-35739.	1.7	224

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19	Lattice dynamics of Al-containing MAX-phase carbides: a first-principle study. <i>Journal of Raman Spectroscopy</i> , 2015, 46, 784-794.	1.2	21
20	Growth morphology and microstructural characterization of nonstoichiometric Ti <sub>2</sub> AlC bulk synthesized by self-propagating high temperature combustion synthesis with pseudo hot isostatic pressing. <i>International Journal of Refractory Metals and Hard Materials</i> , 2014, 45, 58-63.	1.7	17
21	Effect of transition metal (M) and Mâ€‘C slabs on equilibrium properties of Al-containing MAX carbides: An ab initio study. <i>Computational Materials Science</i> , 2014, 91, 28-37.	1.4	24
22	High temperature physical and mechanical properties of large-scale Ti <sub>2</sub> AlC bulk synthesized by self-propagating high temperature combustion synthesis with pseudo hot isostatic pressing. <i>Journal of the European Ceramic Society</i> , 2013, 33, 2435-2445.	2.8	56
23	An ab initio study on compressibility of Al-containing MAX-phase carbides. <i>Journal of Applied Physics</i> , 2013, 114, 173709.	1.1	22
24	Microstructures, Electrical, Thermal, and Mechanical Properties of Bulk $\langle \text{Ti} \rangle_{2} \langle \text{AlC} \rangle$ Synthesized by Self-Propagating High-Temperature Combustion Synthesis with Pseudo Hot Isostatic Pressing. <i>Journal of the American Ceramic Society</i> , 2012, 95, 358-364.	1.9	78
25	Phase Stability, Electronic Structure, Compressibility, Elastic and Optical Properties of a Newly Discovered $\langle \text{Ti} \rangle_{3} \langle \text{SnC} \rangle_{2}$ : A First-Principle Study. <i>Journal of the American Ceramic Society</i> , 2011, 94, 3907-3914.	1.9	27
26	Polymorphism of newly discovered Ti <sub>4</sub> GaC <sub>3</sub> : A first-principles study. <i>Acta Materialia</i> , 2011, 59, 5523-5533.	3.8	39
27	Ab initio study of the bonding and elastic properties of Ti <sub>2</sub> CdC. <i>Solid State Sciences</i> , 2010, 12, 144-147.	1.5	31
28	Chemical bonding and elastic properties of Ti <sub>3</sub> AC <sub>2</sub> phases (A=Si, Ge, and Sn): A first-principle study. <i>Solid State Sciences</i> , 2010, 12, 1220-1225.	1.5	57
29	In situ synthesis and mechanical properties of bulk Ti <sub>3</sub> SiC <sub>2</sub> /TiC composites by SHS/PHIP. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2010, 527, 4554-4559.	2.6	20
30	First-principles investigation of Naâ€‘Ag co-doping effect on electronic properties in p-type ZnO. <i>Chinese Physics B</i> , 2010, 19, 047101.	0.7	27
31	General trends in the structural, electronic and elastic properties of the M <sub>3</sub> AlC <sub>2</sub> phases (M =) Tj ETQq1 1 0.784314 rgBT /Overlock 10 1.4 86		
32	Rapid synthesis of bulk Ti <sub>2</sub> AlC by self-propagating high temperature combustion synthesis with a pseudoâ€‘hot isostatic pressing process. <i>Journal of Materials Research</i> , 2009, 24, 2528-2535.	1.2	76
33	Ab initio calculations for properties of MAX phases Ti <sub>2</sub> InC, Zr <sub>2</sub> InC, and Hf <sub>2</sub> InC. <i>Solid State Communications</i> , 2009, 149, 564-566.	0.9	49
34	An ab initio study of the electronic structure and elastic properties of the newly discovered ternary carbide. <i>Solid State Communications</i> , 2009, 149, 2156-2159.	0.9	30