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Indentation strength of ultraincompressible rhenium boride, carbide, and nitride from first-principles calculations

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#	Paper	IF	Citations
50	Unexpectedly low indentation strength of WB3 and MoB3 from first principles. <i>Physical Review B</i> , 2012 , 86,	3.3	42
49	Fundamental constraints on the strength of transition-metal borides: The case of CrB4. <i>Physical Review B</i> , 2013 , 87,	3.3	35
48	First-principles study of structural stabilities, elastic and electronic properties of transition metal monocarbides (TMCs) and mononitrides (TMNs). <i>Materials Chemistry and Physics</i> , 2013 , 143, 93-108	4.4	20
47	Global structural optimization of tungsten borides. <i>Physical Review Letters</i> , 2013 , 110, 136403	7.4	216
46	Unexpected structural softening of interstitial boron solid solution WB3+x. <i>Applied Physics Letters</i> , 2014 , 105, 211901	3.4	7
45	New stable Re-B phases for ultra-hard materials. <i>Journal of Physics Condensed Matter</i> , 2014 , 26, 455401	1.8	5
44	Hardness of FeB4: density functional theory investigation. <i>Journal of Chemical Physics</i> , 2014 , 140, 174505	5.9	67
43	First-principles calculation of the indentation strength of FeB4. <i>Physical Review B</i> , 2014 , 90,	3.3	32
42	Computational materials discovery: the case of the W-B system. <i>Acta Crystallographica Section C, Structural Chemistry</i> , 2014 , 70, 85-103	0.8	70
41	Exploring Hardness and the Distorted sp ² Hybridization of BB Bonds in WB3. <i>Chemistry of Materials</i> , 2014 , 26, 5297-5302	9.6	59
40	High-pressure and high-temperature synthesis of rhenium carbide using rhenium and nanoscale amorphous two-dimensional carbon nitride ¹¹ This article is associated with 7th Asian Conference on High Pressure Research (ACHPR-7), Bangkok, Thailand.View all notes. <i>Cogent Physics</i> , 2015 , 2, 1076702	3.5	7
39	Nitrogen concentration driving the hardness of rhenium nitrides. <i>Scientific Reports</i> , 2014 , 4, 4797	4.9	47
38	Potentially superhard hcp CrN2 compound studied at high pressure. <i>Physical Review B</i> , 2016 , 93,	3.3	21
37	Ultraincompressible, Superhard Materials. <i>Annual Review of Materials Research</i> , 2016 , 46, 465-485	12.8	73
36	Exploring the effects of interlamellar binding modes on the hardness of ReB2 and MoB2 with laminar structure. <i>Canadian Journal of Physics</i> , 2017 , 95, 621-624	1.1	1
35	Extraordinary Indentation Strain Stiffening Produces Superhard Tungsten Nitrides. <i>Physical Review Letters</i> , 2017 , 119, 115503	7.4	108
34	The vacancy ordering produces a new cubic monocarbide: ReC. <i>Materials Today Physics</i> , 2018 , 7, 54-60	8	5

33	A novel superhard tungsten nitride predicted by machine-learning accelerated crystal structure search. <i>Science Bulletin</i> , 2018 , 63, 817-824	10.6	58
32	Synthesis and High-Pressure Mechanical Properties of Superhard Rhenium/Tungsten Diboride Nanocrystals. <i>ACS Nano</i> , 2019 , 13, 10036-10048	16.7	4
31	Mechanism for unconventional nonlinear elasticity. <i>Physical Review B</i> , 2019 , 100,	3.3	3
30	First-principles design of strong solids: Approaches and applications. <i>Physics Reports</i> , 2019 , 826, 1-49	27.7	17
29	Double-zigzag boron chain-enhanced Vickers hardness and manganese bilayers-induced high d-electron mobility in MnB. <i>Physical Chemistry Chemical Physics</i> , 2019 , 21, 2697-2705	3.6	13
28	Revealing the Unusual Rigid Boron Chain Substructure in Hard and Superconductive Tantalum Monoboride. <i>Chemistry - A European Journal</i> , 2019 , 25, 5051-5057	4.8	7
27	Unravelling the structure and strength of the highest boride of tungsten WB ₄ .2. <i>Physical Review B</i> , 2019 , 100,	3.3	16
26	Theoretical study on structural, mechanical and electronic properties of ternary mononitride Ti _{0.5} W _{0.5} N from first-principles calculations. <i>Materials Chemistry and Physics</i> , 2020 , 242, 122476	4.4	4
25	Toughening a superstrong carbon crystal: Sequential bond-breaking mechanisms. <i>Physical Review B</i> , 2020 , 102,	3.3	2
24	Elucidating Stress-Strain Relations of ZrB from First-Principles Studies. <i>Journal of Physical Chemistry Letters</i> , 2020 , 11, 9165-9170	6.4	50
23	Atomistic Mechanisms for Contrasting Stress-Strain Relations of BCN and BC. <i>Journal of Physical Chemistry Letters</i> , 2020 , 11, 10454-10462	6.4	3
22	Effects of boron defects on mechanical strengths of TiB at high temperature: ab initio molecular dynamics studies. <i>Physical Chemistry Chemical Physics</i> , 2020 , 22, 6560-6571	3.6	2
21	Theoretical study on novel orthorhombic ternary monocarbides M _{0.5} Re _{0.5} C (M=V, Nb, Ta) from first-principles calculations. <i>Ceramics International</i> , 2020 , 46, 24624-24634	5.1	6
20	Tailoring the Mechanical Properties of Earth-Abundant Transition Metal Borides via Bonding Optimization. <i>Journal of Physical Chemistry C</i> , 2020 , 124, 4430-4437	3.8	5
19	Mechanical properties of tantalum carbide from high-pressure/high-temperature synthesis and first-principles calculations. <i>Physical Chemistry Chemical Physics</i> , 2020 , 22, 5018-5023	3.6	7
18	Systematic study on mechanical and electronic properties of ternary VAlN, TiAlN and WAlN systems by first-principles calculations. <i>Ceramics International</i> , 2021 , 47, 7511-7520	5.1	19
17	Crystal structures and mechanical properties of osmium diboride at high pressure. <i>Scientific Reports</i> , 2021 , 11, 5754	4.9	0
16	Indentation Strengths of Zirconium Diboride: Intrinsic versus Extrinsic Mechanisms. <i>Journal of Physical Chemistry Letters</i> , 2021 , 12, 2848-2853	6.4	32

15	Progress in functional studies of transition metal borides. <i>Chinese Physics B</i> ,	1.2	0
14	Indentation-strain stiffening in tungsten nitrides: Mechanisms and implications. <i>Physical Review Materials</i> , 2020 , 4,	3.2	35
13	Structure-strength relations of distinct MoN phases from first-principles calculations. <i>Physical Review Materials</i> , 2020 , 4,	3.2	36
12	Structures and properties of functional transition metal borides. <i>Wuli Xuebao/Acta Physica Sinica</i> , 2017 , 66, 036103	0.6	3
11	Theoretical and experimental studies of compression and shear deformation behavior of Osmium to 280 GPa. <i>Engineering Research Express</i> ,	0.9	
10	Extreme incompressibility and hardness of Re-N system. <i>Physica Scripta</i> , 2020 , 95, 095701	2.6	1
9	Superhard metallic compound TaB ₂ via crystal orientation resolved strain stiffening. <i>Physical Review B</i> , 2022 , 105,	3.3	1
8	Macroscale Robust Superlubricity on Metallic NbB ₂ . <i>Advanced Science</i> , 2022 , e2103815	13.6	0
7	Experimental and Computational Studies of Compression and Deformation Behavior of Hafnium Diboride to 208 GPa.. <i>Materials</i> , 2022 , 15,	3.5	
6	Exceptional strain strengthening and tuning of mechanical properties of TiN. 2022 , 106,		1
5	Tantalum Diboride: The Superhard and Metallic Boride. 2022 , 22, 6201-6206		0
4	Macroscale superdurable superlubricity achieved in lubricant oil via operando tribochemical formation of fullerene-like carbon. 2022 , 101130		0
3	Microstructure, chemical composition and mechanical properties of rhenium nitride hard coating deposited by reactive magnetron sputtering. 2023 , 110, 106026		0
2	Theoretical study on mechanical and electronic properties of ternary diborides Sc _{0.5} V _{0.5} B ₂ , Sc _{0.5} Nb _{0.5} B ₂ and Sc _{0.5} Ta _{0.5} B ₂ . 2023 , 35, 105760		0
1	Theoretical study on structural and mechanical properties of Si-containing ternary transition metal nitrides M _{0.5} Si _{0.5} N (M = Ti, Zr, Hf). 2023 , 13, 9109-9118		0