Abdul Hadi

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/1483330/publications.pdf

Version: 2024-02-01

51 papers	1,960 citations	186265 28 h-index	254184 43 g-index
51 all docs	51 docs citations	51 times ranked	724 citing authors

#	Article	IF	Citations
1	Elastic and thermodynamic properties of new (Zr3âˆ'Ti)AlC2 MAX-phase solid solutions. Computational Materials Science, 2017, 137, 318-326.	3.0	119
2	Theoretical investigation of structural, elastic, and electronic properties of ternary boride MoAlB. Physica Status Solidi (B): Basic Research, 2017, 254, 1700010.	1.5	113
3	Physical properties of predicted Ti2CdN versus existing Ti2CdC MAX phase: An ab initio study. Computational Materials Science, 2016, 113, 148-153.	3.0	101
4	First hafnium-based MAX phase in the 312 family, Hf3AlC2: A first-principles study. Journal of Alloys and Compounds, 2017, 727, 616-626.	5.5	95
5	Superconducting phases in a remarkable class of metallic ceramics. Journal of Physics and Chemistry of Solids, 2020, 138, 109275.	4.0	84
6	Mechanical behaviors, lattice thermal conductivity and vibrational properties of a new MAX phase Lu2SnC. Journal of Physics and Chemistry of Solids, 2019, 129, 162-171.	4.0	83
7	New ternary nanolaminated carbide Mo2Ga2C: A first-principles comparison with the MAX phase counterpart Mo2GaC. Computational Materials Science, 2016, 117, 422-427.	3.0	74
8	Physical properties of the recently discovered Zr2(Al1âˆ'x Bi x)C MAX phases. Journal of Materials Science: Materials in Electronics, 2016, 27, 11925-11933.	2.2	71
9	Synthesis and physical properties of (Zr_{1âˆ'x},Ti_x)₃AlC₂<scp>MAX</scp> phases. Journal of the American Ceramic Society, 2017, 100, 3393-3401.	3.8	63
10	Firstâ€principles prediction of mechanical and bonding characteristics of new T₂ superconductor Ta₅GeB₂. Physica Status Solidi (B): Basic Research, 2016, 253, 2020-2026.	1.5	61
11	Influence of Ni doping in a lead-halide and a lead-free halide perovskites for optoelectronic applications. AIP Advances, 2019, 9, .	1.3	56
12	Mechanical behavior, bonding nature and defect processes of Mo2ScAlC2: A new ordered MAX phase. Journal of Alloys and Compounds, 2017, 724, 1167-1175.	5.5	52
13	Physical properties and defect processes of M3SnC2 (MÂ= Ti, Zr, Hf) MAX phases: Effect of M-elements. Journal of Alloys and Compounds, 2018, 748, 804-813.	5.5	49
14	Ab initio exploration of the structural, elastic, electronic and optical properties of a new layered perovskite-type oxyï¬‚uoride: CsSrNb2O6F. Materials Science in Semiconductor Processing, 2021, 131, 105890.	4.0	47
15	Density functional theory study of a new Bi-based (K1.00)(Ba1.00)3(Bi0.89Na0.11)4O12 double perovskite superconductor. Computational Materials Science, 2017, 138, 160-165.	3.0	45
16	Zirconium metal-based MAX phases Zr₂AC (A =) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 147 Td International Journal of Modern Physics B, 2014, 28, 1550022.	2.0	41
17	Pressure effects on the structural, elastic, magnetic and thermodynamic properties of Mn2AlC and Mn2SiC MAX phases. Journal of Alloys and Compounds, 2021, 885, 160998.	5.5	40
18	New ternary superconducting compound LaRu ₂ As ₂ : Physical properties from density functional theory calculations. Chinese Physics B, 2017, 26, 037103.	1.4	39

#	Article	IF	Citations
19	Firstâ€Principles Study of Superconducting ScRhP and ScIrP pnictides. Physica Status Solidi (B): Basic Research, 2017, 254, 1700336.	1.5	39
20	Structural, mechanical, thermal, and optical properties of inverse-Heusler alloys Cr2CoZ (Z = Al, In): A first-principles investigation. Physics Letters, Section A: General, Atomic and Solid State Physics, 2021, 385, 126967.	2.1	39
21	New ordered MAX phase Mo₂TiAlC₂: Elastic and electronic properties from first-principles. Chinese Physics B, 2016, 25, 107103.	1.4	36
22	Effect of boron incorporation into the carbon-site in Nb2SC MAX phase: Insights from DFT. Journal of Materials Research and Technology, 2021, 11, 1969-1981.	5.8	36
23	Structural, elastic, thermal and lattice dynamic properties of new 321 MAX phases. Computational Materials Science, 2019, 170, 109144.	3.0	34
24	Chemically stable new MAX phase V₂SnC: a damage and radiation tolerant TBC material. RSC Advances, 2020, 10, 43783-43798.	3.6	34
25	Structural, elastic, and electronic properties of recently discovered ternary silicide superconductor Li₂IrSi₃: Anab-initiostudy. Chinese Physics B, 2015, 24, 117401.	1.4	33
26	Cubic Perovskite Pb(Mg_{1/3}Nb_{2/3})O₃: A Damage Tolerant, Machinable, and Thermal barrier coating material. Zeitschrift Fur Naturforschung - Section A Journal of Physical Sciences, 2018, 74, 71-81.	1.5	33
27	Phase stability and physical properties of (Zr1-Nb)2AlC MAX phases. Journal of Physics and Chemistry of Solids, 2019, 132, 38-47.	4.0	32
28	Intrinsic defect processes and elastic properties of Ti3AC2 (A = Al, Si, Ga, Ge, In, Sn) MAX phases. Journal of Applied Physics, 2018, 123, .	2.5	31
29	New MAX Phase Superconductor Ti₂GeC: A First-principles Study. Journal of Scientific Research, 2014, 6, 11-27.	0.3	29
30	BAND STRUCTURE, HARDNESS, THERMODYNAMIC AND OPTICAL PROPERTIES OF SUPERCONDUCTING Nb₂AsC, Nb₂InC AND Mo₂GaC. International Journal of Computational Materials Science and Engineering, 2013, 02, 1350007.	0.7	28
31	Structural and optical properties of the recently synthesized (Zr3â^'x Ti x)AlC2 MAX phases. Journal of Materials Science: Materials in Electronics, 2017, 28, 3386-3393.	2.2	27
32	Effects of Al substitution by Si in Ti3AlC2 nanolaminate. Scientific Reports, 2021, 11, 3410.	3.3	27
33	Insights into the physical properties of a new 211 MAX phase Nb2CuC. Journal of Physics and Chemistry of Solids, 2021, 149, 109759.	4.0	26
34	Newly synthesized MgAl 2 Ge 2 : A first-principles comparison with its silicide and carbide counterparts. Journal of Physics and Chemistry of Solids, 2018, 117, 139-147.	4.0	24
35	Structural, Elastic, and Electronic Properties of Newly Discovered Li2PtSi3 Superconductor: Effect of Transition Metals. Journal of Superconductivity and Novel Magnetism, 2016, 29, 2503-2508.	1.8	23
36	Comprehensive first-principles calculations on physical properties of ScV2Ga4 and ZrV2Ga4 in comparison with superconducting HfV2Ga4. Materials Today Communications, 2020, 24, 100935.	1.9	23

#	Article	IF	Citations
37	Indirect to direct band gap transition through order to disorder transformation of Cs₂AgBiBr₆via creating antisite defects for optoelectronic and photovoltaic applications. RSC Advances, 2022, 12, 15461-15469.	3.6	21
38	312 MAX Phases: Elastic Properties and Lithiation. Materials, 2019, 12, 4098.	2.9	20
39	Electronic structures, bonding natures and defect processes in Sn-based 211 MAX phases. Computational Materials Science, 2019, 168, 203-212.	3.0	17
40	Insights into the predicted Hf2SN in comparison with the synthesized MAX phase Hf2SC: A comprehensive study. Computational Condensed Matter, 2020, 24, e00485.	2.1	17
41	Insights into the physical properties and anisotropic nature of ErPdBi with an appearance of low minimum thermal conductivity. Chinese Physics B, 2021, 30, 016203.	1.4	16
42	DFT investigations into the physical properties of a MAB phase Cr4AlB4. Journal of Alloys and Compounds, 2020, 821, 153547.	5.5	15
43	Physical properties of a novel boron-based ternary compound Ti2InB2. Materials Today Communications, 2020, 25, 101600.	1.9	14
44	Structural, electronic, mechanical, thermal, and optical properties of UIr3 under pressure: A comprehensive DFT study. AIP Advances, 2021, 11, .	1.3	14
45	Optical response, lithiation and charge transfer in Sn-based 211 MAX phases with electron localization function. Journal of Materials Research and Technology, 2022, 18, 2470-2479.	5.8	13
46	Elastic behaviour and radiation tolerance in Nb-based 211 MAX phases. Materials Today Communications, 2020, 25, 101499.	1.9	10
47	A density functional theory approach to the effects of C and N substitution at the B-site of the first boride MAX phase Nb2SB. Materials Today Communications, 2021, 29, 102910.	1.9	6
48	Physical properties of ternary silicide superconductors Li₂XSi₃ (X = Rh, Os): An ab initio study. International Journal of Modern Physics B, 2017, 31, 1750135.	2.0	5
49	Effect of hydrostatic compression on physical properties of Li2TmSi3 (Tm = Ir, Pt, Rh, Os) with ground-state optical features. Journal of Physics and Chemistry of Solids, 2021, 156, 110124.	4.0	5
50	Changes in the physical properties of Mg2Ir3Si compared to Li2IrSi3 due to the substitution of Li by Mg and the exchange of positions between Ir and Si. Solid State Communications, 2021, 334-335, 114361.	1.9	0
51	A first-principles study of a new ternary silicide superconductor Li2IrSi3â€. Journal of Physics: Conference Series, 2021, 1718, 012018.	0.4	0