Sezgin Aydin

List of Publications by Year
in descending order

30	545	758635 12	610482 24
papers	citations	h-index	g-index

31	31	31	534
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	First-principles calculations of<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:msub><mml:mrow><mml:mtext>MnB</mml:mtext></mml:mrow><mml:mn>2</mml:mn></mml:m xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:msub><mml:mrow><mml:mtext>TcB</mml:mtext></mml:mrow><mml:mn>2</mml:mn></mml:m and<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:m. Physical Review B, 2009, 80, .	1.1	124
2	The elastic and mechanical properties of MB12 (M=Zr, Hf, Y, Lu) as a function of pressure. Journal of Alloys and Compounds, 2013, 546, 157-164.	2.8	95
3	First-principles calculations of elemental crystalline boron phases under high pressure: Orthorhombic B28 and tetragonal B48. Journal of Alloys and Compounds, 2011, 509, 5219-5229.	2.8	57
4	The enhancement of hydrogen storage capacity in Li, Na and Mg-decorated BC3 graphene by CLICH and RICH algorithms. International Journal of Hydrogen Energy, 2019, 44, 7354-7370.	3.8	40
5	Effect of boron substitution on hydrogen storage in Ca/DCV graphene: A first-principle study. International Journal of Hydrogen Energy, 2019, 44, 27511-27528.	3.8	35
6	Hypothetically superhard boron carbide structures with a B₁₁C icosahedron and threeâ€atom chain. Physica Status Solidi (B): Basic Research, 2009, 246, 62-70.	0.7	31
7	A theoretical study for thorium monocarbide (ThC). Journal of Nuclear Materials, 2012, 429, 55-69.	1.3	23
8	Some new members of MAX family including light-elements: Nanolayered Hf2XY (X= Al, Si, P and Y=B, C,) Tj ETQq0 0 0 rgBT /Overlock 1	1.5	23
9	Superhard transition metal tetranitrides: XN₄(X = Re, Os, W). Journal of Materials Research, 2012, 27, 1705-1715.	1.2	20
10	Enhanced hydrogen storage of a functional material: Hf2CF2 MXene with Li decoration. Applied Surface Science, 2021, 551, 149484.	3.1	20
11	Structural and electronic properties of AB- and AA-stacking bilayer-graphene intercalated by Li, Na, Ca, B, Al, Si, Ge, Ag, and Au atoms. Solid State Communications, 2016, 231-232, 57-63.	0.9	15
12	First-principles study of hypothetical boron crystals: Bn(nÂ=Â13, 14, 15). Solid State Sciences, 2012, 14, 1636-1642.	1.5	14
13	First-principles hydrogen adsorption properties of Li-decorated ThMoB4-type graphene. International Journal of Hydrogen Energy, 2018, 43, 16117-16127.	3.8	10
14	Stability and superconductivity properties of metal substituted aluminum diborides (M0.5Al0.5B2). Computational Materials Science, 2018, 154, 234-242.	1.4	6
15	Alkali and Alkaline earth metal doped aluminum tetraborides containing intrinsic planar boron sheet: XAlB4 (X= Li, Mg, Ca, and Na). Computational Materials Science, 2016, 124, 130-141.	1.4	5
16	The structural, elastic and thermodynamic properties of thorium tetraboride. Solid State Communications, 2011, 151, 628-633.	0.9	4
17	A superconducting battery material: Lithium gold boride (LiAu 3 B). Solid State Communications, 2018, 272, 8-11.	0.9	4
18	First-principles study of thiophene on Î²-SiC (001)-(2Ã—1) surface. Physica B: Condensed Matter, 2011, 406, 2880-2884.	1.3	3

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19	Pressureâ€dependent properties of a multifunctional material: Lithium platinum boride (LiPt₃B). Physica Status Solidi (B): Basic Research, 2012, 249, 1744-1755.	0.7	3
20	Site-different structures from dilithium hexaboride (Li2b6) to dimagnesium hexaboride (Mg2B6) by first-principles. Journal of Alloys and Compounds, 2013, 569, 118-125.	2.8	3
21	Effect of pressure on structural, electronic, mechanical and optical properties of ruthenium diboride with oP12-type structure. Indian Journal of Physics, 2016, 90, 767-779.	0.9	3
22	Mechanical and dynamic properties of stable two-dimensional boron-substituted ThMoB4â€“type graphene: First-Principles Study. Materials Today Communications, 2021, 27, 102322.	0.9	3
23	211-MAX borides: The stable boron-substituted 211-MAX compounds by first-principles. Materials Today Communications, 2020, 25, 101689.	0.9	2
24	Pressure-induced magnetic phase transitions of intermetallic Fe2AlB2. Journal of Magnetism and Magnetic Materials, 2020, 502, 166453.	1.0	1
25	The Structural, Elastic, Electronic, Thermodynamic and Vibrational Properties of Protactinium Monocarbide (PaC) from First-Principles Calculations. Journal of Nanoelectronics and Optoelectronics, 2016, 11, 506-513.	0.1	1
26	Stability and Pressure Dependent Properties of Ternary Lithium Borides of Gold and Silver. Physica Status Solidi (B): Basic Research, 2018, 255, 1700666.	0.7	0
27	Stability of intrinsic and extrinsic co-decorated boron sheets with Li and Mg. Computational Condensed Matter, 2018, 17, e00345.	0.9	0
28	Stability and Pressure Dependent Properties of Ternary Lithium Borides of Gold and Silver (Phys.) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 3	0.7	0
29	Lityum Bor KarbÃ¼r (LiBC) BileÅŸiÄŸinin YapÄ±sal, Elektronik ve Mekanik Ã–zelliklerinin BasÄ±nÃ§ AltÄ±nda DeÄŸiÅŸimi. Journal of the Faculty of Engineering and Architecture of Gazi University, 2018, 33, .	0.3	0
30	The structural, mechanical, and electronic properties of LiAlB ₄ under pressure from first principles. Physica Status Solidi C: Current Topics in Solid State Physics, 2017, 14, 1700080.	0.8	0