Gokhan Surucu

List of Publications by Year
in descending order

77	1,260	331538 21	414303 32
papers	citations	h-index	g-index

77	77	77	636
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Investigation of structural, electronic, anisotropic elastic, and lattice dynamical properties of MAX phases borides: An Ab-initio study on hypothetical MAB (MÂ=ÂTi, Zr, Hf; AÂ=ÂAl, Ga, In) compounds. Materials Chemistry and Physics, 2018, 203, 106-117.	2.0	93
2	Structural and mechanical stability of rare-earth diborides. Chinese Physics B, 2013, 22, 046202.	0.7	63
3	Investigation of structural, electronic and lattice dynamical properties of XNiH (XÂ=ÂLi, Na and K) perovskite type hydrides and their hydrogen storage applications. International Journal of Hydrogen Energy, 2019, 44, 15173-15182.	3.8	56
4	Mechanical and phonon properties of the superhard LuB2, LuB4, and LuB12 compounds. Journal of Alloys and Compounds, 2011, 509, 1711-1715.	2.8	47
5	First-principle investigation for the hydrogen storage properties of NaXH3 (X= Mn, Fe, Co) perovskite type hydrides. International Journal of Hydrogen Energy, 2019, 44, 30218-30225.	3.8	46
6	CaXH ₃ (X = Mn, Fe, Co) perovskiteâ€type hydrides for hydrogen storage applications. International Journal of Energy Research, 2020, 44, 2345-2354.	2.2	46
7	Novel topological nodal lines and exotic drum-head-like surface states in synthesized CsCl-type binary alloy TiOs. Journal of Advanced Research, 2020, 22, 137-144.	4.4	44
8	The effect of hydrogen on the electronic, mechanical and phonon properties of LaMgNi4 and its hydrides for hydrogen storage applications. International Journal of Hydrogen Energy, 2018, 43, 23397-23408.	3.8	40
9	Rich topological nodal line bulk states together with drum-head-like surface states in NaAlGe with anti-PbFCl type structure. Journal of Advanced Research, 2020, 23, 95-100.	4.4	39
10	Investigation of structural, electronic, magnetic and lattice dynamical properties for XCoBi (X: Ti, Zr,) Tj ETQq0 0 0 rgBT /Overlock 10 Tf	1.3	38
11	Lattice dynamical and thermo-elastic properties of M2AlB (MÂ= V, Nb, Ta) MAX phase borides. Journal of Alloys and Compounds, 2020, 819, 153256.	2.8	36
12	MgTiO3Hx and CaTiO3Hx perovskite compounds for hydrogen storage applications. International Journal of Hydrogen Energy, 2019, 44, 11930-11938.	3.8	34
13	Electronic and lattice dynamical properties of Ti ₂ SiB MAX phase. Materials Research Express, 2018, 5, 076303.	0.8	33
14	First-Principles Study on the MAX Phases Ti n+1GaN n (nÂ=Â1,2, and 3). Journal of Electronic Materials, 2016, 45, 4256-4264.	1.0	29
15	Produce of graphene/iron pyrite (FeS2) thin films counter electrode for dye-sensitized solar cell. Materials Letters, 2016, 185, 584-587.	1.3	29
16	Equiatomic quaternary Heusler compounds TiVFeZ (Z=Al, Si, Ge): Half-metallic ferromagnetic materials. Journal of Alloys and Compounds, 2021, 883, 160869.	2.8	27
17	Structural and lattice dynamical properties of Zintl NaIn and NaTl compounds. Computational Materials Science, 2011, 50, 1070-1076.	1.4	25
18	Structural and Thermoelectronic Properties of Chalcopyrite MgSiX2 (XÂ=ÂP, As, Sb). Journal of Electronic Materials, 2017, 46, 247-264.	1.0	24

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19	Properties of BaYO3 perovskite and hydrogen storage properties of BaYO3Hx. International Journal of Hydrogen Energy, 2020, 45, 10507-10515.	3.8	23
20	Mechanical and lattice dynamical properties of the Re₂C compound. Physica Status Solidi - Rapid Research Letters, 2010, 4, 347-349.	1.2	22
21	Electronic, elastic and optical properties on the Zn1â˜'x Mg x Se mixed alloys. Journal of Materials Science, 2011, 46, 1007-1014.	1.7	22
22	Structural, electronic, elastic, thermodynamic and vibration properties of TbN compound from first principles calculations. Solid State Sciences, 2012, 14, 401-408.	1.5	22
23	The lattice dynamical and thermo-elastic properties of Rh3X (X=Ti, V) compounds. Intermetallics, 2010, 18, 286-291.	1.8	21
24	Investigation of structural, electronic and anisotropic elastic properties of Ru -doped WB 2 compound by increased valence electron concentration. Materials Chemistry and Physics, 2017, 189, 90-95.	2.0	21
25	Enhanced hydrogen storage of a functional material: Hf2CF2 MXene with Li decoration. Applied Surface Science, 2021, 551, 149484.	3.1	20
26	The electronic and optical properties of mixed alloys. Solid State Communications, 2010, 150, 1413-1418.	0.9	19
27	Thermo-elastic and lattice dynamical properties of Rh3Hf compound. Computational Materials Science, 2010, 48, 859-865.	1.4	19
28	The Investigation of Electronic, Elastic and Vibrational Properties of an Interlanthanide Perovskite: PrYbO3. Journal of Electronic Materials, 2017, 46, 5827-5836.	1.0	19
29	First-principles investigation of LaGaO₃and LaInO₃lanthanum perovskite oxides. Philosophical Magazine, 2016, 96, 2040-2058.	0.7	18
30	Anisotropic mechanical properties of Tl4Ag18Te11 compound with low thermal conductivity. Journal of Solid State Chemistry, 2020, 289, 121469.	1.4	18
31	The investigation of electronic, magnetic, mechanical, and lattice dynamical properties of PdMX(Mâ€‰â€‰=â€‰â€‰Cr, Fe andXâ€‰â€‰=â€‰â€‰Si and Ge) ferromagnetic half-Heusler metallics: initiostudy. Materials Research Express, 2017, 4, 066504.	0.8	17
32	First principles study on the structural, electronic, mechanical and lattice dynamical properties of XRhSb (X = Ti and Zr) paramagnet half-Heusler antimonides. Materials Research Express, 2019, 6, 106315.	0.8	17
33	Transition metal-doped janus monolayer SMoSe with excellent thermal spin filter and spin Seebeck effect. Applied Surface Science, 2019, 491, 750-756.	3.1	17
34	The investigation of electronic, anisotropic elastic and lattice dynamical properties of MAB phase nanolaminated ternary borides: <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" altimg="si1.svg"><mml:mrow><mml:msub><mml:mi mathvariant="bold-italic">M</mml:mi><mml:mn>2</mml:mn></mml:msub><mml:mi mathvariant="bold-italic">Al</mml:mi><mml:msub><mml:mi mathvariant="bold-italic">B</mml:mi><mml:mn>2</mml:mn></mml:msub></mml:mrow></mml:math>		

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37	The electronic and elasticity properties of new half-metallic chalcogenides Cu₃TMCh₄(TMâ€‰=â€‰Cr, Fe and Châ€‰=â€‰S, Se, Te): anab initiostudy. Philosophical Magazine, 2019, 99, 513-529.	1.8	12
38	Enhancement of hydrogen storage properties of Ca ₃ CH antiperovskite compound with hydrogen doping. International Journal of Energy Research, 2020, 44, 567-573.	2.2	12
39	Pnma metal hydride system LiBH: a superior topological semimetal with the coexistence of twofold and quadruple degenerate topological nodal lines. Journal of Physics Condensed Matter, 2020, 32, 365502.	0.7	11
40	First-principles study of structural, elastic, lattice dynamical and thermodynamical properties of GdX (X = Bi, Sb). Philosophical Magazine, 2010, 90, 1833-1852.	0.7	9
41	Anab initiostudy on the investigation of structural, electronic, mechanical and lattice dynamical properties of theM₂AXtypeMAXphases Sc₂AlB_{0.5}C_{0.5}, Sc₂AlB_{0.5}N_{0.5}and Sc₂AlC_{0.5}N_{0.5}compounds. Materials Research Express, 2017, 4, 106520.	0.8	9
42	Copper-based thiospinel quantum dots as potential candidates for nonlinear optical applications. Optics and Laser Technology, 2022, 148, 107752.	2.2	8
43	Exploration of carbon additives to the synthesis of CuMoS structures and their electrocatalytic activity in oxygen reduction reaction. International Journal of Hydrogen Energy, 2022, 47, 5326-5336.	3.8	8
44	Coexistence of parabolic and linear band crossings and electron-doped spin-gapless properties in rhombohedral type YbBO3. Journal of Alloys and Compounds, 2020, 823, 153835.	2.8	7
45	Electronic, optical and thermodynamic characteristics of Bi12SiO20 sillenite: First principle calculations. Materials Chemistry and Physics, 2021, 267, 124711.	2.0	7
46	The First Principles Investigation of Structural, Electronic, Mechanical and Lattice Dynamical Properties of the B and N Doped M2AX Type MAX Phases Ti2AlB0.5C0.5 and Ti2AlN0.5C0.5 Compounds. Journal of Boron, 0, , .	0.0	7
47	The electronic and optical properties of MB₁₂(M = Zr, Hf, Y, Lu) dodecaboride compounds. Physica Scripta, 2013, 87, 015702.	1.2	6
48	Structural, electronic and mechanical properties of W1â^'xTcxB2 alloys. Solid State Communications, 2013, 171, 1-4.	0.9	6
49	The structural, electronic, magnetic, and mechanical properties of perovskite oxides PbM1/2Nb1/2O₃(M = Fe, Co and Ni). International Journal of Modern Physics B, 2018, 32, 1850057.	1.0	6
50	Electronic, mechanical and lattice dynamical properties of YXB₄ (X = Cr, Mn, Fe, and Co) compounds. Physica Scripta, 2019, 94, 125710.	1.2	6
51	Density functional theory (DFT) study of BaScO₃H_{0.5} compound and its hydrogen storage properties. Canadian Journal of Physics, 2019, 97, 1191-1199.	0.4	6
52	First principles study on new half-metallic ferromagnetic ternary zinc-based sulfide and telluride (Zn₃VS₄ and Zn₃VTe₄). Materials Research Express, 2019, 6, 076107.	0.8	5
53	The investigation of electronic nature and mechanical properties under spin effects for new half-metallic ferromagnetic chalcogenides Ag3CrX4 (XÂ=ÂS, Se, and Te). Journal of Magnetism and Magnetic Materials, 2021, 519, 167482.	1.0	5
54	Structural phase transition, electronic, elastic, and vibrational properties of LiAl intermetallic compound: insights from first-principles calculations. Canadian Journal of Physics, 2017, 95, 691-698.	0.4	4

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55	First-principles studies of Tin+1SiNn (nâ€‰=â€‰1, 2, 3) MAX phase. Philosophical Magazine, 2020, 100, 2183-2204.	0.4	4
56	Electronic and thermodynamic properties of lanthanum tetraboride on low-temperature experimental and ab-initio calculation data. Journal of Alloys and Compounds, 2021, 862, 158020.	2.8	4
57	First principles study of Bi12GeO20: Electronic, optical and thermodynamic characterizations. Materials Today Communications, 2021, 27, 102299.	0.9	4
58	Experimental and theoretical investigation of the mechanical characteristics of sillenite compound: Bi12GeO20. Journal of Alloys and Compounds, 2021, 882, 160686.	2.8	4
59	Thermo-Elastic and Lattice Dynamical Properties of Pd3X (Xâ€‰=â€‰Ti, Zr, Hf) Alloys: An Ab Initio Study. Brazilian Journal of Physics, 2015, 45, 604-614.	0.7	3
60	The mechanical and electronic properties of spinel oxides VX2O4 (X = Mn and Fe) by first principle calculations. AIP Conference Proceedings, 2019, , .	0.3	3
61	Evaluation of mechanical properties of Bi12SiO20 sillenite using first principles and nanoindentation. Philosophical Magazine, 2021, 101, 2200-2215.	0.7	3
62	Equiatomic quaternary CoXCrAl (XÂ=ÂV, Nb, and Ta) Heusler compounds: Insights from DFT calculations. Journal of Magnetism and Magnetic Materials, 2022, 560, 169620.	1.0	3
63	Enhancement in Photovoltaic Characteristics of CdS/CdTe Heterojunction. Journal of Polytechnic, 0, , 801-805.	0.4	2
64	Anisotropic Elastic and Lattice Dynamical Properties of Cr2AB MAX Phases Compounds. European Journal of Science and Technology, 0, , 351-359.	0.5	2
65	Effect of Hydrogen Doping to MgTiH₃ Perovskite Type Hydride to Enhance Hydrogen Storage Properties. , 2019, , .		1
66	Editorial: Computational Modeling of Spintronic Materials. Frontiers in Materials, 2021, 7, .	1.2	1
67	Pressure and Spin Effect on the Stability, Electronic and Mechanic Properties of three Equiatomic Quaternary Heusler (FeVHfZ, Z= Al, Si, and Ge) Compounds. Materials Today Communications, 2021, 29, 102941.	0.9	1
68	The spin effects on electronic, optical and mechanical properties of new ferromagnetic chalcopyrite: YMnS2. Materials Chemistry and Physics, 2022, 284, 126030.	2.0	1
69	Ab-initio studies of some rare-earth borides: CeB₂, PrB₂, NdB₂, and PmB₂. International Journal of Materials Research, 2013, 104, 858-864.	0.1	0
70	An ab initio Study of Cr and Mn Doped MAX Phase TiMSiB. , 2019, , .		0
71	First principles study of the vibrational and thermo-elastic properties of BaScO3 perovskite oxide. AIP Conference Proceedings, 2019, , .	0.3	0
72	DFT study for the mechanical and electronic properties of Mg3BHx (x=l,4,7) compounds for hydrogen storage applications. AIP Conference Proceedings, 2019, , .	0.3	0

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73	The Investigation DO3-type Fe3M (M=Al, Ga, Si and Ge) Full-Heusler Alloys Within First Principles Study. Journal of Polytechnic, 0, , .	0.4	0
74	Study of electronic and lattice dynamical properties of antiperovskite-type nitrides XNNi3 (X= Pd, Sn) Tj ETQq0 0 0 rgBT /Overlock 10 Tf	0.2	0
75	GÃ¼mÃ¼ÅŸ-TabanlÄ± SÃ¼lfÃ¼rÃ¼n Manyetik DoÄŸasÄ± ve Elektronik DavranÄ±ÅŸÄ± Ãœzerine Ä°lk-Ä°lkeler Ã‡alÄ±ÅŸmasÄ±: Ag Journal of Science, 0, , .	0.1	0
76	The Electronic, Optical and Lattice Dynamical Properties of YIr2X2 (X=Si, Ge) Polymorphs: A DFT Study. Aksaray University Journal of Science and Engineering, 0, , .	0.4	0
77	A Theoretical Study on Electronic Behavior and Mechanical Properties of Ferromagnetic Manganese Selenide: AgMn2Se4. SDU Journal of Science, 0, , .	0.1	0