Gokhan Surucu

List of Publications by Citations

66 papers	727 citations	16 h-index	23 g-index
77 ext. papers	991 ext. citations	3.5 avg, IF	5.03 L-index

#	Paper	IF	Citations
66	Investigation of structural, electronic, anisotropic elastic, and lattice dynamical properties of MAX phases borides: An Ab-initio study on hypothetical MAB (M= Ti, Zr, Hf; A= Al, Ga, In) compounds. *Materials Chemistry and Physics*, **2018**, 203, 106-117	4.4	54
65	Structural and mechanical stability of rare-earth diborides. *Chinese Physics B*, **2013**, 22, 046202	1.2	53
64	Mechanical and phonon properties of the superhard LuB2, LuB4, and LuB12 compounds. *Journal of Alloys and Compounds*, **2011**, 509, 1711-1715	5.7	47
63	Produce of graphene/iron pyrite (FeS2) thin films counter electrode for dye-sensitized solar cell. *Materials Letters*, **2016**, 185, 584-587	3.3	27
62	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	13	26
61	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	6.7	25
60	Electronic and lattice dynamical properties of Ti 2 SiB MAX phase. *Materials Research Express*, **2018**, 5, 076303	1.7	25
59	First-Principles Study on the MAX Phases Ti n+1GaN n (n = 1,2, and 3). *Journal of Electronic Materials* , **2016**, 45, 4256-4264	1.9	22
58	Rich topological nodal line bulk states together with drum-head-like surface states in NaAlGe with -PbFCl type structure. *Journal of Advanced Research*, **2020**, 23, 95-100	13	21
57	Mechanical and lattice dynamical properties of the Re2C compound. *Physica Status Solidi - Rapid Research Letters*, **2010**, 4, 347-349	2.5	21
56	Lattice dynamical and thermo-elastic properties of M2AlB (M= V, Nb, Ta) MAX phase borides. *Journal of Alloys and Compounds*, **2020**, 819, 153256	5.7	21
55	Electronic, elastic and optical properties on the Zn1 Mg x Se mixed alloys. *Journal of Materials Science*, **2011**, 46, 1007-1014	4.3	19
54	Investigation of structural, electronic and lattice dynamical properties of XNiH (X= Li, Na and K) perovskite type hydrides and their hydrogen storage applications. *International Journal of Hydrogen Energy*, **2019**, 44, 15173-15182	6.7	18
53	Structural, electronic, elastic, thermodynamic and vibration properties of TbN compound from first principles calculations. *Solid State Sciences*, **2012**, 14, 401-408	3.4	18
52	Structural and lattice dynamical properties of Zintl NaIn and NaTl compounds. *Computational Materials Science*, **2011**, 50, 1070-1076	3.2	18
51	The lattice dynamical and thermo-elastic properties of Rh3X (X=Ti, V) compounds. *Intermetallics*, **2010**, 18, 286-291	3.5	18
50	Investigation of structural, electronic and anisotropic elastic properties of Ru-doped WB2 compound by increased valence electron concentration. *Materials Chemistry and Physics*, **2017**, 189, 90-95	4.4	16

49	Thermo-elastic and lattice dynamical properties of Rh3Hf compound. *Computational Materials Science*, **2010**, 48, 859-865	3.2	16
48	The electronic and optical properties of Zn1−CaxSe mixed alloys. *Solid State Communications*, **2010**, 150, 1413-1418	1.6	16
47	Structural and Thermoelectronic Properties of Chalcopyrite MgSiX2 (X = P, As, Sb). *Journal of Electronic Materials*, **2017**, 46, 247-264	1.9	14
46	Investigation of structural, electronic, magnetic and lattice dynamical properties for XCoBi (X: Ti, Zr, Hf) Half-Heusler compounds. *Physica B: Condensed Matter*, **2020**, 587, 412146	2.8	13
45	First-principles investigation of LaGaO3 and LaInO3 lanthanum perovskite oxides. *Philosophical Magazine*, **2016**, 96, 2040-2058	1.6	13
44	The Investigation of Electronic, Elastic and Vibrational Properties of an Interlanthanide Perovskite: PrYbO3. *Journal of Electronic Materials*, **2017**, 46, 5827-5836	1.9	12
43	Anisotropic elastic and vibrational properties of Ru2B3and Os2B3: a first-principles investigation. *Materials Research Express*, **2016**, 3, 076501	1.7	12
42	The investigation of electronic, magnetic, mechanical, and lattice dynamical properties of PdMX(M = Cr, Fe andX = Si and Ge) ferromagnetic half-Heusler metallics: anab initiostudy. *Materials Research Express*, **2017**, 4, 066504	1.7	11
41	Transition metal-doped janus monolayer SMoSe with excellent thermal spin filter and spin Seebeck effect. *Applied Surface Science*, **2019**, 491, 750-756	6.7	11
40	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	1.7	10
39	MgTiO3Hx and CaTiO3Hx perovskite compounds for hydrogen storage applications. *International Journal of Hydrogen Energy*, **2019**, 44, 11930-11938	6.7	10
38	Equiatomic quaternary Heusler compounds TiVFeZ (Z=Al, Si, Ge): Half-metallic ferromagnetic materials. *Journal of Alloys and Compounds*, **2021**, 883, 160869	5.7	10
37	Anab initiostudy on the investigation of structural, electronic, mechanical and lattice dynamical properties of theM2AXtypeMAXphases Sc2AlB0.5C0.5, Sc2AlB0.5N0.5and Sc2AlC0.5N0.5compounds. *Materials Research Express*, **2017**, 4, 106520	1.7	9
36	The investigation of electronic, anisotropic elastic and lattice dynamical properties of MAB phase nanolaminated ternary borides: M2AlB2 (M=Mn, Fe and Co) under spin effects. *Journal of Alloys and Compounds*, **2020**, 838, 155436	5.7	9
35	Anisotropic mechanical properties of Tl4Ag18Te11 compound with low thermal conductivity. *Journal of Solid State Chemistry*, **2020**, 289, 121469	3.3	9
34	The investigation of electronic, mechanical and lattice dynamical properties of PdCoX (X = Si and Ge) half-Heusler metallics in and structural phases: an ab initio study. *Philosophical Magazine*, **2017**, 97, 2237-2254	1.6	8
33	CaXH3 (X = Mn, Fe, Co) perovskite-type hydrides for hydrogen storage applications. *International Journal of Energy Research*, **2020**, 44, 2345-2354	4.5	7
32	The electronic and elasticity properties of new half-metallic chalcogenides Cu3TMCh4 (TM = Cr, Fe and Ch = S, Se, Te): an ab initio study. *Philosophical Magazine*, **2019**, 99, 513-529	1.6	7

31	Properties of BaYO3 perovskite and hydrogen storage properties of BaYO3Hx. *International Journal of Hydrogen Energy*, **2020**, 45, 10507-10515	6.7	7
30	The electronic and optical properties of MB12(M = Zr, Hf, Y, Lu) dodecaboride compounds. *Physica Scripta*, **2013**, 87, 015702	2.6	6
29	First-principles study of structural, elastic, lattice dynamical and thermodynamical properties of GdX (X = Bi, Sb). *Philosophical Magazine*, **2010**, 90, 1833-1852	1.6	6
28	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	1.1	6
27	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	1.8	5
26	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	6.7	5
25	Structural, electronic and mechanical properties of W1□TcxB2 alloys. *Solid State Communications*, **2013**, 171, 1-4	1.6	5
24	First principles study on new half-metallic ferromagnetic ternary zinc-based sulfide and telluride (Zn3VS4 and Zn3VTe4). *Materials Research Express*, **2019**, 6, 076107	1.7	4
23	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	5.7	4
22	Electronic and thermodynamic properties of lanthanum tetraboride on low-temperature experimental and ab-initio calculation data. *Journal of Alloys and Compounds*, **2021**, 862, 158020	5.7	4
21	Density functional theory (DFT) study of BaScO3H0.5 compound and its hydrogen storage properties. *Canadian Journal of Physics*, **2019**, 97, 1191-1199	1.1	3
20	Enhancement of hydrogen storage properties of Ca3CH antiperovskite compound with hydrogen doping. *International Journal of Energy Research*, **2020**, 44, 567-573	4.5	3
19	Experimental and theoretical investigation of the mechanical characteristics of sillenite compound: Bi12GeO20. *Journal of Alloys and Compounds*, **2021**, 882, 160686	5.7	3
18	Thermo-Elastic and Lattice Dynamical Properties of Pd3X (X = Ti, Zr, Hf) Alloys: An Ab Initio Study. *Brazilian Journal of Physics*, **2015**, 45, 604-614	1.2	2
17	Enhancement in Photovoltaic Characteristics of CdS/CdTe Heterojunction. *Journal of Polytechnic*,801-805		2
16	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*,		2
15	Anisotropic Elastic and Lattice Dynamical Properties of Cr2AB MAX Phases Compounds. *European Journal of Science and Technology*,351-359	0.4	2
14	First principles study of Bi12GeO20: Electronic, optical and thermodynamic characterizations. *Materials Today Communications*, **2021**, 27, 102299	2.5	2

13	Enhanced hydrogen storage of a functional material: Hf2CF2 MXene with Li decoration. *Applied Surface Science*, **2021**, 551, 149484	6.7	2
12	The mechanical and electronic properties of spinel oxides VX2O4 (X = Mn and Fe) by first principle calculations **2019**,		2
11	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	1.1	1
10	First-principles studies of Tin+1SiNn (n = 1, 2, 3) MAX phase. *Philosophical Magazine*, **2020**, 100, 2183-2204	1.6	1
9	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	6.7	1
8	Copper-based thiospinel quantum dots as potential candidates for nonlinear optical applications. *Optics and Laser Technology*, **2022**, 148, 107752	4.2	1
7	Electronic, optical and thermodynamic characteristics of Bi12SiO20 sillenite: First principle calculations. *Materials Chemistry and Physics*, **2021**, 267, 124711	4.4	1
6	Evaluation of mechanical properties of Bi12SiO20 sillenite using first principles and nanoindentation. *Philosophical Magazine*, **2021**, 101, 2200-2215	1.6	1
5	Electronic, mechanical and lattice dynamical properties of YXB4 (X = Cr, Mn, Fe, and Co) compounds. *Physica Scripta*, **2019**, 94, 125710	2.6	0
4	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	2.5	0
3	The investigation of electronic nature and mechanical properties under spin effects for new half-metallic ferromagnetic chalcogenides Ag3CrX4 (X = S, Se, and Te). *Journal of Magnetism and Magnetic Materials*, **2021**, 519, 167482	2.8	0
2	Ab-initio studies of some rare-earth borides: CeB2, PrB2, NdB2, and PmB2. *International Journal of Materials Research*, **2013**, 104, 858-864	0.5	
1	The spin effects on electronic, optical and mechanical properties of new ferromagnetic chalcopyrite: YMnS2. *Materials Chemistry and Physics*, **2022**, 284, 126030	4.4	