

GÃ¶rkay UÄur

List of Publications by Year in descending order

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papers

1,085
citations

471509

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docs citations

111
times ranked

745
citing authors

#	ARTICLE	IF	CITATIONS
1	Electronic structure and vibrational properties in cobalt-based full-Heusler compounds: A first principle study of CoMnX (X=Si, Ge, Al, Ga). Journal of Alloys and Compounds, 2013, 560, 215-222.	5.5	92
2	First-principle calculations of structural, electronic and magnetic investigations of Mn ₂ RuGe _{1-x} Sn _x quaternary Heusler alloys. Chinese Journal of Physics, 2018, 56, 567-573.	3.9	72
3	Structural and dynamical properties of zinc-blende GaN, AlN, BN, and their (110) surfaces. Physical Review B, 2005, 71, .	3.2	49
4	Electronic and phonon properties of the full-Heusler alloys X ₂ YAl (X=Co, Fe and Y=Cr, Sc): a density functional theory study. Journal of Materials Science, 2014, 49, 4180-4190.	3.7	42
5	Theoretical research on structural, electronic, mechanical, lattice dynamical and thermodynamic properties of layered ternary nitrides Ti ₂ AN (A=Si, Ge and Sn). Journal of Alloys and Compounds, 2019, 771, 664-673.	5.5	34
6	Phonon and elastic properties of AlSc and MgSc from first-principles calculations. Computational Materials Science, 2010, 48, 866-870.	3.0	33
7	Structural, Elastic, Electronic and Optical Properties of Cu ₃ TMSe ₄ (TM = V, Tj ETQq1 1 0.784314 rgBT / Overlock 10 T	0.7	29
8	First principles study of structural, elastic, mechanical and electronic properties of nitrogen-doped cubic diamond. Bulletin of Materials Science, 2021, 44, 1.	1.7	29
9	Investigation of structural, elastic, electronic, optical and vibrational properties of silver chromate spinels: Normal (CrAg ₂ O ₄) and inverse (Ag ₂ CrO ₄). Journal of Alloys and Compounds, 2017, 704, 101-108.	5.5	26
10	First principles study of hydrogen storage material NaBH ₄ and LiAlH ₄ compounds: electronic structure and optical properties. Physica Scripta, 2016, 91, 045804.	2.5	24
11	Elastic, mechanical, optical and magnetic properties of Ru ₂ MnX (X=Nb, Ta, V) Heusler alloys. Journal of Magnetism and Magnetic Materials, 2021, 523, 167614.	2.3	24
12	Structural, elastic, electronic and phonon properties of scandium-based compounds ScX ₃ (X=Ir, Pd, Pt) Tj ETQq0 0 0 rgBT / Overlock 10 T	3.0	23
13	Phase transition of Nowotnyâ€œJuza NaZnX (X=P, As and Sb) compounds at high pressure: Theoretical investigation of structural, electronic and vibrational properties. Computational Materials Science, 2014, 87, 187-197.	3.0	23
14	Theoretical study of the structural, electronic and dynamical properties of rocksalt ScN and GaN. Diamond and Related Materials, 2006, 15, 1175-1178.	3.9	22
15	Electronic structure, phase stability, and vibrational properties of Ir-based intermetallic compound IrX (X=Al, Sc, and Ga). Journal of Physics and Chemistry of Solids, 2015, 77, 126-132.	4.0	22
16	A theoretical study for the band gap energies of the most common silica polymorphs. Chinese Journal of Physics, 2020, 65, 472-480.	3.9	21
17	Elastic and thermodynamic properties of ZnSc ₂ S ₄ and CdSc ₂ S ₄ compounds under pressure and temperature effects. Computational Materials Science, 2013, 70, 107-113.	3.0	18
18	Study of the ground-state magnetic ordering, magnetic and optoelectronic properties of (Lenaite) AgFeS ₂ in its chalcopyrite structure. Journal of Magnetism and Magnetic Materials, 2020, 493, 165730.	2.3	18

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19	Electronic structure, optical and vibrational properties of Ti ₂ FeNiSb ₂ and Ti ₂ Ni ₂ InSb double half heusler alloys. Materials Science in Semiconductor Processing, 2021, 123, 105531.	4.0	18
20	A first-principle study of Os-based compounds: Electronic structure and vibrational properties. Journal of Physics and Chemistry of Solids, 2016, 96-97, 121-127.	4.0	17
21	Structural, electronic, elastic, optical and vibrational properties of MAI ₂ O ₄ (M = Co and Mn) aluminate spinels. Ceramics International, 2018, 44, 310-316.	4.8	17
22	Insight into the structural, elastic, electronic, thermoelectric, thermodynamic and optical properties of MRhSb (M = Ti, Zr, Hf) half-Heuslers from ab initio calculations. Chinese Journal of Physics, 2019, 59, 434-448.	3.9	17
23	Insight into the role of weak interactions on optoelectronic properties of LiGaTe ₂ -chalcopyrite under pressure effect: DFT-D3, NCI and QTAIM investigations. Physica B: Condensed Matter, 2020, 599, 412463.	2.7	15
24	First principles study of electronic, elastic, optical and magnetic properties of Rh ₂ MnX (X = Ti, Hf, Sc). Journal of Physics and Chemistry of Solids, 2019, 160, 105531.	2.0	14
25	Electronic structure calculations of rare-earth intermetallic compound YAg using ab initio methods. Journal of Rare Earths, 2009, 27, 664-666.	4.8	13
26	Dynamical and mechanical stability, electronic properties, bonding and weak interactions analysis of new compounds MgS ₂ and MgSe ₂ in $\langle \text{mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" altimg="si1.svg"} \rangle \langle \text{mml:mrow} \rangle \langle \text{mml:mtext} \rangle \text{Pa} \langle \text{mml:mtext} \rangle \langle \text{mml:mover accent="true"} \rangle \langle \text{mml:mn} \rangle 3 \langle \text{mml:mn} \rangle \langle \text{mml:mo stretchy="true"} \rangle \langle \text{mml:mo} \rangle \langle \text{mml:mover} \rangle \langle \text{mml:mrow} \rangle \langle \text{mml:math} \rangle$ space group structure: Ab initio study. Materials Science in Semiconductor Processing, 2022, 146, 106659.	4.0	12
27	Ab-initio study of the structural, electronic, elastic and vibrational properties of the intermetallic Pd ₃ V and Pt ₃ V alloys in the L1 ₂ phase. Metals and Materials International, 2014, 20, 765-773.	3.4	11
28	Structural, elastic, electronic and thermoelectric properties of $\langle \text{i} \rangle \text{X} \langle \text{i} \rangle \text{PN} \langle \text{sub} \rangle 2 \langle \text{sub} \rangle$ ($\langle \text{i} \rangle \text{X} \langle \text{i} \rangle =$) Journal of Physics and Chemistry of Solids, 2019, 160, 105531.	2.0	11
29	First principles study of elastic and mechanical properties of TlBr and TlCl compounds. Journal of Molecular Structure, 2020, 1200, 127150.	3.6	11
30	First-principles study of electronic and dynamical properties of AuAl ₂ . Physica Status Solidi C: Current Topics in Solid State Physics, 2004, 1, 3027-3030.	0.8	10
31	Structural, electronic and elastic properties of YCu from first principles. Journal of Rare Earths, 2009, 27, 661-663.	4.8	10
32	Thermodynamic description of the Bi-Cu and Bi-Tm system supported by first-principles calculations. Calphad: Computer Coupling of Phase Diagrams and Thermochemistry, 2015, 48, 72-78.	1.6	10
33	Computational investigations on band structure and electronic features of chromium-based carbides and nitride Cr ₃ PX (X = Al and N) through the FP-APW+LO approach. Superlattices and Microstructures, 2017, 109, 1-12.	3.1	10
34	Structural, electronic, optical and elastic properties of XLa ₂ S ₄ (X = Ba; Ca): Ab initio study. Physica B: Condensed Matter, 2019, 558, 91-99.	2.7	10
35	First principles investigations of structural, elastic, mechanical, electronic and optical properties of triple perovskite Ba ₂ K ₂ Te ₂ O ₉ . Physica B: Condensed Matter, 2020, 596, 412404.	2.7	10
36	Electronic and phonon structures of AuGa ₂ and AuIn ₂ . Journal of Physics Condensed Matter, 2006, 18, 6777-6784.	1.8	9

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37	First-principles study of structural, electronic, elastic and phonon properties of AB ₂ O ₄ (A = Ge, Si; B =) Tj ETQq1 1 0.784314 rgBT /Overl	1.9	9
38	External pressure effect on the electronic, optical and thermoelectric properties of the CdY ₂ Ch ₄ (Ch) Tj ETQq0 0 0 rgBT /Overlock 10 Tf Matter, 2018, 545, 40-47.	2.7	9
39	Structural, elastic, electronic and vibrational properties of XAl ₂ O ₄ (X=Ca, Sr and Cd) semiconductors with orthorhombic structure. Journal of Alloys and Compounds, 2019, 809, 151773.	5.5	9
40	Elastic, mechanical, anisotropic, optical and magnetic properties of V ₂ NiSb Heusler alloy. Physica Scripta, 2021, 96, 035807.	2.5	9
41	Three-body effect on the lattice dynamics of Pd-10% Fe alloys. Physical Review B, 1995, 51, 3458-3461.	3.2	8
42	Electronic structure, optical and thermodynamic properties of ternary hydrides MBeH ₃ (M= Li, Na, and K). Canadian Journal of Physics, 2016, 94, 865-876.	1.1	8
43	First principles study of the electronic, optical, elastic and thermoelectric properties of Nb ₂ WNi alloy. Molecular Physics, 0, , e1928314.	1.7	8
44	Ab initio calculation of the ground-state properties of CoSi ₂ . Journal of Physics Condensed Matter, 2005, 17, 7127-7132.	1.8	7
45	Ab initio calculation of the structural and dynamical properties of the zinc-blende BN and its (110) surface. Diamond and Related Materials, 2006, 15, 1161-1165.	3.9	7
46	Structural, elastic, electronic, phonon and thermal properties of Ir ₃ Ta and Rh ₃ Ta alloys. Philosophical Magazine Letters, 2015, 95, 392-400.	1.2	7
47	Electronic structure, phase stability, vibrational and thermodynamic properties of the ternary Nowotny-Juza materials LiMgSb and LiZnSb. Physica B: Condensed Matter, 2017, 519, 39-52.	2.7	7
48	Ab Initio Full-Potential Study of the Structural, Electronic, and Magnetic Properties of the Cubic Sr _{0.75} Ti _{0.25} X (X = S, Se, and Te) Ternary Alloys. Journal of Superconductivity and Novel Magnetism, 2020, 33, 3263-3272.	1.8	7
49	DFT aspects of the elastic, mechanical, magnetic, thermodynamic and optical properties of Ce ₃ XY perovskites. Philosophical Magazine, 0, , 1-20.	1.6	7
50	Exploring the elastic, mechanical and anisotropic response of Ti-5Al-XSn alloys through DFT calculations. Chinese Journal of Physics, 2022, 77, 151-160.	3.9	7
51	STRUCTURAL, ELECTRONIC AND PHONON PROPERTIES OF LaX COMPOUNDS (X = P, As). International Journal of Modern Physics B, 2008, 22, 5027-5033.	2.0	6
52	Elastic and mechanical properties of Mg ₃ Rh intermetallic compound: An ab initio study. Journal of Magnesium and Alloys, 2016, 4, 123-127.	11.9	6
53	Insight into the optoelectronic and thermoelectric properties of Ca-based Zintl phase CaCd ₂ X ₂ (X =) Tj ETQq1 1 0.784314 rgBT /Overl	2.7	6
54	Structural, elastic and mechanical properties of Ti-15Nb-xGe alloys: insight from DFT calculations. Bulletin of Materials Science, 2021, 44, 1.	1.7	6

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55	A first-principles study for the elastic and mechanical properties of Ti64, Ti6242 and Ti6246 alloys. European Physical Journal B, 2021, 94, 1.	1.5	6
56	Ab initio study of some fundamental physical properties of the cubic inverse-perovskite Mn ₃ ZnC and Mn ₃ GeC. Computational Materials Science, 2012, 58, 162-166.	3.0	5
57	A first-principles study of the structural, elastic, electronic and phonon properties of LiMgP and LiMgAs in the $\bar{1}\bar{1}\bar{1}$, $\bar{1}\bar{1}2$ and $\bar{1}1\bar{1}$ phases. Journal of Alloys and Compounds, 2013, 551, 108-117.	5.5	5
58	Optoelectronic and thermoelectric properties of Zintl YLi ₃ A ₂ () Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 107801.	1.4	5
59	Investigation of the structural, electronic, elastic and thermodynamic properties of Curium Monopnictides: An <i>ab initio</i> study. International Journal of Modern Physics B, 2017, 31, 1750226.	2.0	5
60	The effect of martensitic phase transition from cubic to tetragonal on the physical properties of V ₃ Si superconductor. Intermetallics, 2018, 96, 25-32.	3.9	5
61	Effect of Structure on the Electronic, Magnetic and Thermal Properties of Cubic Fe ₂ MnxNi $\bar{1}\bar{1}\bar{x}$ Si Heusler Alloys. Journal of Electronic Materials, 2019, 48, 337-351.	2.2	5
62	Investigating the Magnetic, Mechanical, Electronic, Optical, and Anisotropic Properties of ZrCoFeX (X=Si, Ge) Quaternary Heusler Alloys via First Principles. Journal of Superconductivity and Novel Magnetism, 2022, 35, 1173-1182.	1.8	5
63	Structural, elastic and mechanical properties of Hf-doped TiAl ₂ and $\bar{1}\bar{1}\bar{1}$ -TiAl ₃ intermetallic compounds: first-principle calculations. European Physical Journal B, 2022, 95, .	1.5	5
64	Ground state and phonon spectrum of NiSi ₂ . Philosophical Magazine, 2011, 91, 468-476.	1.6	4
65	First-principles study of B2-like intermetallics LaMg and YMg. Intermetallics, 2012, 22, 218-225.	3.9	4
66	Theory study of structural parameters, elastic stiffness, electronic structures and lattice dynamics of RBRh ₃ (R=Sc, Y, La and Lu). Computational Materials Science, 2012, 54, 336-344.	3.0	4
67	<i>AB INITIO</i> STUDY OF PHONON DISPERSION AND ELASTIC PROPERTIES OF $\text{L1}_{2\text{-TiAl}_3\text{YAl}}$ INTERMETALLICS. Modern Physics Letters B, 2013, 27, 1350224.	1.9	4
68	Lattice dynamical and elastic properties of BaF _X (X= Cl, Br and I): Matlockite structure compounds. International Journal of Modern Physics B, 2019, 33, 1950221.	2.0	4
69	Elastic isotropy, magnetic and electronic properties, bonding and non-covalent interactions analyses of HoFe ₄ P ₁₂ filled-skutterudite: DFT+ $\bar{1}\bar{1}\bar{1}$ ASOC, QTAIM and NCI investigations. Journal of Magnetism and Magnetic Materials, 2021, 518, 167435.	2.3	4
70	Cation distribution effect on electronic, magnetic structure and optic properties in cobalt ferrites ($\text{Co}_{1-x}\text{Fe}_x$) ₂ Tet ₄ with disordered spinel structure. Physica Scripta, 2020, 95, 105801.	2.5	4
71	First-principles calculations of electronic and optical properties of AgGa _{1-x} Tl _x S ₂ alloys: Analyses and design for solar cell applications. Journal of Solid State Chemistry, 2022, 309, 122996.	2.9	4
72	Analyzing the electronic and optical properties of bulk, unstrained, and strained monolayers of SrS ₂ by DFT. Physica E: Low-Dimensional Systems and Nanostructures, 2022, 143, 115403.	2.7	4

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73	First principles study of the structural, elastic, electronic and phonon properties of CdX ₂ O ₄ (X=Al,) Tj ETQq1 1 0.784314 rgBj /Overlock		
74	Thermodynamic Modeling of the Al-Ba and Ba-Ge Systems Supported by First-Principles Calculations. Journal of Phase Equilibria and Diffusion, 2019, 40, 195-205.	1.4	3
75	Electronic structure and magnetic properties of manganese-based MnAs _{1-x} P _x ternary alloys. Journal of Magnetism and Magnetic Materials, 2019, 469, 329-341.	2.3	3
76	DFT-investigation on anisotropy degree of electronic, optical, and mechanical properties of olivine ZnRE ₂ S ₄ (RE = Er, Tm) compounds. Materials Research Express, 2020, 7, 016305.	1.6	3
77	The elastic, mechanical, and thermodynamic properties of NaXH (X = B, Al) intended for the storage of hydrogen: An ab-initio study. Physica B: Condensed Matter, 2022, 638, 413851.	2.7	3
78	Prediction of the electronic structure, optical and vibrational properties of ScXCo ₂ Sb ₂ (X=V, Nb and) Tj ETQq0 0 0 rgBT /Over	1.8	
79	Three-body effect on the lattice dynamics of Fe-28%Pd alloy. Nuovo Cimento Della Societa Italiana Di Fisica D - Condensed Matter, Atomic, Molecular and Chemical Physics, Biophysics, 1997, 19, 779-786.	0.4	2
80	Three-body effect on the lattice dynamics of some fcc d-band metals. Nuovo Cimento Della Societa Italiana Di Fisica D - Condensed Matter, Atomic, Molecular and Chemical Physics, Biophysics, 1997, 19, 787-796.	0.4	2
81	The lattice dynamics of some type-I and type-II alloys. Nuovo Cimento Della Societa Italiana Di Fisica D - Condensed Matter, Atomic, Molecular and Chemical Physics, Biophysics, 1998, 20, 1863-1870.	0.4	2
82	Full-Potential Calculation of Structural, Electronic, and Thermodynamic Properties of Fluoroperovskite CsMF ₃ (M=Be and Mg). International Journal of Thermophysics, 2012, 33, 2339-2350.	2.1	2
83	Electronic, mechanical, and optical properties of Ruddlesden-Popper perovskite sulfides: First principle calculation. Ferroelectrics, 2018, 535, 142-151.	0.6	2
84	Phase transitions and lattice dynamics in perovskite-type hydride $\text{Li}_{1-x}\text{Na}_x\text{MgH}_3$. Journal of Physics Condensed Matter, 2019, 31, 505402.	1.8	2
85	First principles investigations of the structural, elastic, electronic, vibrational and thermodynamic properties of hexagonal XAl ₂ O ₄ (X = Cd, Ca and Sr). Materials Research Express, 2019, 6, 085518.	1.6	2
86	Electronic, elastic, mechanical and anisotropic response of W ₃ XC ₂ (X: Si, Ge and Al) alloys via first-principles. Solid State Communications, 2022, 343, 114648.	1.9	2
87	Phonon Dispersion of Fe-30%Mn Alloy. Physica Scripta, 1999, 60, 569-571.	2.5	1
88	Vibrational properties of the Sb:InP() surface. Surface Science, 2002, 507-510, 1-6.	1.9	1
89	First-principles investigation of structural, electronic and dynamical properties in ScAuSn alloy. Computational Materials Science, 2007, 41, 134-137.	3.0	1
90	Structural, electronic and phonon properties of MoTa and MoNb: a density functional investigation. Physica Scripta, 2010, 82, 015601.	2.5	1

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91	Investigation of electronic structure and thermodynamic properties of quaternary Li-containing chalcogenide diamond-like semiconductors. Semiconductor Science and Technology, 2016, 31, 125015.	2.0	1
92	Band Structure and Optical Properties of Kesterite Type Compounds: first principle calculations. IOP Conference Series: Materials Science and Engineering, 2017, 175, 012014.	0.6	1
93	Pressure effect on mechanical stability and ground state optoelectronic properties of Li ₂ S ₂ produced by Lithium-Sulfur batteries discharge: GGA-PBE, GLLB-SC and mBJ investigation. Philosophical Magazine, 2019, 99, 2789-2817.	1.6	1
94	First principles investigations of the structural, elastic, vibrational, and thermodynamic properties of TiMg ₂ O ₄ oxide spinels: cubic and tetragonal phases. Journal of Molecular Modeling, 2019, 25, 210.	1.8	1
95	Analytical Investigation of Maximum Stresses According to the (hkl) Layers at Stable Condition for Al-Sc Alloys. El-Cezeri Journal of Science and Engineering, 0, , .	0.1	1
96	Chemical bonding, magnetic and electronic properties, mechanical and dynamical stabilities of DyOs ₄ P ₁₂ filled-skutterudite: DFT and QTAIM insight. Materials Chemistry and Physics, 2022, 278, 125684.	4.0	1
97	Elastic properties of antiferromagnetic Fe-40%Mn alloy. Journal of Materials Science Letters, 2000, 19, 127-129.	0.5	0
98	Structural, Electronic and Dynamical Properties of GeSi: An Ab-initio Study. AIP Conference Proceedings, 2007, , .	0.4	0
99	Ab-initio Study of Electronic Structure of ScAuSn. AIP Conference Proceedings, 2007, , .	0.4	0
100	First-Principle Calculations of Electronic and Dynamical Properties of GeSn. AIP Conference Proceedings, 2007, , .	0.4	0
101	Ab initio study of structural, electronic and dynamical properties of MgAuSn. European Physical Journal B, 2007, 58, 319-322.	1.5	0
102	Preface of the "Symposium on first-principles investigation of structural, electronic, elastic, thermodynamic and phonon properties of materials", 2014, , .		0
103	Structural, elastic, electronic and phonon properties of SnX ₂ O ₄ (X=Mg, Zn, Cd) spinel from density functional theory. AIP Conference Proceedings, 2014, , .	0.4	0
104	Ab-Initio Calculations and Thermodynamic Description of the Yb-Cd and Yb-Sn Systems. Journal of Phase Equilibria and Diffusion, 2017, 38, 665-675.	1.4	0
105	Basis set convergence of binding energy with and without CP-correction utilizing PBE0 method: A benchmark study of X ₂ (X=Ge, As, Se, Sc, Ti, V, Cr, Mn, Co, Cu, Zn). Journal of Theoretical and Computational Chemistry, 2019, 18, 1950034.	1.8	0
106	The Lattice Dynamics of Ni-24%Fe Alloy Based on an Empirical Many-Body Potential. Acta Physica Polonica A, 1999, 96, 391-398.	0.5	0
107	First-Principles Calculations and Thermodynamic Assessment of the Li-Rh and Ti-Tm Systems. International Journal of Materials Mechanics and Manufacturing, 2015, 4, 135-139.	0.2	0
108	Investigation of Elastic Anisotropy Pressure Change in Al-Sc Alloys. El-Cezeri Journal of Science and Engineering, 0, , .	0.1	0

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109	Probing the electronic, elastic, mechanical and anisotropic features of ZrTiX(4) alloys via density functional theory. Europhysics Letters, 0, , .	2.0	0