Fouad El Haj Hassan

List of Publications by Year
in descending order

94	2,291	172386 29	243529 44
papers	citations	h-index	g-index

94	94	94	1359
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Full potential linearized augmented plane wave calculations of structural and electronic properties of BN, BP, BAs and BSb. Journal of Physics Condensed Matter, 2001, 13, 253-262.	0.7	142
2	High pressure study of structural and electronic properties of calcium chalcogenides. Journal of Physics Condensed Matter, 2005, 17, 4083-4092.	0.7	116
3	First-principles investigation of BNxP1â^'x, BNxAs1â^'x and BPxAs1â^'x ternary alloys. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2005, 121, 170-177.	1.7	113
4	Ground state properties and structural phase transition of beryllium chalcogenides. Computational Materials Science, 2006, 35, 423-431.	1.4	82
5	Theoretical study of structural, electronic, and thermal properties of CdS, CdSe and CdTe compounds. Computational Materials Science, 2011, 50, 1460-1466.	1.4	73
6	Structural and electronic properties of matlockite MFX (MSr, Ba, Pb; XCl, Br, I) compounds. Journal of Physics and Chemistry of Solids, 2004, 65, 1871-1878.	1.9	66
7	First-principles elastic and bonding properties of barium chalcogenides. Computational Materials Science, 2006, 38, 362-368.	1.4	60
8	First-principles calculations on the origins of the gap bowing in BeSxSe1-x, BeSxTe1-x and BeSexTe1-x alloys. Physica Status Solidi (B): Basic Research, 2005, 242, 909-915.	0.7	59
9	Structural and electronic properties of the wide-gap Zn1â^'xMgxS, Zn1â^'xMgxSe and Zn1â^'xMgxTe ternary alloys. Journal of Physics Condensed Matter, 2005, 17, 7077-7088.	0.7	56
10	Structural, electronic and thermodynamic properties of wide band gap MgxZn1â^'xO alloy. Computational Materials Science, 2007, 40, 66-72.	1.4	56
11	Structural properties of copper halides. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2001, 87, 40-47.	1.7	54
12	Structural properties of boron compounds at high pressure. Journal of Physics Condensed Matter, 2004, 16, 293-301.	0.7	54
13	FP-LAPW investigations of Zn1â€“xBexS, Zn1â€“xBexSe and Zn1â€“xBexTe ternary alloys. Physica Status Solidi (B): Basic Research, 2006, 243, 1296-1305.	0.7	53
14	First-principles study of the ternary semiconductor alloys (Ga,Al)(As,Sb). Journal of Alloys and Compounds, 2010, 499, 80-89.	2.8	52
15	Computational study of AgCl and AgBr semiconductors. Physica B: Condensed Matter, 2007, 392, 309-317.	1.3	47
16	Theoretical study of IIIâ€“V yttrium compounds. Computational Materials Science, 2007, 39, 563-568.	1.4	45
17	Study of wurtzite and zincblende GaN/InN based solar cells alloys: First-principles investigation within the improved modified Beckeâ€“Johnson potential. Solar Energy, 2014, 107, 543-552.	2.9	44
18	Density functional study ofZn1â^'xMgxSeyTe1â^'yquaternary semiconductor alloys. Physical Review B, 2006, 73, .	1.1	42

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19	First principles investigation of barium chalcogenide ternary alloys. Computational Materials Science, 2009, 46, 376-382.	1.4	36
20	First-principles study of BNxSb1-x, BPxSb1-x and BAsxSb1-x alloys. Physica Status Solidi (B): Basic Research, 2005, 242, 3129-3137.	0.7	35
21	First principle investigation of AlAs and AlP compounds and ordered AlAs1â^'xPx alloys. Computational Materials Science, 2010, 50, 274-278.	1.4	35
22	Comparative study of structural and electronic properties of GaSe and InSe polytypes. Journal of Chemical Physics, 2018, 149, 054106.	1.2	35
23	Mutual alloying of XAs (X=Ga, In, Al) materials: Tuning the optoelectronic and thermodynamic properties for solar energy applications. Solar Energy, 2014, 100, 1-8.	2.9	34
24	First-Principles Study on the Structural, Electronic, Magnetic and Thermodynamic Properties of Full Heusler Alloys Co2VZ (ZÂ=ÂAl, Ga). Journal of Electronic Materials, 2017, 46, 130-142.	1.0	34
25	First principle calculations of structural, electronic, thermodynamic and optical properties of Pb_{1â^'x}Ca_xS,Pb_{1â^'x}Ca_xSe and Pb_{1â^'x}Ca_xTe ternary alloys. Journal of Physics Condensed Matter, 2009, 21, 195401.	0.7	33
26	First-principles investigations of the ground-state and excited-state properties of BeO polymorphs. Journal of Physics Condensed Matter, 2007, 19, 436216.	0.7	32
27	Theoretical calculations of the high-pressure phases of SnO2. Computational Materials Science, 2013, 72, 86-92.	1.4	32
28	Density functional study of CdS1â€“xSex and CdS1â€“xTex alloys. Computational Materials Science, 2010, 48, 206-211.	1.4	31
29	Theoretical study of structural and electronic properties of CaFI. Journal of Physics Condensed Matter, 2004, 16, 3329-3337.	0.7	30
30	Structural, electronic, magnetic and thermodynamic properties of full-Heusler compound Co2VSi: Ab initio study. Journal of Magnetism and Magnetic Materials, 2015, 381, 65-69.	1.0	29
31	Ab initio investigations of zinc chalcogenides semiconductor alloys. Physica B: Condensed Matter, 2007, 391, 363-370.	1.3	28
32	Electronic, magnetic and thermal properties of Co2Cr Fe1â^'X (X=Al, Si) Heusler alloys: First-principles calculations. Journal of Magnetism and Magnetic Materials, 2016, 414, 219-226.	1.0	28
33	First principles study of structural and electronic properties of Be_x Zn_{1â€“x}S and Be_x Zn_{1â€“x}Te alloys. Physica Status Solidi (B): Basic Research, 2008, 245, 106-113.	0.7	26
34	Phase stability and electronic behavior of MgS, MgSe and MgTe compounds. Phase Transitions, 2017, 90, 929-941.	0.6	26
35	FP-LAPW investigations of SrS_{1â^'x}Se_x, SrS_{1â^'x}Te_xand SrSe_{1â^'x}Te_xternary alloys. Journal of Physics Condensed Matter, 2008, 20, 445213.	0.7	23
36	Structural, electronic, optical and thermal properties of AlxGa1â^'xAsySb1â^'y quaternary alloys: First-principles study. Journal of Alloys and Compounds, 2010, 504, 559-565.	2.8	23

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37	Atomistic description of phenol, CO and H2O adsorption over crystalline and amorphous silica surfaces for hydrodeoxygenation applications. Applied Surface Science, 2019, 494, 721-730.	3.1	23
38	Structural, electronic and thermodynamic properties of magnesium chalcogenide ternary alloys. Journal of Physics Condensed Matter, 2007, 19, 386234.	0.7	22
39	First principle investigation of mercury chalcogenides and their HgSxSe1â^'x and HgSxTe1â^'x ternary alloys. Computational Materials Science, 2014, 83, 107-113.	1.4	22
40	Electronic structure of CuClxBr1â^'x, CuClxI1â^'xand CuBrxI1â^'xalloys. Superlattices and Microstructures, 2001, 30, 75-80.	1.4	21
41	Structural, electronic and optical properties of AgI under pressure. Physics Letters, Section A: General, Atomic and Solid State Physics, 2008, 372, 2502-2508.	0.9	19
42	FIRST-PRINCIPLES INVESTIGATION OF SnO2 AT HIGH PRESSURE. International Journal of Modern Physics B, 2005, 19, 4081-4092.	1.0	18
43	Ab initio investigations of calcium chalcogenide alloys. Journal of Alloys and Compounds, 2009, 485, 642-647.	2.8	17
44	Imprinting isolated single iron atoms onto mesoporous silica by templating with metallosurfactants. Journal of Colloid and Interface Science, 2020, 573, 193-203.	5.0	17
45	First-principles study of rock-salt AgClxBr1â^'x alloys. Physica B: Condensed Matter, 2007, 396, 192-198.	1.3	16
46	STRUCTURAL, ELECTRONIC, THERMODYNAMIC AND THERMAL PROPERTIES OF ZINC-BLENDE InP, InAs AND THEIR InAs_x P_{1-x} TERNARY ALLOYS VIA FIRST PRINCIPLES CALCULATIONS. International Journal of Modern Physics B, 2013, 27, 1350166.	1.0	16
47	First-principle calculations of the structural, electronic, thermodynamic and thermal properties of ZnS x Se1â^'x ternary alloys. Bulletin of Materials Science, 2015, 38, 365-372.	0.8	16
48	Crystal structure and energy bands of (Ga/In)Se and Cu(In,Ga)Se₂ semiconductors in comparison. Physica Status Solidi (B): Basic Research, 2016, 253, 1472-1475.	0.7	16
49	First principles calculations of structural, electronic and thermal properties of lead chalcogenides PbS, PbSe and PbTe compounds. Bulletin of Materials Science, 2014, 37, 1159-1166.	0.8	15
50	First principles calculations of structural, electronic, optical and thermodynamic properties of PbS, SrS and their ternary alloys Pb1â^'Sr S. Computational Materials Science, 2011, 50, 1077-1082.	1.4	14
51	Theoretical study of structural, electronic and thermal properties of Zn1â^'Be S ternary alloy. Computational Materials Science, 2011, 50, 3080-3084.	1.4	14
52	Structural and electronic properties of Zn1â^'xMgxSySe1â^'y alloys. Materials Letters, 2007, 61, 1178-1182.	1.3	13
53	Application of the full-potential linear augmented-plane-wave method to the study of electronic properties in semiconductors with d valence electrons. The Philosophical Magazine: Physics of Condensed Matter B, Statistical Mechanics, Electronic, Optical and Magnetic Properties, 2002, 82, 791-800.	0.6	11
54	First-principles investigation of wide-gap quaternary alloys Zn1â^'xMgxSyTe1â^'y. Journal of Alloys and Compounds, 2007, 433, 306-312.	2.8	11

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55	Electronic and optical properties of borophene and graphene with an adsorbed ionic liquid: A density functional theory study. Journal of Molecular Liquids, 2020, 316, 113803.	2.3	11
56	First-principles calculations on the origins of the gap bowing in InAs1â€“xPx alloys. Physica B: Condensed Matter, 2009, 404, 3435-3439.	1.3	10
57	Structural, electronic, thermodynamic and optical properties of SrS1â^'xOx mixed crystals. Physica B: Condensed Matter, 2009, 404, 4100-4105.	1.3	10
58	Theoretical prediction of the structural, electronic, and thermal properties of Al1â^'xBxAs ternary alloys. Materials Science in Semiconductor Processing, 2013, 16, 2063-2069.	1.9	10
59	Comparative studies for the physical properties of superconducting (BaSnO₃)_x(Bi,Pb)-2223 samples determined from excess conductivity and thermoelectric power analysis. Materials Research Express, 2019, 6, 096001.	0.8	10
60	Skyrmion based random bit generator. Physica B: Condensed Matter, 2020, 579, 411900.	1.3	10
61	STRUCTURAL, ELECTRONIC, OPTICAL AND THERMODYNAMIC PROPERTIES OF PbS, PbSe AND THEIR TERNARY ALLOY PbS_{1-x}Se_x. Modern Physics Letters B, 2011, 25, 473-486.	1.0	9
62	Density functional calculations of Pb1â^'xCaxSySe1â^'y alloys lattice matched to different substrates. Journal of Physics and Chemistry of Solids, 2012, 73, 608-613.	1.9	9
63	Theoretical investigation of the structural stabilities, optoelectronic properties and thermodynamic characteristics of GaPxSb1â^'x ternary alloys. Indian Journal of Physics, 2018, 92, 705-714.	0.9	9
64	Study of Structural, Electronic, and Magnetic Properties of Cubic Lanthanide Based on Oxide Perovskite-Type NdGaO3. Journal of Superconductivity and Novel Magnetism, 2019, 32, 2149-2154.	0.8	9
65	First-principles analysis of Cx(BN)1â^'x ordered alloy. Superlattices and Microstructures, 2002, 32, 91-97.	1.4	8
66	Theoretical study of CuxAg1â^'xI alloys. Journal of Physics and Chemistry of Solids, 2009, 70, 1055-1061.	1.9	8
67	Size and thickness effect on magnetic structures of maghemite hollow magnetic nanoparticles. Journal of Nanoparticle Research, 2016, 18, 1.	0.8	8
68	Ab initio study of structural, mechanical, thermal and electronic properties of perovskites Sr(Li,Pd)H₃. International Journal of Modern Physics B, 2016, 30, 1650003.	1.0	8
69	Ab initiocalculations of the structural, electronic, thermodynamic and thermal properties of BaSe_{1â^'x}Te_xalloys. Physica Scripta, 2017, 92, 105701.	1.2	8
70	Tuning the hybrid boropheneâ^'/graphene-ionic liquid interface: Effect of metal cations on the electronic and photonic properties. Journal of Molecular Liquids, 2021, 321, 114759.	2.3	7
71	Application of the full-potential linear augmented-plane-wave method to the study of electronic properties in semiconductors with d valence electrons. The Philosophical Magazine: Physics of Condensed Matter B, Statistical Mechanics, Electronic, Optical and Magnetic Properties, 2002, 82, 791-800.	0.6	7
72	Ab initio study of the structural, electronic, phase diagram, and thermal properties of cadium beryllium selenide mixed crystals. Materials Science in Semiconductor Processing, 2014, 26, 642-648.	1.9	6

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73	Competing structures in (In,Ga)Se and (In,Ga)2 Se3 semiconductors. Physica Status Solidi (B): Basic Research, 2017, 254, 1700120.	0.7	6
74	Fundamental properties of zinc-blende AlSb, BSb and their Al1-xBxSb ternary alloys. Chinese Journal of Physics, 2017, 55, 1092-1102.	2.0	6
75	Ab initio study of the adsorption of Potassium on B, N, and BN-doped graphene heterostructure. Materials Today Communications, 2019, 21, 100676.	0.9	6
76	Water-silanol interactions on the amorphous silica surface: A dispersion-corrected DFT investigation. Journal of Molecular Liquids, 2020, 320, 114496.	2.3	6
77	Structural, electronic and thermodynamic properties of SrxCd1â^'xO: A first-principles study. Materials Science in Semiconductor Processing, 2013, 16, 1853-1858.	1.9	5
78	First-principles calculations of the structural, electronic and optical properties of In1â^'xBxAsyP1â^'y quaternary alloys lattice matched to InP and BeS. Materials Science in Semiconductor Processing, 2015, 36, 27-35.	1.9	5
79	Near-forward/high-pressure-backward Raman study of Zn_{1â€‰â^'â€‰x} Be _x Se (x â€‰~â€‰0.5) - evidence for percolation behavior of the long (Znâ€•Se) bond. Journal of Raman Spectroscopy, 2016, 47, 357-367.	1.2	5
80	Ab initio calculations of fundamental properties of SrTe1â^'x O x alloys. Bulletin of Materials Science, 2016, 39, 827-835.	0.8	5
81	Phase stability and electronic properties of silver halides. Phase Transitions, 2015, 88, 357-367.	0.6	4
82	Structural, electronic, optical and thermal properties of CuXTe₂ (X=Al, Ga, In) compounds: An ab-initio study. International Journal of Modern Physics B, 2019, 33, 1950045.	1.0	4
83	Structural and electronic properties of BCC tellurium under high pressure. Physica B: Condensed Matter, 2005, 363, 82-87.	1.3	3
84	Fundamental properties of scandium chalcogenides and their alloys: DFT study. Indian Journal of Physics, 2019, 93, 1129-1135.	0.9	3
85	Comparative study of the fundamental properties of Ga2O3 polymorphs. Journal of Solid State Chemistry, 2022, 312, 123272.	1.4	3
86	FIRST PRINCIPLES CALCULATIONS OF STRUCTURAL, ELECTRONIC, THERMODYNAMIC AND THERMAL PROPERTIES OF BaxSr1-xTe TERNARY ALLOYS. International Journal of Modern Physics B, 2014, 28, 1450041.	1.0	2
87	First-principle calculations of the fundamental properties of CuBrxI1â^'xternary alloy. Molecular Physics, 2015, 113, 3637-3644.	0.8	2
88	First-principles calculations to investigate half-metallic ferromagnetism in Zn_{0.50}Ti_{0.50}S alloy by using DFTâ€‰+â€‰U calculations. Philosophical Magazine, 2019, 99, 3000-3014.	0.7	2
89	Theoretical investigations on KClxBr1â^'x, KClxI1â^'x and KBrxI1â^'x: A first-principles study. Physica B: Condensed Matter, 2008, 403, 2773-2779.	1.3	1
90	First principles calculations of structural, electronic and optical properties of Zn1â^'xBexSeyTe1â^'y quaternary alloys. Computational Materials Science, 2014, 87, 202-208.	1.4	1

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91	Magnetic ordering and electronic structure of the ternary iron arsenide BaFe2As2. International Journal of Modern Physics B, 2015, 29, 1550182.	1.0	0
92	ab-initio investigations of electronic and magnetic properties of the tetragonal chalcopyrite BeTiTe2 compound: DFTâ€‰+â€‰U study. Philosophical Magazine, 2019, 99, 2185-2197.	0.7	0
93	Electrical conductivity and impedance calculated beyond Ï„-approximation. Indian Journal of Physics, 2021, 95, 433-437.	0.9	0
94	First-Principle Calculations of Fundamental Properties of AgGaTe₂, AgInTe₂ and Their Mixed Crystals AgIn_{1â€“x}Ga_xTe₂. Journal of Nanoelectronics and Optoelectronics, 2018, 13, 1214-1221.	0.1	0