

# Fouad El Haj Hassan

## List of Publications by Year in descending order

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94  
papers

2,291  
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172207

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docs citations

94  
times ranked

1359  
citing authors

#	ARTICLE	IF	CITATIONS
1	Comparative study of the fundamental properties of Ga <sub>2</sub> O <sub>3</sub> polymorphs. Journal of Solid State Chemistry, 2022, 312, 123272.	1.4	3
2	Tuning the hybrid borophene/graphene-ionic liquid interface: Effect of metal cations on the electronic and photonic properties. Journal of Molecular Liquids, 2021, 321, 114759.	2.3	7
3	Electrical conductivity and impedance calculated beyond ĩ <sub>∞</sub> -approximation. Indian Journal of Physics, 2021, 95, 433-437.	0.9	0
4	Skyrmion based random bit generator. Physica B: Condensed Matter, 2020, 579, 411900.	1.3	10
5	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
6	Water-silanol interactions on the amorphous silica surface: A dispersion-corrected DFT investigation. Journal of Molecular Liquids, 2020, 320, 114496.	2.3	6
7	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
8	First-principles calculations to investigate half-metallic ferromagnetism in Zn <sub>0.50</sub> Ti <sub>0.50</sub> S alloy by using DFT calculations. Philosophical Magazine, 2019, 99, 3000-3014.	0.7	2
9	Comparative studies for the physical properties of superconducting (BaSnO <sub>3</sub> ) <sub>x</sub> (Bi,Pb)-2223 samples determined from excess conductivity and thermoelectric power analysis. Materials Research Express, 2019, 6, 096001.	0.8	10
10	Atomistic description of phenol, CO and H <sub>2</sub> O adsorption over crystalline and amorphous silica surfaces for hydrodeoxygenation applications. Applied Surface Science, 2019, 494, 721-730.	3.1	23
11	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
12	Fundamental properties of scandium chalcogenides and their alloys: DFT study. Indian Journal of Physics, 2019, 93, 1129-1135.	0.9	3
13	ab-initio investigations of electronic and magnetic properties of the tetragonal chalcopyrite BeTiTe <sub>2</sub> compound: DFT study. Philosophical Magazine, 2019, 99, 2185-2197.	0.7	0
14	Structural, electronic, optical and thermal properties of CuXTe <sub>2</sub> (X=Al, Ga, In) compounds: An ab-initio study. International Journal of Modern Physics B, 2019, 33, 1950045.	1.0	4
15	Study of Structural, Electronic, and Magnetic Properties of Cubic Lanthanide Based on Oxide Perovskite-Type NdGaO <sub>3</sub> . Journal of Superconductivity and Novel Magnetism, 2019, 32, 2149-2154.	0.8	9
16	Theoretical investigation of the structural stabilities, optoelectronic properties and thermodynamic characteristics of Ga <sub>x</sub> Sb <sub>1-x</sub> ternary alloys. Indian Journal of Physics, 2018, 92, 705-714.	0.9	9
17	Comparative study of structural and electronic properties of GaSe and InSe polytypes. Journal of Chemical Physics, 2018, 149, 054106.	1.2	35
18	First-Principle Calculations of Fundamental Properties of AgGaTe <sub>2</sub> , AgInTe <sub>2</sub> and Their Mixed Crystals AgIn <sub>1-x</sub> Ga <sub>x</sub> Te <sub>2</sub> . Journal of Nanoelectronics and Optoelectronics, 2018, 13, 1214-1221.	0.1	0

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19	Competing structures in (In,Ga)Se and (In,Ga) <sub>2</sub> Se <sub>3</sub> semiconductors. Physica Status Solidi (B): Basic Research, 2017, 254, 1700120.	0.7	6
20	Phase stability and electronic behavior of MgS, MgSe and MgTe compounds. Phase Transitions, 2017, 90, 929-941.	0.6	26
21	Ab initio calculations of the structural, electronic, thermodynamic and thermal properties of BaSe <sub>1-x</sub> Te <sub>x</sub> alloys. Physica Scripta, 2017, 92, 105701.	1.2	8
22	Fundamental properties of zinc-blende AlSb, BSb and their Al <sub>1-x</sub> B <sub>x</sub> Sb ternary alloys. Chinese Journal of Physics, 2017, 55, 1092-1102.	2.0	6
23	First-Principles Study on the Structural, Electronic, Magnetic and Thermodynamic Properties of Full Heusler Alloys Co <sub>2</sub> VZ (Z=Al, Ga). Journal of Electronic Materials, 2017, 46, 130-142.	1.0	34
24	Near-forward/high-pressure-backward Raman study of Zn <sub>1-x</sub> Be <sub>x</sub> Se (0 ≤ x ≤ 0.5) - evidence for percolation behavior of the long (Zn-Be) bond. Journal of Raman Spectroscopy, 2016, 47, 357-367.	1.2	5
25	Crystal structure and energy bands of (Ga/In)Se and Cu(In,Ga)Se <sub>2</sub> semiconductors in comparison. Physica Status Solidi (B): Basic Research, 2016, 253, 1472-1475.	0.7	16
26	Electronic, magnetic and thermal properties of Co <sub>2</sub> CrFe <sub>1-x</sub> X (X=Al, Si) Heusler alloys: First-principles calculations. Journal of Magnetism and Magnetic Materials, 2016, 414, 219-226.	1.0	28
27	Size and thickness effect on magnetic structures of maghemite hollow magnetic nanoparticles. Journal of Nanoparticle Research, 2016, 18, 1.	0.8	8
28	Ab initio calculations of fundamental properties of SrTe <sub>1-x</sub> O <sub>x</sub> alloys. Bulletin of Materials Science, 2016, 39, 827-835.	0.8	5
29	Ab initio study of structural, mechanical, thermal and electronic properties of perovskites Sr(Li,Pd)H <sub>3</sub> . International Journal of Modern Physics B, 2016, 30, 1650003.	1.0	8
30	First-principle calculations of the fundamental properties of CuBr <sub>1-x</sub> ternary alloy. Molecular Physics, 2015, 113, 3637-3644.	0.8	2
31	Phase stability and electronic properties of silver halides. Phase Transitions, 2015, 88, 357-367.	0.6	4
32	Structural, electronic, magnetic and thermodynamic properties of full-Heusler compound Co <sub>2</sub> VSi: Ab initio study. Journal of Magnetism and Magnetic Materials, 2015, 381, 65-69.	1.0	29
33	First-principle calculations of the structural, electronic, thermodynamic and thermal properties of Zn <sub>x</sub> Se <sub>1-x</sub> ternary alloys. Bulletin of Materials Science, 2015, 38, 365-372.	0.8	16
34	First-principles calculations of the structural, electronic and optical properties of In <sub>1-x</sub> B <sub>x</sub> As <sub>y</sub> P <sub>1-y</sub> quaternary alloys lattice matched to InP and BeS. Materials Science in Semiconductor Processing, 2015, 36, 27-35.	1.9	5
35	Magnetic ordering and electronic structure of the ternary iron arsenide BaFe <sub>2</sub> As <sub>2</sub> . International Journal of Modern Physics B, 2015, 29, 1550182.	1.0	0
36	FIRST PRINCIPLES CALCULATIONS OF STRUCTURAL, ELECTRONIC, THERMODYNAMIC AND THERMAL PROPERTIES OF Ba <sub>x</sub> Sr <sub>1-x</sub> Te TERNARY ALLOYS. International Journal of Modern Physics B, 2014, 28, 1450041.	1.0	2

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37	First principle investigation of mercury chalcogenides and their Hg <sub>x</sub> Se <sub>1-x</sub> and Hg <sub>x</sub> Te <sub>1-x</sub> ternary alloys. Computational Materials Science, 2014, 83, 107-113.	1.4	22
38	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
39	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
40	Ab initio study of the structural, electronic, phase diagram, and thermal properties of cadmium beryllium selenide mixed crystals. Materials Science in Semiconductor Processing, 2014, 26, 642-648.	1.9	6
41	Study of wurtzite and zincblende GaN/InN based solar cells alloys: First-principles investigation within the improved modified Becke-Johnson potential. Solar Energy, 2014, 107, 543-552.	2.9	44
42	First principles calculations of structural, electronic and optical properties of Zn <sub>1-x</sub> BexSeyTe <sub>1-y</sub> quaternary alloys. Computational Materials Science, 2014, 87, 202-208.	1.4	1
43	Theoretical prediction of the structural, electronic, and thermal properties of Al <sub>1-x</sub> BxAs ternary alloys. Materials Science in Semiconductor Processing, 2013, 16, 2063-2069.	1.9	10
44	STRUCTURAL, ELECTRONIC, THERMODYNAMIC AND THERMAL PROPERTIES OF ZINC-BLENDE $\langle \text{InP} \rangle$ , $\langle \text{InAs} \rangle$ AND THEIR $\langle \text{InAs} \rangle_x \langle \text{P} \rangle_{1-x}$ TERNARY ALLOYS VIA FIRST PRINCIPLES CALCULATIONS. International Journal of Modern Physics B, 2013, 27, 1350166.	1.0	16
45	Theoretical calculations of the high-pressure phases of SnO <sub>2</sub> . Computational Materials Science, 2013, 72, 86-92.	1.4	32
46	Structural, electronic and thermodynamic properties of Sr <sub>x</sub> Cd <sub>1-x</sub> O: A first-principles study. Materials Science in Semiconductor Processing, 2013, 16, 1853-1858.	1.9	5
47	Density functional calculations of Pb <sub>1-x</sub> CaxSySe <sub>1-y</sub> alloys lattice matched to different substrates. Journal of Physics and Chemistry of Solids, 2012, 73, 608-613.	1.9	9
48	STRUCTURAL, ELECTRONIC, OPTICAL AND THERMODYNAMIC PROPERTIES OF $\langle \text{PbS} \rangle$ , $\langle \text{PbSe} \rangle$ AND THEIR TERNARY ALLOY $\langle \text{PbS} \rangle_{1-x} \langle \text{Se} \rangle_x$ . Modern Physics Letters B, 2011, 25, 473-486.	1.0	9
49	First principles calculations of structural, electronic, optical and thermodynamic properties of PbS, SrS and their ternary alloys Pb <sub>1-x</sub> Sr <sub>x</sub> S. Computational Materials Science, 2011, 50, 1077-1082.	1.4	14
50	Theoretical study of structural, electronic, and thermal properties of CdS, CdSe and CdTe compounds. Computational Materials Science, 2011, 50, 1460-1466.	1.4	73
51	Theoretical study of structural, electronic and thermal properties of Zn <sub>1-x</sub> Be <sub>x</sub> S ternary alloy. Computational Materials Science, 2011, 50, 3080-3084.	1.4	14
52	First-principles study of the ternary semiconductor alloys (Ga,Al)(As,Sb). Journal of Alloys and Compounds, 2010, 499, 80-89.	2.8	52
53	Structural, electronic, optical and thermal properties of Al <sub>x</sub> Ga <sub>1-x</sub> As <sub>y</sub> Sb <sub>1-y</sub> quaternary alloys: First-principles study. Journal of Alloys and Compounds, 2010, 504, 559-565.	2.8	23
54	Density functional study of CdS <sub>1-x</sub> Sex and CdS <sub>1-x</sub> Tex alloys. Computational Materials Science, 2010, 48, 206-211.	1.4	31

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55	First principle investigation of AIs and AlP compounds and ordered AIs <sub>1-x</sub> P <sub>x</sub> alloys. Computational Materials Science, 2010, 50, 274-278.	1.4	35
56	Theoretical study of Cu <sub>x</sub> Ag <sub>1-x</sub> alloys. Journal of Physics and Chemistry of Solids, 2009, 70, 1055-1061.	1.9	8
57	First-principles calculations on the origins of the gap bowing in InAs <sub>1-x</sub> P <sub>x</sub> alloys. Physica B: Condensed Matter, 2009, 404, 3435-3439.	1.3	10
58	Structural, electronic, thermodynamic and optical properties of SrS <sub>1-x</sub> O <sub>x</sub> mixed crystals. Physica B: Condensed Matter, 2009, 404, 4100-4105.	1.3	10
59	First principles investigation of barium chalcogenide ternary alloys. Computational Materials Science, 2009, 46, 376-382.	1.4	36
60	Ab initio investigations of calcium chalcogenide alloys. Journal of Alloys and Compounds, 2009, 485, 642-647.	2.8	17
61	First principle calculations of structural, electronic, thermodynamic and optical properties of Pb <sub>1-x</sub> Ca <sub>x</sub> S, Pb <sub>1-x</sub> Ca <sub>x</sub> Se and Pb <sub>1-x</sub> Ca <sub>x</sub> Te ternary alloys. Journal of Physics Condensed Matter, 2009, 21, 195401.	0.7	33
62	First principles study of structural and electronic properties of Be <sub>x</sub> Zn <sub>1-x</sub> S and Be <sub>x</sub> Zn <sub>1-x</sub> Te alloys. Physica Status Solidi (B): Basic Research, 2008, 245, 106-113.	0.7	26
63	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
64	Theoretical investigations on KCl <sub>x</sub> Br <sub>1-x</sub> , KCl <sub>1-x</sub> and KBr <sub>1-x</sub> : A first-principles study. Physica B: Condensed Matter, 2008, 403, 2773-2779.	1.3	1
65	FP-LAPW investigations of SrS <sub>1-x</sub> Se <sub>x</sub> , SrS <sub>1-x</sub> Te <sub>x</sub> and SrSe <sub>1-x</sub> Te <sub>x</sub> ternary alloys. Journal of Physics Condensed Matter, 2008, 20, 445213.	0.7	23
66	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
67	Theoretical study of III-V yttrium compounds. Computational Materials Science, 2007, 39, 563-568.	1.4	45
68	Structural, electronic and thermodynamic properties of wide band gap Mg <sub>x</sub> Zn <sub>1-x</sub> O alloy. Computational Materials Science, 2007, 40, 66-72.	1.4	56
69	First-principles investigation of wide-gap quaternary alloys Zn <sub>1-x</sub> Mg <sub>x</sub> SyTe <sub>1-y</sub> . Journal of Alloys and Compounds, 2007, 433, 306-312.	2.8	11
70	Structural, electronic and thermodynamic properties of magnesium chalcogenide ternary alloys. Journal of Physics Condensed Matter, 2007, 19, 386234.	0.7	22
71	Ab initio investigations of zinc chalcogenides semiconductor alloys. Physica B: Condensed Matter, 2007, 391, 363-370.	1.3	28
72	Computational study of AgCl and AgBr semiconductors. Physica B: Condensed Matter, 2007, 392, 309-317.	1.3	47

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73	First-principles study of rock-salt $\text{AgCl}_x\text{Br}_{1-x}$ alloys. <i>Physica B: Condensed Matter</i> , 2007, 396, 192-198.	1.3	16
74	Structural and electronic properties of $\text{Zn}_{1-x}\text{Mg}_x\text{SySe}_{1-y}$ alloys. <i>Materials Letters</i> , 2007, 61, 1178-1182.	1.3	13
75	Ground state properties and structural phase transition of beryllium chalcogenides. <i>Computational Materials Science</i> , 2006, 35, 423-431.	1.4	82
76	First-principles elastic and bonding properties of barium chalcogenides. <i>Computational Materials Science</i> , 2006, 38, 362-368.	1.4	60
77	Density functional study of $\text{Zn}_{1-x}\text{Mg}_x\text{Se}_y\text{Te}_{1-y}$ quaternary semiconductor alloys. <i>Physical Review B</i> , 2006, 73, .	1.1	42
78	FP-LAPW investigations of $\text{Zn}_{1-x}\text{BexS}$ , $\text{Zn}_{1-x}\text{BexSe}$ and $\text{Zn}_{1-x}\text{BexTe}$ ternary alloys. <i>Physica Status Solidi (B): Basic Research</i> , 2006, 243, 1296-1305.	0.7	53
79	First-principles investigation of $\text{BN}_x\text{P}_{1-x}$ , $\text{BN}_x\text{As}_{1-x}$ and $\text{BP}_x\text{As}_{1-x}$ ternary alloys. <i>Materials Science and Engineering B: Solid-State Materials for Advanced Technology</i> , 2005, 121, 170-177.	1.7	113
80	Structural and electronic properties of BCC tellurium under high pressure. <i>Physica B: Condensed Matter</i> , 2005, 363, 82-87.	1.3	3
81	First-principles calculations on the origins of the gap bowing in $\text{BeS}_x\text{Se}_{1-x}$ , $\text{BeS}_x\text{Te}_{1-x}$ and $\text{BeSe}_x\text{Te}_{1-x}$ alloys. <i>Physica Status Solidi (B): Basic Research</i> , 2005, 242, 909-915.	0.7	59
82	First-principles study of $\text{BN}_x\text{Sb}_{1-x}$ , $\text{BP}_x\text{Sb}_{1-x}$ and $\text{BAS}_x\text{Sb}_{1-x}$ alloys. <i>Physica Status Solidi (B): Basic Research</i> , 2005, 242, 3129-3137.	0.7	35
83	FIRST-PRINCIPLES INVESTIGATION OF $\text{SnO}_2$ AT HIGH PRESSURE. <i>International Journal of Modern Physics B</i> , 2005, 19, 4081-4092.	1.0	18
84	Structural and electronic properties of the wide-gap $\text{Zn}_{1-x}\text{Mg}_x\text{S}$ , $\text{Zn}_{1-x}\text{Mg}_x\text{Se}$ and $\text{Zn}_{1-x}\text{Mg}_x\text{Te}$ ternary alloys. <i>Journal of Physics Condensed Matter</i> , 2005, 17, 7077-7088.	0.7	56
85	High pressure study of structural and electronic properties of calcium chalcogenides. <i>Journal of Physics Condensed Matter</i> , 2005, 17, 4083-4092.	0.7	116
86	Structural properties of boron compounds at high pressure. <i>Journal of Physics Condensed Matter</i> , 2004, 16, 293-301.	0.7	54
87	Structural and electronic properties of matlockite $\text{MFX}$ (MSr, Ba, Pb; XCl, Br, I) compounds. <i>Journal of Physics and Chemistry of Solids</i> , 2004, 65, 1871-1878.	1.9	66
88	Theoretical study of structural and electronic properties of CaFl. <i>Journal of Physics Condensed Matter</i> , 2004, 16, 3329-3337.	0.7	30
89	Application of the full-potential linear augmented-plane-wave method to the study of electronic properties in semiconductors with d valence electrons. <i>The Philosophical Magazine: Physics of Condensed Matter B, Statistical Mechanics, Electronic, Optical and Magnetic Properties</i> , 2002, 82, 791-800.	0.6	11
90	First-principles analysis of $\text{Cx}(\text{BN})_{1-x}$ ordered alloy. <i>Superlattices and Microstructures</i> , 2002, 32, 91-97.	1.4	8

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91	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
92	Structural properties of copper halides. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2001, 87, 40-47.	1.7	54
93	Electronic structure of $\text{CuCl}_x\text{Br}_{1-x}$ , $\text{CuCl}_x\text{I}_{1-x}$ and $\text{CuBr}_x\text{I}_{1-x}$ alloys. Superlattices and Microstructures, 2001, 30, 75-80.	1.4	21
94	Application of the full-potential linear augmented-plane-wave method to the study of electronic properties in semiconductors with d valence electrons. , 0, .		7