Habib Rached

List of Publications by Citations

60 papers	753 citations	15 h-index	25 g-index
65 ext. papers	1,080 ext. citations	2.6 avg, IF	4.58 L-index

#	Paper	IF	Citations
60	Structural, mechanical, electronic and magnetic properties of a new series of quaternary Heusler alloys CoFeMnZ (Z=Si, As, Sb): A first-principle study. *Journal of Magnetism and Magnetic Materials*, **2015**, 393, 165-174	2.8	83
59	Electronic structure and magnetic properties of quaternary Heusler alloys CoRhMnZ (Z□=□Al, Ga, Ge and Si) via first-principle calculations. *Journal of Alloys and Compounds*, **2015**, 647, 276-286	5.7	73
58	First-principles calculations of structural, elastic and electronic properties of Ni2MnZ (Z = Al, Ga and In) Heusler alloys. *Physica Status Solidi (B): Basic Research*, **2009**, 246, 1580-1586	1.3	59
57	Full-potential calculation of the structural, elastic, electronic and magnetic properties of XFeO3 (X=Sr and Ba) perovskite. *Physica B: Condensed Matter*, **2010**, 405, 3515-3519	2.8	43
56	Investigation of Iron-based double perovskite oxides on the magnetic phase stability, mechanical, electronic and optical properties via first-principles calculation. *Materials Chemistry and Physics*, **2017**, 193, 453-469	4.4	37
55	Computational study of structural, elastic and electronic properties of lithium disilicate (Li(2)Si(2)O(5)) glass-ceramic. *Journal of the Mechanical Behavior of Biomedical Materials*, **2014**, 32, 345-350	4.1	33
54	A Comparative Study of Structural Stability and Mechanical and Optical Properties of Fluorapatite (Ca5(PO4)3F) and Lithium Disilicate (Li2Si2O5) Components Forming Dental Glass□Ceramics: First Principles Study. *Journal of Electronic Materials*, **2016**, 45, 5082-5095	1.9	23
53	Theoretical investigation of the structural, electronic, magnetic and elastic properties of binary cubic C15-Laves phases TbX2 (X = Co and Fe). *Journal of Alloys and Compounds*, **2016**, 689, 885-893	5.7	23
52	A first principle study of phase stability, electronic structure and magnetic properties for Co2□CrxMnAl Heusler alloys. *Journal of Magnetism and Magnetic Materials*, **2015**, 379, 84-89	2.8	22
51	Investigation of electronic structure, magnetic properties and thermal properties of the new half-metallic ferromagnetic full-Heusler alloys Cr2GdSi1□Gex: An ab-initio study. *Journal of Alloys and Compounds*, **2016**, 676, 440-451	5.7	22
50	First-principles study of structural stabilities, elastic and electronic properties of transition metal monocarbides (TMCs) and mononitrides (TMNs). *Materials Chemistry and Physics*, **2013**, 143, 93-108	4.4	20
49	Structural stability, electronic structure and magnetic properties of the new hypothetical half-metallic ferromagnetic full-Heusler alloy CoNiMnSi. *Materials Science-Poland*, **2016**, 34, 85-93	0.6	18
48	Study of the structural, mechanical and thermodynamic properties of the new MAX phase compounds (Zr1-xTix)3AlC2. *Computational Condensed Matter*, **2020**, 23, e00468	1.7	18
47	Structural, electronic and mechanical properties of RuO2 from first-principles calculations. *Materials Science in Semiconductor Processing*, **2012**, 15, 331-339	4.3	16
46	Prediction study of the structural, elastic, electronic and optical properties of the antiperovskite BiNBa3. *Solid State Communications*, **2009**, 149, 2002-2006	1.6	15
45	Prediction of stabilities phase and elastic properties of Palladium Carbide. *Computational Materials Science*, **2010**, 48, 556-562	3.2	14
44	DFT study with different exchange-correlation potentials of physical properties of the new synthesized alkali-metal based Heusler alloy. *European Physical Journal B*, **2020**, 93, 1	1.2	14

43	Ab Initio Study of Electronic Structure, Elastic and Transport Properties of Fluoroperovskite LiBeF3. *Journal of Electronic Materials*, **2017**, 46, 2205-2210	1.9	13
42	Full potential calculation of structural, elastic properties and high-pressure phase of binary noble metal carbide: ruthenium carbide. *Journal of Physics and Chemistry of Solids*, **2010**, 71, 1780-1784	3.9	13
41	Magneto-electronic, mechanical and thermodynamic properties of full-Heusler alloys Cr2GdGe1-xSnx. *Journal of Alloys and Compounds*, **2018**, 742, 736-750	5.7	12
40	Theoretical investigation of magnetic, electronic, thermoelectric and thermodynamic properties of Fe2TaZ (Z= B, In) compounds by GGA and GGA+U approaches. *Computational Condensed Matter*, **2020**, 22, e00438	1.7	12
39	First-Principle Study of Half-Metallic Ferrimagnet Behavior in Titanium-Based Heusler Alloys Ti2FeZ (Z = Al, Ga, and In). *Journal of Superconductivity and Novel Magnetism*, **2018**, 31, 1059-1065	1.5	11
38	Pressure effects on the structural, elastic, magnetic and thermodynamic properties of Mn2AlC and Mn2SiC MAX phases. *Journal of Alloys and Compounds*, **2021**, 885, 160998	5.7	11
37	Spin Gapless Semiconductor Behavior in d?-d Half-Heusler CrSbSr: Potential Candidate for Spintronic Application. *Spin*, **2020**, 10, 2050025	1.3	10
36	First-principles calculations to investigate structural stabilities, mechanical and optoelectronic properties of NbCoSn and NbFeSb half-Heusler compounds. *International Journal of Quantum Chemistry*, **2021**, 121, e26582	2.1	10
35	Study of structural, elastic and electronic properties of GdX (X = Bi, Sb) compounds using LSDA and LSDA + U approach. *Computational Materials Science*, **2011**, 50, 1965-1972	3.2	9
34	Theoretical Studies of the Structural, Electronic and Magnetic Properties of the CoFeCeZ (Z = P, As and Sb) Quaternary Heusler Alloys. *Spin*, **2020**, 10, 2050002	1.3	9
33	First-principles calculations of the elastic, and electronic properties of YFe2, NiFe2 and YNiFe4 intermetallic compounds. *Computational Materials Science*, **2013**, 73, 56-64	3.2	8
32	Ab-initio prediction of high TC half-metallic ferrimagnetism in Li-based Heusler compounds Mn2LiZ (Z□ Si, Ge and Sn). *Computational Condensed Matter*, **2021**, 27, e00557	1.7	7
31	Electronic structure and optical properties of (BeTe)n/(ZnSe)m superlattices. *Materials Science-Poland*, **2016**, 34, 115-125	0.6	7
30	The half metallic feature at high temperature of the novel half-Heusler alloys and their [100] oriented layered superlattices: A DFT investigations. *Materials Chemistry and Physics*, **2021**, 267, 124712	4.4	7
29	The Structural, Electronic, Optical and Thermo-Electric Properties of Oxynitride Perovskite CaTaO2N. *Spin*, **2020**, 10, 2050007	1.3	6
28	Elastic stability, electronic structure and optical properties of PtN2 with pyrite and fluorite structures. *Journal of Alloys and Compounds*, **2009**, 478, 297-302	5.7	6
27	The Vanadium-doping effect on physical properties of the Zr2AlC MAX phase compound. *Materials Chemistry and Physics*, **2021**, 260, 124189	4.4	6
26	Full potential study of the structural, electronic and optical properties of (InAs)m/(GaSb)n superlattices. *Computational Condensed Matter*, **2019**, 21, e00394	1.7	5

25	Prediction of phase transition, mechanical and electronic properties of inverse Heusler compound Y2RuPb, via FP-LMTO method. *International Journal of Modern Physics C*, **2016**, 27, 1650107	1.1	5
24	Structural stabilities, elastic, and electronic properties of iridium mononitride: a first-principles study. *Phase Transitions*, **2011**, 84, 269-283	1.3	5
23	Prediction of a new quaternary Heusler alloy within a good electrical response at high temperature for spintronics applications: DFT calculations. *International Journal of Quantum Chemistry*, **2021**, 121, e26647	2.1	5
22	DFT calculations of structural, optoelectronic and thermodynamic properties of BxAl1-xP alloys. *Computational Condensed Matter*, **2019**, 19, e00377	1.7	5
21	Investigation of Ruthenium based Full-Heusler compound for thermic, spintronics and thermoelectric applications: DFT computation. *Materials Science in Semiconductor Processing*, **2021**, 134, 106047	4.3	5
20	Insight into the structural, electronic, mechanical and optical properties of inorganic lead bromide perovskite APbBr3 (A□ Li, Na, K, Rb, and Cs). *Computational Condensed Matter*, **2020**, 24, e00478	1.7	4
19	A Theoretical Analysis of Physical Properties and Half-Metallic Stability under Pressure Effect of the ScNiCrZ (Z=Ga, Al, In) Heusler Alloys. *Spin*, **2021**, 11, 2150007	1.3	4
18	Computational determination of structural, electronic, magnetic and thermodynamic properties of Co2HfZ (Z = Al, Ga, Si and Sn) full Heusler compounds for spintronic applications. *Journal of Alloys and Compounds*, **2021**, 894, 162503	5.7	3
17	Investigation of Structural, Elastic, Electronic, Magnetic and Thermoelectric Proprieties for Mn2RhZ (Z = Al, Si and Ge) Full-Heusler Alloys. *International Journal of Thermophysics*, **2021**, 42, 1	2.1	3
16	Prediction of a new Sn-based MAX phases for nuclear industry applications: DFT calculations. *Materials Today Communications*, **2021**, 27, 102233	2.5	3
15	Prediction of double transition metal (Cr1□Zrx)2AlC MAX phases as thermal barrier coatings: Insight from density functional theory. *International Journal of Quantum Chemistry*, **2021**, 121, e26770	2.1	3
14	Elastic and electronic properties calculations of the filled skutterudite CeOs4P12. *Journal of Physics: Conference Series*, **2016**, 758, 012010	0.3	2
13	Spin gapless semiconductor and nearly spin semimetal antiferromagnets: The case of the inverse Heusler compounds Mn2LiZ (Z = Al and Ga). *Materials Research Bulletin*, **2021**, 143, 111461	5.1	2
12	The effect of Lanthanide doping on the structural, elastic, thermodynamic and electronic properties of YBi: An ab-initio study. *Computational Condensed Matter*, **2018**, 16, e00295	1.7	1
11	Theoretical Insight into the Stability, Magneto-electronic and Thermoelectric Properties of XCrSb (X: Fe, Ni) Half-Heusler Alloys and Their Superlattices. *Journal of Superconductivity and Novel Magnetism*, **2022**, 35, 875	1.5	1
10	Electronic, optical, magnetic and thermoelectric properties of CsNiO(_{mathrm {mathbf {2}}}) and CsCuO(_{mathrm {2}}): Insights from DFT-based computer simulation **2021**, 95, 1		1
9	The half metallic behavior at high temperature of highly spin-polarized V-based Heusler alloy: DFT calculations. *European Physical Journal B*, **2021**, 94, 1	1.2	1
8	Electronic structure and optoelectronic behavior of MgPbP2 chalcopyrite. *Computational Condensed Matter*, **2021**, 27, e00550	1.7	1

7	Theoretical insight of stabilities and optoelectronic features of Ru-based Heusler alloys: Ab-initio calculations. *Computational Condensed Matter*, **2021**, 28, e00573	1.7	1
6	The stability analysis and efficiency of the new MAX-phase compounds M3GaC2 (M: Ti or Zr): A first-principles assessment. *Results in Physics*, **2022**, 38, 105621	3.7	1
5	Electronic structure, magnetic and structural properties of binary cubic C15 Laves phases PrX2 (X = Co and Fe): a first-principles study. *Applied Physics A: Materials Science and Processing*, **2021**, 127, 1	2.6	0
4	High-throughput study of the structural, electronic, and optical properties of short-period (BeSe)m/(ZnSe)n superlattices based on DFT calculations. *Computational Condensed Matter*, **2021**, 29, e00598	1.7	0
3	Theoretical investigation on the optoelectronic properties of ZrxSi1-xO2 tetragonal hypothetical alloys from zircon family. *Applied Physics A: Materials Science and Processing*, **2022**, 128, 1	2.6	0
2	An extensive computational report on the quinary alloys Cu2Zn1−CdxSnS4 for the solar cell systems: DFT simulation. *Computational Condensed Matter*, **2022**, 31, e00670	1.7	0
1	Electronic structure of short-period ZnSe/ZnTe superlattices based on DFT calculations. *Condensed Matter Physics*, **2022**, 25, 13701	1.3	