Gboyega A Adebayo

List of Publications by Year
in descending order

62	403	840776 11	940533 16
papers	citations	h-index	g-index

62	62	62	394
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Generalized control and synchronization of chaos in RCL-shunted Josephson junction using backstepping design. Physica C: Superconductivity and Its Applications, 2010, 470, 558-564.	1.2	45
2	First principles studies of band structure and electronic properties of ZnSe. Journal of Alloys and Compounds, 2012, 513, 294-299.	5.5	20
3	Thermodynamics and surface properties of liquid Alâ€“Ga andÂAlâ€“Ge alloys. Applied Physics A: Materials Science and Processing, 2009, 97, 533-541.	2.3	16
4	Unraveling the Stable Phase, High Absorption Coefficient, Optical and Mechanical Properties of Hybrid Perovskite CH3NH3PbxMg1â€“xI3: Density Functional Approach. Journal of Inorganic and Organometallic Polymers and Materials, 2020, 30, 299-309.	3.7	16
5	Design and theoretical study of phenothiazine-based low bandgap dye derivatives as sensitizers in molecular photovoltaics. Optical and Quantum Electronics, 2020, 52, 1.	3.3	16
6	Infrared absorption of MgO at high pressures and temperatures: A molecular dynamic study. Journal of Chemical Physics, 2009, 131, 014506.	3.0	15
7	Elastic constants and mechanical properties of PEDOT from first principles calculations. Computational Materials Science, 2017, 139, 234-242.	3.0	15
8	Prediction of metallic and half-metallic structure and elastic properties of <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" altimg="si0032.gif" overflow="scroll"><mml:mrow><mml:msub subscriptshift="65%"><mml:mrow><mml:mi>Fe</mml:mi></mml:mrow><mml:mrow><mml:mn>2</mml:mn></mml:mrow></mml:msub><mml:msub subscriptshift="65%"><mml:mrow><mml:mi>Ti</mml:mi></mml:mrow><mml:mrow><mml:mn>1</mml:mn><mml:mo form="prefix">â€’</mml:mo><mml:mi>x</mml:mi></mml:mrow></mml:msub></mml:mrow><mml:m. Effects	2.7	14
9	of Y atom substitution on the structural, magnetic, electronic, elastic, mechanical, thermodynamic and thermoelectric properties of Co2YAl (YÂ= Cr, Mn) Full Heusler alloys from first principles investigations. Computational Condensed Matter, 2019, 21, e00412.	2.1	14
10	Thermoelectric and mechanical properties of XHfSn (X=Ni, Pd and Pt) semiconducting Half-heusler alloys: A first-principles study. Computational Condensed Matter, 2021, 26, e00539.	2.1	13
11	Quasi-chemical studies of ordering in the Cuâ€“Zr and Cuâ€“Si melts. Journal of Alloys and Compounds, 2001, 329, 162-167.	5.5	11
12	Predicting the elastic, phonon and thermodynamic properties of cubic HfNiX (X = Ge and Sn) Half Heulser alloys: a DFT study. European Physical Journal B, 2019, 92, 1.	1.5	11
13	DFT â€“ GGA calculations of magnetic, elastic, thermodynamic and thermoelectric properties of Co2YAl (YÂ=ÂTi, V) full Heusler alloy systems. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2020, 262, 114739.	3.5	11
14	Elastic constants and observed ferromagnetism in inverse Heusler alloy Ti2CoAs using kjpaw pseudopotentials: A first-principles approach. Journal of Alloys and Compounds, 2017, 722, 207-211.	5.5	10
15	Investigation of the thermoelectric properties of Lithium-Aluminium-Silicide (LiAlSi) compound from first-principles calculations. Computational Condensed Matter, 2021, 27, e00551.	2.1	10
16	Electronic, Structural, Mechanical, and Thermodynamic Properties of CoYSb (Y = Cr, Mo, W) Half-Heusler Compounds as Potential Spintronic Materials. Solids, 2022, 3, 22-33.	2.4	10
17	First principle calculations of structural, electronic, optical and thermoelectric properties of tin (II) oxide. Materials Research Express, 2019, 6, 125915.	1.6	9
18	First principles comparative studies of thermoelectric and other properties in the cubic and hexagonal structure of CsCdCl3 halide perovskites. Computational Condensed Matter, 2019, 21, e00388.	2.1	8

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19	Structures and autocorrelation functions of liquid Al and Mg modelled via Lennard-Jones potential from molecular dynamics simulation. Pramana - Journal of Physics, 2005, 64, 269-279.	1.8	7
20	Structural, Electronic, Magnetic and Optical Properties of Ni,Ti/Al-based Heusler Alloys: A First-Principles Approach. Zeitschrift Fur Naturforschung - Section A Journal of Physical Sciences, 2016, 71, 129-134.	1.5	7
21	Ab initio study of phonon dispersion and thermodynamic properties of pure and doped pyrites. European Physical Journal B, 2017, 90, 1.	1.5	7
22	DFT investigation of elastic, mechanical, vibrational and thermodynamic properties of cadmium dichalcogenides. Physica B: Condensed Matter, 2019, 552, 159-164.	2.7	7
23	Exploring the electronic fitness function, effective mass, elastic and transport properties of RhTiP Half-Heusler alloy. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2021, 264, 114987.	3.5	7
24	Electronic structure and optical properties of from ab initio calculations. Physica B: Condensed Matter, 2010, 405, 4578-4581.	2.7	6
25	First principles study of electronic structure, structural and optical properties of Mg3Si2O5(OH)4. Applied Clay Science, 2014, 93-94, 8-11.	5.2	6
26	Predicting the stable Type-I phase of <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" altimg="si1.svg"><mml:mrow><mml:mi>X</mml:mi><mml:mi>M</mml:mi><mml:mi>n</mml:mi><mml:mi>S</mml:mi><mml:mi>b</mml (X= Co, Fe, Os) compounds and its thermodynamic, electronic and magnetic properties from first-principles calculations. Solid State Sciences, 2020, 105, 106208.	3.2	6
27	Electronic fitness function, effective mass and thermoelectric properties of Rh-based (-ScTe; -TiSb;) Tj ETQq1 1 0.784314 rgBT /Overlo e00523.	2.1	6
28	Optical properties of revealed by ab initio calculations. Journal of Physics and Chemistry of Solids, 2010, 71, 1690-1693.	4.0	5
29	Collision frequency of Lennard-Jones fluids at high densities by equilibrium molecular dynamics simulation. Pramana - Journal of Physics, 2010, 75, 523-536.	1.8	5
30	ELECTRONIC AND ELASTIC PROPERTIES OF ZINC-BLENDE MgSe. International Journal of Modern Physics B, 2013, 27, 1350027.	2.0	5
31	First-principles calculations of dynamical and thermodynamic properties of cuprite doped with silver (Cu_{2(1â^'x)}Ag_{2x}O). Materials Research Express, 2018, 5, 045704.	1.6	5
32	Lattice dynamics and thermodynamic investigation of MNiSn (Mâ€¯=â€¯Hf, Ti and Zr) Half-Heusler compounds: Density functional theory approach. Materials Today Communications, 2020, 22, 100671.	1.9	5
33	Influence of strong heterocoordination on surface properties of Liâ€“Pb melts. Physics and Chemistry of Liquids, 2005, 43, 495-506.	1.2	4
34	Band structure, thermoelectric properties, effective mass and electronic fitness function of two newly discovered 18 valence electrons stable half-Heusler TaX(X=Co,Ir)Sn semiconductors: A density functional theory approach. Solid State Sciences, 2020, 100, 106096.	3.2	4
35	Predicting the band structure, transport properties, electronic fitness function and effective mass of PdTiSn indirect band-gap half-Heusler semiconductor. Materials Science in Semiconductor Processing, 2021, 123, 105548.	4.0	4
36	Band structure and absorption spectra of NH4XI3 (X = Pb, Mg) based hybrid Perovskite for UV ray protector and electrochromic materials applications. Journal of Physics and Chemistry of Solids, 2021, 151, 109860.	4.0	4

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37	The effective mass, fitness function and enhanced thermoelectric properties in CuSbS2 for p-type thermoelectric material applications: Density functional theory approach. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2021, 273, 115404.	3.5	4
38	First principle calculations of the structural, elastic, electronic and transport properties of XRuAs (X = Ta and V). Materials Science in Semiconductor Processing, 2022, 148, 106837.	4.0	4
39	Structural properties of low-density liquid alkali metals. Pramana - Journal of Physics, 2005, 65, 1085-1096.	1.8	3
40	Mixing properties in the Inâ€“Pb and Inâ€“Mg liquid alloys. Physica B: Condensed Matter, 2010, 405, 880-887.	2.7	3
41	ANTISYNCHRONIZATION OF IDENTICAL AND NONIDENTICAL Î¦ ⁶ VAN DER POL AND Î¦ ⁶ DUFFING OSCILLATORS WITH BOTH PARAMETRIC AND EXTERNAL EXCITATIONS VIA BACKSTEPPING APPROACH. International Journal of Modern Physics B, 2011, 25, 1957-1969.	2.0	3
42	Thermoelectric properties, optimal doping levels and high figure of merit in Cobalt-based Half/Full Heusler alloys by First-Principles calculations. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2019, 248, 114409.	3.5	3
43	Assessing the structural, electronic, elastic and thermoelectric properties of PtTiSn and PdLaBi transition metal alloys from the first-principles prospective. Materials Science in Semiconductor Processing, 2021, 129, 105796.	4.0	3
44	Structural properties of undercooled liquid sodium and caesium. Pramana - Journal of Physics, 1999, 52, 631-645.	1.8	2
45	Dynamical properties of Ag-Cu binary alloy from molecular dynamics simulation. European Physical Journal B, 2006, 54, 423-427.	1.5	2
46	Ab initio calculations of optical properties of Li and K at high pressures. Journal of Physics and Chemistry of Solids, 2013, 74, 1221-1226.	4.0	2
47	First-principle survey of structural, electronic, and optical properties of zinc-blende<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" altimg="si14.gif" overflow="scroll"><mml:mrow><mml:msub><mml:mrow><mml:mi>B</mml:mi></mml:mrow><mml:mrow><mml:mi>x</mml:mi></mml:mrow></mml:msub><mml:msub><mml:mrow><mml:mi mathvariant="italic">Al</mml:mi></mml:mrow><mml:mrow><mml:mi>y</mml:mi></mml:mrow></mml:msub><mml:msub><mml:mrow><mml:mi mathvariant="italic">Ga</mml:mi></mml:mrow><mml:mrow><mml:mn>1</mml:mn><mm. Materials Letters, 2018, 221, 330-335.	2.6	2
48	Correlation between bulk and surface properties in Rbâ€“Pb liquid alloy. Journal of Molecular Liquids, 2006, 128, 90-95.	4.9	1
49	Adhesion Energy, Surface Traction and Surface Tension in Fe-Mg Binary Alloys. Zeitschrift Fur Naturforschung - Section A Journal of Physical Sciences, 2007, 62, 596-600.	1.5	1
50	Adhesion energy, surface traction and surface tension in liquid xenon. Pramana - Journal of Physics, 2011, 77, 1151-1157.	1.8	1
51	Analysis and interpretation of Ibuji spring magnetic anomaly using the Mellin transform. Open Geosciences, 2013, 5, .	1.7	1
52	Structural and elastic properties of strained Mg1â^'xSrxSe revealed. Solid State Communications, 2014, 178, 46-49.	1.9	1
53	First-principles study of zinc-blende BxAlyIn1â^'xâ^'yN quaternary alloy: Alchemical mixing approximation approach. International Journal of Modern Physics B, 2016, 30, 1650191.	2.0	1
54	Increased Malleability in Tetragonal Zr x Ti1â^'x O2 Ternary Alloys: First-Principles Approach. Zeitschrift Fur Naturforschung - Section A Journal of Physical Sciences, 2017, 72, 567-572.	1.5	1

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55	Bandgap Correction and Spin-Orbit Coupling Induced Absorption Spectra of Dimethylammonium Lead Iodide for Solar Cell Absorber. Frontiers in Energy Research, 2021, 9, .	2.3	1
56	Structure, dsingle-particle and many-particle coefficients of Lennardâ€"Jones liquid Al. Pramana - Journal of Physics, 2005, 65, 339-347.	1.8	0
57	A density functional theory analysis of the mechanical and dynamic stability and thermodynamic properties of pyrite-type ZnSe2 and ZnTe2. Computational Condensed Matter, 2019, 19, e00366.	2.1	0
58	Structural evolution, electronic and physicochemical properties of tin ozonide nanoclusters: a density functional theory perspective. Journal of Nanoparticle Research, 2020, 22, 1.	1.9	0
59	First-principles perspective on structural evolution, sequential lithiation and physicochemical properties of tin oxide nanoclusters: Sn3Oz and LixSn3Oz (xâ€¯=â€¯1-10 and zâ€¯=â€¯0, 3-7). Materials Today Communications, 2020, 24, 101026.	1.9	0
60	CK-RAID: Collaborative Knowledge Repository for Intrusion Detection System. Journal of Computing and Information Technology, 2019, 27, 29-39.	0.3	0
61	Effect of guest atoms on structural properties, electronics structure and optical spectra of BxCo4-XSb12 (X = 0 or 1, B = Fe or Al) skutterudites. Materials Science in Semiconductor Processing, 2022, 139, 106340.	4.0	0
62	Skutterudite materials; AlyFexCo4-x-ySb12 (x = y = 1; x = 2, y = 1) for spintronics and optoelectronics applications. Computational Condensed Matter, 2021, 29, e00613.	2.1	0