Hewa Y Abdullah

List of Publications by Year
in descending order

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Version: 2024-02-01

70 papers	1,093 citations	279778 23 h-index	501174 28 g-index
74 all docs	74 docs citations	74 times ranked	258 citing authors

#	Article	IF	Citations
1	Thermodynamic properties of Aharanovâ€“Bohm (AB) and magnetic fields with screened Kratzer potential. European Physical Journal D, 2020, 74, 1.	1.3	65
2	The adsorption of chlorofluoromethane on pristine, and Al- and Ga-doped boron nitride nanosheets: a DFT, NBO, and QTAIM study. Journal of Molecular Modeling, 2020, 26, 287.	1.8	35
3	Theoretical investigation of X12O12 (XÂ=ÂBe, Mg, and Ca) in sensing CH2N2: A DFT study. Computational and Theoretical Chemistry, 2021, 1198, 113168.	2.5	35
4	Adsorption of alkali and alkaline earth ions on nanocages using density functional theory. Computational and Theoretical Chemistry, 2021, 1204, 113391.	2.5	35
5	DFT Study for Adsorbing of Bromine Monochloride onto BNNT (5,5), BNNT (7,0), BC₂NNT (5,5), and BC₂NNT (7,0). Journal of Computational Biophysics and Chemistry, 2021, 20, 765-783.	1.7	35
6	The adsorption of chlorofluoromethane on pristine and Ge-doped silicon carbide nanotube: a PBC-DFT, NBO, and QTAIM study. Molecular Simulation, 2020, 46, 1405-1416.	2.0	33
7	Thermal Properties and Magnetic Susceptibility of Hellmann Potential in Aharonovâ€“Bohm (AB) Flux and Magnetic Fields at Zero and Finite Temperatures. Journal of Low Temperature Physics, 2021, 202, 83-105.	1.4	31
8	Enhancing the absorption of 1-chloro-1,2,2,2-tetrafluoroethane on carbon nanotubes: an ab initio study. Bulletin of Materials Science, 2021, 44, 1.	1.7	31
9	A comprehensive investigation of the intermolecular interactions between CH₂N₂and X₁₂Y₁₂(X = B, Al, Ga; Y = N, P, As) nanocages. Canadian Journal of Chemistry, 2021, 99, 733-741.	1.1	30
10	The Adsorption of 1-Chloro-1,2,2,2-Tetrafluoroethane Onto the Pristine, Al-, and Ga-Doped Boron Nitride Nanosheet. Iranian Journal of Science and Technology, Transaction A: Science, 2021, 45, 1287-1300.	1.5	29
11	Weak intermolecular interactions of cysteine on BNNT, BNAlNT and BC2NNT: a DFT investigation. Bulletin of Materials Science, 2022, 45, 1.	1.7	29
12	2D boron nitride material as a sensor for H2SiCl2. Computational and Theoretical Chemistry, 2022, 1213, 113742.	2.5	29
13	The Adsorption of Chlorofluoromethane on Pristine, Alâ€, Gaâ€, Pâ€, and Asâ€doped Boron Nitride Nanotubes: A PBCâ€DFT, NBO, and QTAIM Study. ChemistrySelect, 2020, 5, 12115-12124.	1.5	28
14	An Ultimate Investigation on the Adsorption of Amantadine on Pristine and Decorated Fullerenes C59X (X=Si, Ge, B, Al, Ga, N, P, and As): A DFT, NBO, and QTAIM Study. Journal of Computational Biophysics and Chemistry, 2021, 20, 23-39.	1.7	28
15	Vinyl chloride adsorption onto the surface of pristine, Al-, and Ga-doped boron nitride nanotube: A DFT study. Solid State Communications, 2021, 337, 114440.	1.9	28
16	Shannon entropy and Fisher information for screened Kratzer potential. International Journal of Quantum Chemistry, 2020, 120, e26246.	2.0	27
17	The adsorption of bromochlorodifluoromethane on pristine and Ge-doped silicon carbide nanotube: a PBC-DFT, NBO, and QTAIM study. Structural Chemistry, 2021, 32, 481-494.	2.0	27
18	Adsorption of 1-chloro-1,2,2,2-tetrafluoroethane on pristine, Al, Ga-doped boron nitride nanotubes: a study involving PBC-DFT, NBO analysis, and QTAIM. Canadian Journal of Chemistry, 2021, 99, 51-62.	1.1	27

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19	Intermolecular Interactions between Serine and C60, C59Si, and C59Ge: a DFT Study. Silicon, 2022, 14, 6075-6088.	3.3	27
20	Kleinâ€“Gordon Equation and Nonrelativistic Thermodynamic Properties with Improved Screened Kratzer Potential. Journal of Low Temperature Physics, 2021, 202, 269-289.	1.4	26
21	Ab initio investigation for the adsorption of acrolein onto the surface of C60, C59Si, and C59Ge: NBO, QTAIM, and NCI analyses. Structural Chemistry, 2022, 33, 363-378.	2.0	26
22	Low-lying states of 184 W and 184 Os nuclei. Chinese Physics C, 2013, 37, 034101.	3.7	24
23	Vibration analysis of cross-ply laminated truncated conical shells using a spline method. Journal of Engineering Mathematics, 2012, 76, 139-156.	1.2	23
24	U(5) Symmetry of Even 96,98Ru Isotopes Under the Framework of Interacting Boson Model (IBM-1). Brazilian Journal of Physics, 2015, 45, 340-346.	1.4	23
25	The adsorption of bromochlorodifluoromethane on pristine, Al, Ga, P, and As-doped boron nitride nanotubes: A study involving PBC-DFT, NBO analysis, and QTAIM. Computational and Theoretical Chemistry, 2021, 1193, 113047.	2.5	22
26	Interaction of Fluorouracil drug with boron nitride nanotube, Al doped boron nitride nanotube and BC2N nanotube. Computational and Theoretical Chemistry, 2022, 1212, 113699.	2.5	22
27	Non-covalent interactions of cysteine onto C60, C59Si, and C59Ge: a DFT study. Journal of Molecular Modeling, 2021, 27, 330.	1.8	20
28	Theoretical study of the adsorption of amantadine on pristine, Al-, Ga-, P-, and As-doped boron nitride nanosheets: a PBC-DFT, NBO, and QTAIM study. Theoretical Chemistry Accounts, 2020, 139, 1.	1.4	18
29	Bound State Solution of Radial Schrodinger Equation for the Quarkâ€“Antiquark Interaction Potential. Iranian Journal of Science and Technology, Transaction A: Science, 2020, 44, 1191-1204.	1.5	18
30	Interaction of halomethane CH3Z (ZÂ=ÂF, Cl, Br) with X12Y12 (XÂ=ÂB, Al, Ga & YÂ=ÂN, P, As) nanocages. Computational and Theoretical Chemistry, 2022, 1208, 113544.	2.5	18
31	Microscopic description of the even-even 140-148Ba isotopes using BM, IBM and IVBM. European Physical Journal Plus, 2017, 132, 1.	2.6	16
32	THE EVOLUTION PROPERTIES OF EVENâ€“EVEN 100-110Pd NUCLEI. International Journal of Modern Physics E, 2012, 21, 1250101.	1.0	13
33	Relationship between radon concentration and physicochemical parameters in groundwater of Erbil city, Iraq. Journal of Radiation Research and Applied Sciences, 2021, 14, 61-69.	1.2	13
34	Electromagnetic reduced transition properties of evenâ€“even 104â€“112Cd isotopes. Indian Journal of Physics, 2013, 87, 571-574.	1.8	12
35	Electromagnetic reduced transition properties of the ground state band of evenâ€“even 102â^'106Pd isotopes by means of interacting boson model-I. Indian Journal of Physics, 2014, 88, 5-9.	1.8	12
36	Investigation of evenâ€“even 220â€“230Th isotopes within the IBM, IVBM and BM. Nuclear Physics A, 2018, 977, 34-48.	1.5	12

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37	Effect of Al- and Ga-doping on the adsorption of H<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msub><mml:mrow /><mml:mn>2</mml:mn></mml:msub></mml:math>SiCl<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msub><mml:mrow /><mml:mn>2</mml:mn></mml:msub></mml:math>onto the outer surface of boron nitride nanotube: a DFT study. Comptes Rendus Chimie, 2021, 24, 291-304.	0.5	12
38	B (E2) value of even-even ^{108â€“112} Pd isotopes by interacting boson model-1. Chinese Physics C, 2014, 38, 024103.	3.7	10
39	Theoretical study of the binding energy of some gases on Al-doped carbon nanotube. Results in Physics, 2016, 6, 1146-1151.	4.1	10
40	Nuclear structure of the evenâ€“even rare-earth Erâ€“Os nuclei for Nâ€‰=â€‰102. Indian Journal of Physics, 2020, 94, 379-390.	1.8	10
41	Diatomic molecules energy spectra for the generalized Mobius square potential model. International Journal of Modern Physics B, 2020, 34, 2050209.	2.0	10
42	Description of Energy Levels for 84,86,96,98Sr Isotopes. Physics of Atomic Nuclei, 2018, 81, 695-702.	0.4	9
43	Analytical solutions of fractional SchrÃ¶dinger equation and thermal properties of Morse potential for some diatomic molecules. Modern Physics Letters A, 2021, 36, 2150041.	1.2	9
44	Measuring radioactivity level in various types of rice using hyper pure germanium (HPGe) detector. International Journal of Physical Sciences, 2011, 6, .	0.4	9
45	Spectral detection of graphene and graphene oxide with SU-8 based asymmetry tripled-Arm Mach Zehnder. Optik, 2018, 154, 93-99.	2.9	8
46	Experimental Measurement of Physical, Transport, and Optical Properties of Binary Mixtures of N-Hexyl Pyridinium Nitrate [HPy][NO3] Ionic Liquid with Water, Ethanol, and Acetonitrile at 298.15ÂK and 101ÂkPa. Journal of Solution Chemistry, 2021, 50, 576-590.	1.2	8
47	Inelastic electron scattering from light nuclei. Journal of the National Science Foundation of Sri Lanka, 2013, 41, 209.	0.2	8
48	A comparative study of potential energy curves with RKRV curves for the ground states of I2, F2 and CO molecules. Bulletin of Materials Science, 2019, 42, 1.	1.7	7
49	Information Entropies for H2 and ScF Diatomic Molecules with Deng- Fan-Eckart Potential. Revista Mexicana De FÃsica, 2020, 66, 742-748.	0.4	7
50	Algebraic-Matrix Calculation of Vibrational Levels of Triatomic Molecules. Journal of Physical Chemistry A, 2009, 113, 6142-6148.	2.5	5
51	STUDY ON GROUND STATE ENERGY BAND OF EVEN 114-124Cd ISOTOPES UNDER THE FRAMEWORK OF INTERACTING BOSON MODEL (IBM-1). International Journal of Modern Physics E, 2012, 21, 1250072.	1.0	5
52	Potential energy curve and spectroscopic parameters of multi-charged LiF molecule. Canadian Journal of Physics, 2017, 95, 1122-1126.	1.1	5
53	Theoretical investigation of the long-lived metastable AlO2+ dication in gas phase. Chemical Physics, 2016, 477, 32-38.	1.9	4
54	Characterization of Solar Absorber Coated by Reduced Graphene Oxide Polymer Composite on Metal Sheets. International Journal of Thermophysics, 2021, 42, 1.	2.1	4

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55	Approximate energy spectra and statistical mechanical functions of some diatomic molecular hydrides. Canadian Journal of Physics, 2021, 99, 253-258.	1.1	4
56	Description of Superdeformed Bands of the Isotones $$oldsymbol{N=113}$$ for Nuclear Mass Region $$oldsymbol{Asim 190}$$. Physics of Atomic Nuclei, 2020, 83, 866-878.	0.4	4
57	Ground-state energy band of even 104-122Cd isotopes under the framework of interacting boson model-1: a review. Journal of Theoretical and Applied Physics, 2013, 7, 46.	1.4	3
58	Theoretical study of the syn- and anti-conformers of 2,2Ê¹-bifuran derivatives: rotational barrier and solvent effect. Physics and Chemistry of Liquids, 2019, 57, 174-183.	1.2	3
59	Subsurface depth dependence of nitrogen doping in TiO2 anatase: a DFT study. Journal of Physics Condensed Matter, 2021, 33, 205703.	1.8	3
60	Electronic properties of (TiO2)33 nanocrystals with nitrogen impurities at different facets: a DFT study. Molecular Simulation, 2021, 47, 1185-1197.	2.0	3
61	Silicon Carbide Based Nanotubes as a Sensing Material for Gaseous H2SiCl2. Silicon, 2023, 15, 177-186.	3.3	3
62	Interaction of the Serine Amino Acid with BNNT, BNAlNT, and BC2NNT. Arabian Journal for Science and Engineering, 0, , .	3.0	1
63	Contrastive studies of potential energy functions of some diatomic molecules. AIP Conference Proceedings, 2016, , .	0.4	0
64	Preface: International Conference and Workshops on Basic and Applies Sciences (6th ICOWOBAS 2017). AIP Conference Proceedings, 2017, , .	0.4	0
65	Theoretical study of the adsorption energy of some linear saturated hydrocarbons on SWCNT: DFT calculations. AIP Conference Proceedings, 2017, , .	0.4	0
66	A Comparative Study of Potential Energy Curves of Osmium Nitride Molecule. Iranian Journal of Science and Technology, Transaction A: Science, 2019, 43, 1361-1363.	1.5	0
67	Properties of O(6)-U(5) transition symmetry for 122-124Cd isotopes in IBM. IOP Conference Series: Materials Science and Engineering, 2020, 928, 072149.	0.6	0
68	Backbending Phenomena in Evenâ€“Even $${}^{oldsymbol{162{-}172}}$$Hf Isotopes. Physics of Atomic Nuclei, 2021, 84, 18-28.	0.4	0
69	Franck â€“ Condon Factors And r- Centroids of D â€“ A and D â€“ B band systems of AlO molecule. Revista Mexicana De FÃsica, 2020, 66, 568-572.	0.4	0
70	Microscopic Description of ¹⁷⁰ Er, ¹⁷² Yb, ¹⁷⁴ Hf, and ¹⁷⁶ W Isotones. IOP Conference Series: Materials Science and Engineering, 2020, 928, 072124.	0.6	0