Edison H Osorio

List of Publications by Year
in descending order

74 papers	1,905 citations	185998 28 h-index	276539 41 g-index
79 all docs	79 docs citations	79 times ranked	1877 citing authors

#	Article	IF	Citations
1	B₁₈^{2â^'}: a quasi-planar bowl member of the Wankel motor family. Chemical Communications, 2014, 50, 8140-8143.	2.2	107
2	Minimizing the Risk of Reporting False Aromaticity and Antiaromaticity in Inorganic Heterocycles Following Magnetic Criteria. Inorganic Chemistry, 2014, 53, 3579-3585.	1.9	80
3	Influence of cultivar and ripening time on bioactive compounds and antioxidant properties in Cape gooseberry (Physalis peruviana L.). Journal of the Science of Food and Agriculture, 2015, 95, 1562-1569.	1.7	68
4	Dynamical behavior of boron clusters. Nanoscale, 2016, 8, 17639-17644.	2.8	67
5	Structure and bonding of IrB₁₂^{â^'}: converting a rigid boron B₁₂ platelet to a Wankel motor. RSC Advances, 2016, 6, 27177-27182.	1.7	67
6	Analysis of Why Boron Avoids sp²â€...Hybridization and Classical Structures in the B_nH_{n+2} Series. Chemistry - A European Journal, 2012, 18, 9677-9681.	1.7	62
7	Chemodiversity, chemotaxonomy and chemoecology of Amaryllidaceae alkaloids. The Alkaloids Chemistry and Biology, 2020, 83, 113-185.	0.8	58
8	Neuroprotective activity and acetylcholinesterase inhibition of five Amaryllidaceae species: A comparative study. Life Sciences, 2015, 122, 42-50.	2.0	57
9	Planar tetracoordinate carbons with a double bond in CAl₃E clusters. Physical Chemistry Chemical Physics, 2015, 17, 8769-8775.	1.3	57
10	Isomerization Energy Decomposition Analysis for Highly Ionic Systems: Case Study of Starlike E₅Li₇⁺ Clusters. Chemistry - A European Journal, 2013, 19, 2305-2310.	1.7	56
11	Planar pentacoordinate carbon atoms embedded in a metallocene framework. Chemical Communications, 2017, 53, 138-141.	2.2	56
12	Structural evolution of small gold clusters doped by one and two boron atoms. Journal of Computational Chemistry, 2014, 35, 2288-2296.	1.5	55
13	Alkaloid metabolite profiles by GC/MS and acetylcholinesterase inhibitory activities with binding-mode predictions of five Amaryllidaceae plants. Journal of Pharmaceutical and Biomedical Analysis, 2015, 102, 222-228.	1.4	53
14	Antioxidant capacity and phenolic content of commonly used anti-inflammatory medicinal plants in Colombia. Industrial Crops and Products, 2015, 70, 272-279.	2.5	49
15	Theoretical Study of the Antioxidant Activity of Quercetin Oxidation Products. Frontiers in Chemistry, 2019, 7, 818.	1.8	48
16	Stop rotating! One substitution halts the B₁₉^{â^'}motor. Chemical Communications, 2014, 50, 10680.	2.2	47
17	Is Al₂Cl₆ Aromatic? Cautions in Superficial NICS Interpretation. Journal of Physical Chemistry A, 2013, 117, 5529-5533.	1.1	45
18	Fruits of selected wild and cultivated Andean plants as sources of potential compounds with antioxidant and anti-aging activity. Industrial Crops and Products, 2016, 85, 341-352.	2.5	45

#	Article	IF	Citations
19	Scalar and Spinâ^'Orbit Relativistic Corrections to the NICS and the Induced Magnetic Field: The case of the E₁₂^{2â^'} Spherenes (E = Ge, Sn, Pb). Journal of Chemical Theory and Computation, 2010, 6, 2701-2705.	2.3	44
20	Exploiting electronic strategies to stabilize a planar tetracoordinate carbon in cyclic aromatic hydrocarbons. Chemical Communications, 2017, 53, 12112-12115.	2.2	42
21	Why is quercetin a better antioxidant than taxifolin? Theoretical study of mechanisms involving activated forms. Journal of Molecular Modeling, 2013, 19, 2165-2172.	0.8	38
22	Alkaloids of Amaryllidaceae as Inhibitors of Cholinesterases (AChEs and BChEs): An Integrated Bioguided Study. Phytochemical Analysis, 2018, 29, 217-227.	1.2	38
23	Passiflora tarminiana fruits reduce UVB-induced photoaging in human skin fibroblasts. Journal of Photochemistry and Photobiology B: Biology, 2017, 168, 78-88.	1.7	37
24	Cholinesterase Inhibition Activity, Alkaloid Profiling and Molecular Docking of Chilean Rhodophiala (Amaryllidaceae). Molecules, 2018, 23, 1532.	1.7	34
25	Cyanideâ€“isocyanide isomerization: stability and bonding in noble gas inserted metal cyanides (metal =) Tj ETQq1 1 0.784314 rgBT /O	1.3	32
26	Carbon rings decorated with group 14 elements: new aromatic clusters containing planar tetracoordinate carbon. New Journal of Chemistry, 2019, 43, 6781-6785.	1.4	31
27	Low-Density Lipoprotein (LDL)-Antioxidant Biflavonoids from Garcinia madruno. Molecules, 2013, 18, 6092-6100.	1.7	30
28	10-Ï€-Electron arenes Ã la carte: structure and bonding of the [Eâ€“(C_nH_n)â€“E]^{nâ^'6} (E = Ca, Sr, Ba; n = 6â€“8) complexes. Physical Chemistry Chemical Physics, 2016, 18, 11909-11918.	1.3	29
29	A holistic anti-aging approach applied in selected cultivated medicinal plants: A view of photoprotection of the skin by different mechanisms. Industrial Crops and Products, 2017, 97, 431-439.	2.5	29
30	Theoretical design of stable small aluminiumâ€“magnesium binary clusters. Physical Chemistry Chemical Physics, 2013, 15, 2222-2229.	1.3	26
31	Hippeastrum reticulatum (Amaryllidaceae): Alkaloid Profiling, Biological Activities and Molecular Docking. Molecules, 2017, 22, 2191.	1.7	23
32	Amaryllidaceae alkaloids as agents with protective effects against oxidative neural cell injury. Life Sciences, 2018, 203, 54-65.	2.0	21
33	Assembling Small Silicon Clusters Using Criteria of Maximum Matching of the Fukui Functions. Journal of Chemical Theory and Computation, 2011, 7, 3995-4001.	2.3	20
34	Stable NCNgNSi (Ng=Kr, Xe, Rn) Compounds with Covalently Bound Câ€Ngâ€N Unit: Possible Isomerization of NCNSi through the Release of the Noble Gas Atom. Chemistry - A European Journal, 2018, 24, 2879-2887.	1.7	20
35	Exploring the Potential Energy Surface of E₂P₄ Clusters (E=Groupâ€…13 Element): The Quest for Inverse Carbonâ€Free Sandwiches. Chemistry - A European Journal, 2014, 20, 4583-4590.	1.7	19
36	Boron Nanowheels with Axles Containing Noble Gas Atoms: Viable Noble Gas Bound MÂ©B₁₀^{2â^'} Clusters (M=Nb, Ta). Chemistry - A European Journal, 2018, 24, 3590-3598.	1.7	19

#	Article	IF	Citations
37	Exploring the potential energy surface of small lead clusters using the gradient embedded genetic algorithm and an adequate treatment of relativistic effects. RSC Advances, 2018, 8, 145-152.	1.7	18
38	Structure and stability of the Si4Lin (n=1â€“7) binary clusters. Chemical Physics Letters, 2012, 522, 67-71.	1.2	17
39	Ultrasound-assisted phase-transfer catalysis method in an aqueous medium to promote the Knoevenagel reaction: Advantages over the conventional and microwave-assisted solvent-free/catalyst-free method. Ultrasonics Sonochemistry, 2014, 21, 1666-1674.	3.8	17
40	Theobroma cacao L. compounds: Theoretical study and molecular modeling as inhibitors of main SARS-CoV-2 protease. Biomedicine and Pharmacotherapy, 2021, 140, 111764.	2.5	17
41	Double-Ring Epimerization in the Biosynthesis of Clavulanic Acid. Journal of Physical Chemistry A, 2020, 124, 9413-9426.	1.1	15
42	A characterization of the two-step reaction mechanism of phenol decomposition by a Fenton reaction. Chemical Physics Letters, 2015, 640, 16-22.	1.2	14
43	Thermoluminescence glow curves analysis of pure and CeO2-doped Li2Oâ€“Al2O3â€“SiO2 glass ceramics. Journal of Luminescence, 2009, 129, 657-660.	1.5	12
44	Neuroprotection and improvement of the histopathological and behavioral impairments in a murine Alzheimerâ€™s model treated with Zephyranthes carinata alkaloids. Biomedicine and Pharmacotherapy, 2019, 110, 482-492.	2.5	12
45	Chemical Profiling and Cholinesterase Inhibitory Activity of Five Phaedranassa Herb. (Amaryllidaceae) Species from Ecuador. Molecules, 2020, 25, 2092.	1.7	12
46	Ligandâ€Supported E₃ Clusters (E=Siâ€“Sn). Chemistry - A European Journal, 2017, 23, 7463-7473.	1.7	11
47	Exploring the Potential Energy Surface of Trimetallic Deltahedral Zintl Ions: Lowest-Energy [Sn₆Ge₂Bi]^{3â€“} and [(Sn₆Ge₂Bi)₂]^{4â€“} Structures. Inorganic Chemistry, 2019, 58, 10057-10064.	1.9	10
48	Revisiting the Rearrangement of Dewar Thiophenes. Molecules, 2020, 25, 284.	1.7	10
49	The importance of dynamics studies on the design of sandwich structures: a CrB₂₄ case. Physical Chemistry Chemical Physics, 2016, 18, 18336-18341.	1.3	9
50	Antiaging activity, molecular docking, and prediction of percutaneous absorption parameters of quinolineâ€“hydrazone hybrids. Medicinal Chemistry Research, 2019, 28, 1959-1973.	1.1	9
51	Unique magnetic shielding and bonding in Pnicogen nortricyclane Zintl clusters. Chemical Physics Letters, 2020, 749, 137414.	1.2	9
52	Theoretical study of the Si5â¯n(BH)n2â¯ and Na(Si5â¯n(BH)n)â¯ (n = 0â€“5) systems. Physical Chemistry Chemical Physics, 2012, 14, 16326.	1.3	8
53	Structure and Bonding of Alkali-Metal Pentalenides. Organometallics, 2017, 36, 310-317.	1.1	8
54	Mechanistic insights into the phosphoryl transfer reaction in cyclin-dependent kinase 2: A QM/MM study. PLoS ONE, 2019, 14, e0215793.	1.1	8

#	Article	IF	Citations
55	Understanding the Central Location of a Hexagonal Hole in a B₃₆ Cluster. Chemistry - an Asian Journal, 2016, 11, 3220-3224.	1.7	7
56	Alkaloids of Phaedranassa dubia (Kunth) J.F. Macbr. and Phaedranassa brevifolia Meerow (Amaryllidaceae) from Ecuador and its cholinesterase-inhibitory activity. South African Journal of Botany, 2021, 136, 91-99.	1.2	7
57	Crystal structure, Hirshfeld surface analysis and DFT studies of N-(4-acetylphenyl)quinoline-3-carboxamide. Journal of Molecular Structure, 2021, 1246, 131162.	1.8	7
58	In vitro and in silico analysis of galanthine from Zephyranthes carinata as an inhibitor of acetylcholinesterase. Biomedicine and Pharmacotherapy, 2022, 150, 113016.	2.5	7
59	Do planar tetracoordinate tin complexes really exist?. Dalton Transactions, 2013, 42, 11180.	1.6	6
60	Nonclassical 21-Homododecahedryl Cation Rearrangement Revisited. Organic Letters, 2016, 18, 1140-1142.	2.4	6
61	Synthesis and characterization of thermoluminescent glass-ceramics Li2Oâ€“Al2O3â€“SiO2:CeO2. Journal of Luminescence, 2009, 129, 836-839.	1.5	5
62	Why CpAlâ€“Cr(CO)5 is linear while CpInâ€“Cr(CO)5 is not? Understanding the structure and bonding of the CpEâ€“Cr(CO)5 (EÂ=ÂGroup 13 element) complexes. Theoretical Chemistry Accounts, 2016, 135, 1.	0.5	5
63	The effects of halogen elements on the opening of an icosahedral B12 framework. Journal of Chemical Physics, 2017, 147, 144302.	1.2	5
64	Activation and diffusion of ammonia borane hydrogen on gold tetramers. International Journal of Quantum Chemistry, 2018, 118, e25567.	1.0	5
65	Isoelectronic substitution from Si52â˜ to Al5H52â˜: Exploration of the series Si5â˜(AlH)2â˜ (n= 0â€“5). Chemical Physics Letters, 2016, 647, 150-156.	1.2	4
66	Reply to the â€˜Comment on â€œExploiting electronic strategies to stabilize a planar tetracoordinate carbon in cyclic aromatic hydrocarbonsâ€â€™ by V. S. Thimmakondu, Chem. Commun., 2019, DOI: 10.1039/c9cc04639a. Chemical Communications, 2019, 55, 12721-12722.	2.2	4
67	Sinopsis de la familia Amaryllidaceae en Colombia. Biota Colombiana, 2019, 20, 2-20.	0.1	4
68	Theoretical design of stable hydride clusters: isoelectronic transformation in the E_nAl_{4â˜n}H_{7+n}^{â˜} series. RSC Advances, 2017, 7, 16069-16077.	1.7	3
69	Insights on the structural and electronic properties of ScC n + , YC n + , LaC n + (nÂ=Â3â€“6) systems. Theoretical Chemistry Accounts, 2016, 135, 1.	0.5	2
70	Structureâ€“antioxidant activity relationships in boldine and glaucine: a DFT study. New Journal of Chemistry, 2021, 45, 590-596.	1.4	2
71	Amaryllidaceae alkaloids and neuronal cell protection. , 2020, , 135-144.		1
72	Frontispiece: Stable NCNgNSi (Ng=Kr, Xe, Rn) Compounds with Covalently Bound Câ€Ngâ€N Unit: Possible Isomerization of NCNSi through the Release of the Noble Gas Atom. Chemistry - A European Journal, 2018, 24, .	1.7	0

#	Article	IF	Citations
73	Structural, thermodynamic and kinetic factors in the desorption/absorption of a hydrogen molecule in the M3AlH10â^'xNa (M = Be or Mg; x = 0 or 2) hydrides. New Journal of Chemistry, 2019, 43, 18041-18048.	1.4	0
74	Synthesis, characterization, crystal and molecular structure and theoretical study of N-(naphthalen-1-yl)-2-(piperidin-1-yl) acetamide, a selective butyrylcholinesterase inhibitor. Journal of Molecular Structure, 2022, 1248, 131544.	1.8	0