Edison H Osorio

List of Publications by Citations

73 papers	1,464 citations	25 h-index	35 g-index
79 ext. papers	1,715 ext. citations	4.3 avg, IF	4.73 L-index

#	Paper	IF	Citations
73	B18(2-): a quasi-planar bowl member of the Wankel motor family. *Chemical Communications*, **2014**, 50, 8140-3	5.8	98
72	Minimizing the risk of reporting false aromaticity and antiaromaticity in inorganic heterocycles following magnetic criteria. *Inorganic Chemistry*, **2014**, 53, 3579-85	5.1	69
71	Structure and bonding of IrB12converting a rigid boron B12 platelet to a Wankel motor. *RSC Advances*, **2016**, 6, 27177-27182	3.7	56
70	Dynamical behavior of boron clusters. *Nanoscale*, **2016**, 8, 17639-17644	7.7	55
69	Planar tetracoordinate carbons with a double bond in CAl3E clusters. *Physical Chemistry Chemical Physics*, **2015**, 17, 8769-75	3.6	49
68	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, 1562-9	4.3	49
67	Neuroprotective activity and acetylcholinesterase inhibition of five Amaryllidaceae species: a comparative study. *Life Sciences*, **2015**, 122, 42-50	6.8	47
66	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, 222-8	3.5	45
65	Analysis of why boron avoids sp2 hybridization and classical structures in the BnHn+2 series. *Chemistry - A European Journal*, **2012**, 18, 9677-81	4.8	45
64	Structural evolution of small gold clusters doped by one and two boron atoms. *Journal of Computational Chemistry*, **2014**, 35, 2288-96	3.5	44
63	Antioxidant capacity and phenolic content of commonly used anti-inflammatory medicinal plants in Colombia. *Industrial Crops and Products*, **2015**, 70, 272-279	5.9	43
62	Isomerization energy decomposition analysis for highly ionic systems: case study of starlike E5Li7(+) clusters. *Chemistry - A European Journal*, **2013**, 19, 2305-10	4.8	43
61	Stop rotating! One substitution halts the B19motor. *Chemical Communications*, **2014**, 50, 10680-2	5.8	42
60	Planar pentacoordinate carbon atoms embedded in a metallocene framework. *Chemical Communications*, **2016**, 53, 138-141	5.8	41
59	Scalar and Spin-Orbit Relativistic Corrections to the NICS and the Induced Magnetic Field: The case of the E12(2-) Spherenes (E = Ge, Sn, Pb). *Journal of Chemical Theory and Computation*, **2010**, 6, 2701-5	6.4	41
58	Is Al2Cl6 aromatic? Cautions in superficial NICS interpretation. *Journal of Physical Chemistry A*, **2013**, 117, 5529-33	2.8	40
57	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	5.9	33

56	Exploiting electronic strategies to stabilize a planar tetracoordinate carbon in cyclic aromatic hydrocarbons. *Chemical Communications*, **2017**, 53, 12112-12115	5.8	31
55	Why is quercetin a better antioxidant than taxifolin? Theoretical study of mechanisms involving activated forms. *Journal of Molecular Modeling*, **2013**, 19, 2165-72	2	30
54	Passiflora tarminiana fruits reduce UVB-induced photoaging in human skin fibroblasts. *Journal of Photochemistry and Photobiology B: Biology*, **2017**, 168, 78-88	6.7	29
53	Theoretical Study of the Antioxidant Activity of Quercetin Oxidation Products. *Frontiers in Chemistry*, **2019**, 7, 818	5	27
52	10-Electron arenes à la carte: structure and bonding of the [E-(CnHn)-E](n-6) (E = Ca, Sr, Ba; n = 6-8) complexes. *Physical Chemistry Chemical Physics*, **2016**, 18, 11909-18	3.6	26
51	Cyanide-isocyanide isomerization: stability and bonding in noble gas inserted metal cyanides (metal = Cu, Ag, Au). *Physical Chemistry Chemical Physics*, **2018**, 20, 18491-18502	3.6	26
50	Theoretical design of stable small aluminium-magnesium binary clusters. *Physical Chemistry Chemical Physics*, **2013**, 15, 2222-9	3.6	25
49	Low-density lipoprotein (LDL)-antioxidant biflavonoids from Garcinia madruno. *Molecules*, **2013**, 18, 6092-6100	4.8	25
48	Chemodiversity, chemotaxonomy and chemoecology of Amaryllidaceae alkaloids. *The Alkaloids Chemistry and Biology*, **2020**, 83, 113-185	4.8	24
47	Alkaloids of Amaryllidaceae as Inhibitors of Cholinesterases (AChEs and BChEs): An Integrated Bioguided Study. *Phytochemical Analysis*, **2018**, 29, 217-227	3.4	24
46	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	5.9	23
45	Carbon rings decorated with group 14 elements: new aromatic clusters containing planar tetracoordinate carbon. *New Journal of Chemistry*, **2019**, 43, 6781-6785	3.6	22
44	Cholinesterase Inhibition Activity, Alkaloid Profiling and Molecular Docking of Chilean (Amaryllidaceae). *Molecules*, **2018**, 23,	4.8	20
43	Stable NCNgNSi (Ng=Kr, Xe, Rn) Compounds with Covalently Bound C-Ng-N Unit: Possible Isomerization of NCNSi through the Release of the Noble Gas Atom. *Chemistry - A European Journal*, **2018**, 24, 2879-2887	4.8	18
42	Exploring the potential energy surface of EP_2^- clusters (E=Group 13 element): the quest for inverse carbon-free sandwiches. *Chemistry - A European Journal*, **2014**, 20, 4583-90	4.8	17
41	Hippeastrum reticulatum (Amaryllidaceae): Alkaloid Profiling, Biological Activities and Molecular Docking. *Molecules*, **2017**, 22,	4.8	16
40	Amaryllidaceae alkaloids as agents with protective effects against oxidative neural cell injury. *Life Sciences*, **2018**, 203, 54-65	6.8	14
39	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	3.7	14

38	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, 1666-74	8.9	14
37	Structure and stability of the Si4Lin (n=1□7) binary clusters. *Chemical Physics Letters*, **2012**, 522, 67-71	2.5	14
36	Boron Nanowheels with Axles Containing Noble Gas Atoms: Viable Noble Gas Bound M□ B Clusters (M=Nb, Ta). *Chemistry - A European Journal*, **2018**, 24, 3590-3598	4.8	14
35	Assembling Small Silicon Clusters Using Criteria of Maximum Matching of the Fukui Functions. *Journal of Chemical Theory and Computation*, **2011**, 7, 3995-4001	6.4	13
34	A characterization of the two-step reaction mechanism of phenol decomposition by a Fenton reaction. *Chemical Physics Letters*, **2015**, 640, 16-22	2.5	11
33	Thermoluminescence glow curves analysis of pure and CeO2-doped Li2O□Al2O3□SiO2 glass ceramics. *Journal of Luminescence*, **2009**, 129, 657-660	3.8	11
32	Ligand-Supported E Clusters (E=Si-Sn). *Chemistry - A European Journal*, **2017**, 23, 7463-7473	4.8	10
31	Double-Ring Epimerization in the Biosynthesis of Clavulanic Acid. *Journal of Physical Chemistry A*, **2020**, 124, 9413-9426	2.8	10
30	Revisiting the Rearrangement of Dewar Thiophenes. *Molecules*, **2020**, 25,	4.8	8
29	Theoretical study of the Si(5-n)(BH)n2- and Na(Si(5-n)(BH)n)- (n = 0-5) systems. *Physical Chemistry Chemical Physics*, **2012**, 14, 16326-30	3.6	8
28	Structure and Bonding of Alkali-Metal Pentalenides. *Organometallics*, **2017**, 36, 310-317	3.8	7
27	Chemical Profiling and Cholinesterase Inhibitory Activity of Five Herb. (Amaryllidaceae) Species from Ecuador. *Molecules*, **2020**, 25,	4.8	7
26	Exploring the Potential Energy Surface of Trimetallic Deltahedral Zintl Ions: Lowest-Energy [SnGeBi] and [(SnGeBi)] Structures. *Inorganic Chemistry*, **2019**, 58, 10057-10064	5.1	7
25	Understanding the Central Location of a Hexagonal Hole in a B Cluster. *Chemistry - an Asian Journal*, **2016**, 11, 3220-3224	4.5	7
24	Neuroprotection and improvement of the histopathological and behavioral impairments in a murine Alzheimer's model treated with Zephyranthes carinata alkaloids. *Biomedicine and Pharmacotherapy*, **2019**, 110, 482-492	7.5	7
23	Theobroma cacao L. compounds: Theoretical study and molecular modeling as inhibitors of main SARS-CoV-2 protease. *Biomedicine and Pharmacotherapy*, **2021**, 140, 111764	7.5	6
22	Why CpAl□Cr(CO)5 is linear while CpIn□Cr(CO)5 is not? Understanding the structure and bonding of the CpE□Cr(CO)5 (E = Group 13 element) complexes. *Theoretical Chemistry Accounts*, **2016**, 135, 1	1.9	5
21	The importance of dynamics studies on the design of sandwich structures: a CrB24 case. *Physical Chemistry Chemical Physics*, **2016**, 18, 18336-41	3.6	5

20	Nonclassical 21-Homododecahedryl Cation Rearrangement Revisited. *Organic Letters*, **2016**, 18, 1140-2	6.2	5
19	Do planar tetracoordinate tin complexes really exist?. *Dalton Transactions*, **2013**, 42, 11180-5	4.3	5
18	Antiaging activity, molecular docking, and prediction of percutaneous absorption parameters of quinoline–hydrazone hybrids. *Medicinal Chemistry Research*, **2019**, 28, 1959-1973	2.2	4
17	Unique magnetic shielding and bonding in Pnicogen nortricyclane Zintl clusters. *Chemical Physics Letters*, **2020**, 749, 137414	2.5	4
16	Activation and diffusion of ammonia borane hydrogen on gold tetramers. *International Journal of Quantum Chemistry*, **2018**, 118, e25567	2.1	4
15	Isoelectronic substitution from Si52− to Al5H52−. Exploration of the series Si5−(AlH)n2−(n = 0−5). *Chemical Physics Letters*, **2016**, 647, 150-156	2.5	4
14	Synthesis and characterization of thermoluminescent glass-ceramics Li2O–Al2O3–SiO2:CeO2. *Journal of Luminescence*, **2009**, 129, 836-839	3.8	4
13	Theoretical design of stable hydride clusters: isoelectronic transformation in the EnAl4−H7+n− series. *RSC Advances*, **2017**, 7, 16069-16077	3.7	3
12	Mechanistic insights into the phosphoryl transfer reaction in cyclin-dependent kinase 2: A QM/MM study. *PLoS ONE*, **2019**, 14, e0215793	3.7	3
11	Alkaloids of (Kunth) J.F. Macbr. and Meerow (Amaryllidaceae) from Ecuador and its cholinesterase-inhibitory activity. *South African Journal of Botany*, **2021**, 136, 91-99	2.9	3
10	The effects of halogen elements on the opening of an icosahedral B framework. *Journal of Chemical Physics*, **2017**, 147, 144302	3.9	2
9	Insights on the structural and electronic properties of ScC + n , YC + n , LaC + n (n = 3–8) systems. *Theoretical Chemistry Accounts*, **2016**, 135, 1	1.9	2
8	Reply to the 'Comment on "Exploiting electronic strategies to stabilize a planar tetracoordinate carbon in cyclic aromatic hydrocarbons" by V. S. Thimmakondu, Chem. Commun., 2019, DOI. *Chemical Communications*, **2019**, 55, 12721-12722	5.8	2
7	Amaryllidaceae alkaloids and neuronal cell protection **2020**, 135-144		1
6	Crystal structure, Hirshfeld surface analysis and DFT studies of N-(4-acetylphenyl)quinoline-3-carboxamide. *Journal of Molecular Structure*, **2021**, 1246, 131162	3.4	1
5	In vitro and in silico analysis of galanthine from Zephyranthes carinata as an inhibitor of acetylcholinesterase.. *Biomedicine and Pharmacotherapy*, **2022**, 150, 113016	7.5	1
4	Structure–antioxidant activity relationships in boldine and glaucine: a DFT study. *New Journal of Chemistry*, **2021**, 45, 590-596	3.6	0
3	Flavonoids in Transgenic Alzheimer's Disease Mouse Models **2017**, 43-63		

2	Structural, thermodynamic and kinetic factors in the desorption/absorption of a hydrogen molecule in the M3AlH10Na (M = Be or Mg; x = 0 or 2) hydrides. *New Journal of Chemistry*, **2019**, 43, 18041-18048	3.6
1	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	3.4