

# Ignacio Vargas-Baca

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/3867587/publications.pdf>

Version: 2024-02-01

86  
papers

2,331  
citations

257450

24  
h-index

223800

46  
g-index

91  
all docs

91  
docs citations

91  
times ranked

1774  
citing authors

#	ARTICLE	IF	CITATIONS
1	The Nature of the Supramolecular Association of 1,2,5-Chalcogenadiazoles. <i>Journal of the American Chemical Society</i> , 2005, 127, 3184-3190.	13.7	252
2	A survey of tellurium-centered secondary-bonding supramolecular synthons. <i>Coordination Chemistry Reviews</i> , 2011, 255, 1426-1438.	18.8	170
3	Supramolecular macrocycles reversibly assembled by Te $\cdots$ O chalcogen bonding. <i>Nature Communications</i> , 2016, 7, 11299.	12.8	166
4	Recent developments in the coordination chemistry of bis(imino)acenaphthene (BIAN) ligands with s- and p-block elements. <i>Dalton Transactions</i> , 2009, , 240-253.	3.3	139
5	The Effect of Steric Hindrance on the Association of Telluradiazoles through Te $\cdots$ N Secondary Bonding Interactions. <i>Crystal Growth and Design</i> , 2006, 6, 181-186.	3.0	110
6	Chalcogen bonding in materials chemistry. <i>Coordination Chemistry Reviews</i> , 2020, 422, 213464.	18.8	77
7	Organogermanium Reactive Intermediates. The Direct Detection and Characterization of Transient Germynes and Digermenes in Solution. <i>Journal of the American Chemical Society</i> , 2004, 126, 16105-16116.	13.7	73
8	Supramolecular Chromotropism of the Crystalline Phases of 4,5,6,7-Tetrafluorobenzo-2,1,3-telluradiazole. <i>Journal of the American Chemical Society</i> , 2010, 132, 17265-17270.	13.7	69
9	Synthesis of a Heterobimetallic Rhodium $\cdots$ Iron Complex Containing an $\pi$ - $\pi$ -Interaction between Rhodium and the B $\cdots$ Cipso $\cdots$ Cortho Unit of a Triarylborane. <i>Organometallics</i> , 2006, 25, 5835-5838.	2.3	60
10	Synthesis and structural characterisation of the aggregates of benzo-1,2-chalcogenazole 2-oxides. <i>Dalton Transactions</i> , 2017, 46, 6570-6579.	3.3	60
11	Solid-Phase Synthesis of Transition Metal Linked, Branched Oligonucleotides. <i>Angewandte Chemie - International Edition</i> , 2001, 40, 4629-4632.	13.8	58
12	Engineering Second-Order Nonlinear Optical Activity by Means of a Noncentrosymmetric Distortion of the [Te $\cdots$ N] <sub>2</sub> Supramolecular Synthon. <i>Crystal Growth and Design</i> , 2010, 10, 4959-4964.	3.0	55
13	The supramolecular chemistry of 1,2,5-chalcogenadiazoles. <i>Journal of Organometallic Chemistry</i> , 2007, 692, 2654-2657.	1.8	50
14	Boron di- and tri-cations. <i>Dalton Transactions</i> , 2008, , 6421.	3.3	46
15	Planar P6E6 (E = Se, S) macrocycles incorporating P2N2 scaffolds. <i>Chemical Communications</i> , 2012, 48, 6346.	4.1	43
16	Parametrization of a Force Field for Te $\cdots$ N Secondary Bonding Interactions and Its Application in the Design of Supramolecular Structures Based on Heterocyclic Building Blocks. <i>Crystal Growth and Design</i> , 2011, 11, 668-677.	3.0	37
17	Valence Electronic Structure of Benzo-2,1,3-chalcogenadiazoles Studied by Photoelectron Spectroscopy and Density Functional Theory. <i>Inorganic Chemistry</i> , 2008, 47, 6220-6226.	4.0	35
18	The role of the Lewis acid $\cdots$ base properties in the supramolecular association of 1,2,5-chalcogenadiazoles. <i>Canadian Journal of Chemistry</i> , 2013, 91, 338-347.	1.1	35

#	ARTICLE	IF	CITATIONS
19	WEAKLY BONDING INTERACTIONS IN ORGANOCHALCOGEN CHEMISTRY. Phosphorus, Sulfur and Silicon and the Related Elements, 2000, 164, 207-227.	1.6	32
20	Structure and formation of the first (â€œOâ€œTeâ€œNâ€œ)4 ring. Dalton Transactions, 2010, 39, 11126.	3.3	32
21	Direct Detection of Dimethylstannylene and Tetramethyldistannene in Solution and the Gas Phase by Laser Flash Photolysis of 1,1-Dimethylstannacyclopent-3-enes. Journal of the American Chemical Society, 2005, 127, 17469-17478.	13.7	31
22	A planar dianionic ditelluride and a cyclic tritelluride supported by P2N2rings. Dalton Transactions, 2013, 42, 3291-3294.	3.3	27
23	Aggregation-Induced Emission of Bis(imino)acenaphthene Zinc Complexes: Photophysical Tuning via Methylation of the Flanking Aryl Substituents. Organometallics, 2015, 34, 2422-2428.	2.3	26
24	S,C,S-Pnictogen bonding in pincer complexes of the methanediide [C(Ph2PS)2]2â€. Dalton Transactions, 2011, 40, 8086.	3.3	25
25	Chalcogenâ€œNitrogen Secondary Bonding Interactions in the Gas Phase â€œ Spectrometric Detection of Ionized Benzoâ€œ1,3â€œtelluradiazole Dimers. European Journal of Inorganic Chemistry, 2013, 2013, 2751-2756.	2.0	25
26	Spectroscopic and Computational Assessment of the Rotational Barrier of a Ferrocenyl-Stabilized Cyclopentadienyl Cation:Â Evidence for the First Hydroxyfulvalene Ligand. Organometallics, 2003, 22, 663-669.	2.3	24
27	Synthetic, structural, and computational investigations of N-alkyl benzo-2,1,3-selenadiazolium iodides and their supramolecular aggregates. Dalton Transactions, 2016, 45, 3285-3293.	3.3	22
28	Conformational isomers of 1,2,5,6-tetrathiocins and the photoisomerization of a 1,2,5,6-tetrathiocin into a 1,2,3,6-tetrathiocin: X-ray structures of (C<sub>6</sub>X<sub>4</sub>S<sub>2</sub>)<sub>2</sub> (X = F, Cl) and C<sub>6</sub>F<sub>4</sub>SSSC<sub>6</sub>F<sub>4</sub>S. Canadian Journal of Chemistry, 1998, 76, 1093-1101.	1.1	21
29	Non-centrosymmetric Ba3Ti3O6(BO3)2. Journal of Solid State Chemistry, 2004, 177, 159-164.	2.9	20
30	N-Triphenylboryl- and N,Nâ€œ2-bis(triphenylboryl)benzo-2,1,3-telluradiazole. Chemical Communications, 2009, , 4043.	4.1	20
31	Nature of Bonding in Donorâ€œAcceptor Interactions Exemplified by Complexes of Nâ€œHeterocyclic Carbenes with 1,2,5â€œTelluradiazoles. Chemistry - A European Journal, 2017, 23, 10987-10991.	3.3	20
32	Sigma-hole interactions in the molecular and crystal structures of N-boryl benzo-2,1,3-selenadiazoles. New Journal of Chemistry, 2018, 42, 10555-10562.	2.8	20
33	beta-Cyclodextrin Inclusion Complexes with Iodine: An Advanced and Inexpensive Undergraduate Chemistry Experiment. Journal of Chemical Education, 1994, 71, 708.	2.3	19
34	Intramolecular Chalcogenâ€œNitrogen Interactions:Â Molecular and Electronic Structures of Geometrical Isomers of the Diazenes RSNC(Râ€œ)NNC(Râ€œ)NSR. Inorganic Chemistry, 1996, 35, 5836-5842.	4.0	18
35	Photophysical tuning of the aggregation-induced emission of a series of para-substituted aryl bis(imino)acenaphthene zinc complexes. Dalton Transactions, 2015, 44, 11984-11996.	3.3	18
36	Influence of acidic media on the supramolecular aggregation of iso-tellurazole <i>N</i>-oxides. Canadian Journal of Chemistry, 2016, 94, 453-457.	1.1	18

#	ARTICLE	IF	CITATIONS
37	Bis(2,1,3-benzotelluradiazolidyl)2,1,3-benzotelluradiazole: a pair of radical anions coupled by Te-N chalcogen bonding. <i>Chemical Communications</i> , 2020, 56, 1113-1116.	4.1	18
38	Experimental and Theoretical Studies on 1,4,5,7-Dithiadiazepinyl Radicals: Preparation and X-ray Structure of 5-(Trimethylsilyl)tetrachlorobenzo-1,4,5,7-dithiadiazepine. <i>Inorganic Chemistry</i> , 1997, 36, 4772-4777.	4.0	17
39	Linear and nonlinear optical responses of a dye anchored to gold nanoparticles dispersed in liquid and polymeric matrixes. <i>Canadian Journal of Chemistry</i> , 2002, 80, 1625-1633.	1.1	17
40	Computational approaches and sigma-hole interactions: general discussion. <i>Faraday Discussions</i> , 2017, 203, 131-163.	3.2	17
41	The size of the metal ion controls the structures of the coordination polymers of benzo-2,1,3-selenadiazole. <i>CrystEngComm</i> , 2013, 15, 7434.	2.6	16
42	<sup>125</sup> Te NMR provides evidence of autoassociation of organo-ditellurides in solution. <i>Physical Chemistry Chemical Physics</i> , 2016, 18, 30740-30747.	2.8	16
43	Naphthalene-Mediated Electronic Communication in Tetrakis(imino)pyracene Complexes. <i>Angewandte Chemie - International Edition</i> , 2009, 48, 8369-8371.	13.8	15
44	An experimental and computational investigation of the formation and structures of N-hydro and N,N'-dihydro-benzo-2,1,3-chalcogenadiazolium chlorides. <i>Main Group Chemistry</i> , 2010, 9, 117-133.	0.8	15
45	Experimental and Theoretical Investigations of the Formation of the Diazene PhSNC(H)NNC(H)NSPh from HCN <sub>2</sub> (SPh) <sub>3</sub> by a Thiyl-Radical-Catalyzed Mechanism: Identification of the HC(NSPh) <sub>2</sub> Radical and X-ray Structures of HCN <sub>2</sub> (SPh) <sub>3</sub> and PhSNC(H)NNC(H)NSPh. <i>Inorganic Chemistry</i> , 1996, 35, 3839-3847.	4.0	14
46	Sterically Directed Functionalization of the Redox-Active Bis(imino)acenaphthene Ligand Class: An Experimental and Theoretical Investigation. <i>Journal of the American Chemical Society</i> , 2013, 135, 13939-13946.	13.7	13
47	Building new discrete supramolecular assemblies through the interaction of iso-tellurazole N-oxides with Lewis acids and bases. <i>Faraday Discussions</i> , 2017, 203, 187-199.	3.2	13
48	Macrocyclic complexes of Pt(II) and Rh(III) with iso-tellurazole N-oxides. <i>Dalton Transactions</i> , 2019, 48, 4879-4886.	3.3	13
49	Eight- and 16-Membered Cyanuric-Sulfanuric Ring Systems: C <sub>2</sub> N <sub>4</sub> S <sub>2</sub> C <sub>2</sub> N <sub>3</sub> S Ring Contraction. <i>Inorganic Chemistry</i> , 2000, 39, 1697-1704.	4.0	12
50	Tetrakis(imino)pyracene Complexes Exhibiting Multielectron Redox Processes. <i>Journal of the American Chemical Society</i> , 2012, 134, 176-178.	13.7	12
51	Experimental and Theoretical Investigations of Tellurium(IV) Methanediides and Their Insertion Products with Sulfur and Iodine. <i>Organometallics</i> , 2012, 31, 627-636.	2.3	12
52	Molecular and electronic structures of the purple chromophore RC(NH <sub>2</sub> )(NSePh) (R = H, 4-CH <sub>3</sub> C <sub>6</sub> H <sub>4</sub> ). <i>Canadian Journal of Chemistry</i> , 1995, 73, 1380-1385.	1.1	11
53	Synthesis, Structure, and Unexpected Magnetic Properties of La <sub>3</sub> Re <sub>2</sub> O <sub>10</sub> . <i>Inorganic Chemistry</i> , 2007, 46, 8739-8745.	4.0	10
54	An investigation of the formation of 1,3,5-heterosubstituted benzene rings by cyclo-condensation of acetyl-substituted organometallic complexes. <i>Journal of Organometallic Chemistry</i> , 2008, 693, 1957-1967.	1.8	10

#	ARTICLE	IF	CITATIONS
55	CH <sup>+</sup> NH Tautomerism in the Products of the Reactions of the Methanide [HC(PPh) <sub>2</sub> NSiMe <sub>3</sub> ] <sub>2</sub> with Pnictogen and Tellurium Iodides. <i>Organometallics</i> , 2013, 32, 5360-5373.	2.3	10
56	Intramolecular redox cyclization upon oxidation of a sulfur(II)-containing diazene: X-ray structures of (Ar) <sub>2</sub> N=N(4-CH <sub>3</sub> C <sub>6</sub> H <sub>4</sub> ) and MeSO <sub>2</sub> N(4-CH <sub>3</sub> C <sub>6</sub> H <sub>4</sub> )CN=NC(C <sub>6</sub> H <sub>4</sub> CH <sub>3</sub> ) <sub>2</sub> NSO <sub>2</sub> Me. <i>Canadian Journal of Chemistry</i> , 1997, 75, 1188-1194.	1.1	8
57	[(dmpe) <sub>2</sub> MnH(C) <sub>2</sub> H <sub>4</sub> ] as a Source of a Low-Coordinate Ethyl Manganese(I) Species: Reactions with Primary Silanes, H <sub>2</sub> , and Isonitriles. <i>Organometallics</i> , 2018, 37, 3010-3023.	2.3	8
58	Synthetic and structural investigations of bis( <i>N</i> -alkyl-benzoselenadiazolium) cations. <i>Dalton Transactions</i> , 2019, 48, 12541-12548.	3.3	8
59	Structural diversity of the complexes of monovalent metal d <sup>10</sup> ions with macrocyclic aggregates of iso-tellurazole <i>N</i> -oxides. <i>New Journal of Chemistry</i> , 2019, 43, 12601-12608.	2.8	8
60	Competing Effects of Chlorination on the Strength of Te...O Chalcogen Bonds Select the Structure of Mixed Supramolecular Macrocyclic Aggregates of Iso-Tellurazole <i>N</i> -Oxides. <i>Chemistry - A European Journal</i> , 2021, 27, 10849-10853.	3.3	8
61	Iso-Tellurazolium <i>N</i> -Phenoxides: A Family of Te...O Chalcogen-Bonding Supramolecular Building Blocks. <i>Inorganic Chemistry</i> , 2021, 60, 16726-16733.	4.0	8
62	Formation and X-ray Structures of Eight- and Sixteen-Membered Rings (ArC) <sub>n</sub> N <sub>2</sub> (SPh) <sub>n</sub> [n = 2, Ar = 4-XC <sub>6</sub> H <sub>4</sub> (X = Br, CF <sub>3</sub> ); n = 4, Ar = 4-BrC <sub>6</sub> H <sub>4</sub> ] and the Electronic Structures of (HC) <sub>2</sub> N <sub>4</sub> (SH) <sub>2</sub> and (HC) <sub>2</sub> N <sub>4</sub> (SH) <sub>2</sub> . <i>Inorganic Chemistry</i> , 1997, 36, 1669-1675.	4.0	7
63	Structural Diversity of Lithium Sulfenamides: <sup>7</sup> Li NMR Studies in Solution and Crystal Structures of [Li <sub>2</sub> ( <i>η</i> -2-(CH <sub>3</sub> ) <sub>3</sub> Ca <sup>+</sup> NS <sup>-</sup> C <sub>6</sub> H <sub>4</sub> CH <sub>3</sub> ) <sub>2</sub> (THF) <sub>2</sub> ] and [Li <sub>2</sub> ( <i>η</i> -1-4-CH <sub>3</sub> C <sub>6</sub> H <sub>4</sub> NS <sup>-</sup> C <sub>6</sub> H <sub>4</sub> CH <sub>3</sub> ) <sub>2</sub> (THF) <sub>4</sub> ]. <i>Inorganic Chemistry</i> , 2003, 42, 3849-3855.	4.0	7
64	Influence of $\pi$ -Stacking on the Resonant Enhancement of the Second-Order Nonlinear Optical Response of Dipolar Chromophores. <i>Journal of Physical Chemistry B</i> , 2005, 109, 18378-18384.	2.6	6
65	Noise Analysis of Second-Harmonic Generation in Undoped and MgO-Doped Periodically Poled Lithium Niobate. <i>Advances in OptoElectronics</i> , 2008, 2008, 1-10.	0.6	5
66	Naphthalene-Mediated Electronic Communication in Tetrakis(imino)pyracene Complexes. <i>Angewandte Chemie</i> , 2009, 121, 8519-8521.	2.0	5
67	The halogen bond in solution: general discussion. <i>Faraday Discussions</i> , 2017, 203, 347-370.	3.2	5
68	Experimental and Theoretical Investigations of 1,4,5,7 Dithiadiazepines. <i>Phosphorus, Sulfur and Silicon and the Related Elements</i> , 1994, 93, 445-446.	1.6	4
69	Photochemical isomerization of a C <sub>2</sub> N <sub>4</sub> S <sub>2</sub> ring into a diazene. <i>Chemical Communications</i> , 1996, , 949.	4.1	4
70	Imido-pyridine Ti( <i>scp</i> ) <sub>4</sub> compounds: synthesis of unusual imido-amido heterobimetallic derivatives. <i>Dalton Transactions</i> , 2015, 44, 11119-11128.	3.3	4
71	Reversibly Trapping Visible Laser Light through the Catalytic Photo-oxidation of I <sup>+</sup> by Ru(bpy) <sub>3</sub> <sup>2+</sup> . <i>Journal of Physical Chemistry Letters</i> , 2016, 7, 1585-1589.	4.6	3
72	Preparation and Structure of a Sixteen-Membered Ring with Alternating CN and SN Groups. <i>Phosphorus, Sulfur and Silicon and the Related Elements</i> , 1994, 93, 455-456.	1.6	2

#	ARTICLE	IF	CITATIONS
73	<title>Azo-dye hybrid sol-gel glass composites for optoelectronics</title> . , 1998, , .		2
74	Oxygen, sulfur, selenium, tellurium and polonium. Annual Reports on the Progress of Chemistry Section A, 2013, 109, 80.	0.8	2
75	Experimental and computational investigations of arsenicIII and phosphorusIII complexes of bis(diphenylthiophosphinoyl)methanediide. Journal of Organometallic Chemistry, 2014, 761, 93-97.	1.8	2
76	Beyond the halogen bond: general discussion. Faraday Discussions, 2017, 203, 227-244.	3.2	2
77	N-(tert-Butyl)-S-(4-methylphenyl)thiohydroxylamine. Acta Crystallographica Section E: Structure Reports Online, 2003, 59, o1082-o1083.	0.2	1
78	2,2- $\text{D}_2$ -Diiodoazobenzene. Acta Crystallographica Section E: Structure Reports Online, 2012, 68, o3127-o3127.	0.2	1
79	A push-pull azobenzene is mercurated twice at the ring with less electron density. Journal of Organometallic Chemistry, 2012, 716, 11-18.	1.8	1
80	3-D Spiraling Self-Trapped Light Beams in Photochemical Systems. Journal of Physical Chemistry Letters, 2019, 10, 5957-5962.	4.6	1
81	<title>Linear and nonlinear optical response of metal colloid heterostructures by molecular self-assembly on optical chemical benches</title> . , 1998, , .		0
82	Comparison of photorefractive effects in undoped and MgO-doped PPLN. , 2007, , .		0
83	Oxygen, sulfur, selenium, tellurium and polonium. Annual Reports on the Progress of Chemistry Section A, 2012, 108, 113.	0.8	0
84	8. Reagents that Contain Se-H or Te-H Bonds. , 2019, , 301-314.		0
85	Reagents that Contain Se-H or Te-H Bonds. Physical Sciences Reviews, 2019, 4, .	0.8	0
86	Noise characteristics of second-harmonic generation in quasi-phase-matched periodically poled lithium niobate. , 2007, , .		0