

# Diego M Gil

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/1647807/publications.pdf>

Version: 2024-02-01

65  
papers

826  
citations

516710

16  
h-index

580821

25  
g-index

65  
all docs

65  
docs citations

65  
times ranked

920  
citing authors

#	ARTICLE	IF	CITATIONS
1	Experimental and theoretical insights into the formation of weak hydrogen bonds and H $\cdots$ H bonding interactions in the solid-state structure of two eucalyptol derivatives. <i>New Journal of Chemistry</i> , 2022, 46, 5690-5704.	2.8	3
2	Importance of non-covalent interactions in a nitrile anion metal-complex based on pyridine ligands: A theoretical and experimental approach. <i>Journal of Molecular Structure</i> , 2022, 1261, 132885.	3.6	1
3	Importance of R-CH $\cdots$ O tetrel bonding and vinyl $\cdots$ aryl stacking interactions in stabilizing the crystal packing of 2 $\beta$ - $\beta$ ,4 $\beta$ -dihydroxy-3 $\beta$ -methoxychalcone: Exploration of antileishmanial activity and molecular docking studies. <i>Journal of Molecular Structure</i> , 2022, 1265, 133357.	3.6	1
4	Antiparallel $\pi\cdots\pi$ and C $\cdots$ H $\cdots$ H $\cdots$ C contacts in a novel Zn(II) coordination solid involving $\pi$ -hole tetrel bonding interactions: A combined experimental and theoretical study, Hirshfeld surface analysis, molecular docking and potential drug property. <i>Journal of Molecular Structure</i> , 2022, 1268, 133686.	3.6	4
5	Role of fluorine-fluorine and weak intermolecular interactions in the supramolecular network of a new trifluoromethyl-1,5-benzodiazepine: Crystal structure, Hirshfeld surface analysis and theoretical study. <i>Journal of Fluorine Chemistry</i> , 2021, 242, 109697.	1.7	9
6	A first exploration of isostructurality in transition metal nitroprussides: X-ray analysis, magnetic properties and DFT calculations. <i>CrystEngComm</i> , 2021, 23, 1158-1171.	2.6	3
7	Interplay of weak noncovalent interactions in alkoxybenzylidene derivatives of benzohydrazide and acetohydrazide: a combined experimental and theoretical investigation and lipoxigenase inhibition (LOX) studies. <i>CrystEngComm</i> , 2021, 23, 955-971.	2.6	9
8	Crystal engineering with pyrazolyl-thiazole derivatives: structure-directing role of $\pi$ -stacking and $\pi$ -hole interactions. <i>CrystEngComm</i> , 2021, 23, 3276-3287.	2.6	21
9	X-ray characterization, Hirshfeld surface analysis, DFT calculations, <i>in vitro</i> and <i>in silico</i> lipoxigenase inhibition (LOX) studies of dichlorophenyl substituted 3-hydroxy-chromenones. <i>New Journal of Chemistry</i> , 2021, 45, 19928-19940.	2.8	22
10	Role of hydrogen bonds and weak non-covalent interactions in the supramolecular assembly of 9-hydroxyeucalyptol: crystal structure, Hirshfeld surface analysis, and DFT calculations. <i>Journal of Molecular Modeling</i> , 2021, 27, 13.	1.8	3
11	Revealing new non-covalent interactions in polymorphs and hydrates of Acyclovir: Hirshfeld surface analysis, NCI plots and energetic calculations. <i>Computational and Theoretical Chemistry</i> , 2021, 1197, 113133.	2.5	7
12	Weak Interactions in Cocrystals of Isoniazid with Glycolic and Mandelic Acids. <i>Crystals</i> , 2021, 11, 328.	2.2	8
13	Deciphering the H-Bonding Preference on Nucleoside Molecular Recognition through Model Copper(II) Compounds. <i>Pharmaceuticals</i> , 2021, 14, 244.	3.8	4
14	Exploring weak intermolecular interactions in two bis-1,3,4-oxadiazoles derivatives: A combined X-ray diffraction, Hirshfeld surface analysis and theoretical studies. <i>Journal of Molecular Structure</i> , 2021, 1232, 130030.	3.6	7
15	An iron(II) complex of trans, trans, trans-bis(azido)bis(4-amino-3,5-bis(2-pyridyl)-1,2,4-triazole): Insight into molecular and supramolecular structures using Hirshfeld surface analysis and DFT studies. <i>Journal of Molecular Structure</i> , 2021, 1235, 130155.	3.6	4
16	A New Insight into Non-covalent Interactions in 1,4-Disubstituted 1H-1,2,3-Triazole: Synthesis, X-ray structure, DFT calculations, <i>in vitro</i> Lipoxigenase Inhibition (LOX) and <i>in silico</i> Studies. <i>Journal of Molecular Structure</i> , 2021, 1236, 130283.	3.6	12
17	Experimental and theoretical vibrational study of the fungicide pyraclostrobin. <i>Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy</i> , 2021, 259, 119888.	3.9	7
18	Supramolecular, spectroscopic and computational analysis of weak interactions in some thiosemicarbazones derived from 5-acetylbarbituric acid. <i>Journal of Molecular Structure</i> , 2021, 1245, 131031.	3.6	1

#	ARTICLE	IF	CITATIONS
19	Novel $\pi$ - $\pi$ isostructuralism in metal complexes with 1-methylimidazole: crystal structures, energy calculations and magnetic properties. Dalton Transactions, 2021, 50, 17029-17040.	3.3	1
20	Synthesis, molecular structure, spectroscopic and theoretical investigation of 5-chlorosalicylaldehyde-2,4-dinitrophenylhydrazone. Journal of Molecular Structure, 2020, 1205, 127589.	3.6	6
21	Intermolecular interactions in antipyrine-like derivatives 2-halo-N-(1,5-dimethyl-3-oxo-2-phenyl-2,3-dihydro-1H-pyrazol-4-yl)benzamides: X-ray structure, Hirshfeld surface analysis and DFT calculations. New Journal of Chemistry, 2020, 44, 19541-19554.	2.8	23
22	Raise the anchor! Synthesis, X-ray and NMR characterization of 1,3,5-triazinanes with an axial tert-butyl group. Organic and Biomolecular Chemistry, 2020, 18, 8386-8394.	2.8	5
23	Recurrent $\pi$ - $\pi$ stacking motifs in three new 4,5-dihydropyrazolyl-thiazole coumarin hybrids: X-ray characterization, Hirshfeld surface analysis and DFT calculations. New Journal of Chemistry, 2020, 44, 14592-14603.	2.8	54
24	Synthesis, X-ray characterization and theoretical study of 3a,6:7,9a-diepoxybenzo[de]isoquinoline derivatives: on the importance of F $\cdots$ O interactions. New Journal of Chemistry, 2020, 44, 20167-20180.	2.8	7
25	Role of Imidazole Co $\cdots$ Ligand in the Supramolecular Network of a Co(II) Complex with Sulfadiazine: Crystal Structure, Hirshfeld Surface Analysis and Energetic Calculations. ChemistrySelect, 2020, 5, 6331-6338.	1.5	9
26	Exploration of Br $\cdots$ O halogen bonding interactions in dinuclear vanadium(V) complexes with Schiff base ligands. Polyhedron, 2020, 187, 114676.	2.2	18
27	Intramolecular sp <sup>2</sup> -sp <sup>3</sup> Disequalization of Chemically Identical Sulfonamide Nitrogen Atoms: Single Crystal X-Ray Diffraction Characterization, Hirshfeld Surface Analysis and DFT Calculations of N-Substituted Hexahydro-1,3,5-Triazines. Crystals, 2020, 10, 369.	2.2	4
28	Relevant $\pi$ -hole tetrel bonding interactions in ethyl 2-triazolyl-2-oxoacetate derivatives: Hirshfeld surface analysis and DFT calculations. CrystEngComm, 2020, 22, 3567-3578.	2.6	15
29	Synthesis, Structure, and Biological Assays of Novel Trifluoromethyl diazepine $\cdots$ Metal Complexes. Australian Journal of Chemistry, 2020, 73, 49.	0.9	3
30	On the importance of intermolecular interactions of 3-(2,3-dihydroxy-isopentyl)-4-hydroxyacetophenone: Crystal structure, spectroscopic and hirshfeld surface analysis. Journal of Molecular Structure, 2020, 1217, 128393.	3.6	2
31	Enol-imino $\cdots$ Keto-enamine Tautomerism in a Diazepine Derivative: How Decisive Are the Intermolecular Interactions in the Equilibrium?. Journal of Organic Chemistry, 2019, 84, 11042-11053.	3.2	22
32	Diethylaminophenyl-based Schiff base Cu( $\cdots$ ) and V( $\cdots$ ) complexes: experimental and theoretical studies and cytotoxicity assays. New Journal of Chemistry, 2019, 43, 18832-18842.	2.8	22
33	Co(II), Ni(II) and Cu(II) ternary complexes with sulfadiazine and dimethylformamide: Synthesis, spectroscopic characterization, crystallographic study and antibacterial activity. Journal of Molecular Structure, 2019, 1176, 605-613.	3.6	17
34	A new perfluoromethyl aminoenone derivative and the role of the hydrogen bonding in the intra- and intermolecular interactions. Journal of Fluorine Chemistry, 2018, 208, 36-47.	1.7	11
35	New coordination polymers based on 2-methylimidazole and transition metal nitroprusside containing building blocks: synthesis, structure and magnetic properties. New Journal of Chemistry, 2018, 42, 1347-1355.	2.8	26
36	A detailed study of intermolecular interactions, electronic and vibrational properties of the metal complex bis(uracilato)diammine copper(ii) dihydrate. Journal of Molecular Structure, 2018, 1155, 424-433.	3.6	4

#	ARTICLE	IF	CITATIONS
37	Exploring weak intermolecular interactions in thiocyanate-bonded Zn(II) and Cd(II) complexes with methylimidazole: crystal structures, Hirshfeld surface analysis and luminescence properties. <i>RSC Advances</i> , 2018, 8, 23891-23902.	3.6	36
38	Supramolecular architectures in luminescent Zn(II) and Cd(II) complexes containing imidazole derivatives: Crystal structures, vibrational and thermal properties, Hirshfeld surface analysis and electrostatic potentials. <i>Journal of Molecular Structure</i> , 2017, 1134, 492-503.	3.6	25
39	A detailed exploration of intermolecular interactions in 4-(4-dimethylaminobenzylideneamino)-N-(5-methyl-3-isoxazolyl)benzenesulfonamide and related Schiff bases: Crystal structure, spectral studies, DFT methods, Pixel energies and Hirshfeld surface analysis. <i>Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy</i> , 2017, 185, 286-297.	3.9	11
40	A combined experimental and theoretical study of the supramolecular self-assembly of the natural benzopyran 2,2-dimethyl-3-hydroxy-6-acetyl-chromane and its isomeric benzofuran 10,11-dihydro-10-hydroxytremetone. <i>Journal of Molecular Structure</i> , 2017, 1146, 164-178.	3.6	5
41	Weak ferromagnetism and superparamagnetic clusters coexistence in $YFe_{1-x}Co_xO_3$ (0 ≤ x ≤ 1) perovskites. <i>Materials Research Bulletin</i> , 2017, 94, 472-482.	5.2	8
42	Supramolecular self-assembly of a new multi-conformational Schiff base through hydrogen bonds: Crystal structure, spectroscopic and theoretical investigation. <i>Journal of Molecular Structure</i> , 2017, 1133, 24-36.	3.6	15
43	Layered vanadyl (IV) nitroprusside: Magnetic interaction through a network of hydrogen bonds. <i>Journal of Solid State Chemistry</i> , 2016, 239, 159-164.	2.9	10
44	Structure and bonding of 2,2,2-trichloroethylacetate: An experimental gas phase and computational study. <i>Zeitschrift Fur Naturforschung - Section B Journal of Chemical Sciences</i> , 2016, 71, 1253-1260.	0.7	1
45	Synthesis, structural and spectroscopic studies of 1-(2-FUROYL)-3-phenylthiourea: a theoretical and experimental approach. <i>Journal of Sulfur Chemistry</i> , 2016, 37, 555-579.	2.0	3
46	Layered Transition Metal Nitroprussides – Their Preparation, Crystal Structure, and Magnetic Properties. <i>European Journal of Inorganic Chemistry</i> , 2016, 2016, 1690-1696.	2.0	12
47	Gas-phase structure of 2,2,2-trichloroethyl chloroformate studied by electron diffraction and quantum-chemical calculations. <i>Physical Chemistry Chemical Physics</i> , 2016, 18, 393-402.	2.8	5
48	Synthesis, DFT calculations of structure, vibrational and thermal decomposition studies of the metal complex $Pb[Mn(C_3H_2O_4)_2(H_2O)_2]$ . <i>Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy</i> , 2015, 141, 233-238.	3.9	1
49	Biofilm inhibition by a new Mn(II) complex with sulfamethoxazole: Synthesis, spectroscopic characterization and crystal structure. <i>Inorganica Chimica Acta</i> , 2015, 436, 16-22.	2.4	25
50	Structural, vibrational and electronic characterization of 1-benzyl-3-furoyl-1-phenylthiourea: an experimental and theoretical study. <i>New Journal of Chemistry</i> , 2015, 39, 7459-7471.	2.8	46
51	Vibrational studies (FTIR and Raman), conformational analysis, NBO, HOMO–LUMO and reactivity descriptors of S-methyl thiobutanoate, $CH_3CH_2CH_2C(O)SCH_3$ . <i>Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy</i> , 2015, 149, 408-418.	3.9	4
52	Quantum chemical studies on molecular structure, spectroscopic (IR, Raman, UV–Vis), NBO and HOMO–LUMO analysis of 1-benzyl-3-(2-furoyl) thiourea. <i>Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy</i> , 2015, 145, 553-562.	3.9	45
53	Theoretical study on the molecular structure and vibrational properties, NBO and HOMO–LUMO analysis of the POX3 (X=F, Cl, Br, I) series of molecules. <i>Journal of Molecular Structure</i> , 2015, 1081, 536-542.	3.6	8
54	Ab-initio and DFT calculations on molecular structure, NBO, HOMO–LUMO study and a new vibrational analysis of 4-(Dimethylamino) Benzaldehyde. <i>Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy</i> , 2015, 136, 635-643.	3.9	63

#	ARTICLE	IF	CITATIONS
55	DFT calculations of structure and vibrational properties of 2,2,2-trichloroethylacetate, CH <sub>3</sub> CO <sub>2</sub> CH <sub>2</sub> CCl <sub>3</sub> . Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 2014, 123, 290-297.	3.9	8
56	Synthesis, crystal structure, conformational and vibrational properties of 6-acetyl-2,2-dimethyl-chromane. Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 2014, 127, 74-84.	3.9	10
57	Crystal structure, vibrational and thermal behavior of Ba(NH <sub>4</sub> )[Co(CN) <sub>6</sub> ]·4H <sub>2</sub> O: A new precursor for the synthesis of hexagonal BaCoO <sub>3</sub> . Polyhedron, 2014, 73, 51-58.	2.2	5
58	Layered crystal structure, conformational and vibrational properties of 2,2,2-trichloroethoxysulfonamide: An experimental and theoretical study. Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 2013, 116, 122-131.	3.9	8
59	Crystal structure refinement and vibrational analysis of Y[Co(CN) <sub>6</sub> ]·4H <sub>2</sub> O and its thermal decomposition products. Journal of Molecular Structure, 2013, 1041, 23-28.	3.6	11
60	Lead nitroprusside: A new precursor for the synthesis of the multiferroic Pb <sub>2</sub> Fe <sub>2</sub> O <sub>5</sub> , an anion-deficient perovskite. Materials Chemistry and Physics, 2013, 141, 355-361.	4.0	5
61	Y[Fe <sub>1-x</sub> Co <sub>x</sub> (CN) <sub>6</sub> ]·4H <sub>2</sub> O (0 ≤ x ≤ 1) solid solutions: Synthesis, crystal structure, thermal decomposition and spectroscopic and magnetic properties. Journal of Molecular Structure, 2012, 1015, 112-117.	3.6	7
62	Lead hexacyanoferrate(II) tetrahydrate: Crystal structure, FTIR spectroscopy and thermal decomposition studies. Polyhedron, 2012, 33, 450-455.	2.2	18
63	Crystal structure refinement, spectroscopic study and magnetic properties of yttrium hexacyanoferrate (III). Journal of Molecular Structure, 2011, 1003, 129-133.	3.6	16
64	Synthesis and structural characterization of perovskite YFeO <sub>3</sub> by thermal decomposition of a cyano complex precursor, Y[Fe(CN) <sub>6</sub> ]·4H <sub>2</sub> O. Journal of Thermal Analysis and Calorimetry, 2011, 103, 889-896.	3.6	33
65	SYNTHESIS OF Pb <sub>2</sub> Fe <sub>2</sub> O <sub>5</sub> BY THERMAL DECOMPOSITION OF Pb <sub>2</sub> [Fe(CN) <sub>6</sub> ]·4H <sub>2</sub> O. Journal of the Chilean Chemical Society, 2010, 55, .	1.2	7