

Maurizio Casarin

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/3998747/publications.pdf>

Version: 2024-02-01

101
papers

2,883
citations

218381

26
h-index

189595

50
g-index

104
all docs

104
docs citations

104
times ranked

4025
citing authors

#	ARTICLE	IF	CITATIONS
1	Role and effective treatment of dispersive forces in materials: Polyethylene and graphite crystals as test cases. <i>Journal of Computational Chemistry</i> , 2009, 30, 934-939.	1.5	653
2	Moleculesâ€“Oligomersâ€“Nanowiresâ€“Graphene Nanoribbons: A Bottom-Up Stepwise On-Surface Covalent Synthesis Preserving Long-Range Order. <i>Journal of the American Chemical Society</i> , 2015, 137, 1802-1808.	6.6	221
3	Tuning the catalytic activity of Ag(110)-supported Fe phthalocyanine in the oxygen reduction reaction. <i>Nature Materials</i> , 2012, 11, 970-977.	13.3	131
4	Hexakis(acetato)oxotetrazinc, a well-tailored molecular model of zinc oxide. An experimental and theoretical investigation of the electronic structure of Zn ₄ O(acetate) ₆ and ZnO by means of UV and x-ray photoelectron spectroscopies and first principle local density molecular cluster calculations. <i>Inorganic Chemistry</i> , 1992, 31, 1558-1565.	1.9	130
5	Spontaneous Self-Assembly of an Unsymmetric Trinuclear Triangular Copper(II) Pyrazolate Complex, [Cu ₃ ($\frac{1}{4}$ -OH)($\frac{1}{4}$ -pz) ₃ (MeCOO) ₂ (Hpz)] (Hpz = Pyrazole). Synthesis, Experimental and Theoretical Characterization, Reactivity, and Catalytic Activity. <i>Inorganic Chemistry</i> , 2004, 43, 5865-5876.	1.9	117
6	Molecular Chemisorption on TiO ₂ (110): A Local Point of View. <i>Journal of Physical Chemistry B</i> , 1998, 102, 10745-10752.	1.2	91
7	Spin-Orbit Relativistic Time-Dependent Density Functional Calculations of the Metal and Ligand Pre-Edge XAS Intensities of Organotitanium Complexes: TiCl ₄ , Ti(η -5-C ₅ H ₅)Cl ₃ , and Ti(η -5-C ₅ H ₅) ₂ Cl ₂ . <i>Journal of Physical Chemistry A</i> , 2007, 111, 5270-5279.	1.1	54
8	4D Multimodal Nanomedicines Made of Nonequilibrium Au-Fe Alloy Nanoparticles. <i>ACS Nano</i> , 2020, 14, 12840-12853.	7.3	53
9	Experimental and Theoretical Study of the Interaction of CO ₂ with α -Al ₂ O ₃ . <i>Inorganic Chemistry</i> , 2003, 42, 436-445.	1.9	52
10	Electronic properties of CuPc and H ₂ Pc: an experimental and theoretical study. <i>Physical Chemistry Chemical Physics</i> , 2013, 15, 12864.	1.3	51
11	An LCAO-LDF study of the chemisorption of H ₂ O and H ₂ S on ZnO(0001) and ZnO(101 $\bar{1}$,0). <i>Surface Science</i> , 1997, 377-379, 587-591.	0.8	50
12	A theoretical study of the H ₂ O and H ₂ S chemisorption on Cu ₂ O(111). <i>Applied Surface Science</i> , 1999, 142, 164-168.	3.1	44
13	Tunable Band Alignment with Unperturbed Carrier Mobility of On-Surface Synthesized Organic Semiconducting Wires. <i>ACS Nano</i> , 2016, 10, 2644-2651.	7.3	40
14	An Experimental and Theoretical Study of the Electronic Structure of Zinc Thiophenolate-Capped Clusters. <i>Inorganic Chemistry</i> , 1997, 36, 4707-4716.	1.9	37
15	Stereoselective Photopolymerization of Tetraphenylporphyrin Derivatives on Ag(110) at the Sub-Monolayer Level. <i>Chemistry - A European Journal</i> , 2014, 20, 14296-14304.	1.7	35
16	Coordination chemistry of CO and NH ₃ on ZnO(0001): a molecular cluster study of the CO and NH ₃ bonding interaction with a d ₁₀ ion. <i>Surface Science</i> , 1994, 303, 125-138.	0.8	34
17	Density functional studies of molecular chemisorption on TiO ₂ (110). <i>Applied Surface Science</i> , 1999, 142, 196-199.	3.1	34
18	A theoretical study of the CO and NO chemisorption on Cu ₂ O(111). <i>Surface Science</i> , 1997, 387, L1079-L1084.	0.8	32

#	ARTICLE	IF	CITATIONS
19	A comparative study of CO and NO chemisorption on Cu ₂ O(111) and Ag ₂ O(111) non-polar surfaces. Chemical Physics Letters, 1997, 280, 53-58.	1.2	32
20	A Comparative Study of CO Chemisorption on Al ₂ O ₃ and Ti ₂ O ₃ Nonpolar Surfaces. Journal of Physical Chemistry B, 2002, 106, 795-802.	1.2	31
21	Double Level Selection in a Constitutional Dynamic Library of Coordination Driven Supramolecular Polygons. Inorganic Chemistry, 2014, 53, 7276-7287.	1.9	31
22	Hydrogen capture by porphyrins at the TiO ₂ (110) surface. Physical Chemistry Chemical Physics, 2015, 17, 30119-30124.	1.3	29
23	SO ₂ on TiO ₂ (110) and Ti ₂ O ₃ (101̄,2) Nonpolar Surfaces: A DFT Study. Journal of Physical Chemistry B, 2005, 109, 12596-12602.	1.2	28
24	Organometallic Chemistry of Ph ₃ PCCO. Synthesis, Characterization, X-ray Structure Determination, and Density Functional Study of the First Stable Bis-1- <i>η</i> -ketenyl Complex, trans-[PtCl ₂ {1-C(PPh ₃)CO} ₂]. Organometallics, 2000, 19, 1373-1383.	1.1	27
25	The organometallic chemistry of Ph ₃ P ⁻ ...C ⁻ ...C ⁻ ...O. Coordination Chemistry Reviews, 2003, 236, 15-33.	9.5	27
26	Adaptive helicity and chiral recognition in bright europium quadruple-stranded helicates induced by host-guest interaction. Cell Reports Physical Science, 2022, 3, 100692.	2.8	27
27	Theoretical Investigation of the Chemisorption of H ₂ and CO on the ZnO(101̄,0) Surface. Inorganic Chemistry, 1998, 37, 5482-5490.	1.9	26
28	On-Surface Synthesis of a Pure and Long-Range-Ordered Titanium(IV)-Porphyrin Contact Layer on Titanium Dioxide. Journal of Physical Chemistry C, 2017, 121, 13738-13746.	1.5	26
29	Theoretical Study of the Chemisorption of CO on Al ₂ O ₃ (0001). Inorganic Chemistry, 2000, 39, 5232-5237.	1.9	24
30	Tetraphenylporphyrin electronic properties: a combined theoretical and experimental study of thin films deposited by SuMBD. Physical Chemistry Chemical Physics, 2010, 12, 871-880.	1.3	24
31	A comparative study of the NH ₃ chemisorption on ZnO(101̄,0) and Cu ₂ O(111) non-polar surfaces. Chemical Physics Letters, 1999, 300, 403-408.	1.2	23
32	Electronic properties of tetrakis(pentafluorophenyl)porphyrin. New Journal of Chemistry, 2013, 37, 1036.	1.4	23
33	The electronic properties of three popular high spin complexes [TM(acac) ₃], TM = Cr, Mn, and Fe] revisited: an experimental and theoretical study. Physical Chemistry Chemical Physics, 2017, 19, 24840-24854.	1.3	22
34	Coordination chemistry of CO and NH ₃ on CuCl(111): an experimental and theoretical study of the CO and NH ₃ bonding to a d ₁₀ ion. Surface Science, 1994, 317, 422-436.	0.8	20
35	Electronic structure of Nb impurities in and on TiO ₂ . Physical Chemistry Chemical Physics, 1999, 1, 3793-3799.	1.3	20
36	Electronic structure of CuTPP and CuTPP(F) complexes: a combined experimental and theoretical study II. Physical Chemistry Chemical Physics, 2016, 18, 24890-24904.	1.3	19

#	ARTICLE	IF	CITATIONS
37	Reaction of Copper(II) Chloroacetate with Pyrazole. Synthesis of a One-Dimensional Coordination Polymer and Unexpected Dehydrochlorination Reaction. <i>Crystal Growth and Design</i> , 2015, 15, 5910-5918.	1.4	18
38	A theoretical study of the L3 pre-edge XAS in Cu(II) complexes. <i>Physical Chemistry Chemical Physics</i> , 2014, 16, 19852-19855.	1.3	17
39	Theoretical modeling of the L _{2,3} -edge X-ray absorption spectra of Mn(acac) ₂ and Co(acac) ₂ complexes. <i>Physical Chemistry Chemical Physics</i> , 2016, 18, 2242-2249.	1.3	17
40	A LCAO-LDF study of CO and NH ₃ chemisorption on ZnO(0001). <i>Surface Science</i> , 1994, 307-309, 1182-1187.	0.8	16
41	Experimental and Theoretical Investigation of the Molecular and Electronic Structure of [Zn ₄ (S ₂ As(CH ₃) ₂) ₆] and [Cd ₄ (S ₂ As(CH ₃) ₂) ₆]: A Two Possible Molecular Models of Extended Metal Chalcogenide Semiconductors. <i>Inorganic Chemistry</i> , 1999, 38, 1145-1152.		16
42	Electronic structures of CuTPP and CuTPP(F) complexes. A combined experimental and theoretical study I. <i>Physical Chemistry Chemical Physics</i> , 2016, 18, 18727-18738.	1.3	16
43	L _{2,3} -edges absorption spectra of a 2D complex system: a theoretical modelling. <i>Physical Chemistry Chemical Physics</i> , 2016, 18, 28110-28116.	1.3	16
44	Ferrous to Ferric Transition in Fe-Phthalocyanine Driven by NO ₂ Exposure. <i>Chemistry - A European Journal</i> , 2021, 27, 3526-3535.	1.7	16
45	A molecular cluster approach to the study of the bonding of CO and NH ₃ to a d ¹⁰ ion on ZnO(0001) and CuCl(111). <i>Inorganica Chimica Acta</i> , 1995, 235, 151-158.	1.2	15
46	A theoretical investigation of the relaxation effects induced on the ZnO(101̄,0) surface by the chemisorption of H ₂ and CO. <i>Applied Surface Science</i> , 1999, 142, 192-195.	3.1	15
47	Very high temperature tiling of tetraphenylporphyrin on rutile TiO ₂ (110). <i>Nanoscale</i> , 2017, 9, 11694-11704.	2.8	15
48	Molecular orbital analysis of some ligand-bridged iron binuclear complexes by UV photoelectron spectroscopy and DV-XM calculations. <i>Journal of Organometallic Chemistry</i> , 1989, 366, 343-355.	0.8	14
49	Mn(acac) ₂ and Mn(acac) ₃ complexes, a theoretical modeling of their L _{2,3} -edges X-ray absorption spectra. <i>Polyhedron</i> , 2017, 135, 216-223.	1.0	14
50	Covalently Conjugated Gold-Porphyrin Nanostructures. <i>Nanomaterials</i> , 2020, 10, 1644.	1.9	14
51	Zn ₄ O(O ₂ CNEt ₂) ₆ : a further molecular model of ZnO. <i>Journal of the Chemical Society, Faraday Transactions</i> , 1993, 89, 4363.	1.7	13
52	Theoretical Investigation of the Electronic Properties of Three Vanadium Phthalocyaninato (Pc) Based Complexes: PcV, PcVO, and PcVI. <i>Inorganic Chemistry</i> , 2018, 57, 1859-1869.	1.9	13
53	Substrate involvement in dioxygen bond dissociation catalysed by iron phthalocyanine supported on Ag(100). <i>Chemical Communications</i> , 2018, 54, 9418-9421.	2.2	13
54	UV-Photoelectron Spectra of [M(η ³ -C ₃ H ₅) ₂] (M = Ni, Pd, Pt) Revisited: A Quasi-Relativistic Density Functional Study. <i>Organometallics</i> , 2001, 20, 754-762.	1.1	12

#	ARTICLE	IF	CITATIONS
55	Further Insights into the Structure of $[M(\eta^2(C,C\epsilon^-)-C_3O_2)(PPh_3)_2]$ (M = Ni, Pd, Pt) by Quasi-Relativistic Density Functional Calculations and Solid-State CP/MAS NMR. <i>Organometallics</i> , 2002, 21, 2235-2239.	1.1	12
56	Coordinative unsaturated Cu^{I} entities are crucial intermediates governing cell internalization of copper. A combined experimental ESI-MS and DFT study. <i>Metallomics</i> , 2019, 11, 1800-1804.	1.0	12
57	Luminescent Thermometers: From a Library of Europium(III) β -Diketonates to a General Model for Predicting the Thermometric Behaviour of Europium-Based Coordination Systems. <i>ChemPhotoChem</i> , 2020, 4, 674-684.	1.5	12
58	On-surface synthesis of extended linear graphyne molecular wires by protecting the alkynyl group. <i>Physical Chemistry Chemical Physics</i> , 2020, 22, 12180-12186.	1.3	12
59	Comparative Experimental and Theoretical Study of the Fe L _{2,3} -Edges X-ray Absorption Spectroscopy in Three Highly Popular, Low-Spin Organoiron Complexes: $[Fe(CO)_5]$, $[(\eta^5-C_5H_5)Fe(CO)(\eta^4-CO)]_2$, and $[(\eta^5-C_5H_5)_2Fe]_2$. <i>Inorganic Chemistry</i> , 2019, 58, 5844-5857.	1.9	11
60	Multireference <i>Ab Initio</i> Investigation on Ground and Low-Lying Excited States: Systematic Evaluation of $\langle i \rangle \langle i \rangle$ Mixing in a Eu^{3+} Luminescent Complex. <i>Inorganic Chemistry</i> , 2021, 60, 315-324.	1.9	11
61	Experimental and QM/MM investigation of the hydrated silica surface reactivity. <i>Chemical Physics Letters</i> , 2005, 405, 459-464.	1.2	10
62	XAS of tetrakis(phenyl)- and tetrakis(pentafluorophenyl)-porphyrin: an experimental and theoretical study. <i>Physical Chemistry Chemical Physics</i> , 2015, 17, 2001-2011.	1.3	10
63	Reversible redox reactions in metal-supported porphyrin: the role of spin and oxidation state. <i>Journal of Materials Chemistry C</i> , 2021, 9, 12559-12565.	2.7	10
64	A theoretical study of the chemisorption of H ₂ O and H ₂ S on the Ti ₂ O ₃ (10 $\bar{1}$,2) non-polar surface. <i>Physical Chemistry Chemical Physics</i> , 2003, 5, 2461-2468.	1.3	9
65	Density Functional Theory Study of the Binding Capability of Tris(pyrazol-1-yl)methane toward Cu(I) and Ag(I) Cations. <i>Journal of Physical Chemistry A</i> , 2008, 112, 6723-6731.	1.1	9
66	π -Pigments of Life, Molecules Well Suited to Investigate Metal-Ligand Symmetry-Restricted Covalency. <i>European Journal of Inorganic Chemistry</i> , 2018, 2018, 3145-3155.	1.0	9
67	An experimental and theoretical study of the electronic and molecular structure of $[Zn_4(\mu_4-S)(\mu_3-S_2P(OC_2H_5)_2)_6]$: the first molecular model of ZnS. <i>Journal of Organometallic Chemistry</i> , 2000, 593-594, 307-314.	0.8	8
68	A Comparative Theoretical Investigation of Three Sodalite Systems: Δ Cd ₄ S(AlO ₂) ₆ , Zn ₄ O(BO ₂) ₆ , and Zn ₄ S(BO ₂) ₆ . <i>Journal of Physical Chemistry B</i> , 2002, 106, 2569-2573.	1.2	8
69	A theoretical study of the interaction of CO ₂ with hydroxylated α -alumina. <i>Surface Science</i> , 2004, 566-568, 890-894.	0.8	8
70	Ligand-Field Strength and Symmetry-Restricted Covalency in Cu(I) Complexes - a Near-Edge X-ray Absorption Fine Structure Spectroscopy and Time-Dependent DFT Study. <i>European Journal of Inorganic Chemistry</i> , 2015, 2015, 2707-2713.	1.0	8
71	New light on an old debate: does the RCN-PtCl ₂ bond include any back-donation? RCN-PtCl ₂ backbonding vs. the IR ν_{C-N} blue-shift dichotomy in organonitrile-platinum complexes. A thorough density functional theory energy decomposition analysis study. <i>Dalton Transactions</i> , 2019, 48, 12974-12985.	1.6	7
72	Comparative Experimental and Theoretical Study of the C and O K-Edge X-ray Absorption Spectroscopy in Three Highly Popular, Low Spin Organoiron Complexes: $[Fe(CO)_5]$, $[(\eta^5-C_5H_5)Fe(CO)(\eta^4-CO)]_2$, and $[(\eta^5-C_5H_5)_2Fe]_2$. <i>Inorganic Chemistry</i> , 2019, 58, 16411-16423.	1.9	7

#	ARTICLE	IF	CITATIONS
73	Antenna triplet DFT calculations to drive the design of luminescent Ln ³⁺ complexes. Dalton Transactions, 2020, 49, 14556-14563.	1.6	7
74	A comparative study of the CO chemisorption on TiO ₂ (102) and V ₂ O ₃ (102) non-polar surfaces. Surface Science, 2004, 566-568, 451-456.	0.8	6
75	Carbonyl copper(<i>κ</i>) complexes with hydrotris(1,2,4-triazolyl)borate, hydrotris(pyrazolyl)borate, and tris(pyrazolyl)methanelligands: a DFT study. Physical Chemistry Chemical Physics, 2009, 11, 94-96.	1.3	6
76	Pt(II) nitrile complexes: New insights on old complexes from a combined experimental and theoretical study. Inorganica Chimica Acta, 2017, 455, 489-504.	1.2	6
77	Spin state, electronic structure and bonding on C-scorpionate [Fe(II)Cl ₂ (tpm)] catalyst: An experimental and computational study. Catalysis Today, 2020, 358, 403-411.	2.2	6
78	Adsorption and reactivity of CO at a stepped SrTiO ₃ (110) surface in the presence of Cu impurities. Applied Surface Science, 2020, 521, 146450.	3.1	6
79	Heterovalent BiIII/PbII Ionic Substitution in One-Dimensional Trimethylsulfoxonium Halide Pseudo-Perovskites (X = I, Br). Journal of Physical Chemistry C, 2021, 125, 11728-11742.	1.5	6
80	A Theoretical Study of the Occupied and Unoccupied Electronic Structure of High- and Intermediate-Spin Transition Metal Phthalocyaninato (Pc) Complexes: VPc, CrPc, MnPc, and FePc. Nanomaterials, 2021, 11, 54.	1.9	6
81	Bi ³⁺ doping in 1D ((CH ₃) ₃ SO)PbI ₃ : a model for defect interactions in halide perovskites. Journal of Materials Chemistry C, 2022, 10, 1458-1469.	2.7	6
82	Distortion-driven spin switching in electron-doped metal porphyrins. Journal of Materials Chemistry C, 2022, 10, 9748-9757.	2.7	5
83	A Theoretical Study of Amine Bonding in Titanium Alkoxide Adducts. Monatshefte für Chemie, 2007, 138, 1217-1223.	0.9	4
84	Trinuclear Cu(II) complexes from the classic [Cu ₂ (RCOO) ₄ (H ₂ O) ₂] lantern complex and pyrazole: a DFT modelling of the reaction path. Inorganica Chimica Acta, 2018, 470, 93-99.	1.2	4
85	Mn ^{II} -Cu Transmetalation as a Strategy for the Assembly of Decoupled Metal-Organic Networks on Sn/Cu(001) Surface Alloys. Journal of Physical Chemistry C, 2020, 124, 18993-19002.	1.5	4
86	Nature of the Ligand-Centered Triplet State in Gd ³⁺ ^{1,2} -Diketonate Complexes as Revealed by Time-Resolved EPR Spectroscopy and DFT Calculations. Inorganic Chemistry, 2021, 60, 15141-15150.	1.9	4
87	The Magnetic Behaviour of CoTPP Supported on Coinage Metal Surfaces in the Presence of Small Molecules: A Molecular Cluster Study of the Surface trans-Effect. Nanomaterials, 2022, 12, 218.	1.9	4
88	On surface chemical reactions of free-base and titanyl porphyrins with r-TiO ₂ (110): a unified picture. Physical Chemistry Chemical Physics, 2022, 24, 12719-12744.	1.3	4
89	A quasi-relativistic density functional study of structural and electronic properties of the bis-ketene cis-[Pt{ <i>η</i> -3-C ₃ H ₅ }{ <i>η</i> -1-C(PPh ₃)CO} ₂] ⁺ . Journal of Organometallic Chemistry, 2003, 682, 255-259.	0.8	3
90	Reaction between Indazole and Pd-Bound Isocyanides: A Theoretical Mechanistic Study. Molecules, 2018, 23, 2942.	1.7	3

#	ARTICLE	IF	CITATIONS
91	An experimental and theoretical study of metallorganic coordination networks of tetrahydroquinone on Cu(111). <i>New Journal of Chemistry</i> , 2019, 43, 19186-19192.	1.4	3
92	Stabilization of high-spin Mn ions in tetra-pyrrolic configuration on copper. <i>Applied Surface Science</i> , 2021, 551, 149307.	3.1	3
93	A theoretical study of the electronic structure of O2 interstitial impurities in silica. <i>Computational and Theoretical Chemistry</i> , 2003, 631, 111-116.	1.5	2
94	Interstitial O3 in silica: a molecular cluster density functional study. <i>Chemical Physics Letters</i> , 2004, 392, 146-150.	1.2	2
95	A DFT mechanistic study of the synthesis of trans-Z,Z-[PtII(Cl)(NH3){HN=C(NH2)Me}2]Cl from addition of NH3 to trans-[PtII(Cl)2(NCMe)2]. <i>Inorganica Chimica Acta</i> , 2020, 511, 119847.	1.2	2
96	DFT modelling of the NO reduction process at the Cu-doped SrTiO3(100) stepped surface. <i>Inorganica Chimica Acta</i> , 2020, 511, 119813.	1.2	2
97	cis-[(η^5 -C5H5)Fe(η^1 -CO)(η^1 -CO)]2, the poor relative between cis and trans tautomers. A theoretical study of the gas-phase Fe L3-edge and C and O K-edge XAS of trans-/cis-[(η^5 -C5H5)Fe(η^1 -CO)(η^1 -CO)]2. <i>Physical Chemistry Chemical Physics</i> , 2021, 23, 24661-24668.	1.3	1
98	[Zn10(μ_4 -S)(μ_3 -S)6(Py)9(SO4)3] as a molecular model of ZnS surfaces: an experimental and theoretical study. <i>Theoretical Chemistry Accounts</i> , 2012, 131, 1.	0.5	0
99	Luminescent Thermometers: From a Library of Europium(III) β -diketonates to a General Model for Predicting the Thermometric Behaviour of Europium-Based Coordination Systems. <i>ChemPhotoChem</i> , 2020, 4, 646.	1.5	0
100	[Zn10(μ_4 -S)(μ_3 -S)6(Py)9(SO4)3] as a molecular model of ZnS surfaces: an experimental and theoretical study. <i>Highlights in Theoretical Chemistry</i> , 2013, , 161-168.	0.0	0
101	Donation and back-donation in cis- and trans-[(η^5 -C5H5)Fe(η^1 -CO)(η^1 -CO)]2 tautomers: Which relative is more generous? An ETS-NOCV bond analysis. <i>Inorganica Chimica Acta</i> , 2022, 536, 120897.	1.2	0