

Mariona Sodupe

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/7312642/publications.pdf>

Version: 2024-02-01

209
papers

8,290
citations

41258

49
h-index

64668

79
g-index

214
all docs

214
docs citations

214
times ranked

7124
citing authors

#	ARTICLE	IF	CITATIONS
1	Silica Surface Features and Their Role in the Adsorption of Biomolecules: Computational Modeling and Experiments. <i>Chemical Reviews</i> , 2013, 113, 4216-4313.	23.0	508
2	Ground State of the (H ₂ O) ₂ ⁺ Radical Cation: DFT versus Post-Hartree-Fock Methods. <i>Journal of Physical Chemistry A</i> , 1999, 103, 166-170.	1.1	232
3	A theoretical study of the positive and dipositive ions of M(NH ₃) _n and M(H ₂ O) _n for M=Mg, Ca, or Sr. <i>Journal of Chemical Physics</i> , 1992, 96, 4453-4463.	1.2	206
4	Single versus Double Proton-Transfer Reactions in Watson-Crick Base Pair Radical Cations. A Theoretical Study. <i>Journal of the American Chemical Society</i> , 1998, 120, 8159-8167.	6.6	203
5	Realistic Models of Hydroxylated Amorphous Silica Surfaces and MCM-41 Mesoporous Material Simulated by Large-scale Periodic B3LYP Calculations. <i>Advanced Materials</i> , 2008, 20, 4579-4583.	11.1	199
6	The Different Nature of Bonding in Cu ⁺ -Glycine and Cu ²⁺ -Glycine. <i>Journal of Physical Chemistry B</i> , 1999, 103, 2310-2317.	1.2	198
7	Design, Selection, and Characterization of Thioflavin-Based Intercalation Compounds with Metal Chelating Properties for Application in Alzheimer's Disease. <i>Journal of the American Chemical Society</i> , 2009, 131, 1436-1451.	6.6	196
8	Small molecule inhibits α -synuclein aggregation, disrupts amyloid fibrils, and prevents degeneration of dopaminergic neurons. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2018, 115, 10481-10486.	3.3	166
9	Atomic reference energies for density functional calculations. <i>Chemical Physics Letters</i> , 1997, 265, 481-489.	1.2	154
10	Theoretical Study of M ⁺ -CO ₂ and OM+CO Systems for First Transition Row Metal Atoms. <i>Journal of Physical Chemistry A</i> , 1997, 101, 7854-7859.	1.1	112
11	Coordination of Cu ⁺ Ions to Zeolite Frameworks Strongly Enhances Their Ability To Bind NO ₂ . An Ab-Initio Density Functional Study. <i>Journal of the American Chemical Society</i> , 1998, 120, 1545-1551.	6.6	109
12	A Quantum Chemical Study of Cu ²⁺ Interacting with Guanine-Cytosine Base Pair. Electrostatic and Oxidative Effects on Intermolecular Proton-Transfer Processes. <i>Journal of Physical Chemistry A</i> , 2004, 108, 333-341.	1.1	106
13	Affinity Scale for the Interaction of Amino Acids with Silica Surfaces. <i>Journal of Physical Chemistry C</i> , 2009, 113, 5741-5750.	1.5	105
14	Theoretical study of the bonding of the first-row transition-metal positive ions to ethylene. <i>The Journal of Physical Chemistry</i> , 1992, 96, 2118-2122.	2.9	101
15	Theoretical study of the bonding of the first- and second-row transition-metal positive ions to acetylene. <i>The Journal of Physical Chemistry</i> , 1991, 95, 8640-8645.	2.9	100
16	Adsorption of NH ₃ and H ₂ O in Acidic Chabazite. Comparison of ONIOM Approach with Periodic Calculations. <i>Journal of Physical Chemistry B</i> , 2005, 109, 3539-3545.	1.2	96
17	Can Cu ⁺ -Exchanged Zeolites Store Molecular Hydrogen? An Ab-Initio Periodic Study Compared with Low-Temperature FTIR. <i>Journal of Physical Chemistry B</i> , 2004, 108, 8278-8286.	1.2	91
18	Theoretical study of one and two ammonia molecules bound to the first-row transition metal ions. <i>The Journal of Physical Chemistry</i> , 1991, 95, 10677-10681.	2.9	90

#	ARTICLE	IF	CITATIONS
19	Ab initio molecular dynamics study of the hydration of Li ⁺ , Na ⁺ and K ⁺ in a montmorillonite model. Influence of isomorphic substitution. <i>Physical Chemistry Chemical Physics</i> , 2010, 12, 688-697.	1.3	90
20	Ground and Low-Lying States of Cu ²⁺ +H ₂ O. A Difficult Case for Density Functional Methods. <i>Journal of Physical Chemistry A</i> , 2004, 108, 6072-6078.	1.1	85
21	Differences in the Activation Processes of Phosphine-Containing and Grubbs's Hoveyda-Type Alkene Metathesis Catalysts. <i>Organometallics</i> , 2012, 31, 4203-4215.	1.1	85
22	Protonation of glycine, serine and cysteine. Conformations, proton affinities and intrinsic basicities. <i>Computational and Theoretical Chemistry</i> , 2001, 537, 307-318.	1.5	83
23	Interaction of Glycine with Isolated Hydroxyl Groups at the Silica Surface: First Principles B3LYP Periodic Simulation. <i>Langmuir</i> , 2006, 22, 6593-6604.	1.6	83
24	DFT Mechanistic Study on Diene Metathesis Catalyzed by Ru-Based Grubbs's Hoveyda-Type Carbenes: The Key Role of Electron Density Delocalization in the Hoveyda Ligand. <i>Chemistry - A European Journal</i> , 2010, 16, 7331-7343.	1.7	78
25	Crystal structure of thioflavin-T and its binding to amyloid fibrils: insights at the molecular level. <i>Chemical Communications</i> , 2010, 46, 1156.	2.2	78
26	Cation-π Interactions and Oxidative Effects on Cu ⁺ and Cu ²⁺ Binding to Phe, Tyr, Trp, and His Amino Acids in the Gas Phase. Insights from First-Principles Calculations. <i>Journal of Physical Chemistry B</i> , 2006, 110, 24189-24199.	1.2	77
27	Does Silica Surface Catalyze Peptide Bond Formation? New Insights from First-Principles Calculations. <i>ChemPhysChem</i> , 2006, 7, 157-163.	1.0	77
28	Deep-space glycine formation via Strecker-type reactions activated by ice water dust mantles. A computational approach. <i>Physical Chemistry Chemical Physics</i> , 2010, 12, 5285.	1.3	77
29	Theoretical Study of the Ionization of Phenol-Water and Phenol-Ammonia Hydrogen-Bonded Complexes. <i>Journal of Physical Chemistry A</i> , 1997, 101, 9142-9151.	1.1	76
30	Aluminosilicate Surfaces as Promoters for Peptide Bond Formation: An Assessment of Bernal's Hypothesis by ab Initio Methods. <i>Journal of the American Chemical Society</i> , 2007, 129, 8333-8344.	6.6	75
31	Theoretical Study of the Adsorption of RNA/DNA Bases on the External Surfaces of Na ⁺ -Montmorillonite. <i>Journal of Physical Chemistry C</i> , 2009, 113, 13741-13749.	1.5	72
32	Gas-Phase Reactivity of Ni ⁺ with Glycine. <i>Journal of Physical Chemistry A</i> , 2001, 105, 5340-5347.	1.1	66
33	Structure and fragmentation of glycine, alanine, serine and cysteine radical cations. A theoretical study. <i>Computational and Theoretical Chemistry</i> , 2005, 727, 191-197.	1.5	63
34	Three Dimensional Models of Cu ²⁺ -Al ²⁺ (16) Complexes from Computational Approaches. <i>Journal of the American Chemical Society</i> , 2011, 133, 15008-15014.	6.6	61
35	Gas Phase Intramolecular Proton Transfer in Cationized Glycine and Chlorine Substituted Derivatives (M-Gly, M=Na ⁺ , Mg ²⁺ , Cu ⁺ , Ni ⁺ , and Cu ²⁺): Existence of Zwitterionic Structures?. <i>Chemistry - A European Journal</i> , 2000, 6, 4393-4399.	1.7	60
36	A theoretical study of Mg(CO ₂) _n and Sr(CO ₂) _n for n = 1 and 2 and Mg ₂ CO ₂ . <i>Chemical Physics Letters</i> , 1992, 192, 185-194.	1.2	59

#	ARTICLE	IF	CITATIONS
37	Intramolecular Proton Transfer in Glycine Radical Cation. <i>Journal of Physical Chemistry A</i> , 2000, 104, 1256-1261.	1.1	59
38	Effect of Counterpoise Correction on the Geometries and Vibrational Frequencies of Hydrogen Bonded Systems. <i>Journal of Physical Chemistry A</i> , 2001, 105, 4359-4364.	1.1	57
39	Mechanistic Insights into Ring-Closing Enyne Metathesis with the Second-Generation Grubbs-Hoveyda Catalyst: A DFT Study. <i>Chemistry - A European Journal</i> , 2011, 17, 7506-7520.	1.7	56
40	Thioflavin-T excimer formation upon interaction with amyloid fibers. <i>Chemical Communications</i> , 2013, 49, 5745.	2.2	56
41	A Theoretical Study of the Endo/Exo Selectivity of the Diels-Alder Reaction between Cyclopropene and Butadiene. <i>Journal of the American Chemical Society</i> , 1997, 119, 4232-4238.	6.6	55
42	Computational calculations of pKa values of imidazole in Cu(ii) complexes of biological relevance. <i>Physical Chemistry Chemical Physics</i> , 2011, 13, 7852.	1.3	55
43	H-Bond Features of Fully Hydroxylated Surfaces of Crystalline Silica Polymorphs: A Periodic B3LYP Study. <i>Journal of Physical Chemistry C</i> , 2009, 113, 17876-17884.	1.5	54
44	Determination of the structure and bond energies of nickel dioxide and copper dioxide. <i>The Journal of Physical Chemistry</i> , 1993, 97, 856-859.	2.9	53
45	Solvent-assisted catalysis in the enolization of acetaldehyde radical cation. <i>Chemical Physics Letters</i> , 2001, 334, 112-118.	1.2	52
46	Cu ²⁺ Cation Coordination to Adenine-Thymine Base Pair. Effects on Intermolecular Proton-Transfer Processes. <i>Journal of Physical Chemistry B</i> , 2008, 112, 4817-4825.	1.2	52
47	Theoretical Study of the Ionization of the H ₂ O-H ₂ O, NH ₃ -H ₂ O, and FH-H ₂ O Hydrogen-Bonded Molecules. <i>Journal of the American Chemical Society</i> , 1994, 116, 8249-8258.	6.6	51
48	COMPUTATIONAL STUDY OF INTERSTELLAR GLYCINE FORMATION OCCURRING AT RADICAL SURFACES OF WATER-ICE DUST PARTICLES. <i>Astrophysical Journal</i> , 2012, 754, 24.	1.6	51
49	How Does Silica Catalyze the Amide Bond Formation under Dry Conditions? Role of Specific Surface Silanol Pairs. <i>ACS Catalysis</i> , 2018, 8, 4558-4568.	5.5	51
50	A theoretical study of the spectroscopy of MgH ₂ O ⁺ and MgCH ₃ OH ⁺ . <i>Chemical Physics Letters</i> , 1992, 195, 494-499.	1.2	50
51	The calculation of the vibrational frequencies of CuCO ⁺ , NiCO and CuCH ₃ . <i>Chemical Physics Letters</i> , 1992, 189, 266-272.	1.2	49
52	Isomerization versus Fragmentation of Glycine Radical Cation in Gas Phase. <i>Journal of Physical Chemistry A</i> , 2002, 106, 5697-5702.	1.1	49
53	Electron hole formation in acidic zeolite catalysts. <i>Journal of Chemical Physics</i> , 2004, 121, 6034-6041.	1.2	49
54	pH-Responsive Self-Assembly of Amyloid Fibrils for Dual Hydrolase-Oxidase Reactions. <i>ACS Catalysis</i> , 2021, 11, 595-607.	5.5	49

#	ARTICLE	IF	CITATIONS
55	Theoretical determination of the alkali-metal superoxide bond energies. <i>Chemical Physics Letters</i> , 1992, 195, 200-206.	1.2	48
56	Hydrogen Atom or Proton Transfer in Neutral and Single Positive Ions of Salicylic Acid and Related Compounds. <i>Journal of the American Chemical Society</i> , 1999, 121, 8882-8890.	6.6	48
57	Effects of protonation on proton-transfer processes in guanine?cytosine Watson?Crick base pairs. <i>Theoretical Chemistry Accounts</i> , 2004, 112, 318.	0.5	48
58	Visibleâ€Light Photocatalytic Intramolecular Cyclopropane Ring Expansion. <i>Angewandte Chemie - International Edition</i> , 2017, 56, 7826-7830.	7.2	47
59	Comparison of density functional and coupled cluster methods in the study of metalâ€ligand systems: Scâ€CO ₂ and Cuâ€NO ₂ . <i>Journal of Chemical Physics</i> , 1996, 105, 9966-9971.	1.2	46
60	KetoâˆEnol Isomerization of Acetaldehyde in HZSM5. A Theoretical Study Using the ONIOM2 Method. <i>Journal of Physical Chemistry B</i> , 2002, 106, 10220-10226.	1.2	46
61	Coordination Properties of the Oxime Analogue of Glycine to Cu(II). <i>Journal of Physical Chemistry A</i> , 2005, 109, 5668-5676.	1.1	46
62	Role of Mineral Surfaces in Prebiotic Chemical Evolution. In <i>Silico Quantum Mechanical Studies</i> . <i>Life</i> , 2019, 9, 10.	1.1	44
63	The Role of Exact Exchange in the Description of Cu ²⁺ (H ₂ O) _{<i>n</i>} (<i>n</i> = 1âˆ6) Complexes by Means of DFT Methods. <i>Journal of Physical Chemistry A</i> , 2010, 114, 10857-10863.	1.1	43
64	Cooperative effects at waterâ€crystalline silica interfaces strengthen surface silanol hydrogen bonding. An ab initio molecular dynamics study. <i>Physical Chemistry Chemical Physics</i> , 2012, 14, 10507.	1.3	43
65	Alâ€ligand binding energies. <i>Chemical Physics Letters</i> , 1991, 181, 321-326.	1.2	42
66	Interaction of Co ⁺ and Co ²⁺ with Glycine. A Theoretical Study. <i>Journal of Physical Chemistry A</i> , 2005, 109, 224-230.	1.1	42
67	Influence of N7 Protonation on the Mechanism of the N-Glycosidic Bond Hydrolysis in 2â€-Deoxyguanosine. A Theoretical Study. <i>Journal of Physical Chemistry B</i> , 2007, 111, 6071-6077.	1.2	42
68	On the Bonding in Sc-CO ₂ . <i>The Journal of Physical Chemistry</i> , 1995, 99, 8567-8571.	2.9	41
69	Influence of the Side Chain in the Structure and Fragmentation of Amino Acids Radical Cations. <i>Journal of Chemical Theory and Computation</i> , 2007, 3, 2210-2220.	2.3	41
70	Theoretical study of the adsorption of DNA bases on the acidic external surface of montmorillonite. <i>Physical Chemistry Chemical Physics</i> , 2012, 14, 945-954.	1.3	39
71	Palladium Nanoparticles Entrapped in Heavily Fluorinated Compounds. <i>Chemistry of Materials</i> , 2006, 18, 716-722.	3.2	38
72	Diels-Alder cycloadditions of electron-rich, electron-deficient, and push-pull dienes with cyclic dienophiles: high-pressure-induced reactions and theoretical calculations. <i>Journal of Organic Chemistry</i> , 1991, 56, 4135-4141.	1.7	37

#	ARTICLE	IF	CITATIONS
73	Effects of protonation on proton transfer processes in Watson-Crick adenine-thymine base pair. <i>Theoretical Chemistry Accounts</i> , 2007, 118, 113-121.	0.5	36
74	Theoretical study of the alkaline-earth metal superoxides BeO ₂ through SrO ₂ . <i>The Journal of Physical Chemistry</i> , 1992, 96, 9259-9264.	2.9	35
75	Peptide bond formation activated by the interplay of Lewis and Brønsted catalysts. <i>Chemical Physics Letters</i> , 2005, 408, 295-301.	1.2	35
76	On the Bonding of First-Row Transition Metal Cations to Guanine and Adenine Nucleobases. <i>Journal of Physical Chemistry A</i> , 2007, 111, 9823-9829.	1.1	34
77	Binding of Thioflavin T and Related Probes to Polymorphic Models of Amyloid- β Fibrils. <i>Journal of Physical Chemistry B</i> , 2017, 121, 8926-8934.	1.2	34
78	Metal-Mediated Deamination of Cytosine: Experiment and DFT Calculations. <i>Angewandte Chemie - International Edition</i> , 2004, 43, 5396-5399.	7.2	33
79	Coordination properties of glycylglycine to Cu ⁺ , Ni ⁺ and Co ⁺ . Influence of metal cation electronic configuration. <i>New Journal of Chemistry</i> , 2005, 29, 1585.	1.4	32
80	Hydrogen bonding and aromaticity in the guanine-cytosine base pair interacting with metal cations (M ⁺ =Cu ⁺ , Ca ²⁺ and Cu ²⁺). <i>Molecular Physics</i> , 2005, 103, 163-173.	0.8	32
81	Is the Peptide Bond Formation Activated by Cu ²⁺ Interactions? Insights from Density Functional Calculations. <i>Journal of Physical Chemistry B</i> , 2007, 111, 5740-5747.	1.2	32
82	Toward Olefin Metathesis with Iron Carbene Complexes: Benefits of Tridentate σ -Donating Ligands. <i>Organometallics</i> , 2016, 35, 3914-3923.	1.1	32
83	<i>exo</i> / <i>endo</i> Selectivity of the Ring-Closing Enyne Methathesis Catalyzed by Second Generation Ru-Based Catalysts. Influence of Reactant Substituents. <i>ACS Catalysis</i> , 2013, 3, 206-218.	5.5	31
84	DFT Study on the Relative Stabilities of Substituted Ruthenacyclobutane Intermediates Involved in Olefin Cross-Metathesis Reactions and Their Interconversion Pathways. <i>Organometallics</i> , 2014, 33, 6065-6075.	1.1	31
85	Spin-forbidden N ₂ O dissociation in Cu-ZSM-5. <i>Chemical Physics Letters</i> , 2003, 368, 242-246.	1.2	30
86	Physisorption vs. chemisorption of probe molecules on boron nitride nanomaterials: the effect of surface curvature. <i>Physical Chemistry Chemical Physics</i> , 2013, 15, 13190.	1.3	30
87	DFT Study on the Recovery of Hoveyda-Grubbs Type Catalyst Precursors in Enyne and Diene Ring-Closing Metathesis. <i>Chemistry - A European Journal</i> , 2013, 19, 14553-14565.	1.7	30
88	3D Structures and Redox Potentials of Cu ²⁺ -Al ¹⁶ Complexes at Different pH: A Computational Study. <i>Journal of Physical Chemistry B</i> , 2014, 118, 4840-4850.	1.2	30
89	Amide and Peptide Bond Formation: Interplay between Strained Ring Defects and Silanol Groups at Amorphous Silica Surfaces. <i>Journal of Physical Chemistry C</i> , 2016, 120, 24817-24826.	1.5	30
90	A study of the ground and low-lying states of MgCH ₄ . <i>Chemical Physics Letters</i> , 1993, 214, 489-494.	1.2	28

#	ARTICLE	IF	CITATIONS
91	Theoretical Study of the Ionization of the H ₂ S-H ₂ S, PH ₃ -H ₂ S, and ClH-H ₂ S Hydrogen Bonded Molecules. <i>Journal of the American Chemical Society</i> , 1995, 117, 8416-8421.	6.6	28
92	Interstellar H adsorption and H ₂ formation on the crystalline (010) forsterite surface: a B3LYP-D2* periodic study. <i>Physical Chemistry Chemical Physics</i> , 2014, 16, 17447-17457.	1.3	28
93	Canonical, Deprotonated, or Zwitterionic? A Computational Study on Amino Acid Interaction with the TiO ₂ (101) Anatase Surface. <i>Journal of Physical Chemistry C</i> , 2017, 121, 14156-14165.	1.5	28
94	Water Adsorption on MO ₂ (M = Ti, Ru, and Ir) Surfaces. Importance of Octahedral Distortion and Cooperative Effects. <i>ACS Omega</i> , 2019, 4, 2989-2999.	1.6	28
95	Periodic DFT Study of Radical Species on Crystalline Silica Surfaces. <i>Journal of Physical Chemistry C</i> , 2010, 114, 16430-16438.	1.5	27
96	Structures and Stabilities of Fe ^{2+/3+} Complexes Relevant to Alzheimer's Disease: An ab Initio Study. <i>Journal of Physical Chemistry A</i> , 2011, 115, 12523-12530.	1.1	27
97	Water-catalyzed isomerization of the glycine radical cation. From hydrogen-atom transfer to proton-transport catalysis. <i>Theoretical Chemistry Accounts</i> , 2004, 111, 217-222.	0.5	26
98	Effects of ionization on N-glycylglycine peptide: Influence of intramolecular hydrogen bonds. <i>Journal of Chemical Physics</i> , 2006, 124, 154306.	1.2	26
99	Reactivity of Metal Carbenes with Olefins: Theoretical Insights on the Carbene Electronic Structure and Cyclopropanation Reaction Mechanism. <i>Journal of Physical Chemistry A</i> , 2018, 122, 1702-1712.	1.1	26
100	A study of the ground and low-lying states of MgC ₂ H ₂ ⁺ and MgC ₂ H ₄ ⁺ . <i>Chemical Physics</i> , 1994, 185, 163-171.	0.9	25
101	Theoretical Study of the Structure of ZCu(NO ₂)(NO). A Proposed Intermediate in the NO _x Decomposition by Cu ⁺ /ZSM-5. <i>Journal of Physical Chemistry A</i> , 2000, 104, 3225-3230.	1.1	25
102	On the NO Decomposition by Cu ⁺ /ZSM-5 through the ZCu(NO ₂)(NO) or ZCu(N ₂ O ₃) Intermediates. <i>Journal of Physical Chemistry B</i> , 2002, 106, 1372-1379.	1.2	25
103	Do H-Bond Features of Silica Surfaces Affect the H ₂ O and NH ₃ Adsorption? Insights from Periodic B3LYP Calculations. <i>Journal of Physical Chemistry A</i> , 2011, 115, 11221-11228.	1.1	25
104	Ab initio study of the ground and low-lying states of FeH. <i>Journal of Chemical Physics</i> , 1990, 92, 2478-2480.	1.2	24
105	Effects of Ionization, Metal Cationization and Protonation on 2'-Deoxyguanosine: Changes on Sugar Puckering and Stability of the N-Glycosidic Bond. <i>Journal of Physical Chemistry B</i> , 2006, 110, 5767-5772.	1.2	24
106	Gas phase reactivity of Cu ⁺ -aromatic amino acids. <i>International Journal of Mass Spectrometry</i> , 2006, 257, 60-69.	0.7	24
107	Formation versus Hydrolysis of the Peptide Bond from a Quantum-mechanical Viewpoint: The Role of Mineral Surfaces and Implications for the Origin of Life. <i>International Journal of Molecular Sciences</i> , 2009, 10, 746-760.	1.8	24
108	Disaggregation-induced fluorescence enhancement of NIAD-4 for the optical imaging of amyloid-β fibrils. <i>Physical Chemistry Chemical Physics</i> , 2015, 17, 19718-19725.	1.3	24

#	ARTICLE	IF	CITATIONS
109	Dioxygen activation in the Cu ^{II} amyloid β complex. <i>Physical Chemistry Chemical Physics</i> , 2015, 17, 27270-27274.	1.3	24
110	Drastic Effect of the Peptide Sequence on the Copper Binding Properties of Tripeptides and the Electrochemical Behaviour of Their Copper(II) Complexes. <i>Chemistry - A European Journal</i> , 2018, 24, 5153-5162.	1.7	24
111	Triplet ($\tilde{\Gamma}, \tilde{\Gamma}^*$) Reactivity of the Guanine ⁺ Cytosine DNA Base Pair: A Benign Deactivation versus Double Tautomerization via Intermolecular Hydrogen Transfer. <i>Journal of the American Chemical Society</i> , 2004, 126, 12770-12771.	6.6	23
112	Relevance of silicate surface morphology in interstellar H ₂ formation. Insights from quantum chemical calculations. <i>Monthly Notices of the Royal Astronomical Society</i> , 2015, 453, 914-924.	1.6	23
113	Thioflavin-based molecular probes for application in Alzheimer's disease: from in silico to in vitro models. <i>Metallomics</i> , 2015, 7, 83-92.	1.0	23
114	When the Surface Matters: Prebiotic Peptide Bond Formation on the TiO ₂ (101) Anatase Surface through Periodic DFT Simulations. <i>Chemistry - A European Journal</i> , 2018, 24, 16292-16301.	1.7	23
115	Chemistry of the scandium-benzynes in the gas phase. <i>Inorganic Chemistry</i> , 1991, 30, 3822-3829.	1.9	22
116	Hydrogen Bond vs Proton Transfer in HZSM5 Zeolite. A Theoretical Study. <i>Journal of Physical Chemistry B</i> , 2005, 109, 19301-19308.	1.2	22
117	Does Fe ²⁺ in olivine-based interstellar grains play any role in the formation of H ₂ ? Atomistic insights from DFT periodic simulations. <i>Chemical Communications</i> , 2016, 52, 6873-6876.	2.2	22
118	Theoretical study of the bonding of NO ₂ to Cu and Ag. <i>Journal of Chemical Physics</i> , 1995, 103, 9738-9743.	1.2	21
119	Density functional cluster model study of bonding and coordination modes of CO ₂ on Pd(111). <i>Surface Science</i> , 1999, 431, 208-219.	0.8	21
120	On the electronic structure of second generation Hoveyda Grubbs alkene metathesis precursors. <i>Computational and Theoretical Chemistry</i> , 2012, 996, 57-67.	1.1	21
121	Elucidating the 3D structures of Al(III) complexes: a template free strategy based on the pre-organization hypothesis. <i>Chemical Science</i> , 2017, 8, 5041-5049.	3.7	21
122	Origin of the Enhanced Interaction of Molecular Hydrogen with Extraframework Cu ⁺ and FeO ⁺ Cations in Zeolite Hosts. A Periodic DFT Study. <i>Journal of Physical Chemistry C</i> , 2010, 114, 13926-13934.	1.5	20
123	Ab Initio Design of Chelating Ligands Relevant to Alzheimer's Disease: Influence of Metalloaromaticity. <i>Journal of Physical Chemistry A</i> , 2011, 115, 12659-12666.	1.1	20
124	B3LYP Periodic Study of the Physicochemical Properties of the Nonpolar (010) Mg-Pure and Fe-Containing Olivine Surfaces. <i>Journal of Physical Chemistry A</i> , 2014, 118, 5866-5875.	1.1	20
125	Ground and low-lying states of FeH ⁺ as derived from ab initio self-consistent field and configuration interaction calculations. <i>Journal of Chemical Physics</i> , 1989, 90, 6436-6442.	1.2	19
126	Binding Properties of Cu ²⁺ -(glycyl) _n -glycine Complexes ($n = 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100$)	1.1	19

#	ARTICLE	IF	CITATIONS
127	Structure, Bonding, and Relative Stability of the Ground and Low-Lying Electronic States of CuO ₂ . The Role of Exact Exchange. <i>Journal of Physical Chemistry A</i> , 2009, 113, 1308-1317.	1.1	19
128	A DFT periodic study on the interaction between O ₂ and cation exchanged chabazite MCHA (M = H ⁺ , Na ⁺ or Cu ⁺): effects in the triplet-singlet energy gap. <i>Physical Chemistry Chemical Physics</i> , 2010, 12, 442-452.	1.3	19
129	Insights on the Binding of Thioflavin Derivative Markers to Amyloid-Like Fibril Models from Quantum Chemical Calculations. <i>Journal of Physical Chemistry B</i> , 2013, 117, 6674-6680.	1.2	19
130	3-Hydroxy-4-pyridinone derivatives as metal ion and amyloid binding agents. <i>Metallomics</i> , 2014, 6, 249-262.	1.0	19
131	Gas Phase Dissociation Energies of Saturated AHn ⁺ Radical Cations and AHn Neutrals (A = Li ⁺ , F, Na ⁺ , Cl): Dehydrogenation, Deprotonation, and Formation of AHn-2 ⁺ H ₂ Complexes. <i>Journal of the American Chemical Society</i> , 2003, 125, 7461-7469.	6.6	18
132	Gas Phase Reactivity of Ni ⁺ with Urea. <i>Mass Spectrometry and Theoretical Studies. Journal of Physical Chemistry A</i> , 2003, 107, 9865-9874.	1.1	18
133	A Theoretical Study on PdII Complexes Containing Hemilabile Pyrazole-Derived Ligands. <i>European Journal of Inorganic Chemistry</i> , 2006, 2006, 447-454.	1.0	18
134	Interaction between Ruthenium Oxide Surfaces and Water Molecules. Effect of Surface Morphology and Water Coverage. <i>Journal of Physical Chemistry C</i> , 2019, 123, 7786-7798.	1.5	18
135	Importance of the oxyl character on the IrO ₂ surface dependent catalytic activity for the oxygen evolution reaction. <i>Journal of Catalysis</i> , 2021, 396, 192-201.	3.1	18
136	An AM1 and MNDO theoretical study of the Diels-Alder reaction between .beta.-angelica lactone and cyclopentadiene. <i>Journal of Organic Chemistry</i> , 1989, 54, 2488-2490.	1.7	17
137	[2 + 2] Photocycloaddition of 2(5 <i>H</i>)-Furanone to Unsaturated Compounds. Insights from First Principles Calculations and Transient-Absorption Measurements. <i>Journal of Organic Chemistry</i> , 2010, 75, 4392-4401.	1.7	17
138	Structural Behaviors of Cytosine into the Hydrated Interlayer of Na ⁺ -Montmorillonite Clay. An ab Initio Molecular Dynamics Study. <i>Journal of Physical Chemistry C</i> , 2013, 117, 26179-26189.	1.5	17
139	Modeling Cu ²⁺ -Al ³⁺ complexes from computational approaches. <i>AIP Advances</i> , 2015, 5, 092402.	0.6	17
140	Theoretical study of the conformational preferences in the Cl ₄ W:CH ₂ complex. <i>Organometallics</i> , 1989, 8, 1837-1841.	1.1	16
141	The bonding in the low-lying states of MgO+2. <i>Chemical Physics Letters</i> , 1993, 203, 215-219.	1.2	16
142	Gas-phase chemistry of Sc(CH ₃) ₂ ⁺ with alkenes: activation of allylic carbon-hydrogen (C-H) bonds by a d ⁰ system and the migratory insertion of C:C bonds into scandium-methyl (Sc-CH ₃) bonds. <i>Journal of the American Chemical Society</i> , 1992, 114, 9106-9111.	6.6	15
143	Theoretical study of the ScCO ₂ ⁺ OScCO reaction. <i>Computational and Theoretical Chemistry</i> , 1996, 371, 79-84.	1.5	15
144	O-O Bond activation in H ₂ O ₂ and (CH ₃) ₃ C-OOH mediated by [Ni(cyclam)(CH ₃ CN) ₂](ClO ₄) ₂ : Different mechanisms to form the same Ni(III) product?. <i>Dalton Transactions</i> , 2011, 40, 6868.	1.6	15

#	ARTICLE	IF	CITATIONS
145	Gas-Phase and Microsolvated Glycine Interacting with Boron Nitride Nanotubes. A B3LYP-D2* Periodic Study. <i>Inorganics</i> , 2014, 2, 334-350.	1.2	15
146	The bonding in FeC ₅ H ₅ . <i>Chemical Physics Letters</i> , 1993, 207, 19-22.	1.2	14
147	How the site of ionisation influences side-chain fragmentation in histidine radical cation. <i>Chemical Physics Letters</i> , 2008, 451, 276-281.	1.2	14
148	In silico strategies for the selection of chelating compounds with potential application in metal-promoted neurodegenerative diseases. <i>Journal of Computer-Aided Molecular Design</i> , 2011, 25, 21-30.	1.3	14
149	On the mechanism of the N-glycosidic bond hydrolysis of 2- ϵ -deoxyguanosine: insights from first principles calculations. <i>Theoretical Chemistry Accounts</i> , 2011, 128, 619-626.	0.5	14
150	Pt ^{II} Coordination to N1 of 9-Methylguanine: Why it Facilitates Binding of Additional Metal Ions to the Purine Ring. <i>Chemistry - A European Journal</i> , 2011, 17, 9970-9983.	1.7	14
151	Influence of Ligands and Oxidation State on the Reactivity of Pentacoordinated Iron Carbenes with Olefins: Metathesis versus Cyclopropanation. <i>Organometallics</i> , 2018, 37, 1229-1241.	1.1	14
152	Formamide Adsorption at the Amorphous Silica Surface: A Combined Experimental and Computational Approach. <i>Life</i> , 2018, 8, 42.	1.1	14
153	Prebiotic chemistry. <i>Chemical Society Reviews</i> , 2012, 41, 5373.	18.7	13
154	Coordination properties of a metal chelator clioquinol to Zn ²⁺ studied by static DFT and ab initio molecular dynamics. <i>Physical Chemistry Chemical Physics</i> , 2015, 17, 13582-13589.	1.3	13
155	BCN-M: A Free Computational Tool for Generating Wulff-like Nanoparticle Models with Controlled Stoichiometry. <i>Journal of Physical Chemistry C</i> , 2020, 124, 1227-1237.	1.5	13
156	Metal coordination determines the catalytic activity of IrO ₂ nanoparticles for the oxygen evolution reaction. <i>Journal of Catalysis</i> , 2022, 412, 78-86.	3.1	13
157	Basic and acidic bifunctional catalysis: application to the tautomeric equilibrium of formamide. <i>Chemical Physics</i> , 2003, 295, 151-158.	0.9	12
158	Unusual hydrogen bonds in [AH ₃ ⋯H ₃ O] ⁺ radical cations (A=C, Si, Ge, Sn and Pb) Single-electron hydrogen bond, proton-hydride hydrogen bond and formation of [H ₂ AOH ₂] ⁺ ⋯H ₂ complexes. <i>Chemical Physics Letters</i> , 2004, 395, 27-32.	1.2	12
159	The metal-ligand binding energies for Sr(H ₂ O) _n . <i>Journal of Chemical Physics</i> , 1991, 95, 9422-9423.	1.2	11
160	Comment on: Anabinitio study of the ionization of sodium superoxide. <i>Journal of Chemical Physics</i> , 1992, 96, 7871-7871.	1.2	11
161	A theoretical study of the spectroscopy of SrH ₂ O ⁺ and SrNH ₃ . <i>Chemical Physics Letters</i> , 1993, 212, 624-630.	1.2	11
162	Coordination of NO ₂ to Cu and Mg in M(NO ₂) ₂ Complexes. A Theoretical Study. <i>Inorganic Chemistry</i> , 1998, 37, 4512-4517.	1.9	11

#	ARTICLE	IF	CITATIONS
163	Influence of π -stacking on the N7 and O6 proton affinity of guanine. <i>Theoretical Chemistry Accounts</i> , 2009, 123, 105-111.	0.5	11
164	Enhanced photocatalytic activity of gold nanoparticles driven by supramolecular host-guest chemistry. <i>Chemical Communications</i> , 2017, 53, 2126-2129.	2.2	11
165	Enhanced Metallophilicity in Metal-Carbene Systems: Stronger Character of Auophilic Interactions in Solution. <i>Chemistry - A European Journal</i> , 2020, 26, 997-1002.	1.7	11
166	Coordination of NO ₂ to Alkaline-Earth Metals. A Theoretical Study. <i>Journal of Physical Chemistry A</i> , 1998, 102, 630-635.	1.1	10
167	Bent and Linear Forms of the (1/4-Oxo)bis[trichloroferrate(III)] Dianion: An Intermolecular Effect Structural, Electronic and Magnetic Properties. <i>European Journal of Inorganic Chemistry</i> , 2003, 2003, 4187-4194.	1.0	10
168	In silico study of the interstellar prebiotic formation and delivery of glycine. <i>Rendiconti Lincei</i> , 2011, 22, 137-144.	1.0	10
169	Strained ring motif at silica surfaces: A quantum mechanical study of their reactivity towards protic molecules. <i>Computational and Theoretical Chemistry</i> , 2015, 1074, 168-177.	1.1	10
170	What is the structure of FeC ₅ H ₆ ⁺ ?. <i>Chemical Physics Letters</i> , 1995, 240, 526-532.	1.2	9
171	Gas-phase proton-transport self-catalysed isomerisation of glutamine radical cation: The important role of the side-chain. <i>Theoretical Chemistry Accounts</i> , 2007, 118, 589-595.	0.5	9
172	Coordination Properties of Lysine Interacting with Co(I) and Co(II). A Theoretical and Mass Spectrometry Study. <i>Journal of Physical Chemistry A</i> , 2008, 112, 12385-12392.	1.1	9
173	Coordination of (Glycyl) _n glycine (n = 1-3) to Co ⁺ and Co ²⁺ . <i>Journal of Physical Chemistry A</i> , 2009, 113, 8883-8892.	1.1	9
174	Mixed Adenine/Guanine Quartets with Three <i>trans</i> -Pt ^{II} (a = NH ₃ or MeNH ₂) Cross-Links: Linkage and Rotational Isomerism, Base Pairing, and Loss of NH ₃ . <i>Chemistry - A European Journal</i> , 2014, 20, 3394-3407.	1.7	9
175	Computational study on donor-acceptor optical markers for Alzheimer's disease: a game of charge transfer and electron delocalization. <i>Physical Chemistry Chemical Physics</i> , 2016, 18, 11634-11643.	1.3	9
176	Fluorous I-Carbidopa Precursors: Highly Enantioselective Synthesis and Computational Prediction of Bioactivity. <i>Journal of Organic Chemistry</i> , 2018, 83, 303-313.	1.7	9
177	Activating a Peroxo Ligand for C=O Bond Formation. <i>Angewandte Chemie - International Edition</i> , 2019, 58, 3037-3041.	7.2	9
178	Aerobic intramolecular carbon-hydrogen bond oxidation promoted by Cu complexes. <i>Dalton Transactions</i> , 2020, 49, 14647-14655.	1.6	9
179	Atomistic fibrillar architectures of polar prion-inspired heptapeptides. <i>Chemical Science</i> , 2020, 11, 13143-13151.	3.7	9
180	Theoretical study of the 2A ₂ ⁻ -2B ₂ separation of the alkali superoxides. <i>Chemical Physics Letters</i> , 1992, 197, 213-216.	1.2	8

#	ARTICLE	IF	CITATIONS
181	Influence of ionization on the conformational preferences of peptide models. Ramachandran surfaces of N -formylglycine amide and N -formylalanine amide radical cations. <i>Journal of Computational Chemistry</i> , 2009, 30, 1771-1784.	1.5	8
182	Stability of transient $Cu+Al^2$ (1Å^{-16}) species and influence of coordination and peptide configuration on superoxide formation. <i>Theoretical Chemistry Accounts</i> , 2016, 135, 1.	0.5	8
183	Surface morphology controls water dissociation on hydrated IrO_2 nanoparticles. <i>Nanoscale</i> , 2021, 13, 14480-14489.	2.8	8
184	Multiple Condensation Reactions Involving $Pt^{II}/Pd^{II}-OH_2$, $Pt^{III}-NH_3$, and Cytosine NH_2 Groups: New Twists in Cisplatin $Nucleobase$ Chemistry. <i>Chemistry - A European Journal</i> , 2016, 22, 13653-13668.	1.7	7
185	Impact of Cu and Al on the conformational landscape of amyloid β_{1-42} . <i>Physical Chemistry Chemical Physics</i> , 2021, 23, 13023-13032.	1.3	7
186	Ab initio study of the reaction between $Cl_4W \rightarrow CH_2$ and ethylene. <i>Computational and Theoretical Chemistry</i> , 1991, 251, 37-47.	1.5	6
187	Surface Reaction of Acetylene with H-Terminated Silicon Surfaces. A Theoretical Study from Hybrid DFT-D2 Periodic Simulations. <i>Journal of Physical Chemistry C</i> , 2013, 117, 15130-15138.	1.5	6
188	Site-selective-induced isomerization of formamide. <i>Physical Chemistry Chemical Physics</i> , 2019, 21, 25626-25634.	1.3	6
189	Canonical Watson-Crick base pair interactions in π -stacked type triplet states. <i>Molecular Physics</i> , 2006, 104, 925-931.	0.8	5
190	Nucleobase Stacking at Clay Edges, a Favorable Interaction for RNA/DNA Oligomerization. <i>ACS Earth and Space Chemistry</i> , 2019, 3, 1023-1033.	1.2	5
191	Unusual hydrogen bonds in $[AH_3-H_3O]^+$ radical cations (A=C, Si, Ge, Sn and Pb). <i>Chemical Physics Letters</i> , 2004, 395, 27-32.	1.2	4
192	Theoretical study of $ScCO_2^+$. <i>International Journal of Quantum Chemistry</i> , 1997, 63, 523-528.	1.0	3
193	Theoretical study of the bonding of the first-row transition-metal positive ions to ethylene. [Erratum to document cited in CA116(13):128993g]. <i>The Journal of Physical Chemistry</i> , 1992, 96, 5670-5670.	2.9	2
194	The role of charge transfer in the photophysics of dithiophene-based (NIADs) fluorescent markers for amyloid β_2 detection. <i>Theoretical Chemistry Accounts</i> , 2016, 135, 1.	0.5	2
195	Fluorescent Markers for Amyloid β_2 Detection: Computational Insights. <i>Israel Journal of Chemistry</i> , 2017, 57, 686-698.	1.0	2
196	Intramolecular Photocycloaddition of 2(5-H)-Furanones to Temporarily Tethered Terminal Alkenes as a Stereoselective Source of Enantiomerically Pure Polyfunctionalized Cyclobutanes. <i>Journal of Organic Chemistry</i> , 2018, 83, 3188-3199.	1.7	2
197	Activating a Peroxo Ligand for $C=O$ Bond Formation. <i>Angewandte Chemie</i> , 2019, 131, 3069-3073.	1.6	2
198	First-Principles Modeling of Protein/Surface Interactions. Polyglycine Secondary Structure Adsorption on the TiO_2 (101) Anatase Surface Adopting a Full Periodic Approach. <i>Journal of Chemical Information and Modeling</i> , 2021, 61, 5484-5498.	2.5	2

#	ARTICLE	IF	CITATIONS
199	An ab initio study of the collinear reaction of Fe+ (4F) and Fe+ (6D) with H2. Journal of Chemical Physics, 1991, 94, 4352-4355.	1.2	1
200	Computational Simulations of Prebiotic Processes. Cellular Origin and Life in Extreme Habitats, 2012, , 345-362.	0.3	1
201	Effects of Ionization and Cationization on Intermolecular Proton Transfer Reactions in DNA base Pairs. , 2003, , 1231-1255.		1
202	Can Cu+-Exchanged Zeolites Store Molecular Hydrogen? An ab initio Periodic Study Compared with Low-Temperature FTIR.. ChemInform, 2004, 35, no.	0.1	0
203	Theoretical and computational chemistry in Spain. Theoretical Chemistry Accounts, 2011, 128, 389-391.	0.5	0
204	Computational simulations of copper complexes relevant to Alzheimer's disease. , 2014, , .		0
205	Insights on the binding of thioflavin derivative markers to amyloid fibril models and A β 1-40 fibrils from computational approaches. , 2014, , .		0
206	Frontispiece: When the Surface Matters: Prebiotic Peptide-Bond Formation on the TiO2 (101) Anatase Surface through Periodic DFT-D2 Simulations. Chemistry - A European Journal, 2018, 24, .	1.7	0
207	Frontispiece: Enhanced Metallophilicity in Metal-Carbene Systems: Stronger Character of Auophilic Interactions in Solution. Chemistry - A European Journal, 2020, 26, .	1.7	0
208	Atomistic insights into the structure of heptapeptide nanofibers. Journal of Chemical Physics, 2021, 155, 055101.	1.2	0
209	Formamide Dehydration and Condensation on Acidic Montmorillonite: Mechanistic Insights from Ab-Initio Periodic Simulations. Lecture Notes in Computer Science, 2020, , 502-512.	1.0	0