

Michelle M Francl

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/8109924/publications.pdf>

Version: 2024-02-01

88
papers

10,760
citations

304368

22
h-index

110170

64
g-index

90
all docs

90
docs citations

90
times ranked

10814
citing authors

#	ARTICLE	IF	CITATIONS
1	Self-consistent molecular orbital methods. XXIII. A polarization-type basis set for second-row elements. <i>Journal of Chemical Physics</i> , 1982, 77, 3654-3665.	1.2	7,209
2	Self-consistent molecular orbital methods. 24. Supplemented small split-valence basis sets for second-row elements. <i>Journal of the American Chemical Society</i> , 1982, 104, 5039-5048.	6.6	1,148
3	Atomic charges derived from electrostatic potentials: A detailed study. <i>Journal of Computational Chemistry</i> , 1987, 8, 894-905.	1.5	984
4	Charges fit to electrostatic potentials. II. Can atomic charges be unambiguously fit to electrostatic potentials?. , 1996, 17, 367-383.		146
5	Nuclear Spin-Spin Coupling via Nonbonded Interactions. 8.1 The Distance Dependence of Through-Space Fluorine-Fluorine Coupling. <i>Journal of the American Chemical Society</i> , 2000, 122, 4108-4116.	6.6	117
6	NMR and molecular modeling study of the conformations of taxol and of its side chain methylester in aqueous and non-aqueous solution.. <i>Tetrahedron</i> , 1993, 49, 6545-6560.	1.0	111
7	Polarization corrections to electrostatic potentials. <i>The Journal of Physical Chemistry</i> , 1985, 89, 428-433.	2.9	97
8	Representation of electron densities. 1. Sphere fits to total electron density surfaces. <i>Journal of the American Chemical Society</i> , 1984, 106, 563-570.	6.6	68
9	Theoretical investigation of aluminum-oxygen pi-bonding in 3- and 4-coordinate aluminum alkoxides. <i>Journal of the American Chemical Society</i> , 1991, 113, 39-43.	6.6	62
10	Isomers of nitric acid and chlorine nitrate. <i>The Journal of Physical Chemistry</i> , 1988, 92, 5352-5357.	2.9	61
11	The nitrogen (N4) molecule and its metastability. <i>The Journal of Physical Chemistry</i> , 1990, 94, 526-528.	2.9	59
12	NMR and molecular modeling study of active and inactive taxol analogues in aqueous and nonaqueous solution. <i>Canadian Journal of Chemistry</i> , 1994, 72, 252-260.	0.6	49
13	Distance dependence of nonadiabaticity in the branching between C-Br and C-Cl bond fission following $1[n(O), \pi^*(C=O)]$ excitation in bromopropionyl chloride. <i>Journal of Chemical Physics</i> , 1993, 99, 4479-4494.	1.2	42
14	Laughing matter. <i>Nature Chemistry</i> , 2014, 6, 1-2.	6.6	42
15	Through the eyes of a chemist. <i>Nature Chemistry</i> , 2016, 8, 1-2.	6.6	39
16	Hyperconjugation and the structures of metal carbenes. <i>Organometallics</i> , 1983, 2, 281-286.	1.1	36
17	Competing C-Br and C-C bond fission following $1[n(O), \pi^*(C=O)]$ excitation in bromoacetone: Conformation dependence of nonadiabaticity at a conical intersection. <i>Journal of Chemical Physics</i> , 1994, 100, 3463-3475.	1.2	35
18	Phosphoranes: multiple bonding and substituent effects. <i>Journal of the American Chemical Society</i> , 1988, 110, 3723-3728.	6.6	33

#	ARTICLE	IF	CITATIONS
19	Conformational preferences in transition-metal carbenes. <i>Organometallics</i> , 1983, 2, 815-818.	1.1	30
20	π -Complexes of alkenes to trivalent aluminum. <i>Organometallics</i> , 1990, 9, 2430-2436.	1.1	30
21	CF ₃ Rotation in 3-(Trifluoromethyl)phenanthrene. X-ray Diffraction and ab Initio Electronic Structure Calculations. <i>Journal of Physical Chemistry A</i> , 2006, 110, 3954-3960.	1.1	27
22	The Pluses and Minuses of Mapping Atomic Charges to Electrostatic Potentials. <i>Reviews in Computational Chemistry</i> , 2007, , 1-31.	1.5	27
23	Transition States for the Carboalumination of Alkenes and Alkynes. <i>Organometallics</i> , 1999, 18, 3913-3920.	1.1	25
24	Stability of rotational transition structures in amides and thioamides. <i>The Journal of Physical Chemistry</i> , 1987, 91, 2716-2721.	2.9	24
25	1-Oxabicyclobutonium ions can intervene in epoxycarbonyl and 3-oxetanyl solvolyses. <i>Journal of the American Chemical Society</i> , 1990, 112, 3535-3539.	6.6	23
26	How to counteract chemophobia. <i>Nature Chemistry</i> , 2013, 5, 439-440.	6.6	22
27	Structure of the Tebbe reagent. An intramolecular complex?. <i>Organometallics</i> , 1983, 2, 457-459.	1.1	20
28	Stretching topology. <i>Nature Chemistry</i> , 2009, 1, 334-335.	6.6	20
29	Transition states for hydroalumination of alkenes and alkynes: ab initio molecular orbital studies. <i>Organometallics</i> , 1993, 12, 1608-1615.	1.1	17
30	Anionic hyperconjugation. <i>Tetrahedron</i> , 1985, 41, 499-506.	1.0	15
31	Making molecular monsters. <i>Nature Chemistry</i> , 2018, 10, 1-2.	6.6	14
32	Seeding crystallography. <i>Nature Chemistry</i> , 2014, 6, 842-844.	6.6	13
33	Role of Active Site Residues and Solvation in RNase A. <i>Annals of the New York Academy of Sciences</i> , 1986, 471, 295-298.	1.8	12
34	Beyond CHELP: improved potential derived charges for sugars. <i>Glycoconjugate Journal</i> , 1997, 14, 501-505.	1.4	9
35	A molecule with a ring to it. <i>Nature Chemistry</i> , 2015, 7, 6-7.	6.6	9
36	Conformational preferences in Mo ₂ L ₆ complexes. <i>Inorganic Chemistry</i> , 1984, 23, 24-26.	1.9	8

#	ARTICLE	IF	CITATIONS
37	Scents and sensibility. <i>Nature Chemistry</i> , 2015, 7, 265-266.	6.6	7
38	Double vision. <i>Nature Chemistry</i> , 2019, 11, 597-598.	6.6	6
39	Table manners. <i>Nature Chemistry</i> , 2009, 1, 97-98.	6.6	5
40	Urban legends of chemistry. <i>Nature Chemistry</i> , 2010, 2, 600-601.	6.6	5
41	Zen and the art of molecules. <i>Nature Chemistry</i> , 2012, 4, 142-144.	6.6	5
42	The enlightenment of chemistry. <i>Nature Chemistry</i> , 2015, 7, 761-762.	6.6	5
43	Homemade chemists. <i>Nature Chemistry</i> , 2012, 4, 687-687.	6.6	4
44	An ab initio molecular orbital study of the reduction of carbonyls by alkylaluminum complexes. <i>Journal of Molecular Graphics and Modelling</i> , 2005, 24, 195-202.	1.3	3
45	Blogging on the sidelines. <i>Nature Chemistry</i> , 2011, 3, 183-184.	6.6	3
46	Naming names. <i>Nature Chemistry</i> , 2012, 4, 956-957.	6.6	3
47	Tangible assets. <i>Nature Chemistry</i> , 2013, 5, 147-148.	6.6	3
48	Chemical doublespeak. <i>Nature Chemistry</i> , 2015, 7, 533-534.	6.6	3
49	Atomic women. <i>Nature Chemistry</i> , 2018, 10, 373-375.	6.6	3
50	Exploring Exotic Kinetics: An Introduction to the Use of Numerical Methods in Chemical Kinetics. <i>Journal of Chemical Education</i> , 2004, 81, 1535.	1.1	2
51	Walking the Tightrope: Teaching the Timeless Fundamentals in the Context of Modern Physical Chemistry. <i>ACS Symposium Series</i> , 2007, , 253-267.	0.5	2
52	Sex and the citadel of science. <i>Nature Chemistry</i> , 2011, 3, 670-673.	6.6	2
53	Take a number. <i>Nature Chemistry</i> , 2013, 5, 725-726.	6.6	2
54	Chemists boldly go. <i>Nature Chemistry</i> , 2017, 9, 4-5.	6.6	2

#	ARTICLE	IF	CITATIONS
55	The weight of water. <i>Nature Chemistry</i> , 2019, 11, 284-285.	6.6	2
56	Chapter 15 Crossing the Line: Stochastic Models in the Chemistry Classroom. <i>Annual Reports in Computational Chemistry</i> , 2005, 1, 215-220.	0.9	1
57	An Introduction to Statistical Mechanics. <i>Journal of Chemical Education</i> , 2005, 82, 175.	1.1	1
58	Men of mystery. <i>Nature Chemistry</i> , 2010, 2, 68-70.	6.6	1
59	Staging science. <i>Nature Chemistry</i> , 2010, 2, 338-339.	6.6	1
60	Neolexia. <i>Nature Chemistry</i> , 2011, 3, 417-418.	6.6	1
61	A brief history of water. <i>Nature Chemistry</i> , 2016, 8, 897-898.	6.6	1
62	It's alive!. <i>Nature Chemistry</i> , 2018, 10, 993-994.	6.6	1
63	Talking to Pauling's ghost. <i>Nature Chemistry</i> , 2018, 10, 688-689.	6.6	1
64	Isotopic enrichment. <i>Nature Chemistry</i> , 2019, 11, 101-102.	6.6	1
65	Ephemeral elements. <i>Nature Chemistry</i> , 2019, 11, 2-4.	6.6	1
66	AMPAC 4.5. <i>Journal of Chemical Information and Computer Sciences</i> , 1994, 34, 1025-1025.	2.8	0
67	Ab initio MO study of the symmetrical and asymmetrical isomers of bridging alkynylaluminum and alkynylberyllium dimers. <i>International Journal of Quantum Chemistry</i> , 2003, 95, 806-809.	1.0	0
68	Mapping the two cultures. <i>Nature Chemistry</i> , 2009, 1, 591-592.	6.6	0
69	Selling science. <i>Nature Chemistry</i> , 2010, 2, 999-1000.	6.6	0
70	Spellbound by books. <i>Nature Chemistry</i> , 2011, 3, 651-652.	6.6	0
71	A quantum of history. <i>Nature Chemistry</i> , 2011, 3, 902-903.	6.6	0
72	Chemical abstractions. <i>Nature Chemistry</i> , 2012, 4, 427-428.	6.6	0

#	ARTICLE	IF	CITATIONS
73	Attack of the clones. Nature Chemistry, 2014, 6, 267-268.	6.6	0
74	The write stuff. Nature Chemistry, 2014, 6, 555-556.	6.6	0
75	Strangers to fiction. Nature Chemistry, 2016, 8, 636-637.	6.6	0
76	Changing chemistry by degrees. Nature Chemistry, 2016, 8, 289-290.	6.6	0
77	Identity crisis. Nature Chemistry, 2017, 9, 606-607.	6.6	0
78	It figures. Nature Chemistry, 2017, 9, 501-502.	6.6	0
79	Sleeping with your science. Nature Chemistry, 2019, 11, 863-864.	6.6	0
80	Postcards from the past. Nature Chemistry, 2020, 12, 4-6.	6.6	0
81	The invisible college. Nature Chemistry, 2020, 12, 582-583.	6.6	0
82	A unit of revolution. Nature Chemistry, 2020, 12, 879-880.	6.6	0
83	A chemist's cup of tea. Nature Chemistry, 2020, 12, 319-320.	6.6	0
84	Cabinet of curiosities. Nature Chemistry, 2021, 13, 294-295.	6.6	0
85	Hearing voices. Nature Chemistry, 2021, 13, 615-617.	6.6	0
86	Molecular backstories. Nature Chemistry, 2021, 13, 923-924.	6.6	0
87	From Permission to Poise. ACS Symposium Series, 2020, , 15-28.	0.5	0
88	Poetic licence. Nature Chemistry, 2021, 13, 3-4.	6.6	0