Joseph Francisco

List of Publications by Year in descending order

409 papers	12,490 citations	25034 57 h-index	49909 87 g-index
424 all docs	424 docs citations	424 times ranked	9558 citing authors

#	Article	IF	Citations
1	Revealing the Intrinsic Atomic Structure and Chemistry of Amorphous LiO₂-Containing Products in Liâ€“O₂ Batteries Using Cryogenic Electron Microscopy. Journal of the American Chemical Society, 2022, 144, 2129-2136.	13.7	28
2	Spectroscopic Properties Relevant to Astronomical and Laboratory Detection of MCH and MCH⁺ (M = Al, Mg). Astrophysical Journal, 2022, 924, 139.	4.5	4
3	Photosensitization mechanisms at the airâ€“water interface of aqueous aerosols. Chemical Science, 2022, 13, 2624-2631.	7.4	17
4	The influence of iodine on the Antarctic stratospheric ozone hole. Proceedings of the National Academy of Sciences of the United States of America, 2022, 119, .	7.1	15
5	Spectroscopic characterization of two peroxyl radicals during the O2-oxidation of the methylthio radical. Communications Chemistry, 2022, 5, .	4.5	7
6	Generation and Release of OH Radicals from the Reaction of H₂O with O₂ over Soot. Angewandte Chemie - International Edition, 2022, 61, .	13.8	12
7	Rapid Allylic 1,6 H-Atom Transfer in an Unsaturated Criegee Intermediate. Journal of the American Chemical Society, 2022, 144, 5945-5955.	13.7	5
8	Solvation and Hydrolysis Reaction of Isocyanic Acid at the Airâ€“Water Interface: A Computational Study. Journal of the American Chemical Society, 2022, 144, 5315-5322.	13.7	7
9	Innentitelbild: Generation and Release of OH Radicals from the Reaction of H₂O with O₂ over Soot (Angew. Chem. 21/2022). Angewandte Chemie, 2022, 134, .	2.0	1
10	Microscopic Insight into Water Desalination through Nanoporous Graphene: The Influence of the Dipole Moment. Journal of Physical Chemistry Letters, 2022, 13, 4029-4035.	4.6	6
11	AlOSO: Spectroscopy and Structure of a New Group of Astrochemical Molecules. Astrophysical Journal, 2022, 930, 29.	4.5	2
12	Reaction of SO₃ with HONO₂ and Implications for Sulfur Partitioning in the Atmosphere. Journal of the American Chemical Society, 2022, 144, 9172-9177.	13.7	8
13	Spectral Signatures of Hydrogen Thioperoxide (HOSH) and Hydrogen Persulfide (HSSH): Possible Molecular Sulfur Sinks in the Dense ISM. Molecules, 2022, 27, 3200.	3.8	3
14	The Chemistry of Mercury in the Stratosphere. Geophysical Research Letters, 2022, 49, .	4.0	4
15	The Photoionization Dynamics, Electronic Spectroscopy, and Excited State Photochemistry of AlCO and AlOC. Astrophysical Journal, 2022, 933, 192.	4.5	3
16	Universal Principle for Large-Scale Production of a High-Quality Two-Dimensional Monolayer via Positive Charge-Driven Exfoliation. Journal of Physical Chemistry Letters, 2022, 13, 6597-6603.	4.6	6
17	Reactivity of Undissociated Molecular Nitric Acid at the Airâ€“Water Interface. Journal of the American Chemical Society, 2021, 143, 453-462.	13.7	14
18	Two-Dimensional Carbonitride MXenes as an Efficient Electrocatalyst for Hydrogen Evolution. Journal of Physical Chemistry C, 2021, 125, 4477-4488.	3.1	13

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19	Theoretical rovibrational characterization of HAlNP: Weak bonding but strong intensities. Journal of Molecular Spectroscopy, 2021, 377, 111422.	1.2	2
20	Astrochemical Significance of the P + SO Reaction: Spectroscopic Characterization of SPO, PSO, and SOP Isomers. Astrophysical Journal, 2021, 909, 122.	4.5	2
21	Neutron Diffraction Study of Significant sp³ and sp² Câ€“H Bond Shortening in a Fluorinated Pyridinium Saccharinate. Journal of the American Chemical Society, 2021, 143, 5550-5557.	13.7	12
22	First-Principles Molecular Dynamics Simulations of the Spontaneous Freezing Transition of 2D Water in a Nanoslit. Journal of the American Chemical Society, 2021, 143, 8177-8183.	13.7	27
23	Photochemistry of NH2NO2 and implications for chemistry in the atmosphere. Journal of Chemical Physics, 2021, 154, 194301.	3.0	1
24	Multiple Wettingâ€“Dewetting States of a Water Droplet on Dual-Scale Hierarchical Structured Surfaces. Jacs Au, 2021, 1, 955-966.	7.9	3
25	Spectroscopic Characterization of the First and Second Excited States of the HOSO Radical. Journal of Physical Chemistry A, 2021, 125, 6254-6262.	2.5	4
26	Tight electrostatic regulation of the OH production rate from the photolysis of hydrogen peroxide adsorbed on surfaces. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	7.1	9
27	Photochemistry and Non-adiabatic Photodynamics of the HOSO Radical. Journal of the American Chemical Society, 2021, 143, 10836-10841.	13.7	16
28	Mechanistic Study of the Aqueous Reaction of Organic Peroxides with HSO 3 â^’ on the Surface of a Water Droplet. Angewandte Chemie, 2021, 133, 20362-20365.	2.0	2
29	Rational Design of Highly Stable and Active MXeneâ€Based Bifunctional ORR/OER Doubleâ€Atom Catalysts. Advanced Materials, 2021, 33, e2102595.	21.0	137
30	Single Iridium Atom Doped Ni₂P Catalyst for Optimal Oxygen Evolution. Journal of the American Chemical Society, 2021, 143, 13605-13615.	13.7	162
31	Mechanistic Insights into Fast Charging and Discharging of the Sodium Metal Battery Anode: A Comparison with Lithium. Journal of the American Chemical Society, 2021, 143, 13929-13936.	13.7	46
32	Rapid sulfuric acidâ€“dimethylamine nucleation enhanced by nitric acid in polluted regions. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	7.1	22
33	Single Atomâ€Modified Hybrid Transition Metal Carbides as Efficient Hydrogen Evolution Reaction Catalysts. Advanced Functional Materials, 2021, 31, 2104285.	14.9	42
34	Mechanistic Study of the Aqueous Reaction of Organic Peroxides with HSO₃^{â^’} on the Surface of a Water Droplet. Angewandte Chemie - International Edition, 2021, 60, 20200-20203.	13.8	9
35	Anharmonic fundamental vibrational frequencies and spectroscopic constants of the potential HSO2 radical astromolecule. Journal of Chemical Physics, 2021, 155, 114301.	3.0	2
36	Two-dimensional monolayer salt nanostructures can spontaneously aggregate rather than dissolve in dilute aqueous solutions. Nature Communications, 2021, 12, 5602.	12.8	12

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37	Mechanism for Rapid Conversion of Amines to Ammonium Salts at the Airâ€“Particle Interface. Journal of the American Chemical Society, 2021, 143, 1171-1178.	13.7	19
38	Matrix-isolated trifluoromethylthiyl radical: sulfur atom transfer, isomerization and oxidation reactions. Chemical Communications, 2021, 57, 12143-12146.	4.1	3
39	Photochemistry of HOSO₂ and SO₃ and Implications for the Production of Sulfuric Acid. Journal of the American Chemical Society, 2021, 143, 18794-18802.	13.7	10
40	Uptake and hydration of sulfur dioxide on dry and wet hydroxylated silica surfaces: a computational study. Physical Chemistry Chemical Physics, 2021, 24, 172-179.	2.8	4
41	Spectroscopic Characterization of HSO₂^{â€¢} and HOSO^{â€¢} Intermediates Involved in SO₂ Geoengineering. Journal of Physical Chemistry A, 2021, 125, 10615-10621.	2.5	8
42	Two-dimensional semiconducting Lu₂CT₂(T = F, OH) MXene with low work function and high carrier mobility. Nanoscale, 2020, 12, 3795-3802.	5.6	30
43	Multielemental singleâ€“atom-thick A layers in nanolaminated V ₂ (Sn, A) C () Tj ETQq1 1 0.784314 rgBT /O Sciences of the United States of America, 2020, 117, 820-825.	7.1	84
44	Atomic imaging of the edge structure and growth of a two-dimensional hexagonal ice. Nature, 2020, 577, 60-63.	27.8	149
45	Photodissociation Mechanisms of Major Mercury(II) Species in the Atmospheric Chemical Cycle of Mercury. Angewandte Chemie, 2020, 132, 7675-7680.	2.0	4
46	Photodissociation Mechanisms of Major Mercury(II) Species in the Atmospheric Chemical Cycle of Mercury. Angewandte Chemie - International Edition, 2020, 59, 7605-7610.	13.8	45
47	Integrating Rh Species with NiFe-Layered Double Hydroxide for Overall Water Splitting. Nano Letters, 2020, 20, 136-144.	9.1	129
48	The Triplet Hydroxyl Radical Complex of Phosphorus Monoxide. Angewandte Chemie - International Edition, 2020, 59, 21949-21953.	13.8	10
49	Anharmonic Frequencies and Spectroscopic Constants of OAlOH and AlOH: Strong Bonding but Unhindered Motion. Journal of Physical Chemistry A, 2020, 124, 8834-8841.	2.5	12
50	Turning a Superhydrophilic Surface Weakly Hydrophilic: Topological Wetting States. Journal of the American Chemical Society, 2020, 142, 18491-18502.	13.7	25
51	Molecular Interaction and Orientation of HOCl on Aqueous and Ice Surfaces. Journal of the American Chemical Society, 2020, 142, 17329-17333.	13.7	7
52	In Situ Observation of the pH Gradient near the Gas Diffusion Electrode of CO₂ Reduction in Alkaline Electrolyte. Journal of the American Chemical Society, 2020, 142, 15438-15444.	13.7	154
53	Unraveling Molecular Mechanism on Dilute Surfactant Solution Controlled Ice Recrystallization. Langmuir, 2020, 36, 1691-1698.	3.5	8
54	Molecular reactions at aqueous interfaces. Nature Reviews Chemistry, 2020, 4, 459-475.	30.2	149

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55	Two-step reaction mechanism reveals new antioxidant capability of cysteine disulfides against hydroxyl radical attack. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 18216-18223.	7.1	17
56	Photochemistry of oxidized Hg(I) and Hg(II) species suggests missing mercury oxidation in the troposphere. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 30949-30956.	7.1	50
57	RÃ¼cktitelbild: The Triplet Hydroxyl Radical Complex of Phosphorus Monoxide (Angew. Chem. 49/2020). Angewandte Chemie, 2020, 132, 22452-22452.	2.0	0
58	The Aqueous Surface as an Efficient Transient Stop for the Reactivity of Gaseous NO₂ in Liquid Water. Journal of the American Chemical Society, 2020, 142, 20937-20941.	13.7	17
59	Computational Prediction of Novel Ice Phases: A Perspective. Journal of Physical Chemistry Letters, 2020, 11, 7449-7461.	4.6	17
60	The Triplet Hydroxyl Radical Complex of Phosphorus Monoxide. Angewandte Chemie, 2020, 132, 22133-22137.	2.0	1
61	A gas-to-particle conversion mechanism helps to explain atmospheric particle formation through clustering of iodine oxides. Nature Communications, 2020, 11, 4521.	12.8	39
62	Photoinduced Oxidation Reactions at the Airâ€“Water Interface. Journal of the American Chemical Society, 2020, 142, 16140-16155.	13.7	38
63	Spectroscopic identification of the â€¢SSNO isomers. Journal of Chemical Physics, 2020, 153, 094303.	3.0	3
64	Mechanisms of Acid-Promoted N₂ and N₂O Generation from NH₂NO and NH₂NO₂. Journal of Physical Chemistry A, 2020, 124, 7575-7584.	2.5	3
65	Adsorption and isomerization of glyoxal and methylglyoxal at the air/hydroxylated silica surface. Journal of Chemical Physics, 2020, 152, 164702.	3.0	4
66	Energetic Properties, Spectroscopy, and Reactivity of NF3O. Journal of Physical Chemistry A, 2020, 124, 5237-5245.	2.5	1
67	Climate Metrics for C1â€“C4 Hydrofluorocarbons (HFCs). Journal of Physical Chemistry A, 2020, 124, 4793-4800.	2.5	5
68	Multiple Stable Isopreneâ€“Ozone Complexes Reveal Complex Entrance Channel Dynamics in the Isoprene + Ozone Reaction. Journal of the American Chemical Society, 2020, 142, 10806-10813.	13.7	9
69	New Insights into the Stability of Anhydrous 2H-Imidazolium Fluoride and its High Dissolution Capability toward a Strongly Hydrogen-Bonded Compound. Journal of the American Chemical Society, 2020, 142, 10314-10318.	13.7	8
70	A possible unaccounted source of atmospheric sulfate formation: amine-promoted hydrolysis and non-radical oxidation of sulfur dioxide. Chemical Science, 2020, 11, 2093-2102.	7.4	11
71	Evidence of the Elusive Gold-Induced Non-classical Hydrogen Bonding in Aqueous Environments. Journal of the American Chemical Society, 2020, 142, 6001-6006.	13.7	24
72	HIO_xâ€“IONO₂ Dynamics at the Airâ€“Water Interface: Revealing the Existence of a Halogen Bond at the Atmospheric Aerosol Surface. Journal of the American Chemical Society, 2020, 142, 12467-12477.	13.7	8

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73	Hydration, Solvation, and Isomerization of Methylglyoxal at the Air/Water Interface: New Mechanistic Pathways. Journal of the American Chemical Society, 2020, 142, 5574-5582.	13.7	26
74	Spectroscopic characterization of the first excited state and photochemistry of the HO3 radical. Journal of Chemical Physics, 2020, 152, 064304.	3.0	3
75	Capture of the Sulfur Monoxideâ€“Hydroxyl Radical Complex. Journal of the American Chemical Society, 2020, 142, 2175-2179.	13.7	23
76	Heterogeneous Reactions of SO3 on Ice: An Overlooked Sink for SO3 Depletion. Journal of the American Chemical Society, 2020, 142, 2150-2154.	13.7	8
77	Photochemistry from low-lying states of HOSO+. Journal of Chemical Physics, 2020, 152, 134302.	3.0	1
78	Dihalogenated Methylperoxy Radicals: Spectroscopic Characterization and Photodecomposition by Release of HO .. Chemistry - A European Journal, 2020, 26, 2817-2820.	3.3	4
79	High-level Ab Initio Studies of the Spectroscopic Properties of Triatomic [Al, S, O]^x (x = 0,) Tj ETQq1 1 0.784314 rgBT /O	4.5	8
80	Catalytic and autocatalytic chemical processes in the atmosphere. Annual Reports in Computational Chemistry, 2020, 16, 157-185.	1.7	1
81	Designing Flexible Quantum Spin Hall Insulators through 2D Ordered Hybrid Transition-Metal Carbides. Journal of Physical Chemistry C, 2019, 123, 20664-20674.	3.1	4
82	Direct observation of 2-dimensional ices on different surfaces near room temperature without confinement. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 16723-16728.	7.1	33
83	Molecular oxygen generation from the reaction of water cations with oxygen atoms. Journal of Chemical Physics, 2019, 150, 201103.	3.0	6
84	A New Mechanism of Acid Rain Generation from HOSO at the Airâ€“Water Interface. Journal of the American Chemical Society, 2019, 141, 16564-16568.	13.7	39
85	Production of hydrogen peroxide enabled by microdroplets. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 19222-19224.	7.1	13
86	Editorial: Wissenschaftsfreiheit mithilfe von Netzwerken sichern. Angewandte Chemie, 2019, 131, 8332-8334.	2.0	0
87	Rational Design of Flexible Two-Dimensional MXenes with Multiple Functionalities. Chemical Reviews, 2019, 119, 11980-12031.	47.7	242
88	Unraveling a New Chemical Mechanism of Missing Sulfate Formation in Aerosol Haze: Gaseous NO₂ with Aqueous HSO₃^{â€“}/SO₃^{2â€“}. Journal of the American Chemical Society, 2019, 141, 19312-19320.	13.7	36
89	Specific inter-domain interactions stabilize a compact HIV-1 Gag conformation. PLoS ONE, 2019, 14, e0221256.	2.5	2
90	Molecular insights into organic particulate formation. Communications Chemistry, 2019, 2, .	4.5	6

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91	Photochemistry of HOSO radical in the gas phase. Journal of Chemical Physics, 2019, 151, 111103.	3.0	13
92	Water desalination through rim functionalized carbon nanotubes. Journal of Materials Chemistry A, 2019, 7, 3583-3591.	10.3	56
93	Reconciling the Debate on the Existence of Pentazole HN₅ in the Pentazolate Salt of (N₅)₆(H₃O)₃(NH₄)₄Cl. Journal of the American Chemical Society, 2019, 141, 2984-2989.	13.7	21
94	Role of Water on the Rotational Dynamics of the Organic Methylammonium Cation: A First Principles Analysis. Scientific Reports, 2019, 9, 668.	3.3	15
95	Elucidating the molecular mechanisms of Criegee-amine chemistry in the gas phase andÂaqueous surface environments. Chemical Science, 2019, 10, 743-751.	7.4	26
96	Theoretical Investigation of the Photoexcited NO₂+H₂O reaction at the Airâ€“Water Interface and Its Atmospheric Implications. Chemistry - A European Journal, 2019, 25, 13899-13904.	3.3	14
97	Atmospheric Spectroscopy and Photochemistry at Environmental Water Interfaces. Annual Review of Physical Chemistry, 2019, 70, 45-69.	10.8	38
98	An ultralow-density porous ice with the largest internal cavity identified in the water phase diagram. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 12684-12691.	7.1	16
99	Gas-Phase Photolysis of Hg(I) Radical Species: A New Atmospheric Mercury Reduction Process. Journal of the American Chemical Society, 2019, 141, 8698-8702.	13.7	40
100	Mechanistic Insight into the Reaction of Organic Acids with SO₃ at the Airâ€“Water Interface. Angewandte Chemie, 2019, 131, 8439-8443.	2.0	9
101	Triplet state promoted reaction of SO₂ with H₂O by competition between proton coupled electron transfer (pcet) and hydrogen atom transfer (hat) processes. Physical Chemistry Chemical Physics, 2019, 21, 9779-9784.	2.8	27
102	Room temperature electrofreezing of water yields a missing dense ice phase in the phase diagram. Nature Communications, 2019, 10, 1925.	12.8	20
103	Spectroscopy and characterization of AlNX (X = O and S): Triatomic circumstellar molecules. Journal of Chemical Physics, 2019, 150, 124306.	3.0	7
104	Editorial: Securing Academic Freedom through Networks. Angewandte Chemie - International Edition, 2019, 58, 8246-8248.	13.8	2
105	Mechanistic Insight into the Reaction of Organic Acids with SO₃ at the Airâ€“Water Interface. Angewandte Chemie - International Edition, 2019, 58, 8351-8355.	13.8	30
106	Caged Nitric Oxideâ€“Thiyl Radical Pairs. Journal of the American Chemical Society, 2019, 141, 3361-3365.	13.7	16
107	Spectroscopic investigation of [Al,N,C,O] refractory molecules. Journal of Chemical Physics, 2019, 151, 244303.	3.0	25
108	Unexpected quenching effect on new particle formation from the atmospheric reaction of methanol with SO ₃. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 24966-24971.	7.1	32

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109	Spectroscopy and Stability of AlOP: A Possible Progenitor of Interstellar Metal. Journal of Physical Chemistry A, 2019, 123, 463-470.	2.5	10
110	Adsorption Behaviors and Phase Equilibria for Clathrate Hydrates of Sulfur- and Nitrogen-Containing Small Molecules. Journal of Physical Chemistry C, 2019, 123, 2691-2702.	3.1	10
111	Water transport through subnanopores in the ultimate size limit: Mechanism from molecular dynamics. Nano Research, 2019, 12, 587-592.	10.4	25
112	Mechanistic Quantification of Thermodynamic Stability and Mechanical Strength for Two-Dimensional Transition-Metal Carbides. Journal of Physical Chemistry C, 2018, 122, 4710-4722.	3.1	28
113	Can Urea Be a Seed for Aerosol Particle Formation in Air?. Journal of Physical Chemistry A, 2018, 122, 3261-3269.	2.5	14
114	Identification of Key Intermediates during the NO and H₂S Crosstalk Signaling Pathways. Journal of Physical Chemistry A, 2018, 122, 2877-2883.	2.5	6
115	Phonon-mediated stabilization and softening of 2D transition metal carbides: case studies of Ti₂CO₂ and Mo₂CO₂. Physical Chemistry Chemical Physics, 2018, 20, 14608-14618.	2.8	8
116	Nitric Acidâ€“Amine Chemistry in the Gas Phase and at the Airâ€“Water Interface. Journal of the American Chemical Society, 2018, 140, 6456-6466.	13.7	51
117	Phase behaviors of deeply supercooled bilayer water unseen in bulk water. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, 4839-4844.	7.1	13
118	Tuning the Stereoselectivity and Solvation Selectivity at Interfacial and Bulk Environments by Changing Solvent Polarity: Isomerization of Glyoxal in Different Solvent Environments. Journal of the American Chemical Society, 2018, 140, 5535-5543.	13.7	23
119	Spectroscopic Identification of H₂NSO and synâ€•and antiâ€HNSOH Radicals. Angewandte Chemie - International Edition, 2018, 57, 7513-7517.	13.8	4
120	Insight into Chemistry on Cloud/Aerosol Water Surfaces. Accounts of Chemical Research, 2018, 51, 1229-1237.	15.6	96
121	Electronic and spectroscopic characterizations of SNP isomers. Journal of Chemical Physics, 2018, 148, 054305.	3.0	6
122	Tribute to Veronica Vaida. Journal of Physical Chemistry A, 2018, 122, 1157-1158.	2.5	0
123	Reactivity of hydropersulfides toward the hydroxyl radical unraveled: disulfide bond cleavage, hydrogen atom transfer, and proton-coupled electron transfer. Physical Chemistry Chemical Physics, 2018, 20, 4793-4804.	2.8	9
124	Photoinduced Sulfurâ€“Nitrogen Bond Rotation and Thermal Nitrogen Inversion in Heterocumulene OSNSO. Journal of the American Chemical Society, 2018, 140, 1231-1234.	13.7	9
125	Spectroscopic Identification of H₂NSO and synâ€•and antiâ€HNSOH Radicals. Angewandte Chemie, 2018, 130, 7635-7639.	2.0	0
126	Reaction of Criegee Intermediate with Nitric Acid at the Airâ€“Water Interface. Journal of the American Chemical Society, 2018, 140, 4913-4921.	13.7	53

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127	A Possible Progenitor of the Interstellar Sulfide Bond: Rovibrational Characterization of the Hydrogen Disulfide Cation HSSH⁺. Astrophysical Journal, 2018, 856, 30.	4.5	7
128	Formation of CO₂ Hydrates within Single-Walled Carbon Nanotubes at Ambient Pressure: CO₂ Capture and Selective Separation of a CO₂/H₂ Mixture in Water. Journal of Physical Chemistry C, 2018, 122, 7951-7958.	3.1	21
129	The Trifluoromethyl Sulfinyl and Oxathiyl Radicals. Chemistry - A European Journal, 2018, 24, 1505-1508.	3.3	15
130	Binding of the atomic cations hydrogen through argon to water and hydrogen sulfide. Physical Chemistry Chemical Physics, 2018, 20, 25967-25973.	2.8	12
131	A synergetic stabilization and strengthening strategy for two-dimensional ordered hybrid transition metal carbides. Physical Chemistry Chemical Physics, 2018, 20, 29684-29692.	2.8	9
132	Two-dimensional dry ices with rich polymorphic and polyamorphic phase behavior. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, 10263-10268.	7.1	6
133	Single-Molecule Catalysis Revealed: Elucidating the Mechanistic Framework for the Formation and Growth of Atmospheric Iodine Oxide Aerosols in Gas-Phase and Aqueous Surface Environments. Journal of the American Chemical Society, 2018, 140, 14704-14716.	13.7	24
134	Photochemistry of SO₂ at the Airâ€“Water Interface: A Source of OH and HOSO Radicals. Journal of the American Chemical Society, 2018, 140, 12341-12344.	13.7	42
135	Surface Electrochemical Stability and Strainâ€Tunable Lithium Storage of Highly Flexible 2D Transition Metal Carbides. Advanced Functional Materials, 2018, 28, 1804867.	14.9	33
136	A molecular perspective for global modeling of upper atmospheric NH ₃ from freezing clouds. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, 6147-6152.	7.1	27
137	Hydrogen Sulfide as a Scavenger of Sulfur Atomic Cation. Journal of Physical Chemistry A, 2018, 122, 4983-4987.	2.5	16
138	Toward the detection of the triatomic negative ion SPNâ¯: Spectroscopy and potential energy surfaces. Journal of Chemical Physics, 2018, 148, 164305.	3.0	1
139	Organic Acid Formation from the Atmospheric Oxidation of Gem Diols: Reaction Mechanism, Energetics, and Rates. Journal of Physical Chemistry A, 2018, 122, 6266-6276.	2.5	19
140	Criegee intermediate inside fullerene cage: Evidence for size-dependent reactivity. Journal of Chemical Physics, 2018, 148, 244301.	3.0	2
141	Formation of HONO from the NH₃-promoted hydrolysis of NO₂dimers in the atmosphere. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, 7236-7241.	7.1	67
142	Wie wir das Vertrauen in die Wissenschaft wiederherstellen kÃ¶nnen â€“ und warum dies unerlÃsslich ist. Angewandte Chemie, 2018, 130, 13888-13890.	2.0	2
143	How We Can Rebuild Trust in Scienceâ€”And Why We Must. Angewandte Chemie - International Edition, 2018, 57, 13696-13697.	13.8	13
144	Rotational (de-)excitation of NS+(X1Î£+) by collision with He at low temperature. Monthly Notices of the Royal Astronomical Society, 2018, 480, 4259-4264.	4.4	2

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145	Phenylsulfinyl Radical: Gas-Phase Generation, Photoisomerization, and Oxidation. Journal of the American Chemical Society, 2018, 140, 9972-9978.	13.7	18
146	Photochemistry of OPN: Formation of Cyclic PON and Reversible Combination with Carbon Monoxide. Chemistry - A European Journal, 2018, 24, 14627-14630.	3.3	7
147	Is AlOH the Astrochemical Reservoir Molecule of AlO?: Insights from Excited Electronic States. Astrophysical Journal, 2018, 863, 139.	4.5	25
148	Mechanistic study of the photoexcitation, photoconversion, and photodissociation of CS2. Journal of Chemical Physics, 2018, 149, 064304.	3.0	19
149	Self-Catalytic Reaction of SO₃ and NH₃ To Produce Sulfamic Acid and Its Implication to Atmospheric Particle Formation. Journal of the American Chemical Society, 2018, 140, 11020-11028.	13.7	86
150	Effects of Different Surface Functionalization and Doping on the Electronic Transport Properties of M₂CT_xâ€“M₂CO₂ Heterojunction Devices. Journal of Physical Chemistry C, 2018, 122, 14908-14917.	3.1	18
151	Elemental sulfur aerosol-forming mechanism. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, 864-869.	7.1	31
152	Heterocumulene Sulfinyl Radical OCNSO. Angewandte Chemie - International Edition, 2017, 56, 2140-2144.	13.8	17
153	Heterocumulene Sulfinyl Radical OCNSO. Angewandte Chemie, 2017, 129, 2172-2176.	2.0	5
154	Oxygenate-Induced Tuning of Aldehyde-Amine Reactivity and Its Atmospheric Implications. Journal of Physical Chemistry A, 2017, 121, 1022-1031.	2.5	17
155	Temperature-Dependent Rate Coefficients for the Reaction of CH2OO with Hydrogen Sulfide. Journal of Physical Chemistry A, 2017, 121, 938-945.	2.5	30
156	Characterization of the electronic states of the biological relevant SSNO molecule. Journal of Chemical Physics, 2017, 146, 074301.	3.0	1
157	Energetic Properties and Electronic Structure of [C,N,O,P] and [C,N,S,P] Isomers. Journal of Physical Chemistry A, 2017, 121, 2180-2186.	2.5	0
158	On the Detectability of the HSS, HSO, and HOS Radicals in the Interstellar Medium. Astrophysical Journal, 2017, 835, 243.	4.5	36
159	The atmospheric oxidation of CH₃OOH by the OH radical: the effect of water vapor. Physical Chemistry Chemical Physics, 2017, 19, 12331-12342.	2.8	28
160	Benchmark study of the structural and spectroscopic parameters of the hydroxymethyl peroxy (HOCH2OO) radical and its decomposition reaction to HO2 and H2CO. Journal of Chemical Physics, 2017, 146, 144303.	3.0	5
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162	Criegee intermediate-hydrogen sulfide chemistry at the air/water interface. Chemical Science, 2017, 8, 5385-5391.	7.4	39

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