

Xiaoqing Zeng

List of Publications by Year in descending order

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docs citations

123
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citing authors

#	ARTICLE	IF	CITATIONS
1	Elusive Diazirinone, N_2CO . <i>Angewandte Chemie - International Edition</i> , 2011, 50, 1720-1723.	7.2	56
2	Synthesis and Characterization of Carbonyl Diazone, $OC(N_3)_2$. <i>Inorganic Chemistry</i> , 2010, 49, 9694-9699.	1.9	55
3	Thermally Persistent Fluorosulfonyl Nitrene and Unexpected Formation of the Fluorosulfonyl Radical. <i>Journal of the American Chemical Society</i> , 2013, 135, 2096-2099.	6.6	50
4	Fast Heavy-Atom Tunneling in Trifluoroacetyl Nitrene. <i>Angewandte Chemie - International Edition</i> , 2017, 56, 15672-15676.	7.2	41
5	Gas-Phase Generation and Decomposition of a Sulfinyl Nitrene into the Iminyl Radical OSN. <i>Angewandte Chemie - International Edition</i> , 2016, 55, 1507-1510.	7.2	40
6	Parent Thioketene Sulfide H_2CCSO : Gas-Phase Generation, Structure, and Bonding Analysis. <i>Chemistry - A European Journal</i> , 2017, 23, 16566-16573.	1.7	39
7	Reaction of AgN_3 with $SOCl_2$: Evidence for the Formation of Thionyl Azide, $SO(N_3)_2$. <i>Inorganic Chemistry</i> , 2004, 43, 4799-4801.	1.9	36
8	Formyl Azide: Properties and Solid-State Structure. <i>Angewandte Chemie - International Edition</i> , 2013, 52, 3503-3506.	7.2	36
9	The Iminyl Radical O_2SN . <i>Angewandte Chemie - International Edition</i> , 2013, 52, 7981-7984.	7.2	35
10	The Missing Link: Triplet Fluorocarbonyl Nitrene $FC(O)N$. <i>Chemistry - A European Journal</i> , 2011, 17, 3977-3984.	1.7	34
11	Simplest <i>N</i> -Sulfonylamine $HNSO_2$. <i>Journal of the American Chemical Society</i> , 2016, 138, 11509-11512.	6.6	34
12	Nitrosyl Isocyanate ($ONNCO$): Gas-Phase Generation and a HeI Photoelectron Spectroscopy Study. <i>Inorganic Chemistry</i> , 2005, 44, 9283-9287.	1.9	28
13	Direct Observation of Carbamoyl Nitrenes. <i>Chemistry - A European Journal</i> , 2016, 22, 7856-7862.	1.7	28
14	Magnetically Bistable Nitrenes: Matrix Isolation of Furoyl Nitrenes in Both Singlet and Triplet States and Triplet 3-Furyl Nitrene. <i>Journal of the American Chemical Society</i> , 2018, 140, 10-13.	6.6	28
15	Thermally Persistent Carbonyl Nitrene: $FC(O)N$. <i>Journal of Organic Chemistry</i> , 2015, 80, 2006-2009.	1.7	27
16	Photochemistry of Matrix Isolated (Trifluoromethyl)sulfonyl Azide, $CF_3SO_2N_3$. <i>Journal of Physical Chemistry A</i> , 2015, 119, 2281-2288.	1.1	27
17	Methoxyphosphinidene and Isomeric Methylphosphinidene Oxide. <i>Journal of the American Chemical Society</i> , 2018, 140, 13604-13608.	6.6	27
18	Elusive $O=P=N$, a Rare Example of Phosphorus f^2g^5 -Coordination. <i>Journal of the American Chemical Society</i> , 2011, 133, 20696-20699.	6.6	25

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19	Elusive Fluoro Sulfinyl Nitrite, FS(O)NO, Produced by Photolysis of Matrix-Isolated FS(O) ₂ N. Zeitschrift Fur Anorganische Und Allgemeine Chemie, 2012, 638, 526-533.	0.6	25
20	Fascinating Diazirinone: A Violet Gas. European Journal of Inorganic Chemistry, 2012, 2012, 3403-3409.	1.0	25
21	Two complexes (Cu, Zn) with 1,10-phenanthroline and a tridentate amino-Schiff-base: crystal structures, spectra, thermogravimetric analyses and superoxide dismutase activity. Journal of Coordination Chemistry, 2009, 62, 745-756.	0.8	23
22	Capture of the Sulfur Monoxide-Hydroxyl Radical Complex. Journal of the American Chemical Society, 2020, 142, 2175-2179.	6.6	23
23	Bis(trifluoroaceto) Disulfide (CF ₃ C(O)OSSOC(O)CF ₃): A Hel Photoelectron Spectroscopy and Theoretical Study. Journal of Physical Chemistry A, 2006, 110, 5685-5691.	1.1	22
24	Synthesis and Characterization of Sulfuryl Diazide, O ₂ S(N ₃) ₂ . Inorganic Chemistry, 2011, 50, 8679-8684.	1.9	22
25	Experimental Observation of the 16-Electron Molecules SPN, SNP, and Cyclic PSN. Angewandte Chemie - International Edition, 2012, 51, 3334-3339.	7.2	22
26	Phosphorus Analogues of Methyl Nitrite and Nitromethane: CH ₃ OPO and CH ₃ PO ₂ . Angewandte Chemie - International Edition, 2019, 58, 12164-12169.	7.2	22
27	First Experimental Observation of Gas-Phase Nitrosyl Thiocyanate. European Journal of Inorganic Chemistry, 2006, 2006, 2469-2475.	1.0	21
28	Matrix Isolation of Two Isomers of N ₄ CO. Angewandte Chemie - International Edition, 2011, 50, 482-485.	7.2	20
29	The decomposition of benzenesulfonyl azide: a matrix isolation and computational study. Physical Chemistry Chemical Physics, 2017, 19, 3792-3799.	1.3	20
30	A Singlet Thiophosphoryl Nitrene and Its Interconversion with Thiazyl and Thionitroso Isomers. Journal of the American Chemical Society, 2015, 137, 10942-10945.	6.6	19
31	Direct observation of methoxycarbonylnitrene. Chemical Communications, 2017, 53, 4783-4786.	2.2	19
32	Capture of SO ₃ isomers in the oxidation of sulfur monoxide with molecular oxygen. Chemical Communications, 2018, 54, 1690-1693.	2.2	19
33	Anomeric Effects in Sulfonyl Compounds: An Experimental and Computational Study of Fluorosulfonyl Azide, FSO ₂ N ₃ , and Trifluoromethylsulfonyl Azide, CF ₃ SO ₂ N ₃ . Journal of Physical Chemistry A, 2010, 114, 7624-7630.	1.1	18
34	Chlorodifluoroacetyl Azide, ClF ₂ CC(O)N ₃ : Preparation, Properties, and Decomposition. Journal of Organic Chemistry, 2012, 77, 6456-6462.	1.7	18
35	Photolysis of Carbonyl Diisocyanate: Generation of Isocyanatocarbonyl Nitrene and Diazomethanone. Chemistry - an Asian Journal, 2016, 11, 2953-2959.	1.7	18
36	The near-UV absorber OSSO and its isomers. Chemical Communications, 2018, 54, 4517-4520.	2.2	18

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37	Phenylsulfinyl Radical: Gas-Phase Generation, Photoisomerization, and Oxidation. <i>Journal of the American Chemical Society</i> , 2018, 140, 9972-9978.	6.6	18
38	Azidoacetylene " interpretation of gas phase infrared spectra based on high-level vibrational configuration interaction calculations. <i>Physical Chemistry Chemical Physics</i> , 2013, 15, 6719.	1.3	17
39	Heterocumulene Sulfinyl Radical OCNSO. <i>Angewandte Chemie - International Edition</i> , 2017, 56, 2140-2144.	7.2	17
40	Electronic structures of acyl nitrites and nitrates. <i>Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy</i> , 2006, 64, 949-955.	2.0	16
41	Methanesulfonyl Azide: Molecular Structure and Photolysis in Solid Noble Gas Matrices. <i>Journal of Physical Chemistry A</i> , 2016, 120, 5590-5597.	1.1	16
42	Fast Heavy-Atom Tunneling in Trifluoroacetyl Nitrene. <i>Angewandte Chemie</i> , 2017, 129, 15878-15882.	1.6	16
43	Caged Nitric Oxide-Thiyl Radical Pairs. <i>Journal of the American Chemical Society</i> , 2019, 141, 3361-3365.	6.6	16
44	The Methylsulfonyloxy Radical, CH ₃ SO ₃ . <i>Angewandte Chemie - International Edition</i> , 2015, 54, 11404-11408.	7.2	15
45	Conformational composition, molecular structure and decomposition of difluorophosphoryl azide in the gas phase. <i>Physical Chemistry Chemical Physics</i> , 2015, 17, 8784-8791.	1.3	15
46	The Trifluoromethyl Sulfinyl and Oxathiyl Radicals. <i>Chemistry - A European Journal</i> , 2018, 24, 1505-1508.	1.7	15
47	The Photochemical and Thermal Decomposition of Azidoacetylene in the Gas Phase, Solid Matrix, and Solutions. <i>European Journal of Organic Chemistry</i> , 2014, 2014, 4077-4082.	1.2	14
48	Toward Understanding the Decomposition of Carbonyl Diazide (N ₃) ₂ C=O and Formation of Diazirone <i>cycl</i> -N ₂ CO: Experiment and Computations. <i>Journal of Physical Chemistry A</i> , 2015, 119, 8903-8911.	1.1	14
49	Dichlorophosphanyl isocyanate " spectroscopy, conformation and molecular structure in the gas phase and the solid state. <i>Physical Chemistry Chemical Physics</i> , 2016, 18, 26245-26253.	1.3	12
50	Contrasting Photolytic and Thermal Decomposition of Phenyl Azidoformate: The Curtius Rearrangement Versus Intramolecular C-H Amination. <i>Journal of Physical Chemistry A</i> , 2017, 121, 8604-8613.	1.1	12
51	Gas-Phase Generation and Decomposition of a Sulfinylnitrene into the Iminyl Radical OSN. <i>Angewandte Chemie</i> , 2016, 128, 1529-1532.	1.6	11
52	Methoxysulfinyl Radical CH ₃ OSO: Gas-Phase Generation, Photochemistry, and Oxidation. <i>Journal of Physical Chemistry A</i> , 2017, 121, 3818-3825.	1.1	11
53	N-Methylcarbamoyl azide: spectroscopy, X-ray structure and decomposition via methylcarbamoyl nitrene. <i>Organic Chemistry Frontiers</i> , 2017, 4, 1839-1848.	2.3	11
54	Oxidation of a phosphinidene oxide: formation of a dioxaphosphirane oxide with oxygen scrambling. <i>Chemical Communications</i> , 2019, 55, 245-248.	2.2	11

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55	Copper-Chalcogenide-Based Multimodal Nanotheranostics. ACS Applied Bio Materials, 2020, 3, 6529-6537.	2.3	11
56	<i>Ab initio</i> calculation of rovibrational states for non-degenerate double-well potentials: <i>cis</i> \leftrightarrow <i>trans</i> isomerization of HOPO. Journal of Chemical Physics, 2020, 152, 174306.	1.2	11
57	Photoisomerization of matrix isolated F2CS into <i>cis</i> and <i>trans</i> FCSF. Chemical Communications, 2009, , 5162.	2.2	10
58	Decomposition of fluorophosphoryl diazide: a joint experimental and theoretical study. Physical Chemistry Chemical Physics, 2015, 17, 6433-6439.	1.3	10
59	Sulfamoyl nitrenes: singlet or triplet ground state?. Chemical Communications, 2018, 54, 6136-6139.	2.2	10
60	The Triplet Hydroxyl Radical Complex of Phosphorus Monoxide. Angewandte Chemie - International Edition, 2020, 59, 21949-21953.	7.2	10
61	Hydrogen-Atom Tunneling in Metaphosphorous Acid. Chemistry - A European Journal, 2020, 26, 8205-8209.	1.7	10
62	Photoinduced Sulfur-Nitrogen Bond Rotation and Thermal Nitrogen Inversion in Heterocumulene OSNSO. Journal of the American Chemical Society, 2018, 140, 1231-1234.	6.6	9
63	Decomposition of Sulfonyl Azide Isocyanate and Sulfonyl Diazide: The Oxygen-Shifted Curtius Rearrangement via Sulfonyl Nitrenes. Journal of Physical Chemistry A, 2018, 122, 8511-8519.	1.1	9
64	The Simplest, Isolable, Alkynyl Isocyanate HC \equiv CNCO: Synthesis and Characterization. Angewandte Chemie - International Edition, 2019, 58, 17277-17281.	7.2	9
65	Vibrational spectrum and photochemistry of phosphaketene HPCO. Physical Chemistry Chemical Physics, 2021, 23, 19237-19243.	1.3	9
66	Isomers of Disulfur Dinitride, S ₂ N ₂ . Angewandte Chemie - International Edition, 2015, 54, 2758-2761.	7.2	8
67	Spectroscopic Characterization of HSO ₂ ⁺ and HOSO ⁺ Intermediates Involved in SO ₂ Geoengineering. Journal of Physical Chemistry A, 2021, 125, 10615-10621.	1.1	8
68	A Self-Assembled 3D Hydrogen Bonded Network Constructed from Polyoxovanadate and Protonated Organic Substrate With a Solvent Hydrolysis Reaction. Journal of Cluster Science, 2009, 20, 717-724.	1.7	7
69	Structure and Conformational Properties of Azido(difluoro)phosphane, F ₂ PN ₃ . European Journal of Inorganic Chemistry, 2011, 2011, 895-905.	1.0	7
70	Flash vacuum pyrolysis of methoxysulfinyl azide: Stepwise decomposition via methoxysulfinyl nitrene. Journal of Analytical and Applied Pyrolysis, 2017, 124, 610-617.	2.6	7
71	Photochemistry of OPN: Formation of Cyclic PON and Reversible Combination with Carbon Monoxide. Chemistry - A European Journal, 2018, 24, 14627-14630.	1.7	7
72	Photodecomposition of Thienylsulfonyl Azides: Generation and Spectroscopic Characterization of Triplet Thienylsulfonyl Nitrenes and 3-Thienylnitrene. Journal of Physical Chemistry A, 2019, 123, 9311-9320.	1.1	7

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73	Generation and Characterization of the C ₃ O ₂ ⁺ Anion with an Unexpected Unsymmetrical Structure. <i>Angewandte Chemie - International Edition</i> , 2021, 60, 4518-4523.	7.2	7
74	Spectroscopic characterization of two peroxy radicals during the O ₂ -oxidation of the methylthio radical. <i>Communications Chemistry</i> , 2022, 5, .	2.0	7
75	Spectroscopic Characterization and Constitutional and Rotational Isomerism of ClC(O)SCN and ClC(O)NCS. <i>Journal of Physical Chemistry A</i> , 2013, 117, 2383-2399.	1.1	6
76	Difluoroacetyl azide: Synthesis, characterization, and decomposition. <i>Journal of Analytical and Applied Pyrolysis</i> , 2017, 125, 209-217.	2.6	6
77	The hypothiocyanite radical OSCN and its isomers. <i>Physical Chemistry Chemical Physics</i> , 2017, 19, 16713-16720.	1.3	6
78	Photochemistry of HNSO ₂ in cryogenic matrices: spectroscopic identification of the intermediates and mechanism. <i>Physical Chemistry Chemical Physics</i> , 2020, 22, 7975-7983.	1.3	6
79	Synthesis, structure and superoxide dismutase activity of two self-assembly transition metal complexes containing a tridentate amino-Schiff base deviating from salicylaldehyde with glycine. <i>Science Bulletin</i> , 2009, 54, 3508-3514.	4.3	5
80	Heterocumulene Sulfinyl Radical OCNSO. <i>Angewandte Chemie</i> , 2017, 129, 2172-2176.	1.6	5
81	Phosphorus Analogues of Methyl Nitrite and Nitromethane: CH ₃ OPO and CH ₃ PO ₂ . <i>Angewandte Chemie</i> , 2019, 131, 12292-12297.	1.6	5
82	Spectroscopic Characterization of Nicotinoyl and Isonicotinoyl Nitrenes and the Photointerconversion of 4-Pyridylnitrene with Diazacycloheptatetraene. <i>Journal of Physical Chemistry A</i> , 2019, 123, 3793-3801.	1.1	5
83	Photodecomposition of 1 <i>H</i> -Pyrrole Carbonyl Azides: Direct Observation of Singlet 1 <i>H</i> -Pyrrole Carbonyl Nitrenes and Triplet 1 <i>H</i> -Pyrrolylnitrene. <i>European Journal of Organic Chemistry</i> , 2019, 2019, 401-411.	1.2	5
84	Asparaginyl endopeptidase may promote liver sinusoidal endothelial cell angiogenesis via PI3K/Akt pathway. <i>Revista Espanola De Enfermedades Digestivas</i> , 2018, 111, 214-222.	0.1	5
85	Triple bonding between beryllium and nitrogen in HNB _e CO. <i>Chemical Communications</i> , 2022, 58, 8532-8535.	2.2	5
86	Novel gaseous transient species: Generation and characterization. <i>Science in China Series B: Chemistry</i> , 2007, 50, 145-169.	0.8	4
87	A novel heterogeneous reaction for generating gaseous nitrous acid. <i>Science Bulletin</i> , 2007, 52, 3056-3060.	1.7	4
88	Spectroscopic Identification of H ₂ NSO and <i>syn</i> - and <i>anti</i> -HNSOH Radicals. <i>Angewandte Chemie - International Edition</i> , 2018, 57, 7513-7517.	7.2	4
89	Synthesis, conformation, and photochemistry of difluoroacetyl isocyanate CF ₂ HC(O)NCO and isothiocyanate CF ₂ HC(O)NCS. <i>Journal of Molecular Structure</i> , 2018, 1172, 25-32.	1.8	4
90	Chloro- and Dichloro-methylsulfonyl Nitrenes: Spectroscopic Characterization, Photoisomerization, and Thermal Decomposition. <i>Molecules</i> , 2018, 23, 3312.	1.7	4

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91	Spectroscopic identification of monomeric methyl metaphosphate. Dalton Transactions, 2019, 48, 13907-13911.	1.6	4
92	Acryloylnitrenes: Spectroscopic Characterization, Spin Multiplicities, and Rearrangement to Vinyl Isocyanates. Journal of Physical Chemistry A, 2020, 124, 6319-6329.	1.1	4
93	3-Nitrene-2-formylthiophene and 3-Nitrene-2-formylfuran: Matrix Isolation, Conformation, and Rearrangement Reactions. Journal of Physical Chemistry A, 2020, 124, 3786-3794.	1.1	4
94	Spectroscopic characterization and photochemistry of the vinylsulfinyl radical. Physical Chemistry Chemical Physics, 2021, 23, 16307-16315.	1.3	4
95	Dihalogenated Methylperoxy Radicals: Spectroscopic Characterization and Photodecomposition by Release of HO .. Chemistry - A European Journal, 2020, 26, 2817-2820.	1.7	4
96	Flash vacuum pyrolysis of sulfamoyl azides and chlorides: Facile gas-phase generation of transient N-sulfonylamines. Journal of Analytical and Applied Pyrolysis, 2018, 134, 476-483.	2.6	3
97	Heterocumulenic carbene nitric oxide radical OCCNO \dot{E} . Chemical Communications, 2019, 55, 13510-13513.	2.2	3
98	Spectroscopic identification of the \hat{e} SSNO isomers. Journal of Chemical Physics, 2020, 153, 094303.	1.2	3
99	Synthesis, Characterization and Energetic Performance of Oxalyl Diazide, Carbamoyl Azide, and $\langle i \rangle N \langle /i \rangle, \langle i \rangle N \hat{e} \langle /i \rangle \hat{e}$ Bis(azidocarbonyl)hydrazine. ChemPlusChem, 2021, 86, 870-874.	1.3	3
100	Matrix-isolated trifluoromethylthiyl radical: sulfur atom transfer, isomerization and oxidation reactions. Chemical Communications, 2021, 57, 12143-12146.	2.2	3
101	Spectroscopic Properties, Conformation and Structure of Difluorothiophosphoryl Isocyanate in the Gaseous and Solid Phase. ChemistryOpen, 2020, 9, 913-920.	0.9	2
102	Spectroscopic characterization and photochemistry of the Criegee intermediate CF ₃ C(H)OO. Journal of Environmental Sciences, 2022, 114, 160-169.	3.2	2
103	Fluoromethylsulfinyl radicals: spectroscopic characterization and photoisomerization $\langle i \rangle$ via $\langle /i \rangle$ intramolecular hydrogen shift. Physical Chemistry Chemical Physics, 2022, 24, 8881-8889.	1.3	2
104	Spectroscopic Identification of the Heterocumulenic Isocyanatoborane Radical HBNCO. Journal of Physical Chemistry Letters, 2022, 13, 2619-2624.	2.1	2
105	Preparation and Properties of Chlorosulfonyl Chloroformate, ClC(O)OSO ₂ Cl. Inorganic Chemistry, 2018, 57, 14834-14842.	1.9	1
106	The Triplet Hydroxyl Radical Complex of Phosphorus Monoxide. Angewandte Chemie, 2020, 132, 22133-22137.	1.6	1
107	Synthesis and characterization of phosphorous(iii) diisocyanate and triisocyanate. Dalton Transactions, 2021, 50, 3299-3307.	1.6	1
108	The simplest alkynyl thiocyanate HCCSCN and its isomers. Chemical Communications, 2021, 57, 3343-3346.	2.2	1

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109	Formation and infrared spectroscopic characterization of carbon suboxide complexes $TM\hat{\cdot}1 \hat{\cdot} \hat{\cdot} 3 O 2$ and the inserted ketenylidene complexes $OCTMCCO$ ($TM = Cu, Ag, Au$) in solid neon. Journal of Computational Chemistry, 2022, , .	1.5	1
110	Photolytic insertion of carbon monoxide into nitrosyl chloride: formation of nitrosoformyl chloride. Physical Chemistry Chemical Physics, 0, , .	1.3	1
111	Curtius-Type Rearrangement of Sulfinyl Azides: A Matrix Isolation and Computational Study. Journal of Physical Chemistry A, 2022, 126, 4367-4375.	1.1	1
112	Spectroscopic Identification of $H_{2}NSO$ and <i>syn</i> - and <i>anti</i> - $HNSOH$ Radicals. Angewandte Chemie, 2018, 130, 7635-7639.	1.6	0
113	The Simplest, Isolable, Alkynyl Isocyanate $HC\hat{\cdot}CNCO$: Synthesis and Characterization. Angewandte Chemie, 2019, 131, 17437-17441.	1.6	0
114	$\hat{\cdot}$ cktitelbild: The Triplet Hydroxyl Radical Complex of Phosphorus Monoxide (Angew. Chem. 49/2020). Angewandte Chemie, 2020, 132, 22452-22452.	1.6	0
115	Hydrogen-Atom Tunneling in Metaphosphorous Acid. Chemistry - A European Journal, 2020, 26, 8174-8174.	1.7	0
116	Synthesis and characterizations of fluorophosphoryl diazide and diisocyanate. Journal of Fluorine Chemistry, 2021, 242, 109694.	0.9	0
117	Generation and Characterization of the $C 3 O 2 \hat{\cdot}$ Anion with an Unexpected Unsymmetrical Structure. Angewandte Chemie, 2021, 133, 4568-4573.	1.6	0
118	A combined computational and experimental study on the vibrational structure of ethynyl isothiocyanate, $HCCNCS$, a molecule with a Champagne bottle potential. Journal of Molecular Spectroscopy, 2022, , 111626.	0.4	0