

# Xue-Zhong Sun

## List of Publications by Year in descending order

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51  
papers

1,855  
citations

236925

25  
h-index

265206

42  
g-index

53  
all docs

53  
docs citations

53  
times ranked

2052  
citing authors

#	ARTICLE	IF	CITATIONS
1	Photoreactivity examined through incorporation in metal-organic frameworks. <i>Nature Chemistry</i> , 2010, 2, 688-694.	13.6	137
2	Remarkable Stability of $(\eta^5\text{-C}_5\text{H}_5)\text{Re}(\text{CO})_2\text{L}$ (L = n-Heptane, Xe, and Kr): A Time-Resolved Infrared Spectroscopic Study of $(\eta^5\text{-C}_5\text{H}_5)\text{Re}(\text{CO})_3$ in Conventional and Supercritical Fluid Solution. <i>Journal of the American Chemical Society</i> , 1997, 119, 7521-7525.	13.7	123
3	A Combined Theoretical and Experimental Study on the Role of Spin States in the Chemistry of $\text{Fe}(\text{CO})_5$ Photoproducts. <i>Journal of the American Chemical Society</i> , 2009, 131, 3583-3592.	13.7	117
4	Photochemistry and Photophysics of a Pd(II) Metalloporphyrin: Re(I) Tricarbonyl Bipyridine Molecular Dyad and its Activity Toward the Photoreduction of $\text{CO}_2$ to CO. <i>Inorganic Chemistry</i> , 2011, 50, 11877-11889.	4.0	91
5	Can Organometallic Noble Gas Compounds Be Observed in Solution at Room Temperature? A Time-Resolved Infrared (TRIR) and UV Spectroscopic Study of the Photochemistry of $\text{M}(\text{CO})_6$ (M = Cr, Tj ETQq1 1 0, 784314 rgBT / Overl	13.7	87
	1996, 118, 10525-10532.		
6	Photophysical and Structural Properties of Cyanoruthenate Complexes of Hexaazatriphenylene. <i>Journal of the American Chemical Society</i> , 2007, 129, 11491-11504.	13.7	68
7	Unraveling the Photochemistry of $\text{Fe}(\text{CO})_5$ in Solution: Observation of $\text{Fe}(\text{CO})_3$ and the Conversion between $3\text{Fe}(\text{CO})_4$ and $1\text{Fe}(\text{CO})_4(\text{Solvent})$ . <i>Journal of the American Chemical Society</i> , 2004, 126, 10713-10720.	13.7	65
8	New members of the $[\text{Ru}(\text{diimine})(\text{CN})_4]^{2+}$ family: structural, electrochemical and photophysical properties. <i>Dalton Transactions</i> , 2006, , 39-50.	3.3	65
9	Intraligand Charge-Transfer Excited States in Re(I) Complexes with Donor-Substituted Dipyridophenazine Ligands. <i>Inorganic Chemistry</i> , 2014, 53, 1339-1354.	4.0	61
10	Time-resolved infrared (TRIR) study on the formation and reactivity of organometallic methane and ethane complexes in room temperature solution. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2007, 104, 6933-6938.	7.1	57
11	Probing the Solvent Dependent Photophysics of	4.0	57
	<i>Inorganic Chemistry</i> , 2008, 47, 9857-9869.		
12	Investigation into the reactivity of $\text{M}(\eta^5\text{-C}_5\text{R}_5)(\text{CO})_2(\text{alkane})$ (M = Mn or Re; R = H, Me or Ph; Tj ETQq0 0 0 rgBT / Overl	2.3	52
	temperature. <i>Dalton Transactions RSC</i> , 2000, , 1901-1906.		
13	Complete Family of Mono-, Bi-, and Trinuclear $\text{Re}(\text{CO})_3\text{Cl}$ Complexes of the Bridging Polypyridyl Ligand 2,3,8,9,14,15-Hexamethyl-5,6,11,12,17,18-hexaazatrinaphthalene: Syn/Anti Isomer Separation, Characterization, and Photophysics. <i>Inorganic Chemistry</i> , 2011, 50, 6093-6106.	4.0	50
14	Additive manufacture of complex 3D Au-containing nanocomposites by simultaneous two-photon polymerisation and photoreduction. <i>Scientific Reports</i> , 2017, 7, 17150.	3.3	46
15	Photoinduced N <sub>2</sub> loss as a route to long-lived organometallic alkane complexes: A time-resolved IR and NMR study. <i>Chemical Science</i> , 2010, 1, 622.	7.4	44
16	Understanding the factors affecting the activation of alkane by $\text{Cp}^*\text{Rh}(\text{CO})_2$ ( $\text{Cp}^* = \text{Cp}$ or $\text{Cp}^*$ ). <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2010, 107, 20178-20183.	7.1	43
17	Photoinduced Energy Transfer in a Conformationally Flexible Re(I)/Ru(II) Dyad Probed by Time-Resolved Infrared Spectroscopy: Effects of Conformation and Spatial Localization of Excited States. <i>Inorganic Chemistry</i> , 2008, 47, 5071-5078.	4.0	39
18	Unusually Slow Photodissociation of CO from $(\eta^6\text{-C}_6\text{H}_6)_2\text{Cr}(\text{CO})_3$ (M = Cr or Mo): A Time-Resolved Infrared, Matrix Isolation, and DFT Investigation. <i>Organometallics</i> , 2009, 28, 1461-1468.	2.3	38

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19	Luminescence and Time-Resolved Infrared Study of Dyads Containing (Diimine)Ru(4,4'-diethylamido-2,2'-bipyridine) <sub>2</sub> and (Diimine)Ru(CN) <sub>4</sub> Moieties: Solvent-Induced Reversal of the Direction of Photoinduced Energy-Transfer. <i>Inorganic Chemistry</i> , 2009, 48, 8759-8770.	4.0	35
20	Photophysics and electrochemistry of a platinum-acetylide disubstituted perylene diimide. <i>Dalton Transactions</i> , 2014, 43, 85-94.	3.3	35
21	Excited state dependent electron transfer of a rhenium-dipyridophenazine complex intercalated between the base pairs of DNA: a time-resolved UV-visible and IR absorption investigation into the photophysics of fac-[Re(CO) <sub>3</sub> (F2dppz)(py)] <sup>+</sup> bound to either [poly(dA-dT)] <sub>2</sub> or [poly(dG-dC)] <sub>2</sub> . <i>Photochemical and Photobiological Sciences</i> , 2011, 10, 1355.	2.9	32
22	Carbon-13 Hydrogen Activation of Cycloalkanes by Cyclopentadienylcarbonylrhodium-13C A Lifetime Enigma. <i>Journal of the American Chemical Society</i> , 2014, 136, 8614-8625.	13.7	32
23	Modification of coordination networks through a photoinduced charge transfer process. <i>Chemical Science</i> , 2014, 5, 539-544.	7.4	28
24	Excited States of Triphenylamine-Substituted 2-Pyridyl-1,2,3-triazole Complexes. <i>Inorganic Chemistry</i> , 2016, 55, 12238-12253.	4.0	28
25	A systematic approach to the generation of long-lived metal alkane complexes: combined IR and NMR study of (Tp)Re(CO) <sub>2</sub> (cyclopentane). <i>Chemical Communications</i> , 2009, , 1401.	4.1	27
26	Re(I) Complexes of Substituted dppz: A Computational and Spectroscopic Study. <i>Inorganic Chemistry</i> , 2014, 53, 3126-3140.	4.0	26
27	Photoinduced Se-13C Insertion Following Photolysis of (1 <sup>+</sup> -5 <sup>+</sup> -C <sub>4</sub> H <sub>4</sub> Se)Cr(CO) <sub>3</sub> . A Picosecond and Nanosecond Time-Resolved Infrared, Matrix Isolation, and DFT Investigation. <i>Organometallics</i> , 2008, 27, 3671-3680.	2.3	25
28	Monitoring the Formation and Reactivity of Organometallic Alkane and Fluoroalkane Complexes with Silanes and Xe Using Time-Resolved X-ray Absorption Fine Structure Spectroscopy. <i>Journal of the American Chemical Society</i> , 2019, 141, 11471-11480.	13.7	25
29	Photo-reduction of CO <sub>2</sub> Using a Rhenium Complex Covalently Supported on a Graphene/TiO <sub>2</sub> Composite. <i>ChemSusChem</i> , 2016, 9, 1698-1703.	6.8	24
30	Can aliphatic anchoring groups be utilised with dyes for p-type dye sensitized solar cells?. <i>Dalton Transactions</i> , 2016, 45, 7708-7719.	3.3	24
31	Energetics of the Reactions of (1 <sup>+</sup> -6-C <sub>6</sub> H <sub>6</sub> )Cr(CO) <sub>3</sub> with n-Heptane, N <sub>2</sub> , and H <sub>2</sub> Studied by High-Pressure Photoacoustic Calorimetry. <i>The Journal of Physical Chemistry</i> , 1996, 100, 19425-19429.	2.9	23
32	Picosecond time-resolved infrared investigation into the nature of the lowest excited state of fac-[Re(Cl)(CO) <sub>3</sub> (CO <sub>2</sub> Et-dppz)] (CO <sub>2</sub> Et-dppz = dipyrido[3,2a:2',3'c]phenazine-11-carboxylic ethyl ester). <i>Vibrational Spectroscopy</i> , 2004, 35, 219-223.	2.2	22
33	Solvent-dependent modulation of metal-metal electronic interactions in a dinuclear cyanoruthenate complex: a detailed electrochemical, spectroscopic and computational study. <i>Dalton Transactions</i> , 2012, 41, 10354.	3.3	19
34	Long-Lived Charge Transfer Excited States in HBC-Polypyridyl Complex Hybrids. <i>Inorganic Chemistry</i> , 2016, 55, 4710-4719.	4.0	19
35	Combined experimental and theoretical investigation into C-H activation of cyclic alkanes by Cp-Rh(CO) <sub>2</sub> (Cp = 1 <sup>-</sup> -5-C <sub>5</sub> H <sub>5</sub> or 1 <sup>-</sup> -5-C <sub>5</sub> Me <sub>5</sub> ). <i>Dalton Transactions</i> , 2011, 40, 1751.	3.3	18
36	Alteration of Intraligand Donor-Acceptor Interactions Through Torsional Connectivity in Substituted Re-dppz Complexes. <i>Inorganic Chemistry</i> , 2017, 56, 12967-12977.	4.0	16

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37	Understanding the factors controlling the photo-oxidation of natural DNA by enantiomerically pure intercalating ruthenium polypyridyl complexes through TA/TRIR studies with polydeoxynucleotides and mixed sequence oligodeoxynucleotides. <i>Chemical Science</i> , 2020, 11, 8600-8609.	7.4	16
38	Nature of Excited States of Ruthenium-Based Solar Cell Dyes in Solution: A Comprehensive Spectroscopic Study. <i>Inorganic Chemistry</i> , 2015, 54, 11697-11708.	4.0	15
39	Experimental and Theoretical Investigation into the Formation and Reactivity of $M(\text{Cp})(\text{CO})_2(\text{CO})_2$ ( $M = \text{Mn}$ or $\text{Re}$ ) in Liquid and Supercritical $\text{CO}_2$ and the Effect of Different $\text{CO}_2$ Coordination Modes on Reaction Rates with $\text{CO}$ , $\text{H}_2$ , and $\text{N}_2$ . <i>Organometallics</i> , 2009, 28, 3113-3122.	2.3	13
40	Displacement Kinetics of $\hat{\text{I}}^2$ -Bound Furan and 2,3-Dihydrofuran from Mn and Cr Centers: Evidence for the Partial Dearomatization of the Furan Ligand. <i>Inorganic Chemistry</i> , 2009, 48, 7787-7793.	4.0	12
41	Probing Organometallic Reactions by Time-Resolved Infrared Spectroscopy in Solution and in the Solid State Using Quantum Cascade Lasers. <i>Applied Spectroscopy</i> , 2015, 69, 519-524.	2.2	12
42	A Combined Theoretical and Experimental Study on the Wavelength-Dependent Photophysics of $(\hat{\text{I}}^6\text{-benzene})\text{Mo}(\text{CO})_3$ . <i>Organometallics</i> , 2012, 31, 268-272.	2.3	11
43	Picosecond time-resolved infrared spectroscopic investigation into electron localisation in the excited states of Re(i) polypyridyl complexes with bridging ligands. <i>Photochemical and Photobiological Sciences</i> , 2006, 5, 82-87.	2.9	10
44	Ultrafast time-resolved transient infrared and resonance Raman spectroscopic study of the photo-deprotection and rearrangement reactions of p-hydroxyphenacyl caged phosphates. <i>Faraday Discussions</i> , 0, 145, 171-183.	3.2	10
45	Study of picosecond processes of an intercalated dipyridophenazine $\text{Cr}(\text{III})$ complex bound to defined sequence DNAs using transient absorption and time-resolved infrared methods. <i>Dalton Transactions</i> , 2014, 43, 17606-17609.	3.3	9
46	Competing Pathways in the Photochemistry of $\text{Ru}(\text{H})_2(\text{CO})(\text{PPh}_3)_3$ . <i>Organometallics</i> , 2018, 37, 855-868.	2.3	8
47	New insights into the photochemistry of $[\text{CpFe}(\text{CO})_2]_2$ using picosecond through microsecond time-resolved infrared spectroscopy (TRIR). <i>Polyhedron</i> , 2014, 72, 130-134.	2.2	7
48	Cell Design for Picosecond Time-Resolved Infrared Spectroscopy in High-Pressure Liquids and Supercritical Fluids. <i>Applied Spectroscopy</i> , 2008, 62, 24-29.	2.2	6
49	Integrated Multistep Photochemical and Thermal Continuous Flow Reactions: Production of Bicyclic Lactones with Kilogram Productivity. <i>Organic Process Research and Development</i> , 2021, 25, 2052-2059.	2.7	3
50	Time-Resolved Infrared Spectroscopy in Supercritical Fluids. <i>Laser Chemistry</i> , 1999, 19, 133-139.	0.5	2
51	Wavelength dependent photoextrusion and tandem photo-extrusion reactions of ninhydrin bis-acetals for the synthesis of 8-ring lactones, benzocyclobutenes and orthoanhydrides. <i>Chemical Communications</i> , 2022, 58, 1546-1549.	4.1	2