

# 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	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
2	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
3	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
4	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
5	Competing Pathways in the Photochemistry of $\text{Ru}(\text{H})_2(\text{CO})(\text{PPh})_3$ . <i>Organometallics</i> , 2018, 37, 855-868.	2.3	8
6	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
7	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
8	Photo-reduction of $\text{CO}_2$ Using a Rhenium Complex Covalently Supported on a Graphene/ $\text{TiO}_2$ Composite. <i>ChemSusChem</i> , 2016, 9, 1698-1703.	6.8	24
9	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
10	Long-Lived Charge Transfer Excited States in HBC-Polypyridyl Complex Hybrids. <i>Inorganic Chemistry</i> , 2016, 55, 4710-4719.	4.0	19
11	Excited States of Triphenylamine-Substituted 2-Pyridyl-1,2,3-triazole Complexes. <i>Inorganic Chemistry</i> , 2016, 55, 12238-12253.	4.0	28
12	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
13	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
14	Study of picosecond processes of an intercalated dipyrrophenazine $\text{Cr}(\text{III})$ 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
15	Photophysics and electrochemistry of a platinum-acetylide disubstituted perylene diimide. <i>Dalton Transactions</i> , 2014, 43, 85-94.	3.3	35
16	Modification of coordination networks through a photoinduced charge transfer process. <i>Chemical Science</i> , 2014, 5, 539-544.	7.4	28
17	Intraligand Charge-Transfer Excited States in Re(I) Complexes with Donor-Substituted Dipyrrophenazine Ligands. <i>Inorganic Chemistry</i> , 2014, 53, 1339-1354.	4.0	61
18	Carbon-Hydrogen Activation of Cycloalkanes by Cyclopentadienylcarbonylrhodium: A Lifetime Enigma. <i>Journal of the American Chemical Society</i> , 2014, 136, 8614-8625.	13.7	32

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19	Re(I) Complexes of Substituted dppz: A Computational and Spectroscopic Study. <i>Inorganic Chemistry</i> , 2014, 53, 3126-3140.	4.0	26
20	New insights into the photochemistry of [CpFe(CO) <sub>2</sub> ] <sub>2</sub> using picosecond through microsecond time-resolved infrared spectroscopy (TRIR). <i>Polyhedron</i> , 2014, 72, 130-134.	2.2	7
21	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
22	A Combined Theoretical and Experimental Study on the Wavelength-Dependent Photophysics of (1-η <sup>6</sup> -benzene)Mo(CO) <sub>3</sub> . <i>Organometallics</i> , 2012, 31, 268-272.	2.3	11
23	Combined experimental and theoretical investigation into C-H activation of cyclic alkanes by Cp <sup>2</sup> Rh(CO) <sub>2</sub> (Cp <sup>2</sup> = 1-5-C <sub>5</sub> H <sub>5</sub> or 1-5-C <sub>5</sub> Me <sub>5</sub> ). <i>Dalton Transactions</i> , 2011, 40, 1751.	3.3	18
24	Complete Family of Mono-, Bi-, and Trinuclear Re <sup>I</sup> (CO) <sub>3</sub> 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
25	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
26	Photochemistry and Photophysics of a Pd(II) Metalloporphyrin: Re(I) Tricarbonyl Bipyridine Molecular Dyad and its Activity Toward the Photoreduction of CO <sub>2</sub> to CO. <i>Inorganic Chemistry</i> , 2011, 50, 11877-11889.	4.0	91
27	Photoreactivity examined through incorporation in metal-organic frameworks. <i>Nature Chemistry</i> , 2010, 2, 688-694.	13.6	137
28	Understanding the factors affecting the activation of alkane by Cp <sup>2</sup> Rh(CO) <sub>2</sub> (Cp <sup>2</sup> = Cp or Cp <sup>*</sup> ). <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2010, 107, 20178-20183.	7.1	43
29	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
30	Displacement Kinetics of η <sup>2</sup> -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
31	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
32	Experimental and Theoretical Investigation into the Formation and Reactivity of M(Cp)(CO) <sub>2</sub> (CO) <sub>2</sub> (M = Mn or Re) in Liquid and Supercritical CO <sub>2</sub> and the Effect of Different CO <sub>2</sub> Coordination Modes on Reaction Rates with CO, H <sub>2</sub> , and N <sub>2</sub> . <i>Organometallics</i> , 2009, 28, 3113-3122.	2.3	13
33	A Combined Theoretical and Experimental Study on the Role of Spin States in the Chemistry of Fe(CO) <sub>5</sub> Photoproducts. <i>Journal of the American Chemical Society</i> , 2009, 131, 3583-3592.	13.7	117
34	Unusually Slow Photodissociation of CO from (1-η <sup>6</sup> -C <sub>6</sub> H <sub>6</sub> )Cr(CO) <sub>3</sub> (M = Cr or Mo): A Time-Resolved Infrared, Matrix Isolation, and DFT Investigation. <i>Organometallics</i> , 2009, 28, 1461-1468.	2.3	38
35	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
36	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

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37	Probing the Solvent Dependent Photophysics of Inorganic Chemistry, 2008, 47, 9857-9869.	4.0	57
38	Photoinduced Se <sup>13</sup> C Insertion Following Photolysis of (Ir <sup>5</sup> -C <sup>4</sup> H <sup>4</sup> Se)Cr(CO) <sub>3</sub> . A Picosecond and Nanosecond Time-Resolved Infrared, Matrix Isolation, and DFT Investigation. Organometallics, 2008, 27, 3671-3680.	2.3	25
39	Cell Design for Picosecond Time-Resolved Infrared Spectroscopy in High-Pressure Liquids and Supercritical Fluids. Applied Spectroscopy, 2008, 62, 24-29.	2.2	6
40	Time-resolved infrared (TRIR) study on the formation and reactivity of organometallic methane and ethane complexes in room temperature solution. Proceedings of the National Academy of Sciences of the United States of America, 2007, 104, 6933-6938.	7.1	57
41	Photophysical and Structural Properties of Cyanoruthenate Complexes of Hexaazatriphenylene. Journal of the American Chemical Society, 2007, 129, 11491-11504.	13.7	68
42	New members of the [Ru(diimine)(CN) <sub>4</sub> ] <sup>2-</sup> family: structural, electrochemical and photophysical properties. Dalton Transactions, 2006, , 39-50.	3.3	65
43	Picosecond time-resolved infrared spectroscopic investigation into electron localisation in the excited states of Re(i) polypyridyl complexes with bridging ligands. Photochemical and Photobiological Sciences, 2006, 5, 82-87.	2.9	10
44	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 <sup>ε</sup> ,3 <sup>ε</sup> c]phenazine-11-carboxylic ethyl ester). Vibrational Spectroscopy, 2004, 35, 219-223.	2.2	22
45	Unraveling the Photochemistry of Fe(CO) <sub>5</sub> in Solution: Observation of Fe(CO) <sub>3</sub> and the Conversion between 3Fe(CO) <sub>4</sub> and 1Fe(CO) <sub>4</sub> (Solvent). Journal of the American Chemical Society, 2004, 126, 10713-10720.	13.7	65
46	Investigation into the reactivity of M(η <sup>5</sup> -C <sub>5</sub> R <sub>5</sub> )(CO) <sub>2</sub> (alkane) (M = Mn or Re; R = H, Me or Ph; Tj ETQq0 0 0 rgBT /Overlo) temperature. Dalton Transactions RSC, 2000, , 1901-1906.	2.3	52
47	Time-Resolved Infrared Spectroscopy in Supercritical Fluids. Laser Chemistry, 1999, 19, 133-139.	0.5	2
48	Remarkable Stability of (η <sup>5</sup> -C <sub>5</sub> H <sub>5</sub> )Re(CO) <sub>2</sub> L (L = n-Heptane, Xe, and Kr): A Time-Resolved Infrared Spectroscopic Study of (η <sup>5</sup> -C <sub>5</sub> H <sub>5</sub> )Re(CO) <sub>3</sub> in Conventional and Supercritical Fluid Solution. Journal of the American Chemical Society, 1997, 119, 7521-7525.	13.7	123
49	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 M(CO) <sub>6</sub> (M = Cr, Tj ETQq1 1 0,784314 rgBT /Overlo) 1996, 118, 10525-10532.	13.7	87
50	Energetics of the Reactions of (η <sup>6</sup> -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. The Journal of Physical Chemistry, 1996, 100, 19425-19429.	2.9	23
51	Ultrafast time-resolved transient infrared and resonance Raman spectroscopic study of the photo-deprotection and rearrangement reactions of p-hydroxyphenacyl caged phosphates. Faraday Discussions, 0, 145, 171-183.	3.2	10