

Xiaotai Wang

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/8765335/publications.pdf>

Version: 2024-02-01

63
papers

2,664
citations

218677

26
h-index

182427

51
g-index

63
all docs

63
docs citations

63
times ranked

2656
citing authors

#	ARTICLE	IF	CITATIONS
1	Porous Lanthanide-Organic Frameworks: Synthesis, Characterization, and Unprecedented Gas Adsorption Properties. <i>Journal of the American Chemical Society</i> , 2003, 125, 3062-3067.	13.7	602
2	Ni-Catalyzed Reductive Coupling of Electron-Rich Aryl Iodides with Tertiary Alkyl Halides. <i>Journal of the American Chemical Society</i> , 2018, 140, 14490-14497.	13.7	177
3	A New Porous Three-Dimensional Lanthanide Coordination Polymer. <i>Inorganic Chemistry</i> , 2000, 39, 4174-4178.	4.0	171
4	Computational Study on the Catalytic Role of Pincer Ruthenium(II)-PNN Complex in Directly Synthesizing Amide from Alcohol and Amine: The Origin of Selectivity of Amide over Ester and Imine. <i>Organometallics</i> , 2011, 30, 5233-5247.	2.3	149
5	Novel silver(I)-organic coordination polymers: conversion of extended structures in the solid state as driven by argentophilic interactions. <i>Chemical Communications</i> , 2001, , 1762-1763.	4.1	130
6	A Computational Mechanistic Study of an Unprecedented Heck-Type Relay Reaction: Insight into the Origins of Regio- and Enantioselectivities. <i>Journal of the American Chemical Society</i> , 2014, 136, 986-998.	13.7	118
7	The Mechanism of a Ligand-Promoted C(sp ³)-H Activation and Arylation Reaction via Palladium Catalysis: Theoretical Demonstration of a Pd(II)/Pd(IV) Redox Manifold. <i>Journal of the American Chemical Society</i> , 2015, 137, 2006-2014.	13.7	106
8	Radical Dehydroxylative Alkylation of Tertiary Alcohols by Ti Catalysis. <i>Journal of the American Chemical Society</i> , 2020, 142, 16787-16794.	13.7	91
9	Computational Insight into the Mechanism of Selective Imine Formation from Alcohol and Amine Catalyzed by the Ruthenium(II)-PNP Pincer Complex. <i>European Journal of Inorganic Chemistry</i> , 2012, 2012, 5011-5020.	2.0	79
10	A Thorough DFT Study of the Mechanism of Homodimerization of Terminal Olefins through Metathesis with a Chelated Ruthenium Catalyst: From Initiation to <i>Z</i> -Selectivity to Regeneration. <i>Organometallics</i> , 2012, 31, 7222-7234.	2.3	58
11	Linker Engineering toward Full-Color Emission of UiO-68 Type Metal-Organic Frameworks. <i>Journal of the American Chemical Society</i> , 2021, 143, 10547-10552.	13.7	54
12	Does the Ruthenium Nitrate Catalyst Work Differently in <i>Z</i> -Selective Olefin Metathesis? A DFT Study. <i>Organometallics</i> , 2012, 31, 8654-8657.	2.3	52
13	Organotransition-Metal Metallocarboranes. 43. Directed Synthesis of Carborane-End-Capped Multidecker Sandwiches. <i>Journal of the American Chemical Society</i> , 1995, 117, 12227-12234.	13.7	48
14	CBe ₅ H ₅ Pentagons Containing Planar or Quasi-Planar Pentacoordinate Carbons. <i>Journal of Physical Chemistry A</i> , 2015, 119, 13101-13106.	2.5	48
15	Enantioselective Tandem Cyclization of Alkyne-Tethered Indoles Using Cooperative Silver(I)/Chiral Phosphoric Acid Catalysis. <i>Angewandte Chemie - International Edition</i> , 2017, 56, 12206-12209.	13.8	43
16	Self-assembly of free-base tetrapyrrolylporphyrin units by metal ion coordination. <i>Chemical Communications</i> , 1999, , 157-158.	4.1	39
17	Tuning and Directing Energy Transfer in the Whole Visible Spectrum through Linker Installation in Metal-Organic Frameworks. <i>Angewandte Chemie - International Edition</i> , 2021, 60, 25048-25054.	13.8	39
18	How Does Palladium-Amino Acid Cooperative Catalysis Enable Regio- and Stereoselective C(sp ³)-H Functionalization in Aldehydes and Ketones? A DFT Mechanistic Study. <i>ACS Catalysis</i> , 2018, 8, 7698-7709.	11.2	38

#	ARTICLE	IF	CITATIONS
19	Mechanism of the Palladium-Catalyzed C(sp ³)-H Arylation of Aliphatic Amines: Unraveling the Crucial Role of Silver(I) Additives. <i>ACS Catalysis</i> , 2019, 9, 6672-6680.	11.2	38
20	1-D Infinite Array of Metalloporphyrin Cages. <i>Inorganic Chemistry</i> , 2004, 43, 6878-6880.	4.0	36
21	Ultrashort Beryllium-Beryllium Distances Rivalling Those of Metal-Metal Quintuple Bonds Between Transition Metals. <i>Angewandte Chemie - International Edition</i> , 2016, 55, 15651-15655.	13.8	36
22	Self-assembly of one-dimensional coordination polymers from M(II) salts (M=Co, Cd) and flexible ligand 1,3-bis(4-pyridyl)propane. <i>Inorganica Chimica Acta</i> , 2002, 333, 152-154.	2.4	33
23	Organotransition-Metal Metallocarboranes. 41. Synthesis and Structure of B-B- and Cp*-Cp*-Linked Cobaltacarborane Clusters. <i>Organometallics</i> , 1995, 14, 4668-4675.	2.3	28
24	Facile Syntheses of Titanium(II), Tin(II), and Vanadium(II) Porphyrin Complexes through Homogeneous Reduction. Reactivity of trans-(TTP)TiL ₂ (L = THF, t-BuNC). <i>Inorganic Chemistry</i> , 1998, 37, 5-9.	4.0	26
25	Titanium(II) Porphyrin Complexes: Versatile One- and Two-Electron Reducing Agents. Reduction of Organic Chlorides, Epoxides, and Sulfoxides. <i>Journal of Organic Chemistry</i> , 1998, 63, 356-360.	3.2	26
26	Mechanism and Origins of <i>Z</i> -Selectivity of the Catalytic Hydroalkoxylation of Alkynes via Rhodium Vinylidene Complexes To Produce Enol Ethers. <i>Organometallics</i> , 2013, 32, 2804-2813.	2.3	26
27	Organotransition-metal metallocarboranes. 34. Synthesis and structure of a hexadecker sandwich. <i>Journal of the American Chemical Society</i> , 1994, 116, 2687-2688.	13.7	22
28	Organotransition-Metal Metallocarboranes. 44. Construction of Pentadecker and Hexadecker Sandwiches from Triple-Decker Building Blocks. <i>Journal of the American Chemical Society</i> , 1995, 117, 12218-12226.	13.7	22
29	Isomerization of olefin carboxylic esters catalyzed by nickel and palladium compounds. <i>Journal of Molecular Catalysis A</i> , 1998, 130, 171-176.	4.8	20
30	Mechanism of <i>Z</i> -Selective Olefin Metathesis Catalyzed by a Ruthenium Monothiolate Carbene Complex: A DFT Study. <i>Organometallics</i> , 2014, 33, 4290-4294.	2.3	20
31	Stabilization of beryllium-containing planar pentacoordinate carbon species through attaching hydrogen atoms. <i>RSC Advances</i> , 2018, 8, 36521-36526.	3.6	20
32	Enantioselective Hydroxylation of Dihydrosilanes to Si-Chiral Silanols Catalyzed by In Situ Generated Copper(II) Species. <i>Angewandte Chemie - International Edition</i> , 2022, 61, .	13.8	19
33	Carbon-rich metallocarboranes. 15. Novel metal-promoted cluster fusion reactions. <i>Inorganic Chemistry</i> , 1993, 32, 2156-2163.	4.0	18
34	Mechanism of Cobalt-Catalyzed Direct Aminocarbonylation of Unactivated Alkyl Electrophiles: Outer-Sphere Amine Substitution To Form Amide Bond. <i>ACS Catalysis</i> , 2020, 10, 1520-1527.	11.2	18
35	How Does an Earth-Abundant Copper-Based Catalyst Achieve Anti-Markovnikov Hydrobromination of Alkynes? A DFT Mechanistic Study. <i>Organometallics</i> , 2016, 35, 1923-1930.	2.3	16
36	Aluminum(η^2 -diketiminato) complexes activate C(sp ²)-F and C(sp ³)-F bonds by different oxidative addition mechanisms: a DFT study. <i>Chemical Communications</i> , 2017, 53, 8196-8198.	4.1	15

#	ARTICLE	IF	CITATIONS
37	Preparation of α -amino acids via Ni-catalyzed reductive vinylation and arylation of α -pivaloyloxy glycine. <i>Chemical Science</i> , 2021, 12, 220-226.	7.4	15
38	Building an emission library of donor-acceptor donor type linker-based luminescent metal-organic frameworks. <i>Chemical Science</i> , 2022, 13, 8036-8044.	7.4	15
39	Decamethylnickelocenium hydrogen-7,7,8,8-tetracyano-perfluoro-p-quinodimethandiide: isolation of the protonated weak base [HTCNQF4] ⁺ . <i>Chemical Communications</i> , 1996, , 1979.	4.1	13
40	Enantioselective Tandem Cyclization of Alkyne-Tethered Indoles Using Cooperative Silver(I)/Chiral Phosphoric Acid Catalysis. <i>Angewandte Chemie</i> , 2017, 129, 12374-12377.	2.0	12
41	Alkaline earth metal-organic frameworks supported by ditopic carboxylates. <i>Journal of Coordination Chemistry</i> , 2013, 66, 826-835.	2.2	11
42	Organotransition-Metal Metallacarboranes. 42. Synthesis and Cluster Fusion of Iron-Centered Tetradecker Sandwiches. <i>Inorganic Chemistry</i> , 1995, 34, 6509-6513.	4.0	10
43	Mechanism of nickel-catalyzed direct carbonyl-Heck coupling reaction: the crucial role of second-sphere interactions. <i>Dalton Transactions</i> , 2021, 50, 2654-2662.	3.3	10
44	Ultrashort Beryllium-Beryllium Distances Rivalling Those of Metal-Metal Quintuple Bonds Between Transition Metals. <i>Angewandte Chemie</i> , 2016, 128, 15880-15884.	2.0	9
45	Simulating the effect of a triple bond to achieve the shortest main group metal-metal distance in diberyllium complexes: a computational study. <i>Dalton Transactions</i> , 2018, 47, 14462-14467.	3.3	9
46	Three-component reactions leading to 2D and 3D metal-organic frameworks assembled on dinickel-carboxylate secondary building units. <i>Polyhedron</i> , 2011, 30, 47-52.	2.2	8
47	Mechanistic Insights into Hydroformylation Catalyzed by Cationic Cobalt(II) Complexes: In Silico Modification of the Catalyst System. <i>ACS Catalysis</i> , 2020, 10, 13551-13559.	11.2	8
48	Neutral nano-polygons with ultrashort Be-Be distances. <i>Dalton Transactions</i> , 2019, 48, 15802-15809.	3.3	7
49	Computational design of species with ultrashort Be-Be distances using planar hexacoordinate carbon structures as the templates. <i>Dalton Transactions</i> , 2019, 48, 6581-6587.	3.3	7
50	Mechanism of C-P bond formation via Pd-catalyzed decarbonylative phosphorylation of amides: insight into the chemistry of the second coordination sphere. <i>Chemical Communications</i> , 2020, 56, 113-116.	4.1	7
51	Mechanistic Insights into Formation of All-Carbon Quaternary Centers via Scandium-Catalyzed C-H Alkylation of Imidazoles with 1,1-Disubstituted Alkenes. <i>Journal of Organic Chemistry</i> , 2021, 86, 4598-4606.	3.2	7
52	3D Lanthanide-organic coordination polymers built upon infinite 1D secondary building units. <i>Polyhedron</i> , 2008, 27, 3439-3442.	2.2	6
53	Tuning and Directing Energy Transfer in the Whole Visible Spectrum through Linker Installation in Metal-Organic Frameworks. <i>Angewandte Chemie</i> , 2021, 133, 25252-25258.	2.0	5
54	Carbon Dioxide Capture by Amino Acids through an Arginine-Arginine Carbamate Ion Pair. <i>Industrial & Engineering Chemistry Research</i> , 2021, 60, 17745-17749.	3.7	5

#	ARTICLE	IF	CITATIONS
55	Computational design of organometallic oligomers featuring 1,3-metal-carbon bonding and planar tetracoordinate carbon atoms. <i>Journal of Computational Chemistry</i> , 2016, 37, 296-303.	3.3	4
56	N-heterocyclic carbene-stabilized homoatomic lithium(0) complexes with a lithium-lithium covalent bond: A theoretical design and characterization. <i>Inorganic Chemistry Communication</i> , 2016, 63, 61-64.	3.9	3
57	The degree of π electron delocalization and the formation of 3D-extensible sandwich structures. <i>Physical Chemistry Chemical Physics</i> , 2016, 18, 11942-11950.	2.8	3
58	Unraveling the Mechanism of Palladium-Catalyzed Base-Free Cross-Coupling of Vinyl Carboxylates: Dual Role of Arylboronic Acids as a Reducing Agent and a Coupling Partner. <i>ACS Catalysis</i> , 2022, 12, 1809-1817.	11.2	3
59	Enantioselective Hydroxylation of Dihydrosilanes to β -Chiral Silanols Catalyzed by In Situ Generated Copper(II) Species. <i>Angewandte Chemie</i> , 0, , .	2.0	3
60	Understanding Methyl Salicylate Hydrolysis in the Presence of Amino Acids. <i>Journal of Agricultural and Food Chemistry</i> , 2021, 69, 6013-6021.	5.2	2
61	Mechanistic insights into Ni-catalyzed hydrogen atom transfer (HAT)-triggered hydrodefluorination of CF ₃ -substituted alkenes. <i>Dalton Transactions</i> , 2021, 50, 9026-9030.	3.3	1
62	Activation of Aryl Carboxylic Acids by Diboron Reagents towards Nickel-Catalyzed Direct Decarbonylative Borylation. <i>Angewandte Chemie</i> , 2021, 133, 24715.	2.0	0
63	Frontispiece: Activation of Aryl Carboxylic Acids by Diboron Reagents towards Nickel-Catalyzed Direct Decarbonylative Borylation. <i>Angewandte Chemie - International Edition</i> , 2021, 60, .	13.8	0