

# Xiaoyan Sun

## List of Publications by Year in descending order

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Version: 2024-02-01

48  
papers

3,416  
citations

218677

26  
h-index

206112

48  
g-index

53  
all docs

53  
docs citations

53  
times ranked

6035  
citing authors

#	ARTICLE	IF	CITATIONS
1	Coordinated hedgehog signaling induces new hair follicles in adult skin. <i>ELife</i> , 2020, 9, .	6.0	27
2	Tuning the Reactivities of the Heteronuclear [Al <sub>n</sub> V <sub>3</sub> O <sub>7</sub> ] (n=1,2) Cluster Oxides towards Methane by Varying the Composition of the Metal Centers. <i>Chemistry - A European Journal</i> , 2019, 25, 2967-2971.	3.3	10
3	Thermal Activation of CH <sub>4</sub> and H <sub>2</sub> as Mediated by the Ruthenium Oxide Cluster Ions [RuO <sub>x</sub> ] (x=1-3): On the Influence of Oxidation States. <i>Chemistry - A European Journal</i> , 2019, 25, 3550-3559.	3.3	11
4	Periodic deprivation of gaseous hydrogen sulfide affects the activity of the concrete corrosion layer in sewers. <i>Water Research</i> , 2019, 157, 463-471.	11.3	12
5	A radical switch in clonality reveals a stem cell niche in the epiphyseal growth plate. <i>Nature</i> , 2019, 567, 234-238.	27.8	153
6	On the Remarkable Role of the Nitrogen Ligand in the Gas-Phase Redox Reaction of the N <sub>2</sub> O/CO Couple Catalyzed by [NbN]. <i>Angewandte Chemie - International Edition</i> , 2019, 58, 3635-3639.	13.8	16
7	On the Origin of the Distinctly Different Reactivity of Ruthenium in [MO] <sub>2</sub> /CH <sub>4</sub> Systems (M=Fe, Ru, Os). <i>Angewandte Chemie - International Edition</i> , 2018, 57, 5934-5937.	13.8	15
8	Direct Room-Temperature Conversion of Methane into Protonated Formaldehyde: The Gas-Phase Chemistry of Mercury among the Zinc Triad Oxide Cations. <i>Angewandte Chemie - International Edition</i> , 2018, 57, 3251-3255.	13.8	15
9	Stability of Illicit Drugs as Biomarkers in Sewers: From Lab to Reality. <i>Environmental Science &amp; Technology</i> , 2018, 52, 1561-1570.	10.0	50
10	Über die Ursachen der deutlich unterschiedlichen Reaktivität von Ruthenium unter den [MO] <sub>2</sub> /CH <sub>4</sub> -Systemen (M=Fe, Ru, Os). <i>Angewandte Chemie</i> , 2018, 130, 6039-6043.	2.0	5
11	Catalysis by hybrid sp <sup>2</sup> /sp <sup>3</sup> nanodiamonds and their role in the design of advanced nanocarbon materials. <i>Chemical Society Reviews</i> , 2018, 47, 8438-8473.	38.1	130
12	Selective Nitrogen-Atom Transfer Driven by a Highly Efficient Intersystem Crossing in the [CeON] <sub>2</sub> /CH <sub>4</sub> System. <i>Angewandte Chemie - International Edition</i> , 2018, 57, 15902-15906.	13.8	12
13	Mechanistic aspects of methane activation promoted by [MO <sub>3</sub> ] <sup>+</sup> (M=Mn, Re). <i>International Journal of Mass Spectrometry</i> , 2018, 434, 240-245.	1.5	4
14	Single-Cell Transcriptomics of Traced Epidermal and Hair Follicle Stem Cells Reveals Rapid Adaptations during Wound Healing. <i>Cell Reports</i> , 2018, 25, 585-597.e7.	6.4	137
15	A comprehensive laboratory assessment of the effects of sewer-dosed iron salts on wastewater treatment processes. <i>Water Research</i> , 2018, 146, 109-117.	11.3	56
16	Oriented external electric fields as mimics for probing the role of metal ions and ligands in the thermal gas-phase activation of methane. <i>Dalton Transactions</i> , 2018, 47, 15271-15277.	3.3	23
17	Selective C-O Coupling Hidden in the Thermal Reaction of [Al <sub>2</sub> CuO <sub>5</sub> ] with Methane. <i>Chemistry - A European Journal</i> , 2018, 24, 14649-14653.	3.3	8
18	A Heterogeneous Metal-Free Catalyst for Hydrogenation: Lewis Acid-Base Pairs Integrated into a Carbon Lattice. <i>Angewandte Chemie - International Edition</i> , 2018, 57, 13800-13804.	13.8	64

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19	The Electric Field as a "Smart" Ligand in Controlling the Thermal Activation of Methane and Molecular Hydrogen. <i>Angewandte Chemie - International Edition</i> , 2018, 57, 14635-14639.	13.8	25
20	Unexpected Mechanistic Variants in the Thermal Gas-Phase Activation of Methane. <i>Organometallics</i> , 2017, 36, 8-17.	2.3	91
21	Metal-Free, Room-Temperature Oxygen-Atom Transfer in the N <sub>2</sub> O/CO Redox Couple as Catalyzed by [Si <sub>2</sub> O <sub>x</sub> ] <sup>+</sup> (x = 2-5). <i>Angewandte Chemie - International Edition</i> , 2017, 56, 9990-9993.	13.8	13
22	Control of Product Distribution and Mechanism by Ligation and Electric Field in the Thermal Activation of Methane. <i>Angewandte Chemie - International Edition</i> , 2017, 56, 10219-10223.	13.8	68
23	Thermal Methane Activation by the Metal-Free Cluster Cation [Si <sub>2</sub> O <sub>4</sub> ] <sup>+</sup> . <i>Chemistry - A European Journal</i> , 2017, 23, 1498-1501.	3.3	10
24	Revealing the Origin of Activity in Nitrogen-Doped Nanocarbons towards Electrocatalytic Reduction of Carbon Dioxide. <i>ChemSusChem</i> , 2016, 9, 1085-1089.	6.8	143
25	Single-Cell Transcriptome Profiling of Human Pancreatic Islets in Health and Type 2 Diabetes. <i>Cell Metabolism</i> , 2016, 24, 593-607.	16.2	1,173
26	Efficient Room-Temperature Methane Activation by the Closed-Shell, Metal-Free Cluster [OSiOH] <sup>+</sup> : A Novel Mechanistic Variant. <i>Chemistry - A European Journal</i> , 2016, 22, 14257-14263.	3.3	13
27	Single-Cell Transcriptomics Reveals that Differentiation and Spatial Signatures Shape Epidermal and Hair Follicle Heterogeneity. <i>Cell Systems</i> , 2016, 3, 221-237.e9.	6.2	332
28	Thermal Methane Activation by [Si <sub>2</sub> O <sub>5</sub> ] <sup>+</sup> and [Si <sub>2</sub> O <sub>5</sub> H <sub>2</sub> ] <sup>+</sup> : Reactivity Enhancement by Hydrogenation. <i>Angewandte Chemie - International Edition</i> , 2016, 55, 13345-13348.	13.8	7
29	Wastewater-Enhanced Microbial Corrosion of Concrete Sewers. <i>Environmental Science &amp; Technology</i> , 2016, 50, 8084-8092.	10.0	85
30	Effects of surface washing on the mitigation of concrete corrosion under sewer conditions. <i>Cement and Concrete Composites</i> , 2016, 68, 88-95.	10.7	30
31	Oxygen breaks into carbon nanotubes and abstracts hydrogen from propane. <i>Carbon</i> , 2016, 96, 631-640.	10.3	38
32	The Effect of Different Phosphorus Chemical States on an Onion-Like Carbon Surface for the Oxygen Reduction Reaction. <i>ChemSusChem</i> , 2015, 8, 2872-2876.	6.8	29
33	Identification of controlling factors for the initiation of corrosion of fresh concrete sewers. <i>Water Research</i> , 2015, 80, 30-40.	11.3	78
34	Impact of fluctuations in gaseous H <sub>2</sub> S concentrations on sulfide uptake by sewer concrete: The effect of high H <sub>2</sub> S loads. <i>Water Research</i> , 2015, 81, 84-91.	11.3	28
35	New insights into the oxidative dehydrogenation of propane on borate-modified nanodiamond. <i>Chemical Communications</i> , 2015, 51, 9145-9148.	4.1	49
36	Insight into the Enhanced Selectivity of Phosphate-Modified Annealed Nanodiamond for Oxidative Dehydrogenation Reactions. <i>ACS Catalysis</i> , 2015, 5, 2436-2444.	11.2	58

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37	A novel and simple treatment for control of sulfide induced sewer concrete corrosion using free nitrous acid. <i>Water Research</i> , 2015, 70, 279-287.	11.3	51
38	Evolution and Reactivity of Active Oxygen Species on $\text{sp}^2$ @ $\text{sp}^3$ Core-Shell Carbon for the Oxidative Dehydrogenation Reaction. <i>ChemCatChem</i> , 2014, 6, 2270-2275.	3.7	29
39	Hybrid Nanocarbon as a Catalyst for Direct Dehydrogenation of Propane: Formation of an Active and Selective Core-Shell $\text{sp}^2$ / $\text{sp}^3$ Nanocomposite Structure. <i>Chemistry - A European Journal</i> , 2014, 20, 6324-6331.	3.3	107
40	Topical application of ALK5 inhibitor A-83-01 reduces burn wound contraction in rats by suppressing myofibroblast population. <i>Bioscience, Biotechnology and Biochemistry</i> , 2014, 78, 1805-1812.	1.3	3
41	Insight into the mechanism of nanodiamond catalysed decomposition of methane molecules. <i>Physical Chemistry Chemical Physics</i> , 2014, 16, 4488-4491.	2.8	21
42	Interaction between Palladium Nanoparticles and Surface-Modified Carbon Nanotubes: Role of Surface Functionalities. <i>ChemCatChem</i> , 2014, 6, 2607-2612.	3.7	30
43	A rapid, non-destructive methodology to monitor activity of sulfide-induced corrosion of concrete based on H <sub>2</sub> S uptake rate. <i>Water Research</i> , 2014, 59, 229-238.	11.3	32
44	Low Stability and a Conserved N-Glycosylation Site Are Associated with Regulation of the Discoidin Domain Receptor Family by Glucose via Post-Translational N-Glycosylation. <i>Bioscience, Biotechnology and Biochemistry</i> , 2013, 77, 1907-1916.	1.3	13
45	LCB 03-0110, a Novel Pan-Discoidin Domain Receptor/c-Src Family Tyrosine Kinase Inhibitor, Suppresses Scar Formation by Inhibiting Fibroblast and Macrophage Activation. <i>Journal of Pharmacology and Experimental Therapeutics</i> , 2012, 340, 510-519.	2.5	33
46	The Unique Role of CaO in Stabilizing the Pt/Al <sub>2</sub> O <sub>3</sub> Catalyst for the Dehydrogenation of Cyclohexane. <i>ChemCatChem</i> , 2012, 4, 1376-1381.	3.7	40
47	A high-efficiency, two-dimensional gel electrophoresis platform for mature leaves of grass pea ( <i>Lathyrus sativus</i> L.). <i>Acta Physiologiae Plantarum</i> , 2011, 33, 2387-2397.	2.1	21
48	Coordinated Hedgehog Signaling Induces De Novo Hair Follicles in Primed Epithelial Structures. <i>SSRN Electronic Journal</i> , 0, , .	0.4	0