

# Zhichun Si

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/3593116/publications.pdf>

Version: 2024-02-01

85  
papers

4,289  
citations

101543

36  
h-index

114465

63  
g-index

85  
all docs

85  
docs citations

85  
times ranked

3974  
citing authors

#	ARTICLE	IF	CITATIONS
1	Photoinduced hydroxyl radical and photocatalytic activity of samarium-doped TiO <sub>2</sub> nanocrystalline. <i>Journal of Hazardous Materials</i> , 2008, 150, 62-67.	12.4	322
2	DRIFT Study of CuO/CeO <sub>2</sub> /TiO <sub>2</sub> Mixed Oxides for NO <sub>x</sub> Reduction with NH <sub>3</sub> at Low Temperatures. <i>ACS Applied Materials &amp; Interfaces</i> , 2014, 6, 8134-8145.	8.0	247
3	Impacts of niobia loading on active sites and surface acidity in NbO/CeO <sub>2</sub> /ZrO <sub>2</sub> NH <sub>3</sub> -SCR catalysts. <i>Applied Catalysis B: Environmental</i> , 2015, 179, 380-394.	20.2	210
4	Solar photocatalytic degradation of methylene blue in carbon-doped TiO <sub>2</sub> nanoparticles suspension. <i>Solar Energy</i> , 2008, 82, 706-713.	6.1	196
5	Structure, acidity and activity of CuOx/WOx/ZrO <sub>2</sub> catalyst for selective catalytic reduction of NO by NH <sub>3</sub> . <i>Journal of Catalysis</i> , 2010, 271, 43-51.	6.2	137
6	Sol-gel auto-combustion synthesis of samarium-doped TiO <sub>2</sub> nanoparticles and their photocatalytic activity under visible light irradiation. <i>Materials Science and Engineering B: Solid-State Materials for Advanced Technology</i> , 2007, 137, 189-194.	3.5	133
7	NH <sub>3</sub> -SCR reaction mechanisms of NbO/Ce <sub>0.75</sub> Zr <sub>0.25</sub> O <sub>2</sub> catalyst: DRIFTS and kinetics studies. <i>Journal of Molecular Catalysis A</i> , 2016, 423, 172-180.	4.8	123
8	Selective catalytic reduction of NO by ammonia over phosphate-containing Ce <sub>0.75</sub> Zr <sub>0.25</sub> O <sub>2</sub> solids. <i>Applied Catalysis B: Environmental</i> , 2015, 163, 223-232.	20.2	121
9	Total oxidation of propane on Pt/WOx/Al <sub>2</sub> O <sub>3</sub> catalysts by formation of metastable Pt <sup>+</sup> species interacted with WOx clusters. <i>Journal of Hazardous Materials</i> , 2012, 225-226, 146-154.	12.4	102
10	Nb-modified Mn/Ce/Ti catalyst for the selective catalytic reduction of NO with NH <sub>3</sub> at low temperature. <i>Applied Catalysis A: General</i> , 2017, 545, 64-71.	4.3	99
11	Effects of WOx modification on the activity, adsorption and redox properties of CeO <sub>2</sub> catalyst for NO <sub>x</sub> reduction with ammonia. <i>Journal of Environmental Sciences</i> , 2012, 24, 1305-1316.	6.1	97
12	Influences of impregnation procedure on the SCR activity and alkali resistance of V <sub>2</sub> O <sub>5</sub> /WO <sub>3</sub> /TiO <sub>2</sub> catalyst. <i>Applied Surface Science</i> , 2013, 283, 209-214.	6.1	97
13	Evolution of copper species on Cu/SAPO-34 SCR catalysts upon hydrothermal aging. <i>Catalysis Today</i> , 2017, 281, 596-604.	4.4	92
14	Synergistic effect of CeO <sub>2</sub> modified TiO <sub>2</sub> photocatalyst on the enhancement of visible light photocatalytic performance. <i>Journal of Alloys and Compounds</i> , 2017, 714, 560-566.	5.5	88
15	Rare earth containing catalysts for selective catalytic reduction of NO <sub>x</sub> with ammonia: A Review. <i>Journal of Rare Earths</i> , 2014, 32, 907-917.	4.8	87
16	Modifications of CeO <sub>2</sub> /ZrO <sub>2</sub> solid solutions by nickel and sulfate as catalysts for NO reduction with ammonia in excess O <sub>2</sub> . <i>Catalysis Communications</i> , 2010, 11, 1045-1048.	3.3	85
17	Low-temperature SCR activity and SO <sub>2</sub> deactivation mechanism of Ce-modified V <sub>2</sub> O <sub>5</sub> /WO <sub>3</sub> /TiO <sub>2</sub> catalyst. <i>Progress in Natural Science: Materials International</i> , 2015, 25, 342-352.	4.4	85
18	Lattice oxygen mobility and acidity improvements of NiO/CeO <sub>2</sub> /ZrO <sub>2</sub> catalyst by sulfation for NO <sub>x</sub> reduction by ammonia. <i>Catalysis Today</i> , 2013, 201, 122-130.	4.4	83

#	ARTICLE	IF	CITATIONS
19	A novel Nb <sup>5+</sup> /Ce/WO <sub>3</sub> -TiO <sub>2</sub> catalyst with high NH <sub>3</sub> -SCR activity and stability. <i>Catalysis Communications</i> , 2012, 27, 97-100.	3.3	80
20	IR characterization of propane oxidation on Pt/CeO <sub>2</sub> -ZrO <sub>2</sub> : The reaction mechanism and the role of Pt. <i>Journal of Molecular Catalysis A</i> , 2012, 356, 100-105.	4.8	73
21	Synergistic effect between ceria and tungsten oxide on WO <sub>3</sub> -CeO <sub>2</sub> -TiO <sub>2</sub> catalysts for NH <sub>3</sub> -SCR reaction. <i>Progress in Natural Science: Materials International</i> , 2012, 22, 265-272.	4.4	66
22	NH <sub>3</sub> -SCR activity, hydrothermal stability, sulfur resistance and regeneration of Ce <sub>0.75</sub> Zr <sub>0.25</sub> O <sub>2</sub> -PO <sub>4</sub> catalyst. <i>Catalysis Communications</i> , 2012, 17, 146-149.	3.3	63
23	Localized Surface Plasmon Resonance Assisted Photothermal Catalysis of CO and Toluene Oxidation over Pd <sub>2</sub> CeO <sub>2</sub> Catalyst under Visible Light Irradiation. <i>Journal of Physical Chemistry C</i> , 2016, 120, 29116-29125.	3.1	62
24	Potassium poisoning on Cu-SAPO-34 catalyst for selective catalytic reduction of NO <sub>x</sub> with ammonia. <i>Chemical Engineering Journal</i> , 2015, 267, 191-200.	12.7	57
25	Atomic palladium on graphitic carbon nitride as a hydrogen evolution catalyst under visible light irradiation. <i>Communications Chemistry</i> , 2019, 2, .	4.5	57
26	SmMn <sub>2</sub> O <sub>5</sub> catalysts modified with silver for soot oxidation: Dispersion of silver and distortion of mullite. <i>Applied Catalysis B: Environmental</i> , 2020, 273, 119058.	20.2	56
27	Characterization and photocatalytic activity of Sm <sup>3+</sup> -doped TiO <sub>2</sub> nanocrystalline prepared by low temperature combustion method. <i>Journal of Alloys and Compounds</i> , 2008, 450, 426-431.	5.5	50
28	Synthesis, characterization and photocatalytic activity of porous WO <sub>3</sub> /TiO <sub>2</sub> hollow microspheres. <i>Applied Surface Science</i> , 2014, 313, 470-478.	6.1	48
29	Effects of silica additive on the NH <sub>3</sub> -SCR activity and thermal stability of a V <sub>2</sub> O <sub>5</sub> /WO <sub>3</sub> -TiO <sub>2</sub> catalyst. <i>Chinese Journal of Catalysis</i> , 2016, 37, 1340-1346.	14.0	47
30	Effects of WO <sub>3</sub> doping on stability and N <sub>2</sub> O escape of MnO-CeO <sub>2</sub> mixed oxides as a low-temperature SCR catalyst. <i>Catalysis Communications</i> , 2015, 69, 188-192.	3.3	43
31	Chemical deactivation of V <sub>2</sub> O <sub>5</sub> -WO <sub>3</sub> /TiO <sub>2</sub> SCR catalyst by combined effect of potassium and chloride. <i>Frontiers of Environmental Science and Engineering</i> , 2013, 7, 420-427.	6.0	42
32	Effects of cerium and vanadium on the activity and selectivity of MnO <sub>x</sub> -TiO <sub>2</sub> catalyst for low-temperature NH <sub>3</sub> -SCR. <i>Journal of Rare Earths</i> , 2011, 29, 64-68.	4.8	41
33	A comprehensive study on sulfur tolerance of niobia modified CeO <sub>2</sub> /WO <sub>3</sub> -TiO <sub>2</sub> catalyst for low-temperature NH <sub>3</sub> -SCR. <i>Applied Catalysis A: General</i> , 2019, 580, 121-130.	4.3	40
34	Potassium deactivation of Cu-SSZ-13 catalyst for NH <sub>3</sub> -SCR: Evolution of salts, zeolite and copper species. <i>Chemical Engineering Journal</i> , 2020, 383, 123080.	12.7	40
35	Synergistic effects between copper and tungsten on the structural and acidic properties of CuO <sub>x</sub> /WO <sub>x</sub> -ZrO <sub>2</sub> catalyst. <i>Catalysis Science and Technology</i> , 2011, 1, 453.	4.1	39
36	Relationships between copper speciation and Brønsted acidity evolution over Cu-SSZ-13 during hydrothermal aging. <i>Applied Catalysis A: General</i> , 2020, 602, 117650.	4.3	38

#	ARTICLE	IF	CITATIONS
37	CoMoS <sub>2</sub> /rGO/C <sub>3</sub> N <sub>4</sub> ternary heterojunctions catalysts with high photocatalytic activity and stability for hydrogen evolution under visible light irradiation. <i>Applied Surface Science</i> , 2018, 435, 1296-1306.	6.1	37
38	Low-Temperature Solid-State Ion-Exchange Method for Preparing Cu-SSZ-13 Selective Catalytic Reduction Catalyst. <i>ACS Catalysis</i> , 2019, 9, 6962-6973.	11.2	37
39	Modification of CeO <sub>2</sub> -ZrO <sub>2</sub> catalyst by potassium for NO <sub>x</sub> -assisted soot oxidation. <i>Journal of Environmental Sciences</i> , 2011, 23, 145-150.	6.1	36
40	Participation of sulfates in propane oxidation on Pt/SO <sub>4</sub> <sup>2-</sup> /CeO <sub>2</sub> -ZrO <sub>2</sub> catalyst. <i>Journal of Molecular Catalysis A</i> , 2012, 361-362, 98-103.	4.8	35
41	Facile synthesis of hierarchical porous $\gamma$ -Al <sub>2</sub> O <sub>3</sub> hollow microspheres for water treatment. <i>Journal of Colloid and Interface Science</i> , 2014, 417, 369-378.	9.4	35
42	Critical roles of Cu(OH) <sub>2</sub> in low-temperature moisture-induced degradation of Cu-SAPO-34 SCR catalyst: Correlating reversible and irreversible deactivation. <i>Applied Catalysis B: Environmental</i> , 2020, 278, 119306.	20.2	35
43	Durability of Cu/SAPO-34 catalyst for NO reduction by ammonia: Potassium and sulfur poisoning. <i>Catalysis Communications</i> , 2015, 59, 35-39.	3.3	33
44	Synthesizing multilayer graphene from amorphous activated carbon via ammonia-assisted hydrothermal method. <i>Carbon</i> , 2019, 152, 24-32.	10.3	33
45	Effect of water vapor on NH <sub>3</sub> -NO/NO <sub>2</sub> SCR performance of fresh and aged MnO <sub>x</sub> -NbO <sub>x</sub> -CeO <sub>2</sub> catalysts. <i>Journal of Environmental Sciences</i> , 2015, 31, 240-247.	6.1	32
46	In situ synthesized MoS <sub>2</sub> /Ag dots/Ag <sub>3</sub> PO <sub>4</sub> Z-scheme photocatalysts with ultrahigh activity for oxygen evolution under visible light irradiation. <i>Applied Surface Science</i> , 2018, 450, 441-450.	6.1	30
47	Noble metal-free NiS/P-S codoped g-C <sub>3</sub> N <sub>4</sub> photocatalysts with strong visible light absorbance and enhanced H <sub>2</sub> evolution activity. <i>Catalysis Communications</i> , 2018, 106, 55-59.	3.3	30
48	Pd@Ag@CeO <sub>2</sub> Catalyst of Core-Shell Structure for Low Temperature Oxidation of Toluene Under Visible Light Irradiation. <i>Journal of Physical Chemistry C</i> , 2019, 123, 1761-1769.	3.1	30
49	Effects of samarium dopant on photocatalytic activity of TiO <sub>2</sub> nanocrystallite for methylene blue degradation. <i>Journal of Materials Science</i> , 2007, 42, 9194-9199.	3.7	28
50	Facile synthesis of NaOH-promoted Pt/TiO <sub>2</sub> catalysts for toluene oxidation under visible light irradiation. <i>Applied Surface Science</i> , 2019, 469, 246-252.	6.1	28
51	Improved hydrothermal durability of Cu-SSZ-13 NH <sub>3</sub> -SCR catalyst by surface Al modification: Affinity and passivation. <i>Journal of Catalysis</i> , 2022, 405, 199-211.	6.2	28
52	NO <sub>x</sub> -assisted soot oxidation over K/CuCe catalyst. <i>Journal of Rare Earths</i> , 2010, 28, 542-546.	4.8	26
53	A novel Au/r-GO/TNTs electrode for H <sub>2</sub> O <sub>2</sub> , O <sub>2</sub> and nitrite detection. <i>Sensors and Actuators B: Chemical</i> , 2016, 234, 264-272.	7.8	23
54	Highly dispersed iron species created on alkali-treated zeolite for ammonia SCR. <i>Progress in Natural Science: Materials International</i> , 2013, 23, 493-500.	4.4	22

#	ARTICLE	IF	CITATIONS
55	Optimizing the crystallinity and acidity of H-SAPO-34 by fluoride for synthesizing Cu/SAPO-34 NH <sub>3</sub> -SCR catalyst. <i>Journal of Environmental Sciences</i> , 2016, 41, 244-251.	6.1	22
56	Ni single atoms anchored on nitrogen-doped graphene as H <sub>2</sub> -Evolution cocatalyst of SrTiO <sub>3</sub> (Al)/CoO for photocatalytic overall water splitting. <i>Carbon</i> , 2021, 183, 763-773.	10.3	22
57	Tailored temperature window of MnO <sub>x</sub> -CeO <sub>2</sub> SCR catalyst by addition of acidic metal oxides. <i>Chinese Journal of Catalysis</i> , 2014, 35, 1281-1288.	14.0	21
58	Direct ink writing of porous cordierite honeycomb ceramic. <i>Ceramics International</i> , 2019, 45, 15230-15236.	4.8	21
59	Quantitative control and identification of copper species in Cu@SAPO-34: a combined UV-vis spectroscopic and H <sub>2</sub> -TPR analysis. <i>Research on Chemical Intermediates</i> , 2019, 45, 1309-1325.	2.7	21
60	An isolation strategy to anchor atomic Ni or Co cocatalysts on TiO <sub>2</sub> (A) for photocatalytic hydrogen production. <i>Nano Research</i> , 2022, 15, 5848-5856.	10.4	20
61	Hydrothermal stability of MO <sub>x</sub> -Ce <sub>0.75</sub> Zr <sub>0.25</sub> O <sub>2</sub> catalysts for NO <sub>x</sub> reduction by ammonia. <i>Journal of Rare Earths</i> , 2013, 31, 1148-1156.	4.8	19
62	Decomposition behavior of ammonium nitrate on ceria catalysts and its role in the NH <sub>3</sub> -SCR reaction. <i>Catalysis Science and Technology</i> , 2017, 7, 2531-2541.	4.1	19
63	NH <sub>3</sub> -SCR activity, hydrothermal stability and poison resistance of a zirconium phosphate/Ce <sub>0.5</sub> Zr <sub>0.5</sub> O <sub>2</sub> catalyst in simulated diesel exhaust. <i>RSC Advances</i> , 2015, 5, 83594-83599.	3.6	18
64	Roles of Lewis and Brønsted acid sites in NO reduction with ammonia on CeO <sub>2</sub> -ZrO <sub>2</sub> -NiO-SO <sub>4</sub> catalyst. <i>Journal of Rare Earths</i> , 2010, 28, 727-731.	4.8	17
65	MOF-derived (MoS <sub>2</sub> , Fe <sub>3</sub> O <sub>4</sub> )/graphene Z-scheme photocatalysts with excellent activity for oxygen evolution under visible light irradiation. <i>RSC Advances</i> , 2020, 10, 17154-17162.	3.6	17
66	Nitrogen doped graphene quantum dots as a cocatalyst of SrTiO <sub>3</sub> (Al)/CoO <sub>x</sub> for photocatalytic overall water splitting. <i>Catalysis Science and Technology</i> , 2021, 11, 3039-3046.	4.1	17
67	Graphene quantum dots piecing together into graphene on nano Au for overall water splitting. <i>Carbon</i> , 2021, 178, 265-272.	10.3	17
68	Size effect of Pt nanoparticles in acid-assisted soot oxidation in the presence of NO. <i>Journal of Environmental Sciences</i> , 2020, 94, 64-71.	6.1	14
69	Effect of lean-oxygen treatment on the adsorption and activity of zirconium phosphate @ Ce <sub>0.75</sub> Zr <sub>0.25</sub> O <sub>2</sub> for NH <sub>3</sub> -SCR deNO. <i>Catalysis Today</i> , 2016, 267, 47-55.	4.4	13
70	Migration, reactivity, and sulfur tolerance of copper species in SAPO-34 zeolite toward NO <sub>x</sub> reduction with ammonia. <i>RSC Advances</i> , 2017, 7, 37787-37796.	3.6	13
71	Quasi- <i>operando</i> quantification of Cu(II) ions in Cu-SSZ-13 catalyst by an NH <sub>3</sub> temperature-programmed reduction method. <i>Chemical Communications</i> , 2021, 57, 1891-1894.	4.1	13
72	High-surface-area SmMn <sub>2</sub> O <sub>5</sub> nanosheets with crystal orientation for propane combustion: A facile microwave-assisted hydrothermal method. <i>Fuel</i> , 2021, 306, 121685.	6.4	11

#	ARTICLE	IF	CITATIONS
73	Comparative study of La <sup>3+</sup> /Ce MnO <sub>3</sub> + perovskites and Mn <sup>2+</sup> /Ce mixed oxides for NO catalytic oxidation. Journal of Rare Earths, 2020, 38, 863-872.	4.8	10
74	Facile method of synthesizing multilayer graphene capsuled sulfur nanoparticles for water treatment. Applied Surface Science, 2020, 502, 144194.	6.1	9
75	A Facile One Step Synthesis of MoS <sub>2</sub> /g-C <sub>3</sub> N <sub>4</sub> Photocatalyst with Enhanced Visible Light Photocatalytic Hydrogen Production. Catalysis Letters, 2022, 152, 972-979.	2.6	8
76	Deactivation of Cu-SAPO-34 by urea-related deposits at low temperatures and the regeneration. Journal of Environmental Sciences, 2019, 81, 43-51.	6.1	7
77	Stable Pt atomic clusters on carbon nanotubes grafted with carbon quantum dots as electrocatalyst for H <sub>2</sub> evolution in acidic electrolyte. Nano Select, 2021, 2, 2126-2134.	3.7	7
78	The synthesis, activity, stability and the charge transfer identification of Ag:AgBr/ <sup>γ</sup> -Al <sub>2</sub> O <sub>3</sub> photocatalyst for organic pollutant decomposition in water. Applied Surface Science, 2015, 357, 1792-1800.	6.1	6
79	Pt@g-C <sub>3</sub> N <sub>4</sub> /CeO <sub>2</sub> photocatalyst for the remediation of low concentration NO at room temperature. Progress in Natural Science: Materials International, 2020, 30, 308-311.	4.4	6
80	Deposition of Potassium Salts on Soot Oxidation Activity of Cu-SSZ-13 as a SCR Catalyst: Laboratory Study. Catalysis Surveys From Asia, 2020, 24, 250-258.	2.6	5
81	A strategy to construct a highly active Co <sub>x</sub> /P/SrTiO <sub>3</sub> (Al) catalyst to boost the photocatalytic overall water splitting reactions. Nanoscale, 2022, 14, 2427-2433.	5.6	5
82	Tailored temperature window of CuOx/WO <sub>3</sub> -ZrO <sub>2</sub> for NO <sub>x</sub> reduction via adjusting the calcination temperature of WO <sub>3</sub> -ZrO <sub>2</sub> . Materials Chemistry and Physics, 2013, 138, 399-404.	4.0	3
83	Combining Cu-SSZ-13 with TiO <sub>2</sub> : promotion of urea decomposition and influence on SCR. Reaction Chemistry and Engineering, 2022, 7, 2121-2131.	3.7	2
84	Sub-Nano Pt/ <sup>γ</sup> -FeOOH Quantum Dots for Photocatalytic Removal of Toluene: Catalyst Design, Preparation, and Benefits. Frontiers in Materials, 0, 9, .	2.4	2
85	Tungsten Oxide Modified V <sub>2</sub> O <sub>5</sub> -Sb <sub>2</sub> O <sub>3</sub> /TiO <sub>2</sub> Monolithic Catalyst: NH <sub>3</sub> -SCR Activity and Sulfur Resistance. Processes, 2022, 10, 1333.	2.8	0