Xiaole Weng

List of Publications by Year
in descending order

59 papers	4,303 citations	101543 36 h-index	128289 60 g-index
60 all docs	60 docs citations	60 times ranked	3279 citing authors

#	Article	IF	Citations
1	Continuous Hydrothermal Synthesis of Inorganic Nanoparticles: Applications and Future Directions. Chemical Reviews, 2017, 117, 11125-11238.	47.7	382
2	The role of cerium in the improved SO2 tolerance for NO reduction with NH3 over Mn-Ce/TiO2 catalyst at low temperature. Applied Catalysis B: Environmental, 2014, 148-149, 582-588.	20.2	332
3	The enhanced performance of ceria with surface sulfation for selective catalytic reduction of NO by NH3. Catalysis Communications, 2010, 12, 310-313.	3.3	297
4	Catalytic Oxidation of Chlorobenzene over Mn_{<i>x</i>}Ce_{1â€“<i>x</i>}O₂/HZSM-5 Catalysts: A Study with Practical Implications. Environmental Science & Technology, 2017, 51, 8057-8066.	10.0	281
5	Mechanism study on catalytic oxidation of chlorobenzene over Mn x Ce 1-x O 2 /H-ZSM5 catalysts under dry and humid conditions. Applied Catalysis B: Environmental, 2016, 198, 389-397.	20.2	169
6	Catalytic Oxidation of Chlorinated Organics over Lanthanide Perovskites: Effects of Phosphoric Acid Etching and Water Vapor on Chlorine Desorption Behavior. Environmental Science & Technology, 2019, 53, 884-893.	10.0	154
7	Deactivation mechanism of Ce/TiO₂selective catalytic reduction catalysts by the loading of sodium and calcium salts. Catalysis Science and Technology, 2013, 3, 715-722.	4.1	126
8	Synergistic Elimination of NO_{<i>x</i>} and Chloroaromatics on a Commercial V₂O₅â€“WO₃/TiO₂ Catalyst: Byproduct Analyses and the SO₂ Effect. Environmental Science & Technology, 2019, 53, 12657-12667.	10.0	116
9	Structural modification of LaCoO3 perovskite for oxidation reactions: The synergistic effect of Ca2+ and Mg2+ co-substitution on phase formation and catalytic performance. Applied Catalysis B: Environmental, 2015, 172-173, 18-26.	20.2	111
10	DRIFT studies on promotion mechanism of H 3 PW 12 O 40 in selective catalytic reduction of NO with NH 3. Journal of Colloid and Interface Science, 2016, 461, 9-14.	9.4	110
11	Alkali Potassium Induced HCl/CO₂ Selectivity Enhancement and Chlorination Reaction Inhibition for Catalytic Oxidation of Chloroaromatics. Environmental Science & Technology, 2018, 52, 6438-6447.	10.0	103
12	Active Oxygen Species in La_{<i>n</i>+1}Ni_{<i>n</i>}O_{3<i>n</i>+1} Layered Perovskites for Catalytic Oxidation of Toluene and Methane. Journal of Physical Chemistry C, 2016, 120, 3259-3266.	3.1	94
13	Mechanisms and reaction pathways for simultaneous oxidation of NO and SO2 by ozone determined by in situ IR measurements. Journal of Hazardous Materials, 2014, 274, 376-383.	12.4	93
14	Catalyst performance and mechanism of catalytic combustion of dichloromethane (CH2Cl2) over Ce doped TiO2. Journal of Colloid and Interface Science, 2016, 463, 233-241.	9.4	93
15	Efficient Elimination of Chlorinated Organics on a Phosphoric Acid Modified CeO₂ Catalyst: A Hydrolytic Destruction Route. Environmental Science & Technology, 2019, 53, 12697-12705.	10.0	91
16	Ceria supported on sulfated zirconia as a superacid catalyst for selective catalytic reduction of NO with NH3. Journal of Colloid and Interface Science, 2013, 394, 515-521.	9.4	80
17	Lanthanide perovskite catalysts for oxidation of chloroaromatics: Secondary pollution and modifications. Journal of Catalysis, 2018, 366, 213-222.	6.2	80
18	Direct continuous hydrothermal synthesis of high surface area nanosized titania. Journal of Alloys and Compounds, 2009, 476, 451-456.	5.5	79

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19	Facile Approach for the Syntheses of Ultrafine TiO₂ Nanocrystallites with Defects and C Heterojunction for Photocatalytic Water Splitting. ACS Sustainable Chemistry and Engineering, 2016, 4, 4314-4320.	6.7	76
20	Structural effect and reaction mechanism of MnO2 catalysts in the catalytic oxidation of chlorinated aromatics. Chinese Journal of Catalysis, 2019, 40, 638-646.	14.0	71
21	Development of a multi-active center catalyst in mediating the catalytic destruction of chloroaromatic pollutants: A combined experimental and theoretical study. Applied Catalysis B: Environmental, 2020, 272, 119015.	20.2	71
22	Synthesis and characterization of doped nano-sized ceriaâ€“zirconia solid solutions. Applied Catalysis B: Environmental, 2009, 90, 405-415.	20.2	64
23	Novel SCR catalyst with superior alkaline resistance performance: enhanced self-protection originated from modifying protonated titanate nanotubes. Journal of Materials Chemistry A, 2015, 3, 680-690.	10.3	63
24	Elimination of chloroaromatic congeners on a commercial V2O5-WO3/TiO2 catalyst: The effect of heavy metal Pb. Journal of Hazardous Materials, 2020, 387, 121705.	12.4	62
25	Vacancy-defect semiconductor quantum dots induced an S-scheme charge transfer pathway in 0D/2D structures under visible-light irradiation. Applied Catalysis B: Environmental, 2022, 306, 121109.	20.2	60
26	Supercritical water syntheses of Ce TiO2 nano-catalysts with a strong metal-support interaction for selective catalytic reduction of NO with NH3. Applied Catalysis B: Environmental, 2014, 160-161, 684-691.	20.2	59
27	SO₂ Poisoning Structures and the Effects on Pure and Mn Doped CeO₂: A First Principles Investigation. Journal of Physical Chemistry C, 2012, 116, 22930-22937.	3.1	58
28	A two-stage Ce/TiO2â€“Cu/CeO2 catalyst with separated catalytic functions for deep catalytic combustion of CH2Cl2. Chemical Engineering Journal, 2016, 290, 147-153.	12.7	55
29	Enhanced alkali resistance of CeO2/SO42â^'â€“ZrO2 catalyst in selective catalytic reduction of NOx by ammonia. Catalysis Communications, 2014, 43, 223-226.	3.3	54
30	The Superior Performance of Solâ€“Gel Made Ceâ€“Oâ€“P Catalyst for Selective Catalytic Reduction of NO with NH₃. Journal of Physical Chemistry C, 2016, 120, 221-229.	3.1	54
31	Facile synthesis of highly active LaCoO3/MgO composite perovskite via simultaneous co-precipitation in supercritical water. Applied Catalysis B: Environmental, 2012, 126, 231-238.	20.2	53
32	V₂O₅â€“WO₃/TiO₂ Catalyst for Efficient Synergistic Control of NO_{<i>x</i>} and Chlorinated Organics: Insights into the Arsenic Effect. Environmental Science & Technology, 2021, 55, 9317-9325.	10.0	52
33	Unveiling the secondary pollution in the catalytic elimination of chlorinated organics: The formation of dioxins. Chinese Chemical Letters, 2020, 31, 1410-1414.	9.0	50
34	Influence of Ca doping on MnOx/TiO2 catalysts for low-temperature selective catalytic reduction of NOx by NH3. Catalysis Communications, 2012, 18, 106-109.	3.3	45
35	Supercritical water syntheses of transition metal-doped CeO2 nano-catalysts for selective catalytic reduction of NO by CO: An in situ diffuse reflectance Fourier transform infrared spectroscopy study. Chinese Journal of Catalysis, 2018, 39, 728-735.	14.0	41
36	Effects of morphology and structure of titanate supports on the performance of ceria in selective catalytic reduction of NO. Catalysis Communications, 2012, 26, 178-182.	3.3	40

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37	<i>In situ</i> valence modification of Pd/NiO nano-catalysts in supercritical water towards toluene oxidation. Catalysis Science and Technology, 2018, 8, 1858-1866.	4.1	38
38	Continuous syntheses of highly dispersed composite nanocatalysts via simultaneous co-precipitation in supercritical water. Applied Catalysis B: Environmental, 2011, 103, 453-461.	20.2	35
39	Cl Species Transformation on CeO₂(111) Surface and Its Effects on CVOCs Catalytic Abatement: A First-Principles Investigation. Journal of Physical Chemistry C, 2014, 118, 6758-6766.	3.1	35
40	An ultrafast approach for the syntheses of defective nanosized lanthanide perovskites for catalytic toluene oxidation. Catalysis Science and Technology, 2018, 8, 4364-4372.	4.1	30
41	The role of surface sulfation in mediating the acidity and oxidation ability of nickel modified ceria catalyst for the catalytic elimination of chlorinated organics. Journal of Colloid and Interface Science, 2020, 574, 251-259.	9.4	30
42	Deactivation effects of Pb(II) and sulfur dioxide on a Î³-MnO2 catalyst for combustion of chlorobenzene. Journal of Colloid and Interface Science, 2020, 559, 96-104.	9.4	29
43	The effects of surface acidity on CO2 adsorption over amine functionalized protonated titanate nanotubes. RSC Advances, 2013, 3, 18803.	3.6	28
44	Rapid syntheses of ultrafine LaMnO3 nano-crystallites with superior activity for catalytic oxidation of toluene. Catalysis Communications, 2016, 84, 167-170.	3.3	27
45	Effective Way to Control the Performance of a Ceria-Based DeNO_{<i>x</i>} Catalyst with Improved Alkali Resistance: Acidâ€“Base Adjusting. Journal of Physical Chemistry C, 2015, 119, 15077-15084.	3.1	24
46	Unveiling the importance of reactant mass transfer in environmental catalysis: Taking catalytic chlorobenzene oxidation as an example. Chinese Chemical Letters, 2021, 32, 1206-1209.	9.0	24
47	Thermocatalytic syntheses of highly defective hybrid nano-catalysts for photocatalytic hydrogen evolution. Journal of Materials Chemistry A, 2017, 5, 23766-23775.	10.3	21
48	CePO₄ Catalyst for Elemental Mercury Removal in Simulated Coal-Fired Flue Gas. Energy & Fuels, 2015, 29, 3359-3365.	5.1	20
49	Effect of Cr doping in promoting the catalytic oxidation of dichloromethane (CH2Cl2) over Cr-Co@Z catalysts. Journal of Hazardous Materials, 2021, 413, 125327.	12.4	19
50	Regeneration mechanism of a deactivated zeolite-supported catalyst for the combustion of chlorinated volatile organic compounds. Catalysis Science and Technology, 2021, 11, 923-933.	4.1	19
51	Selective Ru Adsorption on SnO₂/CeO₂ Mixed Oxides for Efficient Destruction of Multicomponent Volatile Organic Compounds: From Laboratory to Practical Possibility. Environmental Science & Technology, 2022, 56, 9762-9772.	10.0	15
52	Continuous hydrothermal syntheses of highly active composite nanocatalysts. Green Chemistry, 2011, 13, 850.	9.0	14
53	Enhanced CO2 adsorptive performance of PEI/SBA-15 adsorbent using phosphate ester based surfactants as additives. Journal of Environmental Sciences, 2015, 38, 1-7.	6.1	14
54	Continuous hydrothermal flow syntheses of transition metal oxide doped Ce TiO2 nanopowders for catalytic oxidation of toluene. Catalysis Today, 2011, 175, 386-392.	4.4	13

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55	Organic-free synthesis and ortho-reaction of monodisperse Ni incorporated CeO₂ nanocatalysts. Journal of Materials Chemistry A, 2018, 6, 866-870.	10.3	12
56	Synergistic Elimination of NO_{<i>x</i>} and Chlorinated Organics over VO_{<i>x</i>}/TiO₂ Catalysts: A Combined Experimental and DFT Study for Exploring Vanadate Domain Effect. Environmental Science & Technology, 2021, 55, 12862-12870.	10.0	11
57	Mercury Re-emission Behaviors in Magnesium-Based Wet Flue Gas Desulfurization Process: The Effects of Oxidation Inhibitors. Energy & Fuels, 2015, 29, 2610-2615.	5.1	8
58	Supercritical water as a feasible reaction environment for the syntheses of hybrid nanocrystallites with strong metalâ€“support interaction. Catalysis Science and Technology, 2016, 6, 2901-2904.	4.1	8
59	Tailoring the simultaneous abatement of methanol and NOx on Sbâˆ’Ceâˆ’Zr catalysts via copper modification. Frontiers of Environmental Science and Engineering, 2022, 16, 1.	6.0	3