Zebao Rui

List of Publications by Year
in descending order

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81	3,828	94433 37	133252 59
papers	citations	h-index	g-index

83	83	83	4207
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Multifunctional Z-scheme CuxO/Ag/SrTiO3 heterojunction for photothermocatalytic VOCs degradation and antibiosis. Applied Surface Science, 2023, 618, 153275.	6.1	7
2	In situ mercaptosilane-assisted confinement of Pd nanoparticles in Beta for high-efficient methane oxidation. Catalysis Today, 2022, 400-401, 124-131.	4.4	4
3	Photothermocatalytic water splitting over Pt/ZnIn2S4 for hydrogen production without external heat. Catalysis Today, 2022, 402, 210-219.	4.4	19
4	Defect-band bridge photothermally activates Type III heterojunction for CO2 reduction and typical VOCs oxidation. Applied Catalysis B: Environmental, 2022, 309, 121248.	20.2	24
5	Combination of reduction-deposition Pd loading and zeolite dealumination as an effective route for promoting methane combustion over Pd/Beta. Catalysis Today, 2021, 376, 119-125.	4.4	18
6	Plasmonic Metal Bridge Leading Type III Heterojunctions to Robust Type B Photothermocatalysts. Industrial & Engineering Chemistry Research, 2021, 60, 8420-8429.	3.7	20
7	Selectively recombining the photoinduced charges in bandgap-broken Ag3PO4/GdCrO3 with a plasmonic Ag bridge for efficient photothermocatalytic VOCs degradation and CO2 reduction. Applied Catalysis B: Environmental, 2021, 291, 120053.	20.2	57
8	Strong metal-support interaction assisted redispersion strategy for obtaining ultrafine and stable IrO2/Ir active sites with exceptional methane oxidation activity. Applied Catalysis B: Environmental, 2021, 297, 120410.	20.2	28
9	Lewis acid (Ni²⁺, Co^{2+/3+} or Zn²⁺) modified electron-deficient Ir⁴⁺ in IrO₂/CuO for promoting methane oxidation to ethanol and methanol. Journal of Materials Chemistry A, 2021, 9, 7094-7101.	10.3	13
10	MOF-templated core-shell Co(II/III)@ZnO hexagonal prisms for selective oxidation of vanillyl alcohol. Catalysis Today, 2020, 355, 280-285.	4.4	14
11	Anodic aluminum oxide supported Pd@CeO2 catalyst for organic gas pollutants removal with an enhanced performance. Catalysis Today, 2020, 355, 602-607.	4.4	11
12	DFT study of formaldehyde oxidation on silver cluster by active oxygen and hydroxyl groups: Mechanism comparison and synergistic effect. Catalysis Today, 2020, 347, 124-133.	4.4	47
13	Deactivation Mechanism, Countermeasures, and Enhanced CH₄ Oxidation Performance of Nickel/Cobalt Oxides. Energy Technology, 2020, 8, 1900641.	3.8	9
14	Hydrogen production with carbon dioxide capture by dual-phase ceramic-carbonate membrane reactor via steam reforming of methane. Journal of Membrane Science, 2020, 598, 117780.	8.2	44
15	Oxygen vacancy defects modulated electrocatalytic activity of iron-nickel layered double hydroxide on Ni foam as highly active electrodes for oxygen evolution reaction. Electrochimica Acta, 2020, 331, 135395.	5.2	56
16	Sequential growth reveals multi-spinel interface promotion for methane combustion over alumina supported palladium catalyst. Applied Catalysis B: Environmental, 2020, 273, 119071.	20.2	41
17	Photothermocatalytic synergistic oxidation: An effective way to overcome the negative water effect on supported noble metal catalysts for VOCs oxidation. Chemical Engineering Journal, 2020, 397, 125485.	12.7	44
18	Highly dispersed and active Pd nanoparticles over titania support through engineering oxygen vacancies and their anchoring effect. AICHE Journal, 2020, 66, e16288.	3.6	25

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19	Promotion effect of strong metal-support interaction to thermocatalytic, photocatalytic, and photothermocatalytic oxidation of toluene on Pt/SrTiO3. Chemosphere, 2020, 249, 126096.	8.2	37
20	Uniphase rutheniumâ€“iridium alloy-based electronic regulation for electronic structureâ€“function study in methane oxidation to methanol. Journal of Materials Chemistry A, 2020, 8, 24024-24030.	10.3	15
21	Perovskite-based photocatalysts for organic contaminants removal: Current status and future perspectives. Catalysis Today, 2019, 327, 47-63.	4.4	86
22	Z-scheme Ag₃PO₄/Ag/SrTiO₃ Heterojunction for Visible-Light Induced Photothermal Synergistic VOCs Degradation with Enhanced Performance. Industrial & Engineering Chemistry Research, 2019, 58, 13950-13959.	3.7	41
23	Metalâ€“Organic Framework-Derived IrO₂/CuO Catalyst for Selective Oxidation of Methane to Methanol. ACS Energy Letters, 2019, 4, 2945-2951.	17.4	50
24	Pt supported on long-rod Î²-FeOOH as an efficient catalyst for HCHO oxidation at ambient temperature. Catalysis Science and Technology, 2019, 9, 3287-3294.	4.1	18
25	Strategy for stabilizing noble metal nanoparticles without sacrificing active sites. Chemical Communications, 2019, 55, 6846-6849.	4.1	18
26	Preface to the special issue of â€œThe 18th Chinese National Congress on Catalysis-Energy Session (18NCC_Energy), October 16-20th 2017, Tianjin, Chinaâ€• Catalysis Today, 2019, 330, 1.	4.4	2
27	Enhanced Formaldehyde Removal from Air Using Fully Biodegradable Chitosan Grafted Î²-Cyclodextrin Adsorbent with Weak Chemical Interaction. Polymers, 2019, 11, 276.	4.5	28
28	Boosting Interfacial Interaction in Hierarchical Coreâ€“Shell Nanostructure for Highly Effective Visible Photocatalytic Performance. Journal of Physical Chemistry C, 2018, 122, 6137-6143.	3.1	15
29	Synchronous pore structure and surface hydroxyl groups amelioration as an efficient route for promoting HCHO oxidation over Pt/ZSM-5. Catalysis Today, 2018, 316, 107-113.	4.4	26
30	Highly CO2 perm-selective metal-organic framework membranes through CO2 annealing post-treatment. Journal of Membrane Science, 2018, 555, 97-104.	8.2	14
31	Synergistic Performance between Visible-Light Photocatalysis and Thermocatalysis for VOCs Oxidation over Robust Ag/F-Codoped SrTiO₃. Industrial & Engineering Chemistry Research, 2018, 57, 12766-12773.	3.7	55
32	Identification of the Nearby Hydroxylsâ€™ Role in Promoting HCHO Oxidation over a Pt Catalyst. Industrial & Engineering Chemistry Research, 2018, 57, 8183-8189.	3.7	20
33	Enhanced formaldehyde oxidation performance over Pt/ZSM-5 through a facile nickel cation modification. Applied Surface Science, 2018, 457, 670-675.	6.1	37
34	Coreâ€“Shell NiO@PdO Nanoparticles Supported on Alumina as an Advanced Catalyst for Methane Oxidation. ACS Catalysis, 2017, 7, 1615-1625.	11.2	113
35	Insight into the enhanced performance of TiO 2 nanotube supported Pt catalyst for toluene oxidation. Catalysis Today, 2017, 297, 159-166.	4.4	77
36	Homeostasis in Cu_xO/SrTiO₃ hybrid allows highly active and stable visible light photocatalytic performance. Chemical Communications, 2017, 53, 12329-12332.	4.1	48

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37	Synergetic effect of oxygen vacancy and Pd site on the interaction between Pd/Anatase TiO 2 (101) and formaldehyde: A density functional theory study. Catalysis Today, 2017, 297, 151-158.	4.4	38
38	Carbon Nitride Polymer Sensitization and Nitrogen Doping of SrTiO₃/TiO₂ Nanotube Heterostructure toward High Visible Light Photocatalytic Performance. Industrial & Engineering Chemistry Research, 2017, 56, 9999-10008.	3.7	53
39	Efficient formaldehyde oxidation over nickel hydroxide promoted Pt/Î³-Al2O3 with a low Pt content. Applied Catalysis B: Environmental, 2017, 200, 543-551.	20.2	159
40	Metalâ€organic framework membrane process for high purity CO₂ production. AIChE Journal, 2016, 62, 3836-3841.	3.6	68
41	Efficient oxidation of cinnamon oil to natural benzaldehyde over Î²-cyclodextrin-functionalized MWCNTs. Chinese Journal of Catalysis, 2016, 37, 2086-2097.	14.0	6
42	Enhanced methane combustion performance over NiAl2O4-interface-promoted Pd/Î³-Al2O3. Journal of Catalysis, 2016, 338, 192-201.	6.2	113
43	Multichannel charge separation promoted ZnO/P25 heterojunctions for the photocatalytic oxidation of toluene. Chinese Journal of Catalysis, 2016, 37, 869-877.	14.0	20
44	Putting an ultrahigh concentration of amine groups into a metalâ€“organic framework for CO₂capture at low pressures. Chemical Science, 2016, 7, 6528-6533.	7.4	197
45	Enhanced Photocatalytic Mineralization of Gaseous Toluene over SrTiO₃ by Surface Hydroxylation. Industrial & Engineering Chemistry Research, 2016, 55, 11923-11930.	3.7	33
46	Visible-light decomposition of gaseous toluene over BiFeO 3 â€“(Bi/Fe) 2 O 3 heterojunctions with enhanced performance. Chemical Engineering Journal, 2016, 302, 552-559.	12.7	41
47	Autothermal reforming of ethanol in dense oxygen permeation membrane reactor. Catalysis Today, 2016, 264, 214-220.	4.4	16
48	Catalysis promoting the development of chemical industry: A special issue dedicated to Tianjin University's 120th anniversary. Catalysis Today, 2016, 264, 1-2.	4.4	0
49	Bifunctional catalytic material: An ultrastable and high-performance surface defect CeO2 nanosheets for formaldehyde thermal oxidation and photocatalytic oxidation. Applied Catalysis B: Environmental, 2016, 181, 779-787.	20.2	268
50	ZnO modified TiO2 nanotube array supported Pt catalyst for HCHO removal under mild conditions. Catalysis Today, 2016, 264, 23-30.	4.4	56
51	Carbon Dots Sensitized BiOI with Dominant {001} Facets for Superior Photocatalytic Performance. Industrial & Engineering Chemistry Research, 2015, 54, 12788-12794.	3.7	89
52	Reactivation and Reuse of Platinumâ€Based Spent Catalysts for Combustion of Exhaust Organic Gases. Chemical Engineering and Technology, 2015, 38, 409-415.	1.5	6
53	Enhancing the Photocatalytic Performance of BiOCl_xI_{1â^’x} by Introducing Surface Disorders and Bi Nanoparticles as Cocatalyst. Advanced Materials Interfaces, 2015, 2, 1500249.	3.7	82
54	Titania-supported Pt catalyst reduced with HCHO for HCHO oxidation under mild conditions. Chinese Journal of Catalysis, 2015, 36, 188-196.	14.0	38

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55	Monodentate hydroxide as a super strong yet reversible active site for CO₂capture from high-humidity flue gas. Energy and Environmental Science, 2015, 8, 1011-1016.	30.8	233
56	Multifunctional Pt/ZSM-5 catalyst for complete oxidation of gaseous formaldehyde at ambient temperature. Catalysis Today, 2015, 258, 56-63.	4.4	52
57	Facile synthesis of ZnO/SnO2 hetero nanotubes with enhanced electrocatalytic property. Catalysis Today, 2015, 258, 75-82.	4.4	15
58	MnO₂ Promoted TiO₂ Nanotube Array Supported Pt Catalyst for Formaldehyde Oxidation with Enhanced Efficiency. Industrial & Engineering Chemistry Research, 2015, 54, 8900-8907.	3.7	84
59	Monolith-Like TiO₂ Nanotube Array Supported Pt Catalyst for HCHO Removal under Mild Conditions. Industrial & Engineering Chemistry Research, 2014, 53, 7629-7636.	3.7	58
60	Strong Metal-Support Interaction in Pt/TiO₂ Induced by Mild HCHO and NaBH₄ Solution Reduction and Its Effect on Catalytic Toluene Combustion. Industrial & Engineering Chemistry Research, 2014, 53, 15879-15888.	3.7	86
61	Anodic Alumina Supported Pt Catalyst for Total Oxidation of Trace Toluene. Chinese Journal of Chemical Engineering, 2014, 22, 882-887.	3.5	24
62	Comparison of TiO2 Degussa P25 with anatase and rutile crystalline phases for methane combustion. Chemical Engineering Journal, 2014, 243, 254-264.	12.7	93
63	Anodic TiO 2 nanotube array supported nickel â€“ noble metal bimetallic catalysts for activation of CH 4 and CO 2 to syngas. International Journal of Hydrogen Energy, 2014, 39, 16252-16261.	7.1	18
64	Simulation of VOCs oxidation in a catalytic nanolith. RSC Advances, 2013, 3, 1103-1111.	3.6	13
65	Effect of titania polymorph on the properties of CuO/TiO2 catalysts for trace methane combustion. Journal of Molecular Catalysis A, 2013, 372, 128-136.	4.8	27
66	Evaluation of TiO2 nanotube supported Ru catalyst for syngas production. Catalysis Today, 2013, 216, 178-184.	4.4	11
67	Thermodynamic Analysis of Hydrogen Generation from Methanolâ€“Formic Acidâ€“Steam Autothermal System. Energy & Fuels, 2013, 27, 5449-5458.	5.1	8
68	YBaCo4O7+Î´ sorbent for oxygen-enriched carbon dioxide stream production at a low-temperature. Fuel, 2012, 94, 191-196.	6.4	21
69	Monolithic-like TiO2 nanotube supported Ru catalyst for activation of CH4 and CO2 to syngas. Catalysis Communications, 2011, 12, 1269-1273.	3.3	21
70	In situ DRIFTS study on the catalytic oxidation of toluene over V2O5/TiO2 under mild conditions. Catalysis Communications, 2011, 14, 77-81.	3.3	55
71	Modeling and analysis of ceramicâ€“carbonate dual-phase membrane reactor for carbon dioxide reforming with methane. International Journal of Hydrogen Energy, 2011, 36, 8292-8300.	7.1	45
72	SrCo0.8Fe0.2O3âˆ’Î´ sorbent for high-temperature production of oxygen-enriched carbon dioxide stream. Fuel, 2010, 89, 1429-1434.	6.4	38

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73	Sequential simulation of dense oxygen permeation membrane reactor for hydrogen production from oxidative steam reforming of ethanol with ASPEN PLUS. International Journal of Hydrogen Energy, 2010, 35, 6691-6698.	7.1	29
74	Effect of sequential desilication and dealumination on catalytic performance of ZSM-5 catalyst for pyridine and 3-picoline synthesis. Journal of Materials Research, 2010, 25, 272-282.	2.6	17
75	Effect of metalâ€support interface on hydrogen permeation through palladium membranes. AICHE Journal, 2009, 55, 630-639.	3.6	30
76	Analysis of oxygen permeation through dense ceramic membranes with chemical reactions of finite rate. Chemical Engineering Science, 2009, 64, 172-179.	3.8	41
77	Modeling and analysis of carbon dioxide permeation through ceramic-carbonate dual-phase membranes. Journal of Membrane Science, 2009, 345, 110-118.	8.2	101
78	Performance of ionic-conducting ceramic/carbonate composite material as solid oxide fuel cell electrolyte and CO2 permeation membrane. Catalysis Today, 2009, 148, 303-309.	4.4	122
79	High-Temperature Stability of Palladium Membranes on Porous Metal Supports with Different Intermediate Layers. Industrial & Engineering Chemistry Research, 2009, 48, 1880-1886.	3.7	77
80	Simulation of methane conversion to syngas in a membrane reactor. Part IIModel predictions. International Journal of Hydrogen Energy, 2008, 33, 2501-2506.	7.1	20
81	Preparation of Thin Palladium Composite Membranes and Application to Hydrogen/Nitrogen Separation. Chinese Journal of Chemical Engineering, 2007, 15, 643-647.	3.5	22