Zhigang Wang

List of Publications by Year
in descending order

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45	2,129	172457	243625
papers	citations	29 h-index	44 g-index

45	45	45	1384
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	High carbon resistant Ni@Ni phyllosilicate@SiO2 core shell hollow sphere catalysts for low temperature CH4 dry reforming. Journal of CO2 Utilization, 2018, 27, 238-246.	6.8	122
2	Enhancement of oxygen permeation through La0.6Sr0.4Co0.2Fe0.8O3â˜Î´ hollow fibre membranes by surface modifications. Journal of Membrane Science, 2008, 324, 128-135.	8.2	115
3	Ni-phyllosilicate structure derived Niâ€“SiO₂â€“MgO catalysts for bi-reforming applications: acidity, basicity and thermal stability. Catalysis Science and Technology, 2018, 8, 1730-1742.	4.1	101
4	Preparation and Oxygen Permeation Properties of Highly Asymmetric La_{0.6}Sr_{0.4}Co_{0.2}Fe_{0.8}O_{3â˜Î±} Perovskite Hollow-Fiber Membranes. Industrial & Engineering Chemistry Research, 2009, 48, 510-516.	3.7	99
5	Pilot-scale production of oxygen from air using perovskite hollow fibre membranes. Journal of Membrane Science, 2010, 352, 189-196.	8.2	99
6	Double redox process to synthesize CuOâ€“CeO2 catalysts with strong Cuâ€“Ce interaction for efficient toluene oxidation. Journal of Hazardous Materials, 2021, 404, 124088.	12.4	91
7	Sintering and Coke Resistant Core/Yolk Shell Catalyst for Hydrocarbon Reforming. ChemCatChem, 2019, 11, 202-224.	3.7	84
8	Improvement of the oxygen permeation through perovskite hollow fibre membranes by surface acid-modification. Journal of Membrane Science, 2009, 345, 65-73.	8.2	76
9	Sintering resistant Ni nanoparticles exclusively confined within SiO₂ nanotubes for CH₄ dry reforming. Catalysis Science and Technology, 2018, 8, 3363-3371.	4.1	71
10	Coupling CO2 separation with catalytic reverse water-gas shift reaction via ceramic-carbonate dual-phase membrane reactor. Chemical Engineering Journal, 2020, 379, 122182.	12.7	69
11	Oxidative CO₂ Reforming of Methane in La_{0.6}Sr_{0.4}Co_{0.8}Ga_{0.2}O_{3-Î´} (LSCG) Hollow Fiber Membrane Reactor. Environmental Science & Technology, 2013, 47, 14510-14517.	10.0	66
12	Catalytic Pd0.77Ag0.23 alloy membrane reactor for high temperature water-gas shift reaction: Methane suppression. Chemical Engineering Journal, 2019, 362, 116-125.	12.7	61
13	SrCo0.9Sc0.1O3â˜ perovskite hollow fibre membranes for air separation at intermediate temperatures. Journal of the European Ceramic Society, 2009, 29, 2815-2822.	5.7	59
14	Recent progress in direct carbon solid oxide fuel cell: Advanced anode catalysts, diversified carbon fuels, and heat management. International Journal of Hydrogen Energy, 2021, 46, 4283-4300.	7.1	57
15	Oxygen permeation and stability study of La0.6Sr0.4Co0.8Ga0.2O3â˜ (LSCG) hollow fiber membrane with exposure to CO2, CH4 and He. Journal of Membrane Science, 2013, 427, 240-249.	8.2	56
16	Low temperature partial oxidation of methane via BaBi 0.05 Co 0.8 Nb 0.15 O 3â˜Î´-Ni phyllosilicate catalytic hollow fiber membrane reactor. Chemical Engineering Journal, 2017, 315, 315-323.	12.7	54
17	Highly active and coke resistant Ni/SiO 2 catalysts for oxidative reforming of model biogas: Effect of low ceria loading. Journal of CO2 Utilization, 2017, 19, 284-295.	6.8	54
18	High performance oxygen permeable membranes with Nb-doped BaBi0.05Co0.95O3â˜Î´ perovskite oxides. Journal of Membrane Science, 2013, 431, 180-186.	8.2	51

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19	Oxidative steam reforming of biomass tar model compound via catalytic BaBi0.05Co0.8Nb0.15O3â˜' hollow fiber membrane reactor. Journal of Membrane Science, 2016, 510, 417-425.	8.2	49
20	High CO2 permeability of ceramic-carbonate dual-phase hollow fiber membrane at medium-high temperature. Journal of Membrane Science, 2020, 597, 117770.	8.2	46
21	Effects of Sintering on the Properties of La_{0.6}Sr_{0.4}Co_{0.2}Fe_{0.8}O_{3â˜'Î´} Perovskite Hollow Fiber Membranes. Industrial & Engineering Chemistry Research, 2010, 49, 2895-2901.	3.7	45
22	Ultra-high oxygen permeable BaBiCoNb hollow fiber membranes and their stability under pure CH4 atmosphere. Journal of Membrane Science, 2014, 465, 151-158.	8.2	44
23	Re-evaluation of La0.6Sr0.4Co0.2Fe0.8O3-Î´ hollow fiber membranes for oxygen separation after long-term storage of five and ten years. Journal of Membrane Science, 2019, 587, 117180.	8.2	42
24	High oxygen permeable and CO2-tolerant SrCoxFe0.9-xNb0.1O3-Î´ (xâ€¯=â€¯0.1â€“0.8) perovskite membranes: Behavior and mechanism. Separation and Purification Technology, 2018, 201, 30-40.	7.9	41
25	High-performance catalytic perovskite hollow fiber membrane reactor for oxidative propane dehydrogenation. Journal of Membrane Science, 2019, 578, 36-42.	8.2	41
26	A mini-review on recent developments in SAPO-34 zeolite membranes and membrane reactors. Reaction Chemistry and Engineering, 2021, 6, 52-66.	3.7	39
27	High Temperature Water Permeable Membrane Reactors for CO2 Utilization. Chemical Engineering Journal, 2021, 420, 129834.	12.7	38
28	Catalytic mixed conducting ceramic membrane reactors for methane conversion. Reaction Chemistry and Engineering, 2020, 5, 1868-1891.	3.7	37
29	High H 2 permeable SAPOâ€34 hollow fiber membrane for high temperature propane dehydrogenation application. AIChE Journal, 2020, 66, e16278.	3.6	34
30	A novel study of sulfur-resistance for CO2 separation through asymmetric ceramic-carbonate dual-phase membrane at high temperature. Journal of Membrane Science, 2019, 581, 72-81.	8.2	32
31	Nanoporous Zeolite-A Sheltered Pd-Hollow Fiber Catalytic Membrane Reactor for Propane Dehydrogenation. ACS Applied Nano Materials, 2020, 3, 6675-6683.	5.0	30
32	CFD Simulation of a Hydrogen-Permeable Membrane Reactor for CO₂ Reforming of CH₄: The Interplay of the Reaction and Hydrogen Permeation. Energy & Fuels, 2020, 34, 12366-12378.	5.1	29
33	High Purity Oxygen Production via BBCN Perovskite Hollow Fiber Membrane Swept by Steam. Industrial & Engineering Chemistry Research, 2015, 54, 6371-6377.	3.7	27
34	Highly Efficient NO Decomposition via Dual-Functional Catalytic Perovskite Hollow Fiber Membrane Reactor Coupled with Partial Oxidation of Methane at Medium-Low Temperature. Environmental Science & Technology, 2019, 53, 9937-9946.	10.0	26
35	Preparation and oxygen permeation properties of SrCo0.9Nb0.1O3â˜'Î´ hollow fibre membranes. Separation and Purification Technology, 2011, 78, 175-180.	7.9	24
36	Zeolite membrane reactors: from preparation to application in heterogeneous catalytic reactions. Reaction Chemistry and Engineering, 2021, 6, 401-417.	3.7	23

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37	A comprehensive review of anti-coking, anti-poisoning and anti-sintering catalysts for biomass tar reforming reaction. Chemical Engineering Science: X, 2020, 7, 100065.	1.5	19
38	CFD simulation on hydrogen-membrane reactor integrating cyclohexane dehydrogenation and CO2 methanation reactions: A conceptual study. Energy Conversion and Management, 2021, 235, 113989.	9.2	15
39	Low-cost and facile fabrication of defect-free water permeable membrane for CO2 hydrogenation to methanol. Chemical Engineering Journal, 2022, 435, 133554.	12.7	14
40	Simultaneous hydrogen and oxygen permeation through BaCe0.70Fe0.10Sc0.20O3-Î´ perovskite hollow fiber membranes. Journal of Membrane Science, 2021, 635, 119513.	8.2	12
41	Tetraethylenepentamine-grafted polyacrylonitrile-poly(methyl methacrylate) hollow fibers for low concentration CO2 capture at ambient temperature. Chemical Engineering Research and Design, 2022, 157, 390-396.	5.6	11
42	Externally self-supported metallic nickel hollow fiber membranes for hydrogen separation. Journal of Membrane Science, 2022, 653, 120513.	8.2	10
43	A superb water permeable membrane for potential applications in CO2 to liquid fuel process. Journal of Membrane Science, 2021, 639, 119682.	8.2	8
44	A CFD study on the performance of CO2 methanation in water-permeable membrane reactor system. Reaction Chemistry and Engineering, 0, , .	3.7	4
45	Highly efficient recovery of hydrogen from dilute H2-streams using BaCe0.7Zr0.1Y0.2O3-Î´/Ni-BaCe0.7Zr0.1Y0.2O3-Î´ dual-layer hollow fiber membrane. Separation and Purification Technology, 2022, 287, 120602.	7.9	4