Runduo Zhang

List of Publications by Year in descending order

Source: https://exaly.com/author-pdf/4741117/publications.pdf

Version: 2024-02-01

81 papers	3,722 citations	136950 32 h-index	133252 59 g-index
84 all docs	84 docs citations	84 times ranked	3398 citing authors

#	Article	IF	Citations
1	Selective Transformation of Various Nitrogen-Containing Exhaust Gases toward N₂ over Zeolite Catalysts. Chemical Reviews, 2016, 116, 3658-3721.	47.7	345
2	Oxygen Vacancies Induced by Transition Metal Doping in Î³-MnO₂ for Highly Efficient Ozone Decomposition. Environmental Science & Technology, 2018, 52, 12685-12696.	10.0	236
3	Economical Way to Synthesize SSZ-13 with Abundant Ion-Exchanged Cu⁺ for an Extraordinary Performance in Selective Catalytic Reduction (SCR) of NO_x by Ammonia. Environmental Science & Technology, 2014, 48, 13909-13916.	10.0	195
4	Influence of the oxide support reducibility on the CO2 methanation over Ru-based catalysts. Applied Catalysis B: Environmental, 2017, 219, 715-726.	20.2	179
5	The Effects of Mn²⁺ Precursors on the Structure and Ozone Decomposition Activity of Cryptomelane-Type Manganese Oxide (OMS-2) Catalysts. Journal of Physical Chemistry C, 2015, 119, 23119-23126.	3.1	144
6	Selective catalytic reduction of NOx with NH3: opportunities and challenges of Cu-based small-pore zeolites. National Science Review, 2021, 8, nwab010.	9.5	137
7	Catalytic reduction of NO by CO over Cu/CexZr1â^'xO2 prepared by flame synthesis. Journal of Catalysis, 2010, 272, 210-219.	6.2	129
8	Low-temperature NH3-SCR of NO by lanthanum manganite perovskites: Effect of A-/B-site substitution and TiO2/CeO2 support. Applied Catalysis B: Environmental, 2014, 146, 94-104.	20.2	129
9	Reduction of NO by CO over nanoscale LaCo1â^'xCuxO3 and LaMn1â^'xCuxO3 perovskites. Journal of Molecular Catalysis A, 2006, 258, 22-34.	4.8	96
10	Zeolite structure effects on Cu active center, SCR performance and stability of Cu-zeolite catalysts. Catalysis Today, 2019, 327, 295-307.	4.4	96
11	Efficiency of Cu and Pd substitution in Fe-based perovskites to promote N2 formation during NH3 selective catalytic oxidation (NH3-SCO). Applied Catalysis B: Environmental, 2017, 203, 174-188.	20.2	91
12	Comparative study on the direct decomposition of nitrous oxide over M (Fe, Co, Cu)â€“BEA zeolites. Journal of Catalysis, 2012, 294, 99-112.	6.2	85
13	Catalytic reduction of NO by propene over LaCo1â^'xCuxO3 perovskites synthesized by reactive grinding. Applied Catalysis B: Environmental, 2006, 64, 220-233.	20.2	84
14	Mesoporous SBA-15 promoted by 3d-transition and noble metals for catalytic combustion of acetonitrile. Applied Catalysis B: Environmental, 2014, 146, 79-93.	20.2	82
15	Activity of perovskite-type mixed oxides for the low-temperature CO oxidation: Evidence of oxygen species participation from the solid. Journal of Catalysis, 2012, 295, 45-58.	6.2	72
16	SCR of NO by propene over nanoscale LaMn1â^'xCuxO3 perovskites. Applied Catalysis A: General, 2006, 307, 85-97.	4.3	69
17	Synthesis of CuO catalyst derived from HKUST-1 temple for the low-temperature NH3-SCR process. Catalysis Today, 2018, 314, 122-128.	4.4	65
18	New Aspects on the Mechanism of C₃H₆ Selective Catalytic Reduction of NO in the Presence of O₂ over LaFe_{1â€“x}(Cu,) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 62 Td (Pd)_x 46, 11280-11288.	10.0	64

#	Article	IF	Citations
19	Synergies of Mn oxidative ability and ZSM-5 acidity for 1, 2-dichloroethane catalytic elimination. Applied Catalysis B: Environmental, 2020, 276, 118922.	20.2	60
20	SO2 poisoning of LaFe0.8Cu0.2O3 perovskite prepared by reactive grinding during NO reduction by C3H6. Applied Catalysis A: General, 2008, 340, 140-151.	4.3	57
21	Low-temperature selective catalytic reduction of NO with NH3 using perovskite-type oxides as the novel catalysts. Journal of Molecular Catalysis A, 2013, 371, 86-93.	4.8	51
22	Insight into the mechanism of catalytic combustion of acrylonitrile over Cu-doped perovskites by an experimental and theoretical study. Applied Catalysis B: Environmental, 2016, 196, 142-154.	20.2	50
23	Encapsulating uniform Pd nanoparticles in TS-1 zeolite as efficient catalyst for catalytic abatement of indoor formaldehyde at room temperature. Applied Catalysis B: Environmental, 2020, 278, 119311.	20.2	48
24	Soot Combustion over Lanthanum Cobaltites and Related Oxides for Diesel Exhaust Treatment. Energy & Fuels, 2010, 24, 3719-3726.	5.1	47
25	Pt Nanoparticles Supported on N/Ce-Doped Activated Carbon for the Catalytic Oxidation of Formaldehyde at Room Temperature. ACS Applied Nano Materials, 2020, 3, 2614-2624.	5.0	45
26	Lean reduction of NO by C3H6 over Ag/alumina derived from Al2O3, AlOOH and Al(OH)3. Applied Catalysis B: Environmental, 2008, 78, 275-287.	20.2	44
27	Highly Efficient NO Abatement over Cu-ZSM-5 with Special Nanosheet Features. Environmental Science & Technology, 2021, 55, 5422-5434.	10.0	42
28	Template Design and Economical Strategy for the Synthesis of SSZâ€13 (CHAâ€Type) Zeolite as an Excellent Catalyst for the Selective Catalytic Reduction of NO_x by Ammonia. ChemCatChem, 2015, 7, 3842-3847.	3.7	40
29	Facile synthesis of Ag-modified manganese oxide for effective catalytic ozone decomposition. Journal of Environmental Sciences, 2019, 80, 159-168.	6.1	38
30	Water vapor sensitivity of nanosized La(Co, Mn, Fe)1â^'x(Cu, Pd)xO3 perovskites during NO reduction by C3H6 in the presence of oxygen. Applied Catalysis B: Environmental, 2007, 72, 331-341.	20.2	35
31	Morphology-Oriented ZrO₂-Supported Vanadium Oxide for the NH₃-SCR Process: Importance of Structural and Textural Properties. ACS Applied Materials & Interfaces, 2019, 11, 22240-22254.	8.0	35
32	Effect of hard-template residues of the nanocasted mesoporous LaFeO₃with extremely high surface areas on catalytic behaviors for methyl chloride oxidation. Journal of Materials Chemistry A, 2014, 2, 17329-17340.	10.3	34
33	Detrimental role of residual surface acid ions on ozone decomposition over Ce-modified Î³-MnO2 under humid conditions. Journal of Environmental Sciences, 2020, 91, 43-53.	6.1	34
34	CO₂ Reforming of Methane over a Highly Dispersed Ni/Mgâ€“Alâ€“O Catalyst Prepared by a Facile and Green Method. Industrial & Engineering Chemistry Research, 2020, 59, 15506-15514.	3.7	34
35	The reaction of NO+C3H6+O2 over the mesoporous SBA-15 supported transition metal catalysts. Catalysis Today, 2011, 175, 26-33.	4.4	33
36	Study on the direct decomposition of nitrous oxide over Fe-beta zeolites: From experiment to theory. Catalysis Today, 2011, 175, 245-255.	4.4	31

#	Article	IF	Citations
37	Catalytic behaviors of chloromethane combustion over the metal-modified ZSM-5 zeolites with diverse SiO2/Al2O3 ratios. Journal of Molecular Catalysis A, 2015, 398, 223-230.	4.8	31
38	Selective catalytic oxidation of ammonia to nitrogen over orderly mesoporous CuFe2O4 with high specific surface area. Science Bulletin, 2014, 59, 3980-3986.	1.7	27
39	Local Electric Field Effect of TMI (Fe, Co, Cu)-BEA on N₂O Direct Dissociation. Journal of Physical Chemistry C, 2014, 118, 10944-10956.	3.1	27
40	Density Functional Theory Study of Mechanism of N₂O Decomposition over Cu-ZSM-5 Zeolites. Journal of Physical Chemistry C, 2012, 116, 20262-20268.	3.1	26
41	Ce-promoted Mn/ZSM-5 catalysts for highly efficient decomposition of ozone. Journal of Environmental Sciences, 2021, 103, 219-228.	6.1	26
42	Significant promotion of reducing treatment on Pd/TS-1 zeolite for formaldehyde catalytic purification at ambient temperature. Applied Catalysis B: Environmental, 2022, 304, 120843.	20.2	26
43	NiO microspheres with tunable porosity and morphology effects for CO oxidation. Catalysis Science and Technology, 2011, 1, 999.	4.1	25
44	Charge Transfer Analysis on the Direct Decomposition of Nitrous Oxide over Fe-BEA Zeolite: An Experimental and Density Functional Study. Journal of Physical Chemistry C, 2011, 115, 12883-12890.	3.1	25
45	Design of nanocrystalline mixed oxides with improved oxygen mobility: a simple non-aqueous route to nano-LaFeO3 and the consequences on the catalytic oxidation performances. Chemical Communications, 2013, 49, 4923.	4.1	25
46	Morphology effect of diverse ceria with active tungsten species on NH3-SCR behaviors. Catalysis Today, 2020, 339, 241-253.	4.4	25
47	Selective catalytic oxidation of ammonia over nano Cu/zeolites with different topologies. Environmental Science: Nano, 2020, 7, 1399-1414.	4.3	24
48	Reduction of N2O by CO over Fe- and Cu-BEA zeolites: An experimental and computational study of the mechanism. Microporous and Mesoporous Materials, 2013, 167, 254-266.	4.4	23
49	Highly active OMS-2 for catalytic ozone decomposition under humid conditions. Petroleum Science, 2019, 16, 912-919.	4.9	21
50	Highly selective catalytic combustion of acrylonitrile towards nitrogen over Cu-modified zeolites. Catalysis Today, 2019, 332, 201-213.	4.4	21
51	Facile ionothermal synthesis of SAPO-LTA zeotypes with high structural stability and their catalytic performance in MTO reaction. Microporous and Mesoporous Materials, 2019, 288, 109611.	4.4	20
52	Effective catalytic abatement of indoor formaldehyde at room temperature over TS-1 supported platinum with relatively low content. Catalysis Today, 2020, 355, 547-554.	4.4	20
53	Selective catalytic combustion of hydrogen cyanide over metal modified zeolite catalysts: From experiment to theory. Catalysis Today, 2017, 297, 201-210.	4.4	19
54	ZSM-5 coreâ€“shell structured catalyst for enhancing low-temperature NH3-SCR efficiency and poisoning resistance. Applied Catalysis A: General, 2022, 630, 118438.	4.3	19

#	Article	IF	Citations
55	M(Fe, Co)-BEA washcoated honeycomb cordierite for N 2 O direct decomposition. Catalysis Today, 2016, 273, 273-285.	4.4	18
56	Catalytic purification of acrylonitrile-containing exhaust gases from petrochemical industry by metal-doped mesoporous zeolites. Catalysis Today, 2015, 258, 17-27.	4.4	17
57	Core-shell structure effect on CeO2 and TiO2 supported WO3 for the NH3-SCR process. Molecular Catalysis, 2020, 485, 110822.	2.0	17
58	CO catalytic combustion over Co/Al2O3: Influence of diverse textural properties of alumina supports on the related oxidation activities. Catalysis Today, 2013, 216, 169-177.	4.4	15
59	Mechanistic insight into selective catalytic combustion of acrylonitrile (C₂H₃CN): NCO formation and its further transformation towards N₂. Physical Chemistry Chemical Physics, 2017, 19, 7971-7979.	2.8	14
60	Mechanistic insight into the methanol selective catalytic reduction of NO reaction over Cu-containing perovskites. Journal of Catalysis, 2019, 377, 480-493.	6.2	14
61	Strategy on Effective Synthesis of SSZ-13 Zeolite Aiming at Outstanding Performances for NH3-SCR Process. Catalysis Surveys From Asia, 2020, 24, 143-155.	2.6	13
62	In Situ Fabrication of Ultrasmall Ni Nanoparticles from Ni(OH)₂ Precursors for Efficient CO₂ Reforming of Methane. Industrial & Engineering Chemistry Research, 2022, 61, 198-206.	3.7	12
63	A Remarkable Catalyst Combination to Widen the Operating Temperature Window of the Selective Catalytic Reduction of NO by NH₃. ChemCatChem, 2014, 6, 2263-2269.	3.7	11
64	Synergistic effect of niobium and ceria on anatase for low-temperature NH3-SCR of NO process. Molecular Catalysis, 2019, 478, 110563.	2.0	11
65	Modulating local environment of Ni with W for synthesis of carbon nanotubes and hydrogen from plastics. Journal of Cleaner Production, 2022, 352, 131620.	9.3	11
66	The Influence of O2, Hydrocarbons, CO, H2, NO x , SO2, and Water Vapor Molecules on Soot Combustion over LaCoO3 Perovskite. Catalysis Letters, 2009, 132, 10-15.	2.6	10
67	Ionothermal Synthesis of Germanosilicate Zeolites Constructed with Doubleâ€Fourâ€Ring Structureâ€Building Units in the Presence of Organic Base. Chemistry - an Asian Journal, 2019, 14, 621-626.	3.3	10
68	New evidence on the correlation between lattice fringe with catalytic performance for suprafacial CO and intrafacial CH4 oxidations over Co3O4 by isotopic 18O2 exchange. Molecular Catalysis, 2017, 437, 26-36.	2.0	9
69	Role of the exposure facets upon diverse morphologies of cobalt spinels on catalytic deN2O process. Catalysis Today, 2021, 376, 177-187.	4.4	8
70	Terminal Hydroxyl Groups on Al₂O₃ Supports Influence the Valence State and Dispersity of Ag Nanoparticles: Implications for Ozone Decomposition. ACS Omega, 2021, 6, 10715-10722.	3.5	7
71	Mechanistic insight into selective catalytic combustion of HCN over Cu-BEA: influence of different active center structures. Physical Chemistry Chemical Physics, 2017, 19, 23960-23970.	2.8	6
72	N/Ce doped graphene supported Pt nanoparticles for the catalytic oxidation of formaldehyde at room temperature. Journal of Environmental Sciences, 2023, 125, 135-147.	6.1	6

#	Article	IF	Citations
73	Role of Al pairs on effective N2O decomposition over the ZSM-5 zeolite catalyst. Catalysis Today, 2022, 402, 17-26.	4.4	6
74	N2O Direct Dissociation over MgxCeyCo1â^'xâ^'yCo2O4 Composite Spinel Metal Oxide. Catalysts, 2017, 7, 10.	3.5	5
75	Ionothermal synthesis, physicochemical characterization and catalytic performance of extra-large-pore silicoaluminophosphate zeotype with -CLO structure. Journal of Porous Materials, 2021, 28, 1585-1594.	2.6	4
76	Synthesis of TiO2 with diverse morphologies as supports of manganese catalysts for CO oxidation. Applied Petrochemical Research, 2016, 6, 89-96.	1.3	3
77	Solventâ€Free Thermal Synthesis of Extraâ€Largeâ€Pore Aluminophosphate Zeotype via Selfâ€Assembly of Doubleâ€Fourâ€Ring Unit. Chemistry - A European Journal, 2022, 28, .	3.3	3
78	Transfer and Reaction Performances of Selective Catalytic Reduction of N2O with CO over Monolith Catalysts. Chinese Journal of Chemical Engineering, 2013, 21, 835-843.	3.5	2
79	Template Design and Economical Strategy for the Synthesis of SSZ-13 (CHA-Type) Zeolite as an Excellent Catalyst for the Selective Catalytic Reduction of NOxby Ammonia. ChemCatChem, 2015, 7, 3792-3792.	3.7	2
80	A Remarkable Catalyst Combination to Widen the Operating Temperature Window of the Selective Catalytic Reduction of NO by NH3. ChemCatChem, 2014, 6, 2143-2143.	3.7	1
81	Facet control of manganese oxides with diverse redox abilities and acidities for catalytically removing hazardous 1,2-dichloroethane. Materials Advances, 2022, 3, 1101-1114.	5.4	1