Lucie ObalovÃ¡

List of Publications by Year
in descending order

80 papers	2,937 citations	172457 29 h-index	175258 52 g-index
81 all docs	81 docs citations	81 times ranked	3025 citing authors

#	Article	IF	Citations
1	Effect of TiO2 particle size on the photocatalytic reduction of CO2. Applied Catalysis B: Environmental, 2009, 89, 494-502.	20.2	460
2	Effect of silver doping on the TiO2 for photocatalytic reduction of CO2. Applied Catalysis B: Environmental, 2010, 96, 239-244.	20.2	314
3	Photocatalytic reduction of CO2 over TiO2 based catalysts. Chemical Papers, 2008, 62, 1-9.	2.2	165
4	Mixed oxides obtained from Co and Mn containing layered double hydroxides: Preparation, characterization, and catalytic properties. Journal of Solid State Chemistry, 2006, 179, 812-823.	2.9	116
5	Comparison of the pure TiO2 and kaolinite/TiO2 composite as catalyst for CO2 photocatalytic reduction. Catalysis Today, 2011, 161, 105-109.	4.4	100
6	Effect of hydrothermal treatment on properties of Niâ€“Al layered double hydroxides and related mixed oxides. Journal of Solid State Chemistry, 2009, 182, 27-36.	2.9	92
7	Effect of potassium in calcined Coâ€“Mnâ€“Al layered double hydroxide on the catalytic decomposition of N2O. Applied Catalysis B: Environmental, 2009, 90, 132-140.	20.2	83
8	Catalytic decomposition of nitrous oxide over catalysts prepared from Co/Mg-Mn/Al hydrotalcite-like compounds. Applied Catalysis B: Environmental, 2005, 60, 289-297.	20.2	75
9	Effect of Mn/Al ratio in Coâ€“Mnâ€“Al mixed oxide catalysts prepared from hydrotalcite-like precursors on catalytic decomposition of N2O. Catalysis Today, 2007, 119, 233-238.	4.4	73
10	Effect of promoters in Coâ€“Mnâ€“Al mixed oxide catalyst on N2O decomposition. Chemical Engineering Journal, 2010, 160, 480-487.	12.7	72
11	Effect of precursor synthesis on catalytic activity of Co3O4 in N2O decomposition. Catalysis Today, 2015, 257, 18-25.	4.4	71
12	Novel cerium doped titania catalysts for photocatalytic decomposition of ammonia. Applied Catalysis B: Environmental, 2015, 178, 108-116.	20.2	63
13	Alkali metals as promoters in Coâ€“Mnâ€“Al mixed oxide for N2O decomposition. Applied Catalysis A: General, 2013, 462-463, 227-235.	4.3	62
14	Kinetic analysis of N2O decomposition over calcined hydrotalcites. Applied Catalysis B: Environmental, 2007, 70, 353-359.	20.2	53
15	Structureâ€“activity relationship in the N2O decomposition over Ni-(Mg)-Al and Ni-(Mg)-Mn mixed oxides prepared from hydrotalcite-like precursors. Journal of Molecular Catalysis A, 2006, 248, 210-219.	4.8	52
16	Catalytic decomposition and reduction of N2O over micro-mesoporous materials containing Beta zeolite nanoparticles. Applied Catalysis B: Environmental, 2014, 146, 112-122.	20.2	50
17	Wavelength Effect on Photocatalytic Reduction of CO2 by Ag/TiO2 Catalyst. Chinese Journal of Catalysis, 2011, 32, 812-815.	14.0	47
18	Electronic nature of potassium promotion effect in Coâ€“Mnâ€“Al mixed oxide on the catalytic decomposition of N2O. Catalysis Communications, 2011, 12, 1055-1058.	3.3	42

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19	Effect of Temperature, Pressure and Volume of Reacting Phase on Photocatalytic CO2 Reduction on Suspended Nanocrystalline TiO2. Collection of Czechoslovak Chemical Communications, 2008, 73, 1192-1204.	1.0	41
20	Influence of reactor geometry on the yield of CO2 photocatalytic reduction. Catalysis Today, 2011, 176, 212-214.	4.4	41
21	Solâ€“gel derived Pd supported TiO2-ZrO2 and TiO2 photocatalysts; their examination in photocatalytic reduction of carbon dioxide. Catalysis Today, 2014, 230, 20-26.	4.4	38
22	On solâ€“gel derived Au-enriched TiO2 and TiO2-ZrO2 photocatalysts and their investigation in photocatalytic reduction of carbon dioxide. Applied Surface Science, 2013, 285, 688-696.	6.1	37
23	Photocatalytic decomposition of nitrous oxide using TiO2 and Ag-TiO2 nanocomposite thin films. Catalysis Today, 2013, 209, 170-175.	4.4	36
24	TiO2 Processed by pressurized hot solvents as a novel photocatalyst for photocatalytic reduction of carbon dioxide. Applied Surface Science, 2017, 391, 282-287.	6.1	36
25	Photocatalytic H2 generation from aqueous ammonia solution using ZnO photocatalysts prepared by different methods. International Journal of Hydrogen Energy, 2015, 40, 8530-8538.	7.1	34
26	Effect of preparation method on catalytic properties of Co-Mn-Al mixed oxides for N2O decomposition. Journal of Molecular Catalysis A, 2016, 425, 237-247.	4.8	31
27	Activated Carbons Prepared from a Broad Range of Residual Agricultural Biomasses Tested for Xylene Abatement in the Gas Phase. ACS Sustainable Chemistry and Engineering, 2017, 5, 2368-2374.	6.7	31
28	Photocatalytic decomposition of N2O on Ag-TiO2. Catalysis Today, 2012, 191, 134-137.	4.4	30
29	Cobalt mixed oxides deposited on the SiC open-cell foams for nitrous oxide decomposition. Applied Catalysis B: Environmental, 2019, 255, 117745.	20.2	30
30	Catalytic reduction of nitrous oxide with carbon monoxide over calcined Coâ€“Mnâ€“Al hydrotalcite. Catalysis Today, 2008, 137, 385-389.	4.4	22
31	Advantages of stainless steel sieves as support for catalytic N2O decomposition over K-doped Co3O4. Catalysis Today, 2015, 257, 2-10.	4.4	22
32	On the stability of alkali metal promoters in Co mixed oxides during direct NO catalytic decomposition. Molecular Catalysis, 2017, 428, 33-40.	2.0	22
33	Effect of calcination temperature and calcination time on the kaolinite/tio2 composite for photocatalytic reduction of CO2. GeoScience Engineering, 2012, 58, 10-22.	0.3	21
34	Photocatalytic and photochemical decomposition of N2O on ZnS-MMT catalyst. Catalysis Today, 2014, 230, 61-66.	4.4	20
35	N2O catalytic decomposition and temperature programmed desorption tests on alkali metals promoted Coâ€“Mnâ€“Al mixed oxide. Catalysis Today, 2011, 176, 208-211.	4.4	19
36	N2O catalytic decomposition â€“ From laboratory experiment to industry reactor. Catalysis Today, 2012, 191, 116-120.	4.4	18

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37	Co-Mn-Al Mixed Oxides Promoted by K for Direct NO Decomposition: Effect of Preparation Parameters. Catalysts, 2019, 9, 593.	3.5	18
38	Effect of support on the catalytic activity of Co3O4-Cs deposited on open-cell ceramic foams for N2O decomposition. Materials Research Bulletin, 2020, 129, 110892.	5.2	18
39	Cobalt Oxides Supported Over Ceriaâ€“Zirconia Coated Cordierite Monoliths as Catalysts for Deep Oxidation of Ethanol and N2O Decomposition. Catalysis Letters, 2017, 147, 1379-1391.	2.6	17
40	Influence of Reaction Medium on CO2 Photocatalytic Reduction Yields Over Zns-MMT / Vliv ReakÄnÃho ProstÅ™enÃ Na VÃ½tÄ›Å¾ky FotokatalytickÃ© Redukce CO2 V PÅ™Ãtomnosti Zns-MMT. GeoScience Engineering, 2012, 58, 34-42.	0.3	16
41	Photocatalytic reactions of nanocomposite of ZnS nanoparticles and montmorillonite. Applied Surface Science, 2013, 275, 369-373.	6.1	16
42	Optimization of cerium doping of TiO2 for photocatalytic reduction of CO2 and photocatalytic decomposition of N2O. Journal of Sol-Gel Science and Technology, 2016, 78, 550-558.	2.4	15
43	TiO₂ and Nitrogen Doped TiO₂ Prepared by Different Methods; on the (Micro)structure and Photocatalytic Activity in CO₂ Reduction and N₂O Decomposition. Journal of Nanoscience and Nanotechnology, 2018, 18, 688-698.	0.9	14
44	Cu-Mg-Fe-O-(Ce) Complex Oxides as Catalysts of Selective Catalytic Oxidation of Ammonia to Dinitrogen (NH3-SCO). Catalysts, 2020, 10, 153.	3.5	14
45	An investigation on the N2O decomposition activity of Mn Co1â^'Co2O4 nanorods prepared by the thermal decomposition of their oxalate precursors. Journal of Industrial and Engineering Chemistry, 2021, 93, 279-289.	5.8	14
46	K-Doped Coâ€“Mnâ€“Al Mixed Oxide Catalyst for N₂O Abatement from Nitric Acid Plant Waste Gases: Pilot Plant Studies. Industrial & Engineering Chemistry Research, 2016, 55, 7076-7084.	3.7	14
47	Preparation, characterization and photocatalytic performance of TiO2 prepared by using pressurized fluids in CO2 reduction and N2O decomposition. Journal of Sol-Gel Science and Technology, 2015, 76, 621-629.	2.4	13
48	Catalytic activity of cobalt grafted on ordered mesoporous silica materials in N2O decomposition and CO oxidation. Molecular Catalysis, 2017, 437, 57-72.	2.0	13
49	N2O catalytic decomposition â€" effect of pelleting pressure on activity of Co-Mn-Al mixed oxide catalysts. Chemical Papers, 2009, 63, .	2.2	12
50	Simulation of N2O Abatement in Waste Gases by Its Decomposition over a K-Promoted Co-Mn-Al Mixed Oxide Catalyst. Chinese Journal of Catalysis, 2011, 32, 816-820.	14.0	12
51	Supported Coâ€“Mnâ€“Al mixed oxides as catalysts for N2O decomposition. Comptes Rendus Chimie, 2015, 18, 1114-1122.	0.5	12
52	Coâ€“Mnâ€“Al mixed oxides as catalysts for ammonia oxidation to N2O. Research on Chemical Intermediates, 2016, 42, 2669-2690.	2.7	12
53	Catalytic activity of rhodium grafted on ordered mesoporous silica materials modified with aluminum in N2O decomposition. Catalysis Today, 2015, 257, 51-58.	4.4	11
54	Microstructure-performance study of cerium-doped TiO2 prepared by using pressurized fluids in photocatalytic mitigation of N2O. Research on Chemical Intermediates, 2015, 41, 9217-9231.	2.7	11

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55	K-Modified Coâ€“Mnâ€“Al Mixed Oxideâ€”Effect of Calcination Temperature on N2O Conversion in the Presence of H2O and NOx. Catalysts, 2020, 10, 1134.	3.5	11
56	A comparative study of TiO2-supported and bulk Coâ€“Mnâ€“Al catalysts for N2O decomposition. Catalysis Today, 2012, 191, 112-115.	4.4	10
57	Titania supported Coâ€“Mnâ€“Al oxide catalysts in total oxidation of ethanol. Catalysis Today, 2012, 179, 164-169.	4.4	10
58	Advantage of the single pellet string reactor for testing real-size industrial pellets of potassium-doped CoMnAl catalyst forÂthe decompositionÂof N2O. Reaction Kinetics, Mechanisms and Catalysis, 2015, 115, 651-662.	1.7	10
59	Precipitated K-Promoted Coâ€“Mnâ€“Al Mixed Oxides for Direct NO Decomposition: Preparation and Properties. Catalysts, 2019, 9, 592.	3.5	10
60	Role of the Cu content and Ce activating effect on catalytic performance of Cu-Mg-Al and Ce/Cu-Mg-Al oxides in ammonia selective catalytic oxidation. Applied Surface Science, 2022, 573, 151540.	6.1	10
61	Titanium and zirconium-based mixed oxides prepared by using pressurized and supercritical fluids: On novel preparation, microstructure and photocatalytic properties in the photocatalytic reduction of CO2. Catalysis Today, 2017, 287, 52-58.	4.4	9
62	Magnesium Effect in K/Co-Mg-Mn-Al Mixed Oxide Catalyst for Direct NO Decomposition. Catalysts, 2020, 10, 931.	3.5	9
63	Reaction mechanism of NO direct decomposition over K-promoted Co-Mn-Al mixed oxides â€“ DRIFTS, TPD and transient state studies. Journal of the Taiwan Institute of Chemical Engineers, 2021, 120, 257-266.	5.3	9
64	Molecular Dimensions and Porous Structure of Activated Carbons for Sorption of Xylene and Isooctane. Chemical Engineering and Technology, 2017, 40, 6-17.	1.5	8
65	Cobalt oxide catalysts supported on CeO2â€“TiO2 for ethanol oxidation and N2O decomposition. Reaction Kinetics, Mechanisms and Catalysis, 2017, 121, 121-139.	1.7	7
66	Must the Best Laboratory Prepared Catalyst Also Be the Best in an Operational Application?. Catalysts, 2019, 9, 160.	3.5	7
67	Antibacterial, Antifungal and Ecotoxic Effects of Ammonium and Imidazolium Ionic Liquids Synthesized in Microwaves. Molecules, 2020, 25, 5181.	3.8	7
68	Catalytic Oxidation of Ammonia over Cerium-Modified Copper Aluminium Zinc Mixed Oxides. Materials, 2021, 14, 6581.	2.9	6
69	Optimization of Cs content in Coâ€“Mnâ€“Al mixed oxide as catalyst for N2O decomposition. Research on Chemical Intermediates, 2015, 41, 9319-9332.	2.7	5
70	Magnetically modified nanogold-biosilica composite as an effective catalyst for CO oxidation. Arabian Journal of Chemistry, 2019, 12, 1148-1158.	4.9	5
71	Application of Calcined Layered Double Hydroxides as Catalysts for Abatement of N2O Emissions. Collection of Czechoslovak Chemical Communications, 2008, 73, 1045-1060.	1.0	4
72	The Possibility of Balancing VOC Concentration Fluctuations by a Flow through an Activated Carbon Bed. Adsorption Science and Technology, 2011, 29, 157-168.	3.2	4

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73	Photocatalytic Hydrogen Formation from Ammonia in an Aqueous Solution Over Pt-Enriched TiO₂â€“ZrO₂ Photocatalyst. Journal of Nanoscience and Nanotechnology, 2015, 15, 6833-6839.	0.9	4
74	Nanosheets-nanorods transformation during the non-isothermal decomposition of gadolinium acetate. Ceramics International, 2020, 46, 25467-25477.	4.8	4
75	Direct Decomposition of NO over Co-Mn-Al Mixed Oxides: Effect of Ce and/or K Promoters. Catalysts, 2020, 10, 808.	3.5	4
76	Oxygen effect in NO direct decomposition over K/Co-Mg-Mn-Al mixed oxide catalystâ€“Temperature programmed desorption study. Molecular Catalysis, 2021, 510, 111695.	2.0	4
77	The balancing of NO concentration fluctuations by adsorption/desorption process on activated carbon. Separation and Purification Technology, 2011, 78, 245-248.	7.9	3
78	Transmission Electron Microscopy Observation of Bionanogold Used for Preliminary N2O Decomposition Testing. Advanced Science Letters, 2016, 22, 631-636.	0.2	3
79	The balancing of VOC concentration fluctuations by adsorption/desorption process on activated carbon. Adsorption, 2013, 19, 667-673.	3.0	2
80	Catalytic Decomposition of N2O and NO. Catalysts, 2021, 11, 667.	3.5	1