Lenka Matejova

List of Publications by Year in descending order

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72 papers 2,166 citations

23 h-index 263392 45 g-index

74 all docs

74 docs citations

74 times ranked 3279 citing authors

#	Article	IF	CITATIONS
1	Revelation of high-adsorption-performance activated carbon for removal of fluoroquinolone antibiotics from water. Biomass Conversion and Biorefinery, 2024, 14, 2585-2599.	2.9	7
2	A case study on microwave pyrolysis of waste tyres and cocoa pod husk; effect on quantity and quality of utilizable products. Journal of Environmental Chemical Engineering, 2022, 10, 106917.	3.3	8
3	α-Fe2O3 Nanoparticles/Iron-Containing Vermiculite Composites: Structural, Textural, Optical and Photocatalytic Properties. Minerals (Basel, Switzerland), 2022, 12, 607.	0.8	3
4	The influence of structural properties on the adsorption capacities of microwave-assisted biochars for metazachlor removal from aqueous solutions. Journal of Environmental Chemical Engineering, 2022, 10, 108003.	3.3	8
5	Effect of Nanoparticle Size in Pt/SiO2 Catalyzed Nitrate Reduction in Liquid Phase. Nanomaterials, 2021, 11, 195.	1.9	7
6	Photocatalytic Oxidation of Methyl Tert-Butyl Ether in Presence of Various Phase Compositions of TiO2. Catalysts, 2020, 10, 35.	1.6	6
7	Vermiculites from Brazil and Palabora: Structural changes upon heat treatment and influence on the depolymerization of polystyrene. Applied Clay Science, 2020, 192, 105639.	2.6	6
8	Successful Immobilization of Lanthanides Doped TiO2 on Inert Foam for Repeatable Hydrogen Generation from Aqueous Ammonia. Materials, 2020, 13, 1254.	1.3	3
9	A Case Study of Waste Scrap Tyre-Derived Carbon Black Tested for Nitrogen, Carbon Dioxide, and Cyclohexane Adsorption. Molecules, 2020, 25, 4445.	1.7	12
10	Must the Best Laboratory Prepared Catalyst Also Be the Best in an Operational Application?. Catalysts, 2019, 9, 160.	1.6	7
11	Structural, magnetic, optical, and magneto-optical properties of CoFe2O4 thin films fabricated by a chemical approach. Materials Research Bulletin, 2019, 117, 96-102.	2.7	19
12	The effect of Zr loading in Zr/TiO2 prepared by pressurized hot water on its surface, morphological and photocatalytic properties. Journal of Sol-Gel Science and Technology, 2019, 90, 369-379.	1,1	4
13	Study of the adsorption of dyes employed in the food industry by activated carbon based on residual forestry. Journal of Physics: Conference Series, 2019, 1173, 012009.	0.3	O
14	Photocatalytic decomposition of methanol-water solution over N-La/TiO2 photocatalysts. Applied Surface Science, 2019, 469, 879-886.	3.1	24
15	Preparation of nanocrystalline TiO2 monoliths by using modified supercritical carbon dioxide. Journal of Supercritical Fluids, 2018, 137, 93-100.	1.6	1
16	Photocatalytic decomposition of methanol over La/TiO2 materials. Environmental Science and Pollution Research, 2018, 25, 34818-34825.	2.7	23
17	The effect of type and concentration of modifier in supercritical carbon dioxide on crystallization of nanocrystalline titania thin films. Journal of Supercritical Fluids, 2018, 133, 211-217.	1.6	3
18	Two Unconventional Precursors to Produce ZnCl ₂ â€Based Activated Carbon for Water Treatment Applications. Chemical Engineering and Technology, 2018, 41, 1649-1659.	0.9	15

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19	Nd/TiO2 Anatase-Brookite Photocatalysts for Photocatalytic Decomposition of Methanol. Frontiers in Chemistry, 2018, 6, 44.	1.8	19
20	Crystallization of Zr0.1Ti0.9On mixed oxide by pressurized hot water and its effect on microstructural properties and photoactivity. Journal of Supercritical Fluids, 2018, 141, 39-48.	1.6	2
21	TiO ₂ and Nitrogen Doped TiO ₂ Prepared by Different Methods; on the (Micro)structure and Photocatalytic Activity in CO ₂ Reduction and N ₂ O Decomposition. Journal of Nanoscience and Nanotechnology, 2018, 18, 688-698.	0.9	14
22	TiO2 Processed by pressurized hot solvents as a novel photocatalyst for photocatalytic reduction of carbon dioxide. Applied Surface Science, 2017, 391, 282-287.	3.1	36
23	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.	2.2	9
24	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.	3.2	31
25	Hydrogen production from microwave catalytic pyrolysis of spruce sawdust. Journal of Analytical and Applied Pyrolysis, 2017, 124, 175-179.	2.6	39
26	Nanostructured TiO2 and ZnO prepared by using pressurized hot water and their eco-toxicological evaluation. Journal of Nanoparticle Research, 2017, 19, 1.	0.8	5
27	Nanostructured ZrO 2 synthesized by using pressurized and supercritical fluidsâ€"lts structural and microstructural evolution and thermal stability. Journal of Supercritical Fluids, 2017, 128, 182-193.	1.6	5
28	Investigation of low Ce amount doped-TiO2 prepared by using pressurized fluids in photocatalytic N2O decomposition and CO2 reduction. Journal of Sol-Gel Science and Technology, 2017, 84, 158-168.	1.1	15
29	Novel TiO2 prepared from titanyl sulphate by using pressurized water processing and its photocatalytic activity evaluation. Materials Research Bulletin, 2017, 95, 30-46.	2.7	9
30	Novel synthesis of ZrxTi1-xOn mixed oxides using titanyl sulphate and pressurized hot and supercritical fluids, and their photocatalytic comparison with sol-gel prepared equivalents. Materials Research Bulletin, 2017, 95, 95-103.	2.7	5
31	Molecular Dimensions and Porous Structure of Activated Carbons for Sorption of Xylene and Isooctane. Chemical Engineering and Technology, 2017, 40, 6-17.	0.9	8
32	Adsorption of As(V), Cd(II) and Pb(II), in Multicomponent Aqueous Systems using Activated Carbons. Water Environment Research, 2017, 89, 846-855.	1.3	6
33	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.	1.1	15
34	Novel TiO ₂ /C ₃ N ₄ Photocatalysts for Photocatalytic Reduction of CO ₂ and for Photocatalytic Decomposition of N ₂ O. Journal of Physical Chemistry A, 2016, 120, 8564-8573.	1.1	158
35	Preparation of nanocrystalline titania thin films by using pure and water-modified supercritical carbon dioxide. Journal of Supercritical Fluids, 2016, 117, 289-296.	1.6	6
36	Microstructure, Optical and Photocatalytic Properties of TiO2 Thin Films Prepared by Chelating-Agent Assisted Sol–Gel Method. Journal of Nanoscience and Nanotechnology, 2016, 16, 504-514.	0.9	4

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37	Photocatalytic Hydrogen Formation from Ammonia in an Aqueous Solution Over Pt-Enriched TiO ₂ â€"ZrO ₂ Photocatalyst. Journal of Nanoscience and Nanotechnology, 2015, 15, 6833-6839.	0.9	4
38	Novel cerium doped titania catalysts for photocatalytic decomposition of ammonia. Applied Catalysis B: Environmental, 2015, 178, 108-116.	10.8	63
39	A Comparative Study on Activated Carbons Derived from a Broad Range of Agro-industrial Wastes in Removal of Large-Molecular-Size Organic Pollutants in Aqueous Phase. Water, Air, and Soil Pollution, 2015, 226, 1.	1.1	9
40	Determination of the thickness of polycrystalline thin films by using X-ray methods. Thin Solid Films, 2015, 591, 215-218.	0.8	2
41	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.	1.3	11
42	TiO2–CeO2 prepared by using pressurized and supercritical fluids: effect of processing parameters and cerium amount on (micro)structural and morphological properties. Research on Chemical Intermediates, 2015, 41, 9243-9257.	1.3	6
43	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.	1.1	13
44	Structural study of ceria-doped TiO2prepared at different conditions. Acta Crystallographica Section A: Foundations and Advances, 2015, 71, s380-s380.	0.0	0
45	Refining bimodal microstructure of materials with MSTRUCT. Powder Diffraction, 2014, 29, S35-S41.	0.4	39
46	Preparation, characterization and photocatalytic properties of cerium doped TiO2: On the effect of Ce loading on the photocatalytic reduction of carbon dioxide. Applied Catalysis B: Environmental, 2014, 152-153, 172-183.	10.8	104
47	Sol–gel derived Pd supported TiO2-ZrO2 and TiO2 photocatalysts; their examination in photocatalytic reduction of carbon dioxide. Catalysis Today, 2014, 230, 20-26.	2.2	38
48	Crystallization kinetics study of cerium titanate CeTi2O6. Journal of Physics and Chemistry of Solids, 2014, 75, 265-270.	1.9	14
49	ZnS/MMT nanocomposites: The effect of ZnS loading in MMT on the photocatalytic reduction of carbon dioxide. Applied Catalysis B: Environmental, 2014, 158-159, 410-417.	10.8	44
50	Total oxidation of dichloromethane and ethanol over ceria–zirconia mixed oxide supported platinum and gold catalysts. Applied Catalysis B: Environmental, 2013, 142-143, 54-64.	10.8	41
51	Oxidation of dichloromethane over Pt, Pd, Rh, and V2O5 catalysts supported on Al2O3, Al2O3–TiO2 and Al2O3–CeO2. Applied Catalysis B: Environmental, 2013, 138-139, 33-42.	10.8	68
52	Reverse micelles directed synthesis of TiO2â€"CeO2 mixed oxides and investigation of their crystal structure and morphology. Journal of Solid State Chemistry, 2013, 198, 485-495.	1.4	26
53	Precursors of active Ni species in Ni/Al2O3 catalysts for oxidative dehydrogenation of ethane. Chinese Journal of Catalysis, 2013, 34, 1905-1913.	6.9	19
54	On sol–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.	3.1	37

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55	Study of carbon black obtained by pyrolysis of waste scrap tyres. Journal of Thermal Analysis and Calorimetry, 2013, 111, 1475-1481.	2.0	36
56	XRD analysis of nanocrystalline anatase powders prepared by various chemical routes: correlations between micro-structure and crystal structure parameters. Powder Diffraction, 2013, 28, S161-S183.	0.4	16
57	Total oxidation of model volatile organic compounds over some commercial catalysts. Applied Catalysis A: General, 2012, 443-444, 40-49.	2.2	47
58	Oxidation of perchloroethyleneâ€"Activity and selectivity of Pt, Pd, Rh, and V2O5 catalysts supported on Al2O3, Al2O3â€"TiO2 and Al2O3â€"CeO2. Part 2. Applied Catalysis B: Environmental, 2012, 126, 215-224.	10.8	37
59	TiO2 powders synthesized by pressurized fluid extraction and supercritical drying: Effect of water and methanol on structural properties and purity. Materials Research Bulletin, 2012, 47, 3573-3579.	2.7	23
60	Preparation and characterization of Ag-doped crystalline titania for photocatalysis applications. Applied Catalysis B: Environmental, 2012, 111-112, 119-125.	10.8	117
61	Oxidation of perchloroethyleneâ€"Activity and selectivity of Pt, Pd, Rh, and V2O5 catalysts supported on Al2O3, Al2O3-TiO2 and Al2O3-CeO2. Applied Catalysis B: Environmental, 2012, 113-114, 150-159.	10.8	52
62	A facile synthesis of well-defined titania nanocrystallites: Study on their growth, morphology and surface properties. Microporous and Mesoporous Materials, 2012, 154, 187-195.	2.2	8
63	Comparison of textural information from argon(87ÂK) and nitrogen(77ÂK) physisorption. Journal of Porous Materials, 2011, 18, 557-565.	1.3	23
64	Catalysis in VOC Abatement. Topics in Catalysis, 2011, 54, 1224-1256.	1.3	169
65	Super/subcritical fluid extractions for preparation of the crystalline titania. Journal of Supercritical Fluids, 2010, 52, 215-221.	1.6	28
66	Effect of TiO2 particle size on the photocatalytic reduction of CO2. Applied Catalysis B: Environmental, 2009, 89, 494-502.	10.8	460
67	Standard (master) isotherms of alumina, magnesia, titania and controlled-pore glass. Microporous and Mesoporous Materials, 2008, 107, 227-232.	2.2	28
68	Possibilities and Limits of Texture Properties Characterization. NATO Science for Peace and Security Series C: Environmental Security, 2008, , 435-440.	0.1	0
69	Preparation and Characterization of Thin Nanocrystalline Tio2 Layers. NATO Science for Peace and Security Series C: Environmental Security, 2008, , 441-446.	0.1	0
70	Structural Study of Tailored Titania Thin Layers. Collection of Czechoslovak Chemical Communications, 2008, 73, 1222-1230.	1.0	2
71	Lamellar micelles-mediated synthesis of nanoscale thick sheets of titania. Materials Letters, 2007, 61, 2931-2934.	1.3	11
72	Pore-size distributions from nitrogen adsorption revisited: Models comparison with controlled-pore glasses. Applied Catalysis A: General, 2006, 313, 167-176.	2.2	24