

Izabela Czekaj

List of Publications by Year in descending order

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42
papers

1,255
citations

430754

18
h-index

360920

35
g-index

44
all docs

44
docs citations

44
times ranked

2042
citing authors

#	ARTICLE	IF	CITATIONS
1	Characterization of surface processes at the Ni-based catalyst during the methanation of biomass-derived synthesis gas: X-ray photoelectron spectroscopy (XPS). <i>Applied Catalysis A: General</i> , 2007, 329, 68-78.	2.2	255
2	Chemical deactivation of V ₂ O ₅ /WO ₃ –TiO ₂ SCR catalysts by additives and impurities from fuels, lubrication oils and urea solution. <i>Applied Catalysis B: Environmental</i> , 2008, 77, 228-236.	10.8	243
3	Sulphur poisoning of Ni catalysts in the SNG production from biomass: A TPO/XPS/XAS study. <i>Applied Catalysis A: General</i> , 2009, 362, 121-128.	2.2	106
4	Electrochemical Stability of Imidazolium Based Ionic Liquids Containing Cyano Groups in the Anion: A Cyclic Voltammetry, XPS and DFT Study. <i>Journal of the Electrochemical Society</i> , 2012, 159, H611-H615.	1.3	67
5	SnO ₂ Model Electrode Cycled in Li-Ion Battery Reveals the Formation of Li ₂ SnO ₃ and Li ₈ SnO ₆ Phases through Conversion Reactions. <i>ACS Applied Materials & Interfaces</i> , 2018, 10, 8712-8720.	4.0	59
6	Evaporation of Urea at Atmospheric Pressure. <i>Journal of Physical Chemistry A</i> , 2011, 115, 2581-2589.	1.1	48
7	The Virtue of Defects: Stable Bromine Production by Catalytic Oxidation of Hydrogen Bromide on Titanium Oxide. <i>Angewandte Chemie - International Edition</i> , 2014, 53, 8628-8633.	7.2	38
8	Electronic structure and oxygen vacancies in PdO and ZnO: validation of DFT models. <i>Physical Chemistry Chemical Physics</i> , 2011, 13, 15947.	1.3	35
9	Modelling Catalyst Surfaces Using DFT Cluster Calculations. <i>International Journal of Molecular Sciences</i> , 2009, 10, 4310-4329.	1.8	30
10	Adsorption and catalytic thermolysis of gaseous urea on anatase TiO ₂ studied by HPLC analysis, DRIFT spectroscopy and DFT calculations. <i>Applied Catalysis B: Environmental</i> , 2013, 134-135, 316-323.	10.8	30
11	Nickel deposition on γ -Al ₂ O ₃ model catalysts: An experimental and theoretical investigation. <i>Surface Science</i> , 2009, 603, 2210-2217.	0.8	29
12	DFT calculations, DRIFT spectroscopy and kinetic studies on the hydrolysis of isocyanic acid on the TiO ₂ -anatase (101) surface. <i>Journal of Molecular Catalysis A</i> , 2008, 280, 68-80.	4.8	28
13	Sulphur poisoning of Ni catalysts used in the SNG production from biomass: Computational studies. <i>Catalysis Today</i> , 2011, 176, 429-432.	2.2	23
14	DFT modeling of the hydrolysis of isocyanic acid over the TiO ₂ anatase (101) surface: Adsorption of HNCO species. <i>Surface Science</i> , 2006, 600, 5158-5167.	0.8	20
15	Decomposition of Urea in the SCR Process: Combination of DFT Calculations and Experimental Results on the Catalytic Hydrolysis of Isocyanic Acid on TiO ₂ and Al ₂ O ₃ . <i>Topics in Catalysis</i> , 2009, 52, 1740-1745.	1.3	19
16	CH ₄ combustion cycles at Pd/Al ₂ O ₃ – important role of support and oxygen access. <i>Physical Chemistry Chemical Physics</i> , 2013, 15, 11368.	1.3	19
17	X-ray Absorption and Emission Spectroscopy of Cr(III) (Hydr)Oxides: Analysis of the K-Pre-Edge Region. <i>Journal of Physical Chemistry A</i> , 2009, 113, 12171-12178.	1.1	18
18	DFT studies of oxidation routes for Pd ₉ clusters supported on γ -alumina. <i>Physical Chemistry Chemical Physics</i> , 2012, 14, 10243.	1.3	18

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19	The Cr X-ray absorption K-edge structure of poorly crystalline Fe(III)-Cr(III)-oxyhydroxides. <i>American Mineralogist</i> , 2010, 95, 1202-1213.	0.9	17
20	Solving the puzzle of $\text{Li}_4\text{Ti}_5\text{O}_{12}$ surface reactivity in aprotic electrolytes in Li-ion batteries by nanoscale XPEEM spectromicroscopy. <i>Journal of Materials Chemistry A</i> , 2018, 6, 3534-3542.	5.2	17
21	Ru/Active Carbon Catalyst: Improved Spectroscopic Data Analysis by Density Functional Theory. <i>Journal of Physical Chemistry C</i> , 2013, 117, 26588-26597.	1.5	16
22	Can Energetic Terahertz Pulses Initiate Surface Catalytic Reactions on the Picosecond Time Scale?. <i>Chimia</i> , 2011, 65, 323.	0.3	14
23	Design of Co, Cu and Fe- β -BEA Zeolite Catalysts for Selective Conversion of Lactic Acid into Acrylic Acid. <i>Catalysis Letters</i> , 2019, 149, 3349-3360.	1.4	12
24	Design, synthesis and molecular modelling of new bulky Fananserin derivatives with altered pharmacological profile as potential antidepressants. <i>Bioorganic and Medicinal Chemistry</i> , 2019, 27, 3396-3407.	1.4	12
25	Lactic acid conversion into acrylic acid and other products over natural and synthetic zeolite catalysts: theoretical and experimental studies. <i>Catalysis Today</i> , 2022, 387, 172-185.	2.2	11
26	Theoretical studies of HNCO adsorption at stabilized iron complexes in the ZSM-5 framework. <i>Microporous and Mesoporous Materials</i> , 2013, 169, 97-102.	2.2	10
27	Investigation of Li-Ion Solvation in Carbonate Based Electrolytes Using Near Ambient Pressure Photoemission. <i>Topics in Catalysis</i> , 2016, 59, 628-634.	1.3	10
28	Characteristics of the structure of natural zeolites and their potential application in catalysis and adsorption processes. <i>Czasopismo Techniczne</i> , 2020, , 1-20.	0.2	9
29	Experimental and Theoretical Studies of Sonically Prepared Cu- γ , Cu-USY and Cu-ZSM-5 Catalysts for SCR deNO _x . <i>Catalysts</i> , 2021, 11, 824.	1.6	8
30	Comparison of Synthetic and Natural Zeolite Catalysts TM Behavior in the Production of Lactic Acid and Ethyl Lactate from Biomass-Derived Dihydroxyacetone. <i>Catalysts</i> , 2021, 11, 1006.	1.6	6
31	Modelling of porous metal-organic framework (MOF) materials used in catalysis. <i>Czasopismo Techniczne</i> , 2020, , 1-24.	0.2	4
32	Nickel Deposition on $\beta\text{-Al}_2\text{O}_3$: Modelling Metal Particle Behaviour at the Support. <i>Chimia</i> , 2009, 63, 193-196.	0.3	3
33	Raw Biogas as Feedstock for the OCM Process. <i>Catalysts</i> , 2022, 12, 54.	1.6	3
34	Catalytic Transformation of Biomass-Derived Glucose by One-Pot Method into Levulinic Acid over Na-BEA Zeolite. <i>Processes</i> , 2022, 10, 223.	1.3	3
35	Theoretical Studies of DENO _x SCR over Cu-, Fe- and Mn-FAU Catalysts. <i>Chemistry and Chemical Technology</i> , 2021, 15, 16-25.	0.2	2
36	Theoretical Studies on the Mechanism of deNO _x Process in Cu-Zn Bimetallic System-Comparison of FAU and MFI Zeolites. <i>Molecules</i> , 2022, 27, 300.	1.7	2

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37	The effect of the presence of a hydroxyl group on the vibration frequencies of NO and NH ₃ adsorbates on Cu-Zn bimetallic nanoparticles in ZSM-5 and FAU zeolite – a DFT study. <i>Journal of Molecular Structure</i> , 2022, 1255, 132440.	1.8	2
38	Remarkable Structural Modifications of Tialite Solid Solutions Obtained by Different Methods. <i>Materials</i> , 2022, 15, 3981.	1.3	2
39	Methane Catalytic Combustion on Pd ₉ /Al ₂ O ₃ with Different Degrees of Pd Oxidation. <i>Chimia</i> , 2013, 67, 271.	0.3	1
40	Vibrational Structure of Selected Compounds Derived from Biomass: Lignin Dimers, Selected Aldopentoses and Aldohexoses. <i>Journal of Chemistry and Chemical Engineering</i> , 2018, 12, .	0.3	1
41	Frontispiece: The Virtue of Defects: Stable Bromine Production by Catalytic Oxidation of Hydrogen Bromide on Titanium Oxide. <i>Angewandte Chemie - International Edition</i> , 2014, 53, .	7.2	0
42	Nano-design of Zeolites Biomass Wastes Valorization: Dehydration of Lactic Acid into Acrylic Acid. <i>Inzynieria Mineralna</i> , 2021, 1, .	0.2	0