Joanna Åojewska

List of Publications by Year in descending order

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201674 254184 2,279 89 27 43 citations g-index h-index papers 90 90 90 2435 docs citations times ranked citing authors all docs

#	Article	IF	CITATIONS
1	Cellulose oxidative and hydrolytic degradation: In situ FTIR approach. Polymer Degradation and Stability, 2005, 88, 512-520.	5.8	326
2	Thin cobalt oxide films for catalysis deposited by plasma-enhanced metal–organic chemical vapor deposition. Thin Solid Films, 2007, 515, 6590-6595.	1.8	101
3	Degradation markers of fibroin in silk through infrared spectroscopy. Polymer Degradation and Stability, 2014, 105, 185-196.	5.8	87
4	FTIR and UV/vis as methods for evaluation of oxidative degradation of model paper: DFT approach for carbonyl vibrations. Carbohydrate Polymers, 2010, 82, 370-375.	10.2	73
5	In situ spectroscopic studies of methane catalytic combustion over Co, Ce, and Pd mixed oxides deposited on a steel surface. Journal of Catalysis, 2017, 350, 1-12.	6.2	70
6	Effect of ball-milling on crystallinity index, degree of polymerization and thermal stability of cellulose. Bioresource Technology, 2018, 270, 270-277.	9.6	69
7	Evaluating paper degradation progress. Cross-linking between chromatographic, spectroscopic and chemical results. Applied Physics A: Materials Science and Processing, 2010, 100, 809-821.	2.3	65
8	Engineering and chemical aspects of the preparation of microstructured cobalt catalyst for VOC combustion. Catalysis Today, 2005, 101, 81-91.	4.4	55
9	Optimization of structured catalyst carriers for VOC combustion. Catalysis Today, 2005, 105, 378-384.	4.4	53
10	FTIR in situ transmission studies on the kinetics of paper degradation via hydrolytic and oxidative reaction paths. Applied Physics A: Materials Science and Processing, 2006, 83, 597-603.	2.3	52
11	Pd/Pt promoted Co3O4 catalysts for VOCs combustion. Catalysis Today, 2005, 105, 655-661.	4.4	51
12	Coupled engineering and chemical approach to the design of a catalytic structured reactor for combustion of VOCs: Cobalt oxide catalyst on knitted wire gauzes. Chemical Engineering Journal, 2012, 200-202, 329-337.	12.7	51
13	Structured cobalt oxide catalyst for VOC combustion. Part I: Catalytic and engineering correlations. Applied Catalysis A: General, 2009, 366, 206-211.	4.3	47
14	Carbonyl groups development on degraded cellulose. Correlation between spectroscopic and chemical results. Applied Physics A: Materials Science and Processing, 2007, 89, 883-887.	2.3	45
15	Size exclusion chromatography and viscometry in paper degradation studies. New Mark-Houwink coefficients for cellulose in cupri-ethylenediamine. Journal of Chromatography A, 2010, 1217, 6462-6468.	3.7	41
16	Experimental and modelling study on flow resistance of wire gauzes. Chemical Engineering and Processing: Process Intensification, 2009, 48, 816-822.	3.6	40
17	Optical response of strongly absorbing inhomogeneous materials: Application to paper degradation. Physical Review B, 2014, 89, .	3.2	40
18	Copper exchanged ultrastable zeolite Y – A catalyst for NH3-SCR of NOx from stationary biogas engines. Catalysis Today, 2012, 191, 6-11.	4.4	37

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19	Spectroscopic characterization of Co3O4 catalyst doped with CeO2 and PdO for methane catalytic combustion. Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 2014, 131, 696-701.	3.9	36
20	Preparation of silver nanoparticles using different fractions of TEMPO-oxidized nanocellulose. European Polymer Journal, 2019, 116, 242-255.	5.4	35
21	Influence of lignin content in cellulose pulp on paper durability. Scientific Reports, 2020, 10, 19998.	3.3	35
22	Mass transfer for woven and knitted wire gauze substrates: Experiments and modelling. Catalysis Today, 2009, 147, S120-S124.	4.4	32
23	Furfural as a marker of cellulose degradation. A quantitative approach. Applied Physics A: Materials Science and Processing, 2010, 100, 873-884.	2.3	32
24	Terahertz Absorption by Cellulose: Application to Ancient Paper Artifacts. Physical Review Applied, 2017, 7, .	3.8	32
25	Heat transfer and flow resistance for stacked wire gauzes: Experiments and modelling. International Journal of Heat and Fluid Flow, 2012, 33, 101-108.	2.4	31
26	Cu SSZ-13 zeolite catalyst on metallic foam support for SCR of NO with ammonia: Catalyst layering and characterisation of active sites. Catalysis Today, 2016, 268, 142-149.	4.4	29
27	Short-channel structured reactor for catalytic combustion: Design and evaluation. Chemical Engineering and Processing: Process Intensification, 2007, 46, 637-648.	3.6	28
28	Evaluating degradation of silk's fibroin by attenuated total reflectance infrared spectroscopy: Case study of ancient banners from Polish collections. Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 2015, 135, 576-582.	3.9	25
29	Metal Foams as Novel Catalyst Support in Environmental Processes. Catalysts, 2019, 9, 587.	3.5	25
30	Prospect of compact afterburners based on metallic microstructures. Design and modelling. Topics in Catalysis, 2007, 42-43, 475-480.	2.8	20
31	Mass transport and kinetics in structured steel foam reactor with Cu-ZSM-5 catalyst for SCR of NOx with ammonia. Catalysis Today, 2013, 216, 135-141.	4.4	20
32	Hyperspectral imaging coupled with chemometric analysis for non-invasive differentiation of black pens. Applied Physics A: Materials Science and Processing, 2016, 122, 1.	2.3	20
33	Active state of model cobalt foil catalyst studied by SEM, TPR/TPO, XPS and TG. Catalysis Today, 2001, 69, 409-418.	4.4	19
34	Advantages of a wire gauze structured reactor with a zeolite (Cu-USY) catalyst for NH3-SCR of NO. Chemical Engineering Journal, 2013, 214, 319-326.	12.7	19
35	Surface structure of cobalt, palladium, and mixed oxideâ€based catalysts and their activity in methane combustion studied by means of microâ€ <scp>R</scp> aman spectroscopy. Journal of Raman Spectroscopy, 2017, 48, 1871-1880.	2.5	19
36	How to estimate cellulose condition in insulation transformers papers? Combined chromatographic and spectroscopic study. Polymer Degradation and Stability, 2019, 168, 108951.	5.8	18

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37	Following cellulose depolymerization in paper: comparison of size exclusion chromatography techniques. Cellulose, 2011, 18, 1349-1363.	4.9	17
38	Catalytic Combustion of Low-Concentration Methane on Structured Catalyst Supports. Industrial & Engineering Chemistry Research, 2018, 57, 10281-10291.	3.7	17
39	AN EXPERIMENTAL STUDY OF THE PRESSURE DROP IN FLUID FLOWS THROUGH WIRE GAUZES. Chemical Engineering Communications, 2009, 196, 932-949.	2.6	16
40	Cobalt catalyst deposited on metallic microstructures for VOC combustion: Preparation by non-equilibrium plasma. Catalysis Communications, 2008, 10, 142-145.	3.3	15
41	Artificial versus natural ageing of paper. Water role inÂdegradation mechanisms. Applied Physics A: Materials Science and Processing, 2010, 100, 625-633.	2.3	15
42	Short-channel structured reactor: Experiments versus previous theoretical design. Chemical Engineering and Processing: Process Intensification, 2011, 50, 869-876.	3.6	15
43	New method of determination of intrinsic kinetic and mass transport parameters from typical catalyst activity tests: Problem of mass transfer resistance and diffusional limitation of reaction rate. Chemical Engineering Science, 2017, 162, 322-331.	3.8	15
44	Recognizing ancient papyri by a combination of spectroscopic, diffractional and chromatographic analytical tools. Scientific Reports, 2017, 7, 46236.	3.3	15
45	DeNOx Abatement over Sonically Prepared Iron-Substituted Y, USY and MFI Zeolite Catalysts in Lean Exhaust Gas Conditions. Nanomaterials, 2018, 8, 21.	4.1	15
46	Flow resistance of wire gauzes. AICHE Journal, 2009, 55, 264-267.	3.6	14
47	Towards determination of absolute molar mass of cellulose polymer by size exclusion chromatography with mulitple angle laser light scattering detection. Journal of Chromatography A, 2015, 1409, 53-59.	3.7	14
48	Fibroin degradation $\hat{a}\in$ Critical evaluation of conventional analytical methods. Polymer Degradation and Stability, 2015, 120, 357-367.	5.8	14
49	In situ and operando spectroscopic studies of sonically aided catalysts for biogas exhaust abatement. Journal of Molecular Structure, 2016, 1126, 132-140.	3.6	14
50	Towards Methane Combustion Mechanism on Metal Oxides Supported Catalysts: Ceria Supported Palladium Catalysts. Topics in Catalysis, 2019, 62, 403-412.	2.8	14
51	Selective oxidation of methylal as a new catalytic route to concentrated formaldehyde: Reaction kinetic profile in gradientless flow reactor. Catalysis Communications, 2008, 9, 1833-1837.	3.3	13
52	Short-Channel Structured Reactor as a Catalytic Afterburner. Topics in Catalysis, 2013, 56, 273-278.	2.8	13
53	Global and Local Thresholding Methods Applied to X-ray Microtomographic Analysis of Metallic Foams. Journal of Nondestructive Evaluation, 2016, 35, 1.	2.4	13
54	Note: Light ageing with simultaneous colorimetry via fibre optics reflection spectrometry. Review of Scientific Instruments, 2011, 82, 076102.	1.3	12

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55	A Comparison Between Monolithic and Wire Gauze Structured Catalytic Reactors for CH4 and CO Removal from Biogas-Fuelled Engine Exhaust. Topics in Catalysis, 2013, 56, 390-396.	2.8	12
56	Topography and morphology of multicomponent catalytic materials based on Co, Ce and Pd oxides deposited on metallic structured carriers studied by AFM/Raman interlaced microscopes. Catalysis Today, 2013, 216, 11-17.	4.4	12
57	Antimicrobial Properties of Silver Cations Substituted to Faujasite Mineral. Nanomaterials, 2017, 7, 240.	4.1	12
58	Generalised two-dimensional correlation analysis of the Co, Ce, and Pd mixed oxide catalytic systems for methane combustion using in situ infrared spectroscopy. Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 2018, 192, 202-210.	3.9	12
59	Design of Co, Cu and Fe–BEA Zeolite Catalysts for Selective Conversion of Lactic Acid into Acrylic Acid. Catalysis Letters, 2019, 149, 3349-3360.	2.6	12
60	Preparation, characterization and deposition of Langmuir–Blodgett Co, Al organic films for the catalytic applications. Thin Solid Films, 2006, 495, 299-307.	1.8	11
61	Size exclusion chromatography for analyses of fibroin in silk: optimization of sampling and separation conditions. Applied Physics A: Materials Science and Processing, 2014, 114, 301-308.	2.3	11
62	Nanoscale analysis of degradation processes of cellulose fibers. Micron, 2016, 91, 75-81.	2.2	11
63	Far Field Combined AFM and Micro-Raman Imaging for Characterisation of Surface of Structured Catalysts: Example of Pd Doped CoOx Catalysts on Precalcined Kanthal Steel. Topics in Catalysis, 2013, 56, 1088-1095.	2.8	10
64	Microstructured Reactor as a Pre-Turbo Catalytic Converter. Topics in Catalysis, 2013, 56, 384-389.	2.8	10
65	Methane combustion modelling of wire gauze reactor coated with Co3O4–CeO2, Co3O4–PdO catalysts. Catalysis Today, 2013, 216, 276-282.	4.4	9
66	Quantitative diagnostics of ancient paper using THz time-domain spectroscopy. Microchemical Journal, 2018, 142, 54-61.	4.5	9
67	Model of activation of the cobalt foil as a catalyst for CO2 methanation. Journal of Molecular Catalysis A, 1997, 122, 1-11.	4.8	8
68	Prospective Catalytic Structured Converters for NH3-SCR of NOx from Biogas Stationary Engines: In Situ Template-Free Synthesis of ZSM-5 Cu Exchanged Catalysts on Steel Carriers. Topics in Catalysis, 2013, 56, 56-61.	2.8	8
69	Impact of residual fuel ash layers on the catalytic activation of K-feldspar regarding the water–gas shift reaction. Biomass Conversion and Biorefinery, 2021, 11, 3-14.	4.6	8
70	Promoting methane partial oxidation: homogenous additives impact on formaldehyde yield on vanadia catalyst. Catalysis Today, 2005, 101, 73-80.	4.4	7
71	Mark–Houwink–Sakurada coefficients determination for molar mass of silk fibroin from viscometric results. SEC-MALLS approach. RSC Advances, 2016, 6, 38071-38078.	3.6	7
72	Evaluating the impact of different exogenous factors on silk textiles deterioration with use of size exclusion chromatography. Applied Physics A: Materials Science and Processing, 2016, 122, 1.	2.3	7

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73	Gasâ€phase flow resistance of metal foams: Experiments and modeling. AICHE Journal, 2017, 63, 1799-1803.	3.6	7
74	2D-COS of in situ μ-Raman and in situ IR spectra for structure evolution characterisation of NEP-deposited cobalt oxide catalyst during n-nonane combustion. Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 2017, 186, 44-51.	3.9	7
75	Short-channel structures of triangular cross-section. International Journal of Heat and Mass Transfer, 2011, 54, 3291-3295.	4.8	6
76	Structured Foam Reactor with CuSSZ-13 Catalyst for SCR of NOx with Ammonia. Topics in Catalysis, 2016, 59, 887-894.	2.8	6
77	Structure Effects on Activity of Plasma Deposited Cobalt Oxide Catalysts for VOC Combustion. Topics in Catalysis, 2017, 60, 318-325.	2.8	6
78	In Search of Governing Gas Flow Mechanism through Metal Solid Foams. Catalysts, 2017, 7, 124.	3.5	6
79	TPR and TPD studies of vanadia/silica catalysts for selective oxidation of methane to formaldehyde. Reaction Kinetics and Catalysis Letters, 2004, 83, 121-128.	0.6	4
80	Spectroscopic studies of MFI and USY zeolite layers over stainless steel 316L wire gauze meshes. Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 2020, 230, 118060.	3.9	4
81	Promoted cobalt oxide catalyst on the metallic structured reactor filling for VOC combustion as an alternative to noble metal catalysts. Polish Journal of Chemical Technology, 2007, 9, 15-19.	0.5	3
82	Reflective and photoacoustic infrared spectroscopic techniques in assessment of binding media in paintings. Applied Physics A: Materials Science and Processing, 2011, 105, 753-761.	2.3	3
83	Novel intense metallic monolith for automotive applications: Experimental versus numerical studies. Comptes Rendus Chimie, 2015, 18, 1030-1035.	0.5	3
84	Paper material containing Ag cations immobilised in faujasite: synthesis, characterisation and antibacterial effects. Cellulose, 2018, 25, 1353-1364.	4.9	3
85	Deactivation of preoxidized cobalt foil studied by CO2 pulse hydrogenation. Reaction Kinetics and Catalysis Letters, 1994, 52, 445-451.	0.6	2
86	Tuning the metathesis performance of a molybdenum oxide-based catalyst by silica support acidity modulation and high temperature pretreatment. Catalysis Science and Technology, 2022, 12, 2134-2145.	4.1	2
87	Structured catalyst carrier for selective oxidation of hydrocarbons: modelling and testing. Catalysis Today, 2004, 91-92, 59-65.	4.4	1
88	In Situ and Operando Techniques in Catalyst Characterisation and Design. Challenges and Advances in Computational Chemistry and Physics, 2019, , 333-359.	0.6	1
89	Advances in Catalyst and Process Design for Air Pollutants Abatement. , 2013, , 461-486.		0