Juha S Lehtonen

List of Publications by Year
in descending order

76 papers	2,067 citations	236612 25 h-index	264894 42 g-index
76 all docs	76 docs citations	76 times ranked	2815 citing authors

#	Article	IF	Citations
1	Chiral-Selective Growth of Single-Walled Carbon Nanotubes on Lattice-Mismatched Epitaxial Cobalt Nanoparticles. Scientific Reports, 2013, 3, 1460.	1.6	175
2	Development of a kinetic model for the esterification of acetic acid with methanol in the presence of a homogeneous acid catalyst. Chemical Engineering Science, 1997, 52, 3369-3381.	1.9	136
3	Product quality and catalyst deactivation in a four day catalytic fast pyrolysis production run. Green Chemistry, 2014, 16, 3549.	4.6	125
4	A review of catalytic aqueous-phase reforming of oxygenated hydrocarbons derived from biorefinery water fractions. International Journal of Hydrogen Energy, 2016, 41, 11003-11032.	3.8	117
5	Comparison of polyvinylbenzene and polyolefin supported sulphonic acid catalysts in the esterification of acetic acid. Applied Catalysis A: General, 1999, 184, 25-32.	2.2	64
6	Growth Mechanism of Single-Walled Carbon Nanotubes on Ironâ€“Copper Catalyst and Chirality Studies by Electron Diffraction. Chemistry of Materials, 2012, 24, 1796-1801.	3.2	63
7	Diameter and chiral angle distribution dependencies on the carbon precursors in surface-grown single-walled carbon nanotubes. Nanoscale, 2012, 4, 7394.	2.8	57
8	Hydrodeoxygenation of guaiacol as a model compound of lignin-derived pyrolysis bio-oil over zirconia-supported Rh catalyst: Process optimization and reaction kinetics. Fuel, 2019, 239, 1015-1027.	3.4	56
9	Water and carbon oxides on monoclinic zirconia: experimental and computational insights. Physical Chemistry Chemical Physics, 2014, 16, 20650-20664.	1.3	55
10	Novel dual extraction process for acetoneâ€“butanolâ€“ethanol fermentation. Separation and Purification Technology, 2014, 124, 18-25.	3.9	52
11	Reactor design and catalysts testing for hydrogen production by methanol steam reforming for fuel cells applications. International Journal of Hydrogen Energy, 2016, 41, 924-935.	3.8	50
12	Hydrodeoxygenation (HDO) of methyl palmitate over bifunctional Rh/ZrO 2 catalyst: Insights into reaction mechanism via kinetic modeling. Applied Catalysis A: General, 2016, 526, 183-190.	2.2	47
13	Catalytic Fast Pyrolysis: Influencing Bioâ€Oil Quality with the Catalystâ€toâ€Biomass Ratio. Energy Technology, 2017, 5, 94-103.	1.8	46
14	Precise Determination of the Threshold Diameter for a Single-Walled Carbon Nanotube To Collapse. ACS Nano, 2014, 8, 9657-9663.	7.3	43
15	Hydrogenolysis of methyl heptanoate over Co based catalysts: Mediation of support property on activity and product distribution. Applied Catalysis B: Environmental, 2014, 147, 236-245.	10.8	41
16	Aqueous-phase reforming of methanol over nickel-based catalysts for hydrogen production. Biomass and Bioenergy, 2017, 106, 29-37.	2.9	39
17	Steam- and autothermal-reforming of n-butanol over Rh/ZrO2 catalyst. Catalysis Today, 2015, 244, 47-57.	2.2	34
18	Steam reforming of n -butanol over Rh/ZrO 2 catalyst: role of 1-butene and butyraldehyde. Applied Catalysis B: Environmental, 2016, 182, 33-46.	10.8	34

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19	Synergistic effects in FeCu bimetallic catalyst for low temperature growth of single-walled carbon nanotubes. Carbon, 2013, 52, 590-594.	5.4	30
20	Benzene steam reforming kinetics in biomass gasification gas cleaning. Fuel, 2016, 182, 696-703.	3.4	29
21	Chiral-selective growth of single-walled carbon nanotubes on stainless steel wires. Carbon, 2012, 50, 4294-4297.	5.4	28
22	Catalytic Pyrolysis of Forest Thinnings with ZSM-5 Catalysts: Effect of Reaction Temperature on Bio-oil Physical Properties and Chemical Composition. Energy & Fuels, 2013, 27, 7587-7601.	2.5	27
23	Key roles of carbon solubility in single-walled carbon nanotube nucleation and growth. Nanoscale, 2015, 7, 20284-20289.	2.8	27
24	Kinetic Model for the Homogeneously Catalyzed Polyesterification of Dicarboxylic Acids with Diols. Industrial & Engineering Chemistry Research, 1996, 35, 3951-3963.	1.8	26
25	Insights into chirality distributions of single-walled carbon nanotubes grown on different Co_xMg_{1â”x}O solid solutions. Journal of Materials Chemistry A, 2014, 2, 5883-5889.	5.2	26
26	Hydrodeoxygenation of Methyl Heptanoate over Noble Metal Catalysts: Catalyst Screening and Reaction Network. Industrial & Engineering Chemistry Research, 2013, 52, 11544-11551.	1.8	25
27	Atomic layer deposition in the preparation of Bi-metallic, platinum-based catalysts for fuel cell applications. Applied Catalysis B: Environmental, 2014, 148-149, 11-21.	10.8	25
28	Liquid Phase Furfural Hydrotreatment to 2â€Methylfuran with Carbon Supported Copper, Nickel, and Iron Catalysts. ChemistrySelect, 2017, 2, 51-60.	0.7	25
29	Value Added Hydrocarbons from Distilled Tall Oil via Hydrotreating over a Commercial NiMo Catalyst. Industrial & Engineering Chemistry Research, 2013, 52, 10114-10125.	1.8	24
30	The activity of ALD-prepared PtCo catalysts for ethanol oxidation in alkaline media. Journal of Catalysis, 2014, 309, 38-48.	3.1	24
31	Assessing the Potential of Crude Tall Oil for the Production of Green-Base Chemicals: An Experimental and Kinetic Modeling Study. Industrial & Engineering Chemistry Research, 2014, 53, 18430-18442.	1.8	23
32	Carbon formation in catalytic steam reforming of natural gas with SOFC anode off-gas. International Journal of Hydrogen Energy, 2015, 40, 1548-1558.	3.8	22
33	Steam reforming of pyrolysis oil aqueous fraction obtained by one-step fractional condensation. International Journal of Hydrogen Energy, 2015, 40, 3149-3157.	3.8	22
34	Kinetic Modeling of Propene Hydroformylation with Rh/TPP and Rh/CHDPP Catalysts. Industrial & Engineering Chemistry Research, 2008, 47, 4317-4324.	1.8	21
35	Preparation Methods for Multiâ€Walled Carbon Nanotube Supported Palladium Catalysts. ChemCatChem, 2012, 4, 2055-2061.	1.8	21
36	Functionalized Activated Carbon Catalysts in Xylose Dehydration. Topics in Catalysis, 2013, 56, 512-521.	1.3	21

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37	Aqueous-phase reforming of Fischer-Tropsch alcohols over nickel-based catalysts to produce hydrogen: Product distribution and reaction pathways. Applied Catalysis A: General, 2018, 567, 112-121.	2.2	19
38	Continuous Liquid-Phase Epoxidation of Ethylene with Hydrogen Peroxide on a Titanium-Silicate Catalyst. Industrial & Engineering Chemistry Research, 2021, 60, 9429-9436.	1.8	19
39	Comparison of Solid Acid-Catalyzed and Autocatalyzed C5 and C6 Sugar Dehydration Reactions with Water as a Solvent. Catalysis Letters, 2014, 144, 1839-1850.	1.4	18
40	Fast Pyrolysis of Hydrolysis Lignin in Fluidized Bed Reactors. Energy & Fuels, 2021, 35, 14758-14769.	2.5	18
41	Oxidative steam reforming of pyrolysis oil aqueous fraction with zirconia pre-conversion catalyst. International Journal of Hydrogen Energy, 2015, 40, 12088-12096.	3.8	17
42	Hydrotreating reactions of tall oils over commercial NiMo catalyst. Energy Science and Engineering, 2015, 3, 286-299.	1.9	16
43	Hydrodeoxygenation of Methyl Heptanoate over Rh/ZrO₂ Catalyst as a Model Reaction for Biofuel Production: Kinetic Modeling Based On Reaction Mechanism. Industrial & Engineering Chemistry Research, 2015, 54, 11986-11996.	1.8	16
44	Solubility of gases in a hydroformylation solvent. Chemical Engineering Science, 2006, 61, 3698-3704.	1.9	15
45	Interaction of H2S with ZrO2 and its influence on reactivity of surface oxygen. Applied Catalysis B: Environmental, 2015, 164, 360-370.	10.8	15
46	Growth and surface engineering of vertically-aligned low-wall-number carbon nanotubes. Carbon, 2012, 50, 4750-4754.	5.4	14
47	1-Butanol dehydration in microchannel reactor: Kinetics and reactor modeling. Chemical Engineering Science, 2015, 137, 740-751.	1.9	14
48	On the Principles of Modelling of Homogeneousâ^'Heterogeneous Reactions in the Production of Fine Chemicals. A Case Study:Â Reductive Alkylation of Aromatic Amines. Organic Process Research and Development, 1998, 2, 78-85.	1.3	13
49	Kinetic Modelling of the Aqueous-Phase Reforming of Fischer-Tropsch Water over Ceria-Zirconia Supported Nickel-Copper Catalyst. Catalysts, 2019, 9, 936.	1.6	12
50	Modelling of a microreactor for the partial oxidation of 1-butanol on a titania supported gold catalyst. Chemical Engineering Science, 2020, 221, 115695.	1.9	12
51	Modelling and scale-up of a loop reactor for hydrogenation processes. Chemical Engineering Science, 1999, 54, 2793-2798.	1.9	11
52	Whisker carbon formation in catalytic steam reforming of biomass gasification gas. Applied Catalysis A: General, 2018, 564, 133-141.	2.2	11
53	Asymptotic analysis of chemical reactions. Chemical Engineering Science, 1999, 54, 1131-1143.	1.9	10
54	Molecular level insights to the interaction of toluene with ZrO2-based biomass gasification gas clean-up catalysts. Applied Catalysis B: Environmental, 2013, 142-143, 769-779.	10.8	10

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55	Structured microreactor with gold and palladium on titania: Active, regenerable and durable catalyst coatings for the gas-phase partial oxidation of 1-butanol. Applied Catalysis A: General, 2018, 562, 173-183.	2.2	10
56	Dual Extraction Process for the Utilization of an Acetoneâ€“Butanolâ€“Ethanol Mixture in Gasoline. Industrial & Engineering Chemistry Research, 2014, 53, 12379-12386.	1.8	9
57	Comparison of Reactive Distillation and Dual Extraction Processes for the Separation of Acetone, Butanol, and Ethanol from Fermentation Broth. Industrial & Engineering Chemistry Research, 2016, 55, 1952-1964.	1.8	9
58	A homogeneous-heterogeneously catalysed reaction system in a loop reactor. Catalysis Today, 1999, 48, 139-145.	2.2	8
59	Modeling of Complex Organic Solidâ^'Liquid Reaction Systems in Stirred Tanks. Industrial & Engineering Chemistry Research, 2003, 42, 2516-2524.	1.8	8
60	Growth of single-walled carbon nanotubes with large chiral angles on rhodium nanoparticles. Nanoscale, 2013, 5, 10200.	2.8	8
61	Effect of process conditions on tar formation from thermal reactions of ethylene. Fuel, 2015, 153, 118-127.	3.4	8
62	Catalytic upgrading of crude tall oil into a paraffin-rich liquid. Biomass Conversion and Biorefinery, 2015, 5, 149-159.	2.9	8
63	Polyesterification kinetics of complex mixtures in semibatch reactors. Chemical Engineering Science, 2001, 56, 1293-1298.	1.9	7
64	Toluene oxidation over ZrO2-based gasification gas clean-up catalysts: Part A. Effect of oxygen and temperature on the product distribution. Applied Catalysis B: Environmental, 2016, 199, 523-530.	10.8	7
65	Solvent-free Hydrodeoxygenation of Î³-Nonalactone on Noble Metal Catalysts Supported on Zirconia. Topics in Catalysis, 2019, 62, 724-737.	1.3	7
66	3D simulations of a microchannel reactor with diffusion inside the catalyst layer for 1-butanol dehydration reaction in gas phase. Chemical Engineering and Processing: Process Intensification, 2016, 110, 97-105.	1.8	6
67	Toluene oxidation over ZrO2-based gasification gas clean-up catalysts: Part B. Kinetic modeling. Applied Catalysis B: Environmental, 2016, 199, 45-54.	10.8	5
68	Kinetic analysis of the reaction network in the catalyzed polyesterification of unsaturated carboxylic acids. Chemical Engineering Science, 1996, 51, 2799-2804.	1.9	4
69	Optimization of the Reaction Conditions for Complex Kinetics in a Semibatch Reactor. Industrial & Engineering Chemistry Research, 1997, 36, 5196-5206.	1.8	4
70	Modelling of speciality chemicals production in liquidâ€“liquid reactorsâ€”A case study: synthesis of diols. Chemical Engineering Science, 1999, 54, 1-18.	1.9	4
71	Toluene Oxidation in the Absence and Presence of CO, CO₂, Water and H₂ over ZrO₂â€Based Gasification Gas Cleanâ€Up Catalysts. ChemistrySelect, 2017, 2, 1663-1670.	0.7	4
72	Modeling of the Kinetics of Alkali Metal Fusion. Industrial & Engineering Chemistry Research, 1995, 34, 3678-3687.	1.8	3

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73	Kinetics and Mass Transfer of Organic Liquid-Phase Reactions in the Presence of a Sparingly Soluble Solid Phase. Organic Process Research and Development, 2000, 4, 323-332.	1.3	3
74	Hydroformylation of 1-Butene on Rh Catalyst. Industrial & Engineering Chemistry Research, 2009, 48, 1325-1331.	1.8	3
75	Dynamic modelling of simultaneous reaction and distillation in a semibatch reactor system. Chemical Engineering Science, 1998, 53, 113-121.	1.9	2
76	Modelling of complex liquidâ€“solid reaction systems in semibatch reactors: Claisen condensation in industrial scale. Chemical Engineering Science, 2001, 56, 699-705.	1.9	0