Jane HvolbÃ¦k Nielsen

List of Publications by Year
in descending order

41 papers	11,573 citations	257450 24 h-index	289244 40 g-index
42 all docs	42 docs citations	42 times ranked	14562 citing authors

#	Article	IF	Citations
1	Identification of Active Edge Sites for Electrochemical H ₂ Evolution from MoS ₂ Nanocatalysts. Science, 2007, 317, 100-102.	12.6	5,149
2	Biomimetic Hydrogen Evolution:Â MoS2Nanoparticles as Catalyst for Hydrogen Evolution. Journal of the American Chemical Society, 2005, 127, 5308-5309.	13.7	3,497
3	Role of Steps inN2Activation on Ru(0001). Physical Review Letters, 1999, 83, 1814-1817.	7.8	706
4	Structure sensitivity of the methanation reaction: H2-induced CO dissociation on nickel surfaces. Journal of Catalysis, 2008, 255, 6-19.	6.2	411
5	The Effect of Size on the Oxygen Electroreduction Activity of Massâ€Selected Platinum Nanoparticles. Angewandte Chemie - International Edition, 2012, 51, 4641-4643.	13.8	319
6	Mass-selected nanoparticles of PtxY as model catalysts for oxygen electroreduction. Nature Chemistry, 2014, 6, 732-738.	13.6	298
7	From fundamental studies of reactivity on single crystals to the design of catalysts. Surface Science Reports, 1999, 35, 163-222.	7.2	209
8	Modification of Ni(111) reactivity toward CH4, CO, and D2 by twoâ€dimensional alloying. Journal of Chemical Physics, 1996, 104, 7289-7295.	3.0	107
9	Designing surface alloys with specific active sites. Catalysis Letters, 1996, 40, 131-135.	2.6	77
10	CO dissociation on Ni: The effect of steps and of nickel carbonyl. Surface Science, 2008, 602, 733-743.	1.9	72
11	N2 dissociation on Fe(110) and Fe/Ru(0001): what is the role of steps?. Surface Science, 2001, 491, 183-194.	1.9	67
12	The morphology of mass selected ruthenium nanoparticles from a magnetron-sputter gas-aggregation source. Journal of Nanoparticle Research, 2010, 12, 1249-1262.	1.9	53
13	Increased dissociation probability of CH4 on Co/Cu(111). Surface Science, 1998, 405, 62-73.	1.9	50
14	Dynamic Behavior of CuZn Nanoparticles under Oxidizing and Reducing Conditions. Journal of Physical Chemistry C, 2015, 119, 2804-2812.	3.1	49
15	Dissociative sticking of CH4 on Ru(0001). Journal of Chemical Physics, 1999, 110, 2637-2642.	3.0	46
16	Self Blocking of CO Dissociation on a Stepped Ruthenium Surface. Topics in Catalysis, 2010, 53, 357-364.	2.8	44
17	Molecular beam study of N2 dissociation on Ru(0001). Physical Chemistry Chemical Physics, 2001, 3, 2007-2011.	2.8	34
18	Combined spectroscopy and microscopy of supported MoS2 nanoparticles. Surface Science, 2009, 603, 1182-1189.	1.9	30

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19	Scanning Tunneling Microscopy Evidence for the Dissociation of Carbon Monoxide on Ruthenium Steps. Journal of Physical Chemistry C, 2012, 116, 14350-14359.	3.1	30
20	Methanol Decomposition on Pt/ZnO(0001)â^'Zn Model Catalysts. Journal of Physical Chemistry B, 2001, 105, 9273-9279.	2.6	26
21	Methanol Synthesis on Potassium-Modified Cu(100) from CO + H2 and CO + CO2 + H2. Topics in Catalysis, 2003, 22, 151-160.	2.8	26
22	A comparative STM study of Ru nanoparticles deposited on HOPG by mass-selected gas aggregation versus thermal evaporation. Surface Science, 2009, 603, 3420-3430.	1.9	25
23	Probing the active sites for CO dissociation on ruthenium nanoparticles. Physical Chemistry Chemical Physics, 2012, 14, 8005.	2.8	25
24	Is the methanation reaction over Ru single crystals structure dependent?. Physical Chemistry Chemical Physics, 2011, 13, 4486.	2.8	21
25	Methanation on mass-selected Ru nanoparticles on a planar SiO2 model support: The importance of under-coordinated sites. Journal of Catalysis, 2013, 308, 282-290.	6.2	20
26	Structural Modification of Platinum Model Systems under High Pressure CO Annealing. Journal of Physical Chemistry C, 2012, 116, 15353-15360.	3.1	19
27	Enthalpies of adsorption of metal atoms on single-crystalline surfaces by microcalorimetry. Journal of Chemical Thermodynamics, 2001, 33, 333-345.	2.0	18
28	Growth and decomposition of lithium and lithium hydride on nickel. Surface Science, 2006, 600, 1468-1474.	1.9	18
29	Catalytic oxidation of graphite by mass-selected ruthenium nanoparticles. Carbon, 2011, 49, 376-385.	10.3	14
30	Biomimetic Hydrogen Evolution: MoS2 Nanoparticles as Catalyst for Hydrogen Evolution. ChemInform, 2005, 36, no.	0.0	12
31	Reduction of a Ni/Spinel Catalyst for Methane Reforming. Journal of Physical Chemistry C, 2015, 119, 1424-1432.	3.1	12
32	Probing the crossover in CO desorption from single crystal to nanoparticulate Ru model catalysts. Physical Chemistry Chemical Physics, 2011, 13, 10333.	2.8	11
33	Catalyst dynamics: consequences for classical kinetic descriptions of reactors. Chemical Engineering Journal, 2001, 82, 219-230.	12.7	9
34	Decomposition of lithium amide and imide films on nickel. Surface Science, 2007, 601, 830-836.	1.9	7
35	Shape-Selection of Thermodynamically Stabilized Colloidal Pd and Pt Nanoparticles Controlled via Support Effects. Journal of Physical Chemistry C, 2015, 119, 29178-29185.	3.1	7
36	Enhanced reactivity of pseudomorphic Co on Cu(111). Catalysis Letters, 1998, 52, 1-5.	2.6	3

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37	PtRu Colloid Nanoparticles for CO Oxidation in Microfabricated Reactors. Catalysis Letters, 2006, 109, 7-12.	2.6	3
38	An Open-Source Data Storage and Visualization Back End for Experimental Data. Journal of the Association for Laboratory Automation, 2014, 19, 183-190.	2.8	3
39	Novel micro-reactor flow cell for investigation ofÂmodel catalysts using<i>in situ</i>grazing-incidence X-ray scattering. Journal of Synchrotron Radiation, 2016, 23, 455-463.	2.4	2
40	Batch chemical microreactors: Reversible, in situ UHV sealing of a microcavity. Microelectronic Engineering, 2009, 86, 1389-1392.	2.4	0
41	Morphology of Ruthenium Particles for Methanation under Reactive Conditions. Microscopy and Microanalysis, 2014, 20, 416-417.	0.4	0