

Jane Hvolbæk Nielsen

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/4890869/publications.pdf>

Version: 2024-02-01

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 | Novel micro-reactor flow cell for investigation of model catalysts using grazing-incidence X-ray scattering. <i>Journal of Synchrotron Radiation</i> , 2016, 23, 455-463. | 2.4 | 2 |
| 2 | Shape-Selection of Thermodynamically Stabilized Colloidal Pd and Pt Nanoparticles Controlled via Support Effects. <i>Journal of Physical Chemistry C</i> , 2015, 119, 29178-29185. | 3.1 | 7 |
| 3 | Dynamic Behavior of CuZn Nanoparticles under Oxidizing and Reducing Conditions. <i>Journal of Physical Chemistry C</i> , 2015, 119, 2804-2812. | 3.1 | 49 |
| 4 | Reduction of a Ni/Spinel Catalyst for Methane Reforming. <i>Journal of Physical Chemistry C</i> , 2015, 119, 1424-1432. | 3.1 | 12 |
| 5 | Morphology of Ruthenium Particles for Methanation under Reactive Conditions. <i>Microscopy and Microanalysis</i> , 2014, 20, 416-417. | 0.4 | 0 |
| 6 | An Open-Source Data Storage and Visualization Back End for Experimental Data. <i>Journal of the Association for Laboratory Automation</i> , 2014, 19, 183-190. | 2.8 | 3 |
| 7 | Mass-selected nanoparticles of Pt _x Y as model catalysts for oxygen electroreduction. <i>Nature Chemistry</i> , 2014, 6, 732-738. | 13.6 | 298 |
| 8 | Methanation on mass-selected Ru nanoparticles on a planar SiO ₂ model support: The importance of under-coordinated sites. <i>Journal of Catalysis</i> , 2013, 308, 282-290. | 6.2 | 20 |
| 9 | Probing the active sites for CO dissociation on ruthenium nanoparticles. <i>Physical Chemistry Chemical Physics</i> , 2012, 14, 8005. | 2.8 | 25 |
| 10 | Structural Modification of Platinum Model Systems under High Pressure CO Annealing. <i>Journal of Physical Chemistry C</i> , 2012, 116, 15353-15360. | 3.1 | 19 |
| 11 | The Effect of Size on the Oxygen Electroreduction Activity of Mass-Selected Platinum Nanoparticles. <i>Angewandte Chemie - International Edition</i> , 2012, 51, 4641-4643. | 13.8 | 319 |
| 12 | Scanning Tunneling Microscopy Evidence for the Dissociation of Carbon Monoxide on Ruthenium Steps. <i>Journal of Physical Chemistry C</i> , 2012, 116, 14350-14359. | 3.1 | 30 |
| 13 | Is the methanation reaction over Ru single crystals structure dependent?. <i>Physical Chemistry Chemical Physics</i> , 2011, 13, 4486. | 2.8 | 21 |
| 14 | Probing the crossover in CO desorption from single crystal to nanoparticulate Ru model catalysts. <i>Physical Chemistry Chemical Physics</i> , 2011, 13, 10333. | 2.8 | 11 |
| 15 | Catalytic oxidation of graphite by mass-selected ruthenium nanoparticles. <i>Carbon</i> , 2011, 49, 376-385. | 10.3 | 14 |
| 16 | The morphology of mass selected ruthenium nanoparticles from a magnetron-sputter gas-aggregation source. <i>Journal of Nanoparticle Research</i> , 2010, 12, 1249-1262. | 1.9 | 53 |
| 17 | Self Blocking of CO Dissociation on a Stepped Ruthenium Surface. <i>Topics in Catalysis</i> , 2010, 53, 357-364. | 2.8 | 44 |
| 18 | Combined spectroscopy and microscopy of supported MoS ₂ nanoparticles. <i>Surface Science</i> , 2009, 603, 1182-1189. | 1.9 | 30 |

| # | ARTICLE | IF | CITATIONS |
|----|---|------|-----------|
| 19 | A comparative STM study of Ru nanoparticles deposited on HOPG by mass-selected gas aggregation versus thermal evaporation. <i>Surface Science</i> , 2009, 603, 3420-3430. | 1.9 | 25 |
| 20 | Batch chemical microreactors: Reversible, in situ UHV sealing of a microcavity. <i>Microelectronic Engineering</i> , 2009, 86, 1389-1392. | 2.4 | 0 |
| 21 | CO dissociation on Ni: The effect of steps and of nickel carbonyl. <i>Surface Science</i> , 2008, 602, 733-743. | 1.9 | 72 |
| 22 | Structure sensitivity of the methanation reaction: H ₂ -induced CO dissociation on nickel surfaces. <i>Journal of Catalysis</i> , 2008, 255, 6-19. | 6.2 | 411 |
| 23 | Identification of Active Edge Sites for Electrochemical H ₂ Evolution from MoS ₂ Nanocatalysts. <i>Science</i> , 2007, 317, 100-102. | 12.6 | 5,149 |
| 24 | Decomposition of lithium amide and imide films on nickel. <i>Surface Science</i> , 2007, 601, 830-836. | 1.9 | 7 |
| 25 | Growth and decomposition of lithium and lithium hydride on nickel. <i>Surface Science</i> , 2006, 600, 1468-1474. | 1.9 | 18 |
| 26 | PtRu Colloid Nanoparticles for CO Oxidation in Microfabricated Reactors. <i>Catalysis Letters</i> , 2006, 109, 7-12. | 2.6 | 3 |
| 27 | Biomimetic Hydrogen Evolution: MoS ₂ Nanoparticles as Catalyst for Hydrogen Evolution. <i>ChemInform</i> , 2005, 36, no. | 0.0 | 12 |
| 28 | Biomimetic Hydrogen Evolution: MoS ₂ Nanoparticles as Catalyst for Hydrogen Evolution. <i>Journal of the American Chemical Society</i> , 2005, 127, 5308-5309. | 18.7 | 3,497 |
| 29 | Methanol Synthesis on Potassium-Modified Cu(100) from CO + H ₂ and CO + CO ₂ + H ₂ . <i>Topics in Catalysis</i> , 2003, 22, 151-160. | 2.8 | 26 |
| 30 | N ₂ dissociation on Fe(110) and Fe/Ru(0001): what is the role of steps?. <i>Surface Science</i> , 2001, 491, 183-194. | 1.9 | 67 |
| 31 | Molecular beam study of N ₂ dissociation on Ru(0001). <i>Physical Chemistry Chemical Physics</i> , 2001, 3, 2007-2011. | 2.8 | 34 |
| 32 | Methanol Decomposition on Pt/ZnO(0001) Zn Model Catalysts. <i>Journal of Physical Chemistry B</i> , 2001, 105, 9273-9279. | 2.6 | 26 |
| 33 | Enthalpies of adsorption of metal atoms on single-crystalline surfaces by microcalorimetry. <i>Journal of Chemical Thermodynamics</i> , 2001, 33, 333-345. | 2.0 | 18 |
| 34 | Catalyst dynamics: consequences for classical kinetic descriptions of reactors. <i>Chemical Engineering Journal</i> , 2001, 82, 219-230. | 12.7 | 9 |
| 35 | Dissociative sticking of CH ₄ on Ru(0001). <i>Journal of Chemical Physics</i> , 1999, 110, 2637-2642. | 3.0 | 46 |
| 36 | From fundamental studies of reactivity on single crystals to the design of catalysts. <i>Surface Science Reports</i> , 1999, 35, 163-222. | 7.2 | 209 |

| # | ARTICLE | IF | CITATIONS |
|----|--|-----|-----------|
| 37 | Role of Steps in N ₂ Activation on Ru(0001). <i>Physical Review Letters</i> , 1999, 83, 1814-1817. | 7.8 | 706 |
| 38 | Enhanced reactivity of pseudomorphic Co on Cu(111). <i>Catalysis Letters</i> , 1998, 52, 1-5. | 2.6 | 3 |
| 39 | Increased dissociation probability of CH ₄ on Co/Cu(111). <i>Surface Science</i> , 1998, 405, 62-73. | 1.9 | 50 |
| 40 | Designing surface alloys with specific active sites. <i>Catalysis Letters</i> , 1996, 40, 131-135. | 2.6 | 77 |
| 41 | Modification of Ni(111) reactivity toward CH ₄ , CO, and D ₂ by two-dimensional alloying. <i>Journal of Chemical Physics</i> , 1996, 104, 7289-7295. | 3.0 | 107 |