

Barbara A J Lechner

List of Publications by Year in descending order

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28
papers

784
citations

687363

13
h-index

642732

23
g-index

30
all docs

30
docs citations

30
times ranked

1407
citing authors

| # | ARTICLE | IF | CITATIONS |
|----|--|------|-----------|
| 1 | Cluster Catalysis with Lattice Oxygen: Tracing Oxygen Transport from a Magnetite (001) Support onto Small Pt Clusters. <i>ACS Catalysis</i> , 2021, 11, 9519-9529. | 11.2 | 14 |
| 2 | The molecular wagon that stays on track. <i>Science</i> , 2020, 370, 912-912. | 12.6 | 0 |
| 3 | Order-disorder phase transition of the subsurface cation vacancy reconstruction on Fe ₃ O ₄ (001). <i>Physical Chemistry Chemical Physics</i> , 2020, 22, 8336-8343. | 2.8 | 8 |
| 4 | Nanoscale patterning at the Si/SiO ₂ /graphene interface by focused He ⁺ beam. <i>Nanotechnology</i> , 2020, 31, 505302. | 2.6 | 2 |
| 5 | Influence of Local Defects on the Dynamics of O-H Bond Breaking and Formation on a Magnetite Surface. <i>Journal of Physical Chemistry C</i> , 2019, 123, 19742-19747. | 3.1 | 11 |
| 6 | Evolution of steady-state material properties during catalysis: Oxidative coupling of methanol over nanoporous Ag _{0.03} Au _{0.97} . <i>Journal of Catalysis</i> , 2019, 380, 366-374. | 6.2 | 24 |
| 7 | The new FAST module: A portable and transparent add-on module for time-resolved investigations with commercial scanning probe microscopes. <i>Ultramicroscopy</i> , 2019, 205, 49-56. | 1.9 | 16 |
| 8 | Scanning Tunneling Microscopy Study of the Structure and Interaction between Carbon Monoxide and Hydrogen on the Ru(0001) Surface. <i>Journal of Physical Chemistry B</i> , 2018, 122, 649-656. | 2.6 | 6 |
| 9 | A Microscopy Approach to Investigating the Energetics of Small Supported Metal Clusters. <i>Journal of Physical Chemistry C</i> , 2018, 122, 22569-22576. | 3.1 | 8 |
| 10 | Dynamic restructuring drives catalytic activity on nanoporous gold-silver alloy catalysts. <i>Nature Materials</i> , 2017, 16, 558-564. | 27.5 | 243 |
| 11 | Recycling of CO ₂ : Probing the Chemical State of the Ni(111) Surface during the Methanation Reaction with Ambient-Pressure X-Ray Photoelectron Spectroscopy. <i>Journal of the American Chemical Society</i> , 2016, 138, 13246-13252. | 13.7 | 145 |
| 12 | A study of the O/Ag(111) system with scanning tunneling microscopy and x-ray photoelectron spectroscopy at ambient pressures. <i>Surface Science</i> , 2016, 652, 51-57. | 1.9 | 29 |
| 13 | Coupling between diffusion and orientation of pentacene molecules on an organic surface. <i>Nature Materials</i> , 2016, 15, 397-400. | 27.5 | 37 |
| 14 | Growth and Structure of the First Layers of Ice on Ru(0001) and Pt(111). <i>Journal of the American Chemical Society</i> , 2016, 138, 3145-3151. | 13.7 | 93 |
| 15 | Vibrational lifetimes and friction in adsorbate motion determined from quasi-elastic scattering. <i>Physical Chemistry Chemical Physics</i> , 2015, 17, 21819-21823. | 2.8 | 7 |
| 16 | Solvation and Reaction of Ammonia in Molecularly Thin Water Films. <i>Journal of Physical Chemistry C</i> , 2015, 119, 23052-23058. | 3.1 | 28 |
| 17 | Studying Complex Surface Dynamical Systems Using Helium-3 Spin-Echo Spectroscopy. <i>Springer Theses</i> , 2014, , . | 0.1 | 2 |
| 18 | The Helium-3 Spin-Echo Experiment. <i>Springer Theses</i> , 2014, , 5-32. | 0.1 | 0 |

| # | ARTICLE | IF | CITATIONS |
|----|--|------|-----------|
| 19 | The Dynamics of Cyclopentadienyl on Cu(111). Springer Theses, 2014, , 71-104. | 0.1 | 0 |
| 20 | The Atomic-Scale Motion of Thiophene on Cu(111). Springer Theses, 2014, , 143-168. | 0.1 | 0 |
| 21 | Quantum Influences in the Diffusive Motion of Pyrrole on Cu(111). Springer Theses, 2014, , 105-141. | 0.1 | 0 |
| 22 | Quantum Influences in the Diffusive Motion of Pyrrole on Cu(111). Angewandte Chemie - International Edition, 2013, 52, 5085-5088. | 13.8 | 16 |
| 23 | Atomic scale friction of molecular adsorbates during diffusion. Journal of Chemical Physics, 2013, 138, 194710. | 3.0 | 20 |
| 24 | Jumping, Rotating, and Flapping: The Atomic-Scale Motion of Thiophene on Cu(111). Journal of Physical Chemistry Letters, 2013, 4, 1953-1958. | 4.6 | 14 |
| 25 | Weak Intermolecular Interactions in an Ionically Bound Molecular Adsorbate:Cyclopentadienyl/Cu(111). Physical Review Letters, 2011, 106, 186101. | 7.8 | 20 |
| 26 | Electronically driven phase transitions in a quasi-one-dimensional adsorbate system. European Physical Journal B, 2010, 75, 15-22. | 1.5 | 6 |
| 27 | Lineshapes in quasi-elastic scattering from species hopping between non-equivalent surface sites. Surface Science, 2010, 604, 1459-1475. | 1.9 | 24 |
| 28 | Phase transitions driven by competing interactions in low-dimensional systems. Europhysics Letters, 2010, 92, 26004. | 2.0 | 11 |