

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	Dynamic restructuring drives catalytic activity on nanoporous gold-silver alloy catalysts. <i>Nature Materials</i> , 2017, 16, 558-564.	27.5	243
2	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
3	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
4	Coupling between diffusion and orientation of pentacene molecules on an organic surface. <i>Nature Materials</i> , 2016, 15, 397-400.	27.5	37
5	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
6	Solvation and Reaction of Ammonia in Molecularly Thin Water Films. <i>Journal of Physical Chemistry C</i> , 2015, 119, 23052-23058.	3.1	28
7	Lineshapes in quasi-elastic scattering from species hopping between non-equivalent surface sites. <i>Surface Science</i> , 2010, 604, 1459-1475.	1.9	24
8	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
9	Weak Intermolecular Interactions in an Ionically Bound Molecular Adsorbate: Cyclopentadienyl/Cu(111). <i>Physical Review Letters</i> , 2011, 106, 186101.	7.8	20
10	Atomic scale friction of molecular adsorbates during diffusion. <i>Journal of Chemical Physics</i> , 2013, 138, 194710.	3.0	20
11	Quantum Influences in the Diffusive Motion of Pyrrole on Cu(111). <i>Angewandte Chemie - International Edition</i> , 2013, 52, 5085-5088.	13.8	16
12	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
13	Jumping, Rotating, and Flapping: The Atomic-Scale Motion of Thiophene on Cu(111). <i>Journal of Physical Chemistry Letters</i> , 2013, 4, 1953-1958.	4.6	14
14	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
15	Phase transitions driven by competing interactions in low-dimensional systems. <i>Europhysics Letters</i> , 2010, 92, 26004.	2.0	11
16	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
17	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
18	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

#	ARTICLE	IF	CITATIONS
19	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
20	Electronically driven phase transitions in a quasi-one-dimensional adsorbate system. <i>European Physical Journal B</i> , 2010, 75, 15-22.	1.5	6
21	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
22	Studying Complex Surface Dynamical Systems Using Helium-3 Spin-Echo Spectroscopy. Springer Theses, 2014, , .	0.1	2
23	Nanoscale patterning at the Si/SiO ₂ /graphene interface by focused He ⁺ beam. <i>Nanotechnology</i> , 2020, 31, 505302.	2.6	2
24	The molecular wagon that stays on track. <i>Science</i> , 2020, 370, 912-912.	12.6	0
25	The Helium-3 Spin-Echo Experiment. Springer Theses, 2014, , 5-32.	0.1	0
26	The Dynamics of Cyclopentadienyl on Cu(111). Springer Theses, 2014, , 71-104.	0.1	0
27	The Atomic-Scale Motion of Thiophene on Cu(111). Springer Theses, 2014, , 143-168.	0.1	0
28	Quantum Influences in the Diffusive Motion of Pyrrole on Cu(111). Springer Theses, 2014, , 105-141.	0.1	0