

Irene Groot

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/2273337/publications.pdf>

Version: 2024-02-01

30
papers

742
citations

623734

14
h-index

526287

27
g-index

32
all docs

32
docs citations

32
times ranked

1110
citing authors

#	ARTICLE	IF	CITATIONS
1	Surface science under reaction conditions: CO oxidation on Pt and Pd model catalysts. Chemical Society Reviews, 2017, 46, 4347-4374.	38.1	202
2	Observing the oxidation of platinum. Nature Communications, 2017, 8, 429.	12.8	109
3	Supersonic molecular beam studies of dissociative adsorption of H ₂ on Ru(0001). Journal of Chemical Physics, 2007, 127, 244701.	3.0	47
4	In situ observations of an active MoS ₂ model hydrodesulfurization catalyst. Nature Communications, 2019, 10, 2546.	12.8	47
5	The Energy Dependence of the Ratio of Step and Terrace Reactivity for H ₂ Dissociation on Stepped Platinum. Angewandte Chemie - International Edition, 2011, 50, 5174-5177.	13.8	33
6	Separating Catalytic Activity at Edges and Terraces on Platinum: Hydrogen Dissociation. Journal of Physical Chemistry C, 2013, 117, 9266-9274.	3.1	33
7	Dynamics of hydrogen dissociation on stepped platinum. Journal of Chemical Physics, 2008, 129, 224707.	3.0	31
8	Real-Time Multiscale Monitoring and Tailoring of Graphene Growth on Liquid Copper. ACS Nano, 2021, 15, 9638-9648.	14.6	28
9	In Situ Optical Reflectance Difference Observations of CO Oxidation over Pd(100). Journal of Physical Chemistry C, 2017, 121, 11407-11415.	3.1	21
10	Development of a reactor for the <i>in situ</i> monitoring of 2D materials growth on liquid metal catalysts, using synchrotron x-ray scattering, Raman spectroscopy, and optical microscopy. Review of Scientific Instruments, 2020, 91, 013907.	1.3	19
11	Transferability of the Specific Reaction Parameter Density Functional for H ₂ + Pt(111) to H ₂ + Pt(211). Journal of Physical Chemistry C, 2019, 123, 2973-2986.	3.1	18
12	Dynamics of dissociative adsorption of hydrogen on a CO-precovered Ru(0001) surface: a comparison of theoretical and experimental results. Physical Chemistry Chemical Physics, 2010, 12, 1331-1340.	2.8	17
13	In situ studies of NO reduction by H ₂ over Pt using surface X-ray diffraction and transmission electron microscopy. Physical Chemistry Chemical Physics, 2017, 19, 8485-8495.	2.8	16
14	From dull to shiny: A novel setup for reflectance difference analysis under catalytic conditions. Review of Scientific Instruments, 2017, 88, 023704.	1.3	15
15	Fast and reliable pre-approach for scanning probe microscopes based on tip-sample capacitance. Ultramicroscopy, 2017, 181, 61-69.	1.9	13
16	Combined scanning probe microscopy and x-ray scattering instrument for in situ catalysis investigations. Review of Scientific Instruments, 2016, 87, 113705.	1.3	12
17	Simultaneous scanning tunneling microscopy and synchrotron X-ray measurements in a gas environment. Ultramicroscopy, 2017, 182, 233-242.	1.9	8
18	Structural Characterization of a Novel Two-Dimensional Material: Cobalt Sulfide Sheets on Au(111). Journal of Physical Chemistry Letters, 2020, 11, 9038-9044.	4.6	8

#	ARTICLE	IF	CITATIONS
19	X-ray reflectivity from curved surfaces as illustrated by a graphene layer on molten copper. <i>Journal of Synchrotron Radiation</i> , 2022, 29, 711-720.	2.4	8
20	Tuning the Properties of Molybdenum Oxide on Al ₂ O ₃ /NiAl(110): Metal versus Oxide Deposition. <i>Journal of Physical Chemistry C</i> , 2016, 120, 19737-19743.	3.1	7
21	The Pressure Gap for Thiols: Methanethiol Self-Assembly on Au(111) from Vacuum to 1 bar. <i>Journal of Physical Chemistry C</i> , 2019, 123, 12382-12389.	3.1	7
22	Thermodynamic analysis of graphene CVD grown on liquid metal: Growth on liquid metallic gallium or solid gallium oxide skin?. <i>Materials Chemistry and Physics</i> , 2022, 275, 125203.	4.0	6
23	Seeing dynamic phenomena with live scanning tunneling microscopy. <i>MRS Bulletin</i> , 2017, 42, 834-841.	3.5	5
24	Structural Dynamics of Al ₂ O ₃ /NiAl(110) During Film Growth in NO ₂ . <i>Journal of Physical Chemistry B</i> , 2018, 122, 788-793.	2.6	5
25	A theoretical study of H ₂ dissociation on (3 $\bar{1}$ –3)R30 \hat{A} °CO/Ru(0001). <i>Journal of Chemical Physics</i> , 2010, 132, 144704.	3.0	4
26	Roadmap for Modeling RhPt/Pt(111) Catalytic Surfaces. <i>Journal of Physical Chemistry C</i> , 2018, 122, 26430-26437.	3.1	4
27	Low-Temperature Synthesis Strategy for MoS ₂ Slabs Supported on TiO ₂ (110). <i>Surfaces</i> , 2020, 3, 605-621.	2.3	4
28	Simultaneous sulfidation of Mo and Co oxides supported on Au(111). <i>Physical Chemistry Chemical Physics</i> , 2021, 23, 8403-8412.	2.8	4
29	Nucleation, Alloying, and Stability of Co ϵ -Re Bimetallic Nanoparticles on Al ₂ O ₃ /NiAl(110). <i>Journal of Physical Chemistry C</i> , 2018, 122, 8967-8975.	3.1	3
30	Investigation of Active Catalysts at Work. <i>Accounts of Chemical Research</i> , 2021, 54, 4334-4341.	15.6	3