Helmut Kuhlenbeck

List of Publications by Year in descending order

Source: https://exaly.com/author-pdf/662594/publications.pdf

Version: 2024-02-01

41 papers 1,439 citations

471509 17 h-index 315739 38 g-index

42 all docs 42 docs citations

42 times ranked 1573 citing authors

#	Article	IF	CITATIONS
1	Oxide surfaces. Reports on Progress in Physics, 1996, 59, 283-347.	20.1	378
2	Well-Ordered Transition Metal Oxide Layers in Model Catalysis – A Series of Case Studies. Chemical Reviews, 2013, 113, 3986-4034.	47.7	187
3	Oxidation of Reduced Ceria by Incorporation of Hydrogen. Angewandte Chemie - International Edition, 2019, 58, 14686-14693.	13.8	112
4	Thermodesorption of CO and NO from Vacuum-Cleaved NiO(100) and MgO(100). Physica Status Solidi A, 1999, 173, 93-100.	1.7	104
5	Formaldehyde Formation on Vanadium Oxide Surfaces V ₂ O ₃ (0001) and V ₂ O ₅ (001): How does the Stable Methoxy Intermediate Form?. Angewandte Chemie - International Edition, 2009, 48, 3695-3698.	13.8	70
6	Adsorption of water on thin V2O3(0001) films. Surface Science, 2006, 600, 1040-1047.	1.9	63
7	Well-Ordered V ₂ O ₅ (001) Thin Films on Au(111): Growth and Thermal Stability. Journal of Physical Chemistry C, 2008, 112, 11835-11846.	3.1	55
8	Surface oxygen Vacancies on Reduced Co ₃ O ₄ (100): Superoxide Formation and Ultraâ€Lowâ€Temperature CO Oxidation. Angewandte Chemie - International Edition, 2021, 60, 16514-16520.	13.8	43
9	The complex core level spectra of CeO2: An analysis in terms of atomic and charge transfer effects. Chemical Physics Letters, 2010, 487, 237-240.	2.6	40
10	Surface core-level binding energy shifts for MgO(100). Physical Chemistry Chemical Physics, 2014, 16, 21953-21956.	2.8	33
11	Surface Structure of V2O3 (0001) Revisited. Physical Review Letters, 2015, 114, 216101.	7.8	30
12	Growth of Fe3O4(001) thin films on Pt(100): Tuning surface termination with an Fe buffer layer. Surface Science, 2015, 636, 42-46.	1.9	25
13	Oxidation of Reduced Ceria by Incorporation of Hydrogen. Angewandte Chemie, 2019, 131, 14828-14835.	2.0	25
14	Growth and Characterization of Ultrathin V2Oy (y â‰^ 5) Films on Au(111). Journal of Physical Chemistry C, 2008, 112, 12363-12373.	3.1	20
15	Revisiting surface core-level shifts for ionic compounds. Physical Review B, 2019, 100, .	3.2	20
16	Methanol Adsorption on V2O3(0001). Topics in Catalysis, 2011, 54, 669-684.	2.8	18
17	Surface Structure of V ₂ O ₃ (0001): A Combined I/V-LEED and STM Study. Journal of Physical Chemistry C, 2015, 119, 22961-22969.	3.1	18
18	Surface core level BE shifts for CaO(100): insights into physical origins. Physical Chemistry Chemical Physics, 2019, 21, 25431-25438.	2.8	17

#	Article	IF	Citations
19	Molecular adsorption on V2O3(0001)/Au(111) surfaces. Topics in Catalysis, 2007, 46, 223-230.	2.8	16
20	Elucidating Surface Structure with Action Spectroscopy. Journal of the American Chemical Society, 2020, 142, 2665-2671.	13.7	16
21	Chapter model systems in heterogeneous catalysis at the atomic level: a personal view. Science China Chemistry, 2020, 63, 426-447.	8.2	14
22	Mo+TiO2(110) Mixed Oxide Layer: Structure and Reactivity. Topics in Catalysis, 2013, 56, 1389-1403.	2.8	13
23	Surface oxygen Vacancies on Reduced Co ₃ O ₄ (100): Superoxide Formation and Ultra‣owâ€Temperature CO Oxidation. Angewandte Chemie, 2021, 133, 16650-16656.	2.0	12
24	Carbon Dioxide Adsorption on V2O3(0001). Topics in Catalysis, 2017, 60, 413-419.	2.8	10
25	Weak thermal reduction of biphase Fe2O3(0001) films grown on Pt(111): Sub-surface Fe2+ formation. Surface Science, 2015, 641, 30-36.	1.9	9
26	The role of exposed silver in CO oxidation over MgO(0 0 1)/Ag(0 0 1) thin films. Catalysis Today, 2015, 240, 206-213.	4.4	9
27	Effect of vanadium admixing on the surface structure of TiO2(110) under non-oxidizing conditions. Surface Science, 2016, 653, 181-186.	1.9	8
28	Reducing the V ₂ O ₃ (0001) surface through electron bombardment $\hat{a} \in \text{``a}$ quantitative structure determination with I/V-LEED. Physical Chemistry Chemical Physics, 2016, 18, 3124-3130.	2.8	8
29	Vibrational Action Spectroscopy of Solids: New Surface-Sensitive Technique. Physical Review Letters, 2017, 119, 136101.	7.8	8
30	Surface action spectroscopy with rare gas messenger atoms. Review of Scientific Instruments, 2018, 89, 083107.	1.3	8
31	Characterization of Phonon Vibrations of Silica Bilayer Films. Journal of Physical Chemistry C, 2019, 123, 7110-7117.	3.1	8
32	Decoupling a Thin Well-Ordered TiO ₂ (110) Layer from a TiO ₂ (110) Substrate with a Ti + Ta Mixed Oxide Interlayer. Journal of Physical Chemistry C, 2016, 120, 8185-8190.	3.1	7
33	Growth of well-ordered iron sulfide thin films. Physical Chemistry Chemical Physics, 2019, 21, 20204-20210.	2.8	7
34	Adatom Bonding Sites in a Nickelâ€Fe ₃ O ₄ (001) Singleâ€Atom Model Catalyst and O ₂ Reactivity Unveiled by Surface Action Spectroscopy with Infrared Freeâ€Electron Laser Light. Angewandte Chemie - International Edition, 2022, 61, e202202561.	13.8	6
35	LEED I/V determination of the structure of a MoO3 monolayer on Au(111): Testing the performance of the CMA-ES evolutionary strategy algorithm, differential evolution, a genetic algorithm and tensor LEED based structural optimization. Surface Science, 2016, 649, 90-100.	1.9	5
36	Gold-Decorated Biphase \hat{l}_{\pm} -Fe2O3(0001): Activation by CO-Induced Surface Reduction. Journal of Physical Chemistry C, 2019, 123, 8221-8227.	3.1	3

#	Article	IF	CITATIONS
37	Adatom Bonding Sites in a Nickelâ€Fe3O4(001) Singleâ€Atom Model Catalyst and O2 Reactivity Unveiled by Surface Action Spectroscopy with Infrared Freeâ€electron Laser Light. Angewandte Chemie, 0, , .	2.0	2
38	Surface Reactivity of Titania–Vanadia Mixed Oxides Under Oxidizing Conditions. Topics in Catalysis, 2018, 61, 792-799.	2.8	1
39	Thin Oxide Films as Model Systems for Heterogeneous Catalysts. Springer Handbooks, 2020, , 267-328.	0.6	1
40	Electron-Stimulated Hydroxylation of Silica Bilayer Films Grown on Ru(0001): A Combined HREELS and EPR Study. Journal of Physical Chemistry C, 2022, 126, 7956-7964.	3.1	1
41	Interaction of CO2 with well-ordered iron sulfide films on Au(111). Surface Science, 2021, 710, 121853.	1.9	0