Alexei Nefedov

List of Publications by Year
in descending order

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41 papers	1,697 citations	361413 20 h-index	276875 41 g-index
42 all docs	42 docs citations	42 times ranked	2856 citing authors

#	Article	IF	Citations
1	N₂O Adsorption and Photochemistry on Ceria Surfaces. Journal of Physical Chemistry C, 2022, 126, 2253-2263.	3.1	1
2	Exploring the Preparation Dependence of Crystalline 2D-Extended Ultrathin C8-BTBT-C8 Films. ACS Applied Materials & Interfaces, 2022, 14, 16830-16838.	8.0	6
3	Dynamic Structural Evolution of Ceria-Supported Pt Particles: A Thorough Spectroscopic Study. Journal of Physical Chemistry C, 2022, 126, 9051-9058.	3.1	6
4	Conductance Switching in Liquid Crystal-Inspired Self-Assembled Monolayer Junctions. ACS Applied Materials & Interfaces, 2022, 14, 31044-31053.	8.0	1
5	CO adsorption on the calcite(10.4) surface: a combined experimental and theoretical study. Physical Chemistry Chemical Physics, 2021, 23, 7696-7702.	2.8	12
6	Neutron spectroscopy study of the diffusivity of hydrogen in MoS₂. Physical Chemistry Chemical Physics, 2021, 23, 7961-7973.	2.8	7
7	Defect-Engineered Metalâ€“Organic Frameworks: A Thorough Characterization of Active Sites Using CO as a Probe Molecule. Journal of Physical Chemistry C, 2021, 125, 593-601.	3.1	15
8	Nano- and Microstructured Copper/Copper Oxide Composites on Laser-Induced Carbon for Enzyme-Free Glucose Sensors. ACS Applied Nano Materials, 2021, 4, 13747-13760.	5.0	27
9	Surface Refaceting Mechanism on Cubic Ceria. Journal of Physical Chemistry Letters, 2020, 11, 7925-7931.	4.6	34
10	Chemical Reactivity of Supported ZnO Clusters: Undercoordinated Zinc and Oxygen Atoms as Active Sites. ChemPhysChem, 2020, 21, 2553-2564.	2.1	5
11	Zusammenwirken elektronischer und sterischer Effekte bei der Tieftemperaturâ€COâ€Oxidation an Einzelatomâ€Metallzentren in defektâ€manipuliertem HKUSTâ€1. Angewandte Chemie, 2020, 132, 10600-10604.	2.0	9
12	Interplay of Electronic and Steric Effects to Yield Lowâ€Temperature CO Oxidation at Metal Single Sites in Defectâ€Engineered HKUSTâ€1. Angewandte Chemie - International Edition, 2020, 59, 10514-10518.	13.8	73
13	Interaction of water with oligo(ethylene glycol) terminated monolayers: wetting versus hydration. Physical Chemistry Chemical Physics, 2020, 22, 8088-8095.	2.8	5
14	Polarization-dependent vibrational shifts on dielectric substrates. Physical Chemistry Chemical Physics, 2020, 22, 17129-17133.	2.8	6
15	Thermally Driven Agâ€“Au Compositional Changes at the Ligament Surface in Nanoporous Gold: Implications for Electrocatalytic Applications. ACS Applied Nano Materials, 2020, 3, 2197-2206.	5.0	11
16	Doping-Induced Electron Transfer at Organic/Oxide Interfaces: Direct Evidence from Infrared Spectroscopy. Journal of Physical Chemistry C, 2020, 124, 4511-4516.	3.1	7
17	Vibrational Frequencies of Cerium-Oxide-Bound CO: A Challenge for Conventional DFT Methods. Physical Review Letters, 2020, 125, 256101.	7.8	13
18	Structural Evolution of Î±-Fe2O3(0001) Surfaces Under Reduction Conditions Monitored by Infrared Spectroscopy. Frontiers in Chemistry, 2019, 7, 451.	3.6	25

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19	Formation and Stability of Nontoxic Perovskite Precursor. Langmuir, 2019, 35, 16217-16225.	3.5	4
20	Structural Evolution of Water on ZnO(100): From Isolated Monomers via Anisotropic Hâ€Bonded 2D and 3D Structures to Isotropic Multilayers. Angewandte Chemie, 2019, 131, 17915-17921.	2.0	3
21	Structural Evolution of Water on ZnO(100): From Isolated Monomers via Anisotropic Hâ€Bonded 2D and 3D Structures to Isotropic Multilayers. Angewandte Chemie - International Edition, 2019, 58, 17751-17757.	13.8	22
22	Chemical Properties of Metal-Silicates Rendered by Metal Exchange Reaction. ACS Sustainable Chemistry and Engineering, 2019, 7, 8449-8457.	6.7	10
23	Structure of the catalytically active copperâ€“ceria interfacial perimeter. Nature Catalysis, 2019, 2, 334-341.	34.4	368
24	Interaction of Water Molecules with the Î±-Fe₂O₃(0001) Surface: A Combined Experimental and Computational Study. Journal of Physical Chemistry C, 2019, 123, 8324-8335.	3.1	26
25	Laser-induced hierarchical carbon patterns on polyimide substrates for flexible urea sensors. Npj Flexible Electronics, 2019, 3, .	10.7	87
26	Spectroscopic Study of Water Adsorption and Desorption on/from Oligo(ethylene glycol)-Substituted Alkanethiolate Self-Assembled Monolayers. Journal of Physical Chemistry C, 2018, 122, 10918-10928.	3.1	5
27	Synthesis and spectroscopic characterization of alkaliâ€“metal intercalated ZrSe₂. Dalton Transactions, 2018, 47, 2986-2991.	3.3	12
28	Hydrophobic Properties of Calcium-Silicate Hydrates Doped with Rare-Earth Elements. ACS Sustainable Chemistry and Engineering, 2018, 6, 14669-14678.	6.7	13
29	Boron-Doped Graphene Nanoribbons: Electronic Structure and Raman Fingerprint. ACS Nano, 2018, 12, 7571-7582.	14.6	38
30	Carbon Dioxide Adsorption on CeO₂(110): An XPS and NEXAFS Study. ChemPhysChem, 2017, 18, 1874-1880.	2.1	34
31	Surface Faceting and Reconstruction of Ceria Nanoparticles. Angewandte Chemie - International Edition, 2017, 56, 375-379.	13.8	185
32	O₂ Activation on Ceria Catalystsâ€”The Importance of Substrate Crystallographic Orientation. Angewandte Chemie - International Edition, 2017, 56, 16399-16404.	13.8	106
33	Rendering Photoreactivity to Ceria: The Role of Defects. Angewandte Chemie - International Edition, 2017, 56, 14301-14305.	13.8	37
34	OberflÃchenfacettierung und Rekonstruktion von Ceroxidâ€•Nanopartikeln. Angewandte Chemie, 2017, 129, 382-387.	2.0	14
35	IR-spectroscopy of CO adsorption on mixed-terminated ZnO surfaces. Surface Science, 2016, 652, 247-252.	1.9	23
36	Methanol adsorption on monocrystalline ceria surfaces. Journal of Catalysis, 2016, 336, 116-125.	6.2	34

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37	Metalâ€“Support Interactions of Platinum Nanoparticles Decorated N-Doped Carbon Nanofibers for the Oxygen Reduction Reaction. ACS Applied Materials & Interfaces, 2016, 8, 82-90.	8.0	120
38	Carbon dioxide adsorption on a ZnO(101Ì„0) substrate studied by infrared reflection absorption spectroscopy. Physical Chemistry Chemical Physics, 2014, 16, 1672-1678.	2.8	38
39	Chemical activity of oxygen vacancies on ceria: a combined experimental and theoretical study on CeO₂(111). Physical Chemistry Chemical Physics, 2014, 16, 24165-24168.	2.8	40
40	Advanced Applications of NEXAFS Spectroscopy for Functionalized Surfaces. Springer Series in Surface Sciences, 2013, , 277-303.	0.3	60
41	Self-metalation of 2H-tetraphenylporphyrin on Cu(111): An x-ray spectroscopy study. Journal of Chemical Physics, 2012, 136, 014705.	3.0	154