Joakim Halldin Stenlid

List of Publications by Year
in descending order

45	1,202	361388 20	395678 33
papers	citations	h-index	g-index

47	47	47	1258
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Extending the Ïƒ-Hole Concept to Metals: An Electrostatic Interpretation of the Effects of Nanostructure in Gold and Platinum Catalysis. Journal of the American Chemical Society, 2017, 139, 11012-11015.	13.7	136
2	Ïƒ-Holes and Ïƒ-lumps direct the Lewis basic and acidic interactions of noble metal nanoparticles: introducing regium bonds. Physical Chemistry Chemical Physics, 2018, 20, 2676-2692.	2.8	99
3	Key activity descriptors of nickel-iron oxygen evolution electrocatalysts in the presence of alkali metal cations. Nature Communications, 2020, 11, 6181.	12.8	80
4	Tying different knots in a molecular strand. Nature, 2020, 584, 562-568.	27.8	74
5	The state of zinc in methanol synthesis over a Zn/ZnO/Cu(211) model catalyst. Science, 2022, 376, 603-608.	12.6	65
6	Trends in oxygenate/hydrocarbon selectivity for electrochemical CO(2) reduction to C2 products. Nature Communications, 2022, 13, 1399.	12.8	56
7	Ab Initio Cyclic Voltammetry on Cu(111), Cu(100) and Cu(110) in Acidic, Neutral and Alkaline Solutions. ChemPhysChem, 2019, 20, 3096-3105.	2.1	48
8	The Surface Structure of Cu₂O(100). Journal of Physical Chemistry C, 2016, 120, 4373-4381.	3.1	46
9	Nucleophilic Aromatic Substitution Reactions Described by the Local Electron Attachment Energy. Journal of Organic Chemistry, 2017, 82, 3072-3083.	3.2	38
10	The Role of Roughening to Enhance Selectivity to C₂₊ Products during CO₂ Electroreduction on Copper. ACS Energy Letters, 2021, 6, 3252-3260.	17.4	38
11	The Molecular Surface Property Approach: A Guide to Chemical Interactions in Chemistry, Medicine, and Material Science. Advanced Theory and Simulations, 2019, 2, 1800149.	2.8	36
12	Catalytic Performance and Near-Surface X-ray Characterization of Titanium Hydride Electrodes for the Electrochemical Nitrate Reduction Reaction. Journal of the American Chemical Society, 2022, 144, 5739-5744.	13.7	31
13	Vernier template synthesis of molecular knots. Science, 2022, 375, 1035-1041.	12.6	31
14	Mechanism and regioselectivity of electrophilic aromatic nitration in solution: the validity of the transition state approach. Journal of Molecular Modeling, 2018, 24, 15.	1.8	29
15	Local Electron Attachment Energy and Its Use for Predicting Nucleophilic Reactions and Halogen Bonding. Journal of Physical Chemistry A, 2016, 120, 10023-10032.	2.5	27
16	Nanoscale Spatial Distribution of Supported Nanoparticles Controls Activity and Stability in Powder Catalysts for CO Oxidation and Photocatalytic H₂ Evolution. Journal of the American Chemical Society, 2020, 142, 14481-14494.	13.7	25
17	Modeling Potential-Dependent Electrochemical Activation Barriers: Revisiting the Alkaline Hydrogen Evolution Reaction. Journal of the American Chemical Society, 2021, 143, 19341-19355.	13.7	25
18	Searching for the thermodynamic limit â€“ a DFT study of the step-wise water oxidation of the bipyramidal Cu₇cluster. Physical Chemistry Chemical Physics, 2014, 16, 2452-2464.	2.8	24

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19	Dehydrogenation of methanol on Cu2O(100) and (111). Journal of Chemical Physics, 2017, 146, 244702.	3.0	23
20	Theoretical Investigation into Rate-Determining Factors in Electrophilic Aromatic Halogenation. Journal of Physical Chemistry A, 2018, 122, 3270-3279.	2.5	22
21	Reactivity at the Cu₂O(100):Cuâ€“H₂O interface: a combined DFT and PES study. Physical Chemistry Chemical Physics, 2016, 18, 30570-30584.	2.8	21
22	Exploring Trends on Coupling Mechanisms toward C₃ Product Formation in CO₍₂₎R. Journal of Physical Chemistry C, 2021, 125, 26437-26447.	3.1	18
23	Ïƒ-Holes on Transition Metal Nanoclusters and Their Influence on the Local Lewis Acidity. Crystals, 2017, 7, 222.	2.2	16
24	Local Lewis Acidity of (TiO₂)_n (n = 7â€“10) Nanoparticles Characterized by DFT-Based Descriptors: Tools for Catalyst Design. Journal of Physical Chemistry C, 2017, 121, 27483-27492.	3.1	14
25	Computational analysis of the early stage of cuprous oxide sulphidation: a top-down process. Corrosion Engineering Science and Technology, 2017, 52, 50-53.	1.4	13
26	The Surface Structure of Cu2O(100): Nature of Defects. Journal of Physical Chemistry C, 2019, 123, 7696-7704.	3.1	13
27	Interaction of Atomic Hydrogen with the Cu₂O(100) and (111) Surfaces. Journal of Physical Chemistry C, 2019, 123, 22172-22180.	3.1	13
28	Utilizing the Surface Electrostatic Potential to Predict the Interactions of Pt and Ni Nanoparticles with Lewis Acids and Basesâ€”Ïƒ-Lumps and Ïƒ-Holes Govern the Catalytic Activities. Journal of Physical Chemistry C, 2020, 124, 14696-14705.	3.1	13
29	Amorphous, Periodic Model of a Copper Electrocatalyst with Subsurface Oxygen for Enhanced CO Coverage and Dimerization. Journal of Physical Chemistry C, 2019, 123, 4961-4968.	3.1	13
30	Aqueous Solvation and Surface Oxidation of the Cu₇ Nanoparticle: Insights from Theoretical Modeling. Journal of Physical Chemistry C, 2016, 120, 1977-1988.	3.1	12
31	On the Kinetic and Thermodynamic Properties of Aryl Radicals Using Electrochemical and Theoretical Approaches. ChemElectroChem, 2017, 4, 3212-3221.	3.4	12
32	Interaction of Sulfur Dioxide and Near-Ambient Pressures of Water Vapor with Cuprous Oxide Surfaces. Journal of Physical Chemistry C, 2017, 121, 24011-24024.	3.1	11
33	Adsorption and Decomposition of Ethanol on Cu₂O(111) and (100). Journal of Physical Chemistry C, 2019, 123, 20384-20392.	3.1	11
34	The local electron attachment energy and the electrostatic potential as descriptors of surfaceâ€“adsorbate interactions. Physical Chemistry Chemical Physics, 2019, 21, 17001-17009.	2.8	10
35	Properties of interfaces between copper and copper sulphide/oxide films. Corrosion Science, 2021, 183, 109313.	6.6	9
36	Poly(styrene) Resinâ€Supported Cobalt(III) Salen Cyclic Oligomers as Active Heterogeneous HKR Catalysts. Advanced Synthesis and Catalysis, 2012, 354, 3016-3024.	4.3	8

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37	High-Density Isolated Fe₁O₃ Sites on a Single-Crystal Cu₂O(100) Surface. Journal of Physical Chemistry Letters, 2019, 10, 7318-7323.	4.6	8
38	Electrochemical Interface during Corrosion of Copper in Anoxic Sulfide-Containing Groundwaterâ€"A Computational Study. Journal of Physical Chemistry C, 2020, 124, 469-481.	3.1	8
39	On the Nature of the Cathodic Reaction during Corrosion of Copper in Anoxic Sulfide Solutions. Journal of the Electrochemical Society, 2019, 166, C196-C208.	2.9	6
40	Chemisorbed oxygen or surface oxides steer the selectivity in Pd electrocatalytic propene oxidation observed by operando Pd L-edge X-ray absorption spectroscopy. Catalysis Science and Technology, 2021, 11, 3347-3352.	4.1	6
41	Uncovering the electrochemical interface of low-index copper surfaces in deep groundwater environments. Electrochimica Acta, 2020, 362, 137111.	5.2	5
42	Stabilization of Cu₂O through Site-Selective Formation of a Co₁Cu Hybrid Single-Atom Catalyst. Chemistry of Materials, 2022, 34, 2313-2320.	6.7	5
43	Acetic acid conversion to ketene on Cu2O(1 0 0): Reaction mechanism deduced from experimental observations and theoretical computations. Journal of Catalysis, 2021, 402, 154-165.	6.2	3
44	Chemical Reactivity: The Molecular Surface Property Approach: A Guide to Chemical Interactions in Chemistry, Medicine, and Material Science (Adv. Theory Simul. 1/2019). Advanced Theory and Simulations, 2019, 2, 1970003.	2.8	1
45	Photodriven CO dimerization on Cu₂O from an electronic-structure perspective. Sustainable Energy and Fuels, 2020, 4, 670-677.	4.9	0