

Martin Åala

List of Publications by Year in descending order

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99
papers

2,887
citations

147801

31
h-index

206112

48
g-index

112
all docs

112
docs citations

112
times ranked

3605
citing authors

#	ARTICLE	IF	CITATIONS
1	Suppressing Platinum Electrocatalyst Degradation via a High-Surface-Area Organic Matrix Support. ACS Omega, 2022, 7, 3540-3548.	3.5	6
2	Critical review on the development of analytical techniques for the elemental analysis of airborne particulate matter. Trends in Environmental Analytical Chemistry, 2022, 33, e00155.	10.3	13
3	Ferroelectric bismuth-titanate nanoplatelets and nanowires with a new crystal structure. Nanoscale, 2022, 14, 3537-3544.	5.6	5
4	The Halophyte Species Solanum chilense Dun. Maintains Its Reproduction despite Sodium Accumulation in Its Floral Organs. Plants, 2022, 11, 672.	3.5	5
5	Age and growth of one of the world's largest carnivorous gastropods, the Florida Horse Conch, Triplofusus giganteus (Kiener, 1840), a target of unregulated, intense harvest. PLoS ONE, 2022, 17, e0265095.	2.5	2
6	Seasonal variability of nitroaromatic compounds in ambient aerosols: Mass size distribution, possible sources and contribution to water-soluble brown carbon light absorption. Chemosphere, 2022, 299, 134381.	8.2	10
7	Understanding the Crucial Significance of the Temperature and Potential Window on the Stability of Carbon Supported Pt-Alloy Nanoparticles as Oxygen Reduction Reaction Electrocatalysts. ACS Catalysis, 2022, 12, 101-115.	11.2	38
8	Determination of trace concentrations of simple phenols in ambient PM samples. Chemosphere, 2022, 303, 135313.	8.2	2
9	Designing UV-protective and hydrophilic or hydrophobic cotton fabrics through in-situ ZnO synthesis using biodegradable waste extracts. Applied Surface Science, 2022, 599, 153931.	6.1	7
10	Importance of Chemical Activation and the Effect of Low Operation Voltage on the Performance of Pt-Alloy Fuel Cell Electrocatalysts. ACS Applied Energy Materials, 2022, 5, 8862-8877.	5.1	15
11	Implications of laser shot dosage on image quality in LA-ICP-QMS imaging. Journal of Analytical Atomic Spectrometry, 2021, 36, 75-79.	3.0	12
12	Studying gold nanoparticle degradation during laser ablation "single particle-inductively coupled plasma mass spectrometry analysis. Journal of Analytical Atomic Spectrometry, 2021, 36, 1879-1883.	3.0	7
13	Electrochemical Stability and Degradation Mechanisms of Commercial Carbon-Supported Gold Nanoparticles in Acidic Media. Journal of Physical Chemistry C, 2021, 125, 635-647.	3.1	18
14	The use of ASH-15 flowstone as a matrix-matched reference material for laser-ablation U-Pb geochronology of calcite. Geochronology, 2021, 3, 35-47.	2.5	39
15	Development of antibacterial and UV protective cotton fabrics using plant food waste and alien invasive plant extracts as reducing agents for the in-situ synthesis of silver nanoparticles. Cellulose, 2021, 28, 3215-3233.	4.9	49
16	Resolving the nanoparticles' structure-property relationships at the atomic level: a study of Pt-based electrocatalysts. IScience, 2021, 24, 102102.	4.1	57
17	Multiple copies of the oxytetracycline gene cluster in selected Streptomyces rimosus strains can provide significantly increased titers. Microbial Cell Factories, 2021, 20, 47.	4.0	5
18	No more waste at the elemental analysis of airborne particulate matter on quartz fibre filters. Talanta, 2021, 226, 122110.	5.5	11

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19	High-surface-area organic matrix tris(aza)pentacene supported platinum nanostructures as selective electrocatalyst for hydrogen oxidation/evolution reaction and suppressive for oxygen reduction reaction. <i>International Journal of Hydrogen Energy</i> , 2021, 46, 25039-25049.	7.1	4
20	Two-dimensional impurity imaging in deep Antarctic ice cores: snapshots of three climatic periods and implications for high-resolution signal interpretation. <i>Cryosphere</i> , 2021, 15, 3523-3538.	3.9	6
21	Novel Green In Situ Synthesis of ZnO Nanoparticles on Cotton Using Pomegranate Peel Extract. <i>Materials</i> , 2021, 14, 4472.	2.9	20
22	Enhancing Iridium Nanoparticles'™ Oxygen Evolution Reaction Activity and Stability by Adjusting the Coverage of Titanium Oxynitride Flakes on Reduced Graphene Oxide Nanoribbons'™ Support. <i>Advanced Materials Interfaces</i> , 2021, 8, 2100900.	3.7	10
23	Observing, tracking and analysing electrochemically induced atomic-scale structural changes of an individual Pt-Co nanoparticle as a fuel cell electrocatalyst by combining modified floating electrode and identical location electron microscopy. <i>Electrochimica Acta</i> , 2021, 388, 138513.	5.2	22
24	Sacrificial Cu Layer Mediated the Formation of an Active and Stable Supported Iridium Oxygen Evolution Reaction Electrocatalyst. <i>ACS Catalysis</i> , 2021, 11, 12510-12519.	11.2	18
25	Pollution levels and deposition processes of airborne organic pollutants over the central Adriatic area: Temporal variabilities and source identification. <i>Marine Pollution Bulletin</i> , 2021, 172, 112873.	5.0	9
26	Comparison of single pulse, multiple dosage, and 2D oversampling / deconvolution LA-ICPMS strategies for mapping of (ultra)low-concentration samples. <i>Talanta</i> , 2021, 235, 122785.	5.5	5
27	Laser ablation-single-particle-inductively coupled plasma mass spectrometry as a multimodality bioimaging tool in nano-based omics. <i>Environmental Science: Nano</i> , 2021, 8, 647-656.	4.3	15
28	Analytical figures of merit of a low-dispersion aerosol transport system for high-throughput LA-ICP-MS analysis. <i>Journal of Analytical Atomic Spectrometry</i> , 2021, 36, 1201-1209.	3.0	33
29	Effect of the Morphology of the High-Surface-Area Support on the Performance of the Oxygen-Evolution Reaction for Iridium Nanoparticles. <i>ACS Catalysis</i> , 2021, 11, 670-681.	11.2	40
30	Electrochemical stability and degradation of commercial Rh/C catalyst in acidic media. <i>Electrochimica Acta</i> , 2021, 400, 139435.	5.2	5
31	Toward the Continuous Production of Multigram Quantities of Highly Uniform Supported Metallic Nanoparticles and Their Application for Synthesis of Superior Intermetallic Pt-Alloy ORR Electrocatalysts. <i>ACS Applied Energy Materials</i> , 2021, 4, 13819-13829.	5.1	21
32	Electrochemical Stability and Degradation of Commercial Pd/C Catalyst in Acidic Media. <i>Journal of Physical Chemistry C</i> , 2021, 125, 27534-27542.	3.1	13
33	Analytical performance of a high-repetition rate laser head (500 Hz) for HR LA-ICP-QMS imaging. <i>Journal of Analytical Atomic Spectrometry</i> , 2020, 35, 1827-1831.	3.0	14
34	Imaging the impurity distribution in glacier ice cores with LA-ICP-MS. <i>Journal of Analytical Atomic Spectrometry</i> , 2020, 35, 2204-2212.	3.0	14
35	Fine-tuning of LA-ICP-QMS conditions for elemental mapping. <i>Journal of Analytical Atomic Spectrometry</i> , 2020, 35, 2494-2497.	3.0	9
36	Lithium contamination of honeybee products and its accumulation in brood as a consequence of anti-varroa treatment. <i>Food Chemistry</i> , 2020, 330, 127334.	8.2	16

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37	Aqueous-Phase Brown Carbon Formation from Aromatic Precursors under Sunlight Conditions. <i>Atmosphere</i> , 2020, 11, 131.	2.3	22
38	Insights into the selection of 2D LA-ICP-MS (multi)elemental mapping conditions. <i>Journal of Analytical Atomic Spectrometry</i> , 2019, 34, 1919-1931.	3.0	46
39	Insight on Single Cell Proton Exchange Membrane Fuel Cell Performance of Pt-Cu/C Cathode. <i>Catalysts</i> , 2019, 9, 544.	3.5	14
40	Synthesis and Advanced Electrochemical Characterization of Multifunctional Electrocatalytic Composite for Unitized Regenerative Fuel Cell. <i>ACS Catalysis</i> , 2019, 9, 11468-11483.	11.2	21
41	Active Site Imprinting: Preparation of Fe-N-C Catalysts from Zinc Ion-Templated Ionothermal Nitrogen-Doped Carbons. <i>Advanced Energy Materials</i> , 2019, 9, 1902412.	19.5	59
42	Electrochemistry as a Tool for Studies of Complex Reaction Mechanisms: The Case of the Atmospheric Aqueous-Phase Aging of Catechols. <i>Environmental Science & Technology</i> , 2019, 53, 11195-11203.	10.0	11
43	A Double-Passivation Water-Based Galvanic Displacement Method for Reproducible Gram-Scale Production of High-Performance Platinum-Alloy Electrocatalysts. <i>Angewandte Chemie</i> , 2019, 131, 13400-13404.	2.0	17
44	A Double-Passivation Water-Based Galvanic Displacement Method for Reproducible Gram-Scale Production of High-Performance Platinum-Alloy Electrocatalysts. <i>Angewandte Chemie - International Edition</i> , 2019, 58, 13266-13270.	13.8	29
45	Comparison of Pt-Cu/C with Benchmark Pt-Co/C: Metal Dissolution and Their Surface Interactions. <i>ACS Applied Energy Materials</i> , 2019, 2, 3131-3141.	5.1	54
46	CO-assisted ex-situ chemical activation of Pt-Cu/C oxygen reduction reaction electrocatalyst. <i>Electrochimica Acta</i> , 2019, 306, 377-386.	5.2	37
47	Nanoparticle Analysis in Biomaterials Using Laser Ablation~Single Particle~Inductively Coupled Plasma Mass Spectrometry. <i>Analytical Chemistry</i> , 2019, 91, 6200-6205.	6.5	43
48	Effect of Particle Size on the Corrosion Behaviour of Gold in the Presence of Chloride Impurities: An EFC-ICP-MS Potentiodynamic Study. <i>Coatings</i> , 2019, 9, 10.	2.6	16
49	Gadolinium tissue deposition in the periodontal ligament of mice with reduced renal function exposed to Gd-based contrast agents. <i>Toxicology Letters</i> , 2019, 301, 157-167.	0.8	12
50	Atomic Scale Insights into Electrochemical Dissolution of Janus Pt-SnO ₂ Nanoparticles in the Presence of Ethanol in Acidic Media: An IL-STEM and EFC-ICP-MS Study. <i>Journal of Physical Chemistry C</i> , 2018, 122, 10050-10058.	3.1	16
51	Perceptual Image Quality Metrics Concept in Continuous Scanning 2D Laser Ablation-Inductively Coupled Plasma Mass Spectrometry Bioimaging. <i>Analytical Chemistry</i> , 2018, 90, 5916-5922.	6.5	9
52	Imaging Artifacts in Continuous Scanning 2D LA-ICPMS Imaging Due to Nonsynchronization Issues. <i>Analytical Chemistry</i> , 2018, 90, 2896-2901.	6.5	24
53	Tolerance and accumulation of cobalt in three species of <i>Haumaniastrum</i> and the influence of copper. <i>Environmental and Experimental Botany</i> , 2018, 149, 27-33.	4.2	24
54	In situ electrochemical dissolution of platinum and gold in organic-based solvent. <i>Npj Materials Degradation</i> , 2018, 2, .	5.8	10

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55	Platinum Dissolution and Redeposition from Pt/C Fuel Cell Electrocatalyst at Potential Cycling. <i>Journal of the Electrochemical Society</i> , 2018, 165, F3161-F3165.	2.9	80
56	Nighttime Aqueous-Phase Formation of Nitrocatechols in the Atmospheric Condensed Phase. <i>Environmental Science & Technology</i> , 2018, 52, 9722-9730.	10.0	57
57	Stability study of silver nanoparticles towards the halide electroreduction. <i>Electrochimica Acta</i> , 2018, 286, 123-130.	5.2	13
58	Corrosion Protection of Platinum-Based Electrocatalyst by Ruthenium Surface Decoration. <i>ACS Applied Energy Materials</i> , 2018, 1, 3190-3197.	5.1	5
59	The influence of in situ synthesis parameters on the formation of ZnO nanoparticles and the UPF value of cotton fabric. <i>Tekstilec</i> , 2018, 61, 280-288.	0.6	10
60	Toxic effects of perfluorinated compounds at human cellular level and on a model vertebrate. <i>Food and Chemical Toxicology</i> , 2017, 104, 14-25.	3.6	47
61	Gelatin gels as multi-element calibration standards in LA-ICP-MS bioimaging: fabrication of homogeneous standards and microhomogeneity testing. <i>Analyst, The</i> , 2017, 142, 3356-3359.	3.5	59
62	New insights into the stability of a high performance nanostructured catalyst for sustainable water electrolysis. <i>Nano Energy</i> , 2017, 40, 618-632.	16.0	112
63	Importance of non-intrinsic platinum dissolution in Pt/C composite fuel cell catalysts. <i>Physical Chemistry Chemical Physics</i> , 2017, 19, 21446-21452.	2.8	44
64	Increase of electrodeposited catalyst stability via plasma grown vertically oriented graphene nanoparticle movement restriction. <i>Chemical Communications</i> , 2017, 53, 9340-9343.	4.1	13
65	Electrochemical Dissolution of Iridium and Iridium Oxide Particles in Acidic Media: Transmission Electron Microscopy, Electrochemical Flow Cell Coupled to Inductively Coupled Plasma Mass Spectrometry, and X-ray Absorption Spectroscopy Study. <i>Journal of the American Chemical Society</i> , 2017, 139, 12837-12846.	13.7	186
66	Microanalysis of arsenic in solid samples by laser ablation-atomic fluorescence spectrometry. <i>Journal of Analytical Atomic Spectrometry</i> , 2017, 32, 299-304.	3.0	5
67	Laser ablation ICP-MS of size-segregated atmospheric particles collected with a MOUDI cascade impactor: a proof of concept. <i>Atmospheric Measurement Techniques</i> , 2017, 10, 1823-1830.	3.1	5
68	Atomically Resolved Dealloying of Structurally Ordered Pt Nanoalloy as an Oxygen Reduction Reaction Electrocatalyst. <i>ACS Catalysis</i> , 2016, 6, 5530-5534.	11.2	65
69	Determination of triacylglycerol regioisomers using differential mobility spectrometry. <i>Rapid Communications in Mass Spectrometry</i> , 2016, 30, 256-264.	1.5	52
70	Quantum Chemical Calculations Resolved Identification of Methylnitrocatechols in Atmospheric Aerosols. <i>Environmental Science & Technology</i> , 2016, 50, 5526-5535.	10.0	47
71	Potentiodynamic dissolution study of PtRu/C electrocatalyst in the presence of methanol. <i>Electrochimica Acta</i> , 2016, 211, 851-859.	5.2	39
72	Electrochemical in-situ dissolution study of structurally ordered, disordered and gold doped PtCu ₃ nanoparticles on carbon composites. <i>Journal of Power Sources</i> , 2016, 327, 675-680.	7.8	30

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73	Durable antibacterial and UV protective properties of cellulose fabric functionalized with Ag/TiO ₂ nanocomposite during dyeing with reactive dyes. <i>Cellulose</i> , 2016, 23, 2199-2209.	4.9	30
74	Positive Effect of Surface Doping with Au on the Stability of Pt-Based Electrocatalysts. <i>ACS Catalysis</i> , 2016, 6, 1630-1634.	11.2	90
75	Rapid identification of atypical tetracyclines using tandem mass spectrometric fragmentation patterns. <i>Rapid Communications in Mass Spectrometry</i> , 2015, 29, 1556-1562.	1.5	5
76	Oleic Acid Metabolism via a Conserved Cytochrome P450 System-Mediated α -Hydroxylation in the Bark Beetle-Associated Fungus <i>Grosmannia clavigera</i> . <i>PLoS ONE</i> , 2015, 10, e0120119.	2.5	13
77	Functionalization of Cellulose Fibres with Oxygen Plasma and ZnO Nanoparticles for Achieving UV Protective Properties. <i>Journal of Nanomaterials</i> , 2015, 2015, 1-9.	2.7	41
78	Construction of a New Class of Tetracycline Lead Structures with Potent Antibacterial Activity through Biosynthetic Engineering. <i>Angewandte Chemie - International Edition</i> , 2015, 54, 3937-3940.	13.8	45
79	Voltammetric Investigation of Iron(III) Interactions with Phytate. <i>Electrochimica Acta</i> , 2015, 176, 1116-1125.	5.2	6
80	New Insights into Corrosion of Ruthenium and Ruthenium Oxide Nanoparticles in Acidic Media. <i>Journal of Physical Chemistry C</i> , 2015, 119, 10140-10147.	3.1	161
81	Multi-element analysis of wines by ICP-MS and ICP-OES and their classification according to geographical origin in Slovenia. <i>Food Chemistry</i> , 2014, 153, 414-423.	8.2	100
82	New Insight into Platinum Dissolution from Nanoparticulate Platinum-Based Electrocatalysts Using Highly Sensitive In-Situ Concentration Measurements. <i>ChemCatChem</i> , 2014, 6, 449-453.	3.7	119
83	Creating cellulose fibres with excellent UV protective properties using moist CF ₄ plasma and ZnO nanoparticles. <i>Cellulose</i> , 2014, 21, 3007-3021.	4.9	58
84	Evaluation of a method for treatment of iron gall ink corrosion on paper. <i>Cellulose</i> , 2014, 21, 2925-2936.	4.9	15
85	Electrochemical performance of platinum electrodes within the multi-electrode spiral nerve cuff. <i>Australasian Physical and Engineering Sciences in Medicine</i> , 2014, 37, 525-533.	1.3	4
86	Identification of the chelocardin biosynthetic gene cluster from <i>Amycolatopsis sulphurea</i> : a platform for producing novel tetracycline antibiotics. <i>Microbiology (United Kingdom)</i> , 2013, 159, 2524-2532.	1.8	27
87	Absolute determination of the X-ray absorption coefficient of barium in the L region using a liquid absorption cell. <i>X-Ray Spectrometry</i> , 2013, 42, 63-67.	1.4	2
88	A study towards superior carbon nanotubes-supported Pd-based catalysts for formic acid electro-oxidation: Preparation, properties and characterisation. <i>Journal of Power Sources</i> , 2013, 235, 111-116.	7.8	22
89	3D laser ablation-ICP-mass spectrometry mapping for the study of surface layer phenomena – a case study for weathered glass. <i>Journal of Analytical Atomic Spectrometry</i> , 2013, 28, 994.	3.0	41
90	Potentiometric and ³¹ P NMR studies on inositol phosphates and their interaction with iron(III) ions. <i>Carbohydrate Research</i> , 2011, 346, 488-494.	2.3	34

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91	Influence of copper chloride for the formation of aromatic compounds during polyethylene pyrolysis. <i>Journal of Analytical and Applied Pyrolysis</i> , 2010, 89, 178-182.	5.5	3
92	Pyrazine-Assisted Dimerization of Molybdenum(V): Synthesis and Structural Characterization of Novel Dinuclear and Tetranuclear Complexes. <i>European Journal of Inorganic Chemistry</i> , 2010, 2010, 542-553.	2.0	17
93	Effect of atmosphere and catalyst on reducing bisphenol A (BPA) emission during thermal degradation of polycarbonate. <i>Chemosphere</i> , 2010, 78, 42-45.	8.2	20
94	Complete Set of Critical Points on the C ₆₀ H ⁺ Potential Energy Surface. <i>Journal of Physical Chemistry A</i> , 2009, 113, 3223-3226.	2.5	3
95	Ion Attachment Mass Spectrometry Combined with Infrared Image Furnace for Thermal Analysis: Evolved Gas Analysis Studies. <i>Analytical Chemistry</i> , 2009, 81, 3155-3158.	6.5	34
96	Insight into the Short-Range Structure of Amorphous Iron Inositol Hexaphosphate as Provided by ³¹ P NMR and Fe X-ray Absorption Spectroscopy. <i>Journal of Physical Chemistry B</i> , 2006, 110, 23060-23067.	2.6	30
97	Synthesis of myo-inositol 1,2,3-tris- and 1,2,3,5-tetrakis(dihydrogen phosphate)s as a tool for the inhibition of iron-gall-ink corrosion. <i>Carbohydrate Research</i> , 2006, 341, 897-902.	2.3	17
98	Stabilisation of Paper Containing Iron-Gall Ink with Current Aqueous Processes. <i>Restaurator</i> , 2005, 26, 181-189.	0.2	25
99	Synthesis of 3-(α - and β -d-arabinofuranosyl)-6-chloro-1,2,4-triazolo[4,3-b]pyridazine. <i>Carbohydrate Research</i> , 2003, 338, 2057-2066.	2.3	8