Gunther Wittstock

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/5690543/publications.pdf

Version: 2024-02-01

227 papers	6,437 citations	61857 43 h-index	106150 65 g-index

243 all docs	243 docs citations	243 times ranked	5321 citing authors

#	Article	IF	Citations
1	Scanning Electrochemical Microscopy for Direct Imaging of Reaction Rates. Angewandte Chemie - International Edition, 2007, 46, 1584-1617.	7.2	361
2	Formation and Imaging of Microscopic Enzymatically Active Spots on an Alkanethiolate-Covered Gold Electrode by Scanning Electrochemical Microscopy. Analytical Chemistry, 1997, 69, 5059-5066.	3.2	185
3	Mediator-modified electrodes for electrocatalytic oxidation of NADH. Journal of Electroanalytical Chemistry, 1995, 395, 143-157.	1.9	135
4	Evaluation of Thin Film Titanium Nitride Electrodes for Electroanalytical Applications. Electroanalysis, 2007, 19, 1023-1031.	1.5	120
5	Detection of Hydrogen Peroxide Produced during Electrochemical Oxygen Reduction Using Scanning Electrochemical Microscopy. Analytical Chemistry, 2008, 80, 750-759.	3.2	119
6	Glucose oxidation at bismuth-modified platinum electrodes. Journal of Electroanalytical Chemistry, 1998, 444, 61-73.	1.9	115
7	Imaging of immobilized antibody layers with scanning electrochemical microscopy. Analytical Chemistry, 1995, 67, 3578-3582.	3.2	110
8	Spatiotemporal Changes of the Solid Electrolyte Interphase in Lithiumâ€ion Batteries Detected by Scanning Electrochemical Microscopy. Angewandte Chemie - International Edition, 2014, 53, 10531-10535.	7.2	105
9	Modification and characterization of artificially patterned enzymatically active surfaces by scanning electrochemical microscopy. Fresenius' Journal of Analytical Chemistry, 2001, 370, 303-315.	1.5	97
10	Imaging of microstructured biochemically active surfaces by means of scanning electrochemical microscopy. Electrochimica Acta, 1997, 42, 3105-3111.	2.6	87
11	PEDOT: PSS as a Functional Binder for Cathodes in Lithium Ion Batteries. Journal of the Electrochemical Society, 2015, 162, A674-A678.	1.3	86
12	Spatially Addressed Deposition and Imaging of Biochemically Active Bead Microstructures by Scanning Electrochemical Microscopy. Analytical Chemistry, 2000, 72, 333-338.	3.2	81
13	Combination of an electrochemical tunneling microscope (ECSTM) and a scanning electrochemical microscope (SECM): application for tip-induced modification of self-assembled monolayers. Electrochimica Acta, 2003, 48, 2923-2932.	2.6	72
14	Patterned self-assembled alkanethiolate monolayers on gold. Patterning and imaging by means of scanning electrochemical microscopy. Electroanalysis, 1997, 9, 746-750.	1.5	69
15	Protic ionic liquid and ionic melts prepared from methanesulfonic acid and 1H-1,2,4-triazole as high temperature PEMFC electrolytes. Journal of Materials Chemistry, 2011, 21, 10426.	6.7	69
16	Generation of Periodic Enzyme Patterns by Soft Lithography and Activity Imaging by Scanning Electrochemical Microscopy. Langmuir, 2002, 18, 9485-9493.	1.6	68
17	Scanning Electrochemical Microscopy of Quinoprotein Glucose Dehydrogenase. Analytical Chemistry, 2004, 76, 3145-3154.	3.2	66
18	Hydrophilic carbon nanoparticle-laccase thin film electrode for mediatorless dioxygen reduction. Electrochimica Acta, 2009, 54, 4620-4625.	2.6	66

#	Article	IF	Citations
19	Oxidation of Galena in Acetate Buffer Investigated by Atomic Force Microscopy and Photoelectron Spectroscopy. Langmuir, 1996, 12, 5709-5721.	1.6	64
20	Investigation of ion-bombarded conducting polymer films by scanning electrochemical microscopy (SECM). Fresenius' Journal of Analytical Chemistry, 2000, 367, 346-351.	1.5	63
21	Photoelectrochemical Kinetics of Eosin Y-Sensitized Zinc Oxide Films Investigated by Scanning Electrochemical Microscopy. Chemistry - A European Journal, 2006, 12, 5832-5839.	1.7	63
22	Microfluidic Pushâ€“Pull Probe for Scanning Electrochemical Microscopy. Analytical Chemistry, 2011, 83, 5275-5282.	3.2	62
23	Numerical Simulations of Complex Nonsymmetrical 3D Systems for Scanning Electrochemical Microscopy Using the Boundary Element Method. Journal of Physical Chemistry B, 2002, 106, 7499-7508.	1.2	61
24	Layer-by-layer modification of Nafion membranes for increased life-time and efficiency of vanadium/air redox flow batteries. Journal of Membrane Science, 2016, 510, 259-269.	4.1	61
25	Electrochemical Immunoassay with Microscopic Immunomagnetic Bead Domains and Scanning Electrochemical Microscopy. Electroanalysis, 2000, 12, 640-644.	1.5	60
26	Controlling the Supramolecular Assembly of Redox-Active Dendrimers at Molecular Printboards by Scanning Electrochemical Microscopy. Langmuir, 2006, 22, 9770-9775.	1.6	60
27	Switching On Cell Adhesion with Microelectrodes. Angewandte Chemie - International Edition, 2006, 45, 5469-5471.	7.2	60
28	Seeing Big with Scanning Electrochemical Microscopy. Analytical Chemistry, 2011, 83, 1493-1499.	3.2	60
29	Patterns of functional proteins formed by local electrochemical desorption of self-assembled monolayers. Electrochimica Acta, 2001, 47, 275-281.	2.6	57
30	Investigation of Localized Catalytic and Electrocatalytic Processes and Corrosion Reactions with Scanning Electrochemical Microscopy (SECM). Zeitschrift Fur Physikalische Chemie, 2008, 222, 1463-1517.	1.4	57
31	Electrocatalytic methanol oxidation with nanoporous gold: microstructure and selectivity. Nanoscale, 2017, 9, 17839-17848.	2.8	57
32	Numerical Simulation of Scanning Electrochemical Microscopy Experiments with Frame-Shaped Integrated Atomic Force Microscopyâ^'SECM Probes Using the Boundary Element Method. Analytical Chemistry, 2005, 77, 764-771.	3.2	53
33	Selective Oxidation and Reduction of Trinuclear Titanium(II) Hexaazatrinaphthylene ComplexesSynthesis, Structure, and Electrochemical Investigations. Inorganic Chemistry, 2007, 46, 7610-7620.	1.9	53
34	Soft Stylus Probes for Scanning Electrochemical Microscopy. Analytical Chemistry, 2009, 81, 6889-6896.	3.2	53
35	Microelectrospotting as a new method for electrosynthesis of surface-imprinted polymer microarrays for protein recognition. Biosensors and Bioelectronics, 2015, 73, 123-129.	5.3	53
36	A highly crystalline anthracene-based MOF-74 series featuring electrical conductivity and luminescence. Nanoscale, 2019, 11, 20949-20955.	2.8	53

#	Article	IF	Citations
37	Parallel Imaging and Templateâ€Free Patterning of Selfâ€Assembled Monolayers with Soft Linear Microelectrode Arrays. Angewandte Chemie - International Edition, 2012, 51, 10413-10416.	7.2	52
38	Analysis of Interaction in Patterned Multienzyme Layers by Using Scanning Electrochemical Microscopy. Angewandte Chemie - International Edition, 2003, 42, 2248-2250.	7.2	50
39	Monitoring Î²-galactosidase activity by means of scanning electrochemical microscopy. Journal of Electroanalytical Chemistry, 2004, 561, 83-91.	1.9	50
40	Electrochemical Pushâ€“Pull Scanner with Mass Spectrometry Detection. Analytical Chemistry, 2012, 84, 6630-6637.	3.2	50
41	Scanning electrochemical microscopy for detection of biosensor and biochip surfaces with immobilized pyrroloquinoline quinone (PQQ)-dependent glucose dehydrogenase as enzyme label. Biosensors and Bioelectronics, 2005, 20, 1277-1284.	5.3	49
42	Heterogeneous Distribution of Reactivity on Metallic Biomaterials: Scanning Probe Microscopy Studies of the Biphasic Ti Alloy Ti6Al4V. Advanced Materials, 2007, 19, 878-882.	11.1	44
43	Fabrication of soft gold microelectrode arrays as probes for scanning electrochemical microscopy. Journal of Electroanalytical Chemistry, 2012, 666, 52-61.	1.9	44
44	Soft Microelectrode Linear Array for Scanning Electrochemical Microscopy. Analytical Chemistry, 2010, 82, 10037-10044.	3.2	43
45	Hydrodynamic dispensing and electrical manipulation of attolitre droplets. Nature Communications, 2016, 7, 12424.	5.8	43
46	An SECM Detection Scheme with Improved Sensitivity and Lateral Resolution: Detection of Galactosidase Activity with Signal Amplification by Glucose Dehydrogenase. Angewandte Chemie - International Edition, 2004, 43, 4170-4172.	7.2	41
47	Voltammetric pH Nanosensor. Analytical Chemistry, 2015, 87, 11641-11645.	3.2	40
48	Investigation of Charge Transfer Kinetics of Polyaniline Supercapacitor Electrodes by Scanning Electrochemical Microscopy. Advanced Materials Interfaces, 2015, 2, 1400154.	1.9	40
49	Effect of Cation on Dye Regeneration Kinetics of N719-Sensitized TiO2 Films in Acetonitrile-Based and Ionic-Liquid-Based Electrolytes Investigated by Scanning Electrochemical Microscopy. Journal of Physical Chemistry C, 2012, 116, 4316-4323.	1.5	39
50	Microelectrochemical Modulation of Micropatterned Cellular Environments. Langmuir, 2008, 24, 7605-7613.	1.6	38
51	Photoelectrochemical kinetics of Eosin Y-sensitized zinc oxide films investigated by scanning electrochemical microscopy under illumination with different LED. Electrochimica Acta, 2009, 55, 458-464.	2.6	38
52	The geometry of nanometer-sized electrodes and its influence on electrolytic currents and metal deposition processes in scanning tunneling and scanning electrochemical microscopy. Surface Science, 2005, 597, 181-195.	0.8	37
53	Electron Transfer Kinetics at Oxide Films on Metallic Biomaterials. Journal of the Electrochemical Society, 2007, 154, C508.	1.3	37
54	Nanoparticleâ€Imprinted Polymers for Sizeâ€Selective Recognition of Nanoparticles. Angewandte Chemie - International Edition, 2014, 53, 294-298.	7.2	37

#	Article	IF	Citations
55	Evaluation of Microelectrode Arrays for Amperometric Detection by Scanning Electrochemical Microscopy. Electroanalysis, 1998, 10, 526-531.	1.5	35
56	Feedback mode SECM study of laccase and bilirubin oxidase immobilised in a solâ€“gel processed silicate film. Analyst, The, 2010, 135, 2051.	1.7	35
57	Monitoring electroactive ions at manganese dioxide pseudocapacitive electrodes with scanning electrochemical microscope for supercapacitor electrodes. Journal of Power Sources, 2012, 207, 205-211.	4.0	35
58	Influence of Dye Architecture of Triphenylamine Based Organic Dyes on the Kinetics in Dye-Sensitized Solar Cells. Journal of Physical Chemistry C, 2015, 119, 21775-21783.	1.5	35
59	Study of an unitised bidirectional vanadium/air redox flow battery comprising a two-layered cathode. Journal of Power Sources, 2015, 273, 1163-1170.	4.0	35
60	Investigation of crossover processes in a unitized bidirectional vanadium/air redox flow battery. Journal of Power Sources, 2016, 306, 692-701.	4.0	35
61	Development and experimental evaluation of a simple system for scanning electrochemical microscopy. Analytica Chimica Acta, 1994, 298, 285-302.	2.6	34
62	Polarization Modulation Infrared Reflection Absorption Spectroscopy Investigations of Thin Silica Films Deposited on Gold. 2. Structural Analysis of a 1,2-Dimyristoyl-sn-glycero-3-phosphocholine Bilayer. Langmuir, 2008, 24, 3922-3929.	1.6	34
63	Influence of electrode size and geometry on electrochemical experiments with combined SECMâ€“SFM probes. Nanotechnology, 2010, 21, 105709.	1.3	34
64	Bioelectrocatalytic mediatorless dioxygen reduction at carbon ceramic electrodes modified with bilirubin oxidase. Electrochimica Acta, 2010, 55, 5719-5724.	2.6	33
65	SECM Feedback Imaging of Enzymatic Activity on Agglomerated Microbeads. Electroanalysis, 2001, 13, 669-675.	1.5	32
66	Application of the boundary element method numerical simulations for characterization of heptode ultramicroelectrodes in SECM experiments. Electrochimica Acta, 2003, 49, 117-128.	2.6	32
67	PM IRRAS Investigation of Thin Silica Films Deposited on Gold. Part 1. Theory and Proof of Concept. Langmuir, 2007, 23, 9303-9309.	1.6	32
68	Electrodeposited noble metal particles in polyelectrolyte multilayer matrix as electrocatalyst for oxygen reduction studied using SECM. Physical Chemistry Chemical Physics, 2008, 10, 3635.	1.3	32
69	Scanning electrochemical microscope studies of dye regeneration in indoline (D149)-sensitized ZnO photoelectrochemical cells. Journal of Electroanalytical Chemistry, 2010, 650, 24-30.	1.9	32
70	Scanning Electrochemical Microscopy as a Readout Tool for Protein Electrophoresis. Analytical Chemistry, 2007, 79, 4833-4839.	3.2	31
71	Integrated cantilever probes for SECM/AFM characterization of surfaces. Microelectronic Engineering, 2010, 87, 1537-1539.	1.1	31
72	Detection of elemental sulphur on galena oxidized in acidic solution. International Journal of Mineral Processing, 1997, 51, 293-301.	2.6	30

#	Article	IF	Citations
73	Scanning electrochemical microscopy of enzymes immobilized on structured glass-gold substrates. Fresenius' Journal of Analytical Chemistry, 1999, 365, 163-167.	1.5	30
74	Fountain pen for scanning electrochemical microscopy. Analytical Methods, 2010, 2, 817.	1.3	30
75	A polarized liquidâ€“liquid interface meets visible light-driven catalytic water oxidation. Chemical Communications, 2016, 52, 11382-11385.	2.2	30
76	Multidimensional electrochemical imaging in materials science. Analytical and Bioanalytical Chemistry, 2007, 389, 1103-1120.	1.9	29
77	Scanning electrochemical microscopy study of laccase within a solâ€“gel processed silicate film. Bioelectrochemistry, 2008, 72, 174-182.	2.4	29
78	Vectorial near-field coupling. Nature Nanotechnology, 2019, 14, 698-704.	15.6	29
79	Modeling Steady-State Experiments with a Scanning Electrochemical Microscope Involving Several Independent Diffusing Species Using the Boundary Element Method. Journal of Physical Chemistry B, 2006, 110, 15869-15877.	1.2	28
80	Kinetic studies of glucose oxidase in polyelectrolyte multilayer films by means of scanning electrochemical microscopy (SECM). Bioelectrochemistry, 2008, 72, 66-76.	2.4	28
81	High-throughput scanning electrochemical microscopy brushing of strongly tilted and curved surfaces. Electrochimica Acta, 2013, 110, 30-41.	2.6	28
82	Photovoltaic characteristics and dye regeneration kinetics in D149-sensitized ZnO with varied dye loading and film thickness. Physical Chemistry Chemical Physics, 2012, 14, 7533.	1.3	27
83	Pt Catalyst Supported within TiO2 Mesoporous Films for Oxygen Reduction Reaction. Electrochimica Acta, 2014, 130, 97-103.	2.6	27
84	Comparison of Electron Transfer Properties of the SEI on Graphite Composite and Metallic Lithium Electrodes by SECM at OCP. Journal of the Electrochemical Society, 2015, 162, A7024-A7036.	1.3	27
85	Local deposition and characterisation of K2Co[Fe(CN)6] and K2Ni[Fe(CN)6] by scanning electrochemical microscopy. Journal of Solid State Electrochemistry, 2001, 5, 205-211.	1.2	26
86	Scanning Electrochemical Microscopy (SECM) Based Detection of Oligonucleotide Hybridization and Simultaneous Determination of the Surface Concentration of Immobilized Oligonucleotides on Gold. Electroanalysis, 2007, 19, 1258-1267.	1.5	26
87	Quantitative characterization of shear force regulation for scanning electrochemical microscopy. Comptes Rendus Chimie, 2013, 16, 7-14.	0.2	26
88	Observation of Dynamic Interfacial Layers in Li-Ion and Li-O2 Batteries by Scanning Electrochemical Microscopy. Electrochimica Acta, 2016, 199, 366-379.	2.6	26
89	Review of Local Inâ€…Situ Probing Techniques for the Interfaces of Lithiumâ€‐Ion and Lithiumâ€“Oxygen Batteries. Energy Technology, 2016, 4, 1472-1485.	1.8	26
90	Formation of ultra-thin prussian blue layer on carbon steel that promotes adherence of hybrid polypyrrole based protective coating. Journal of Solid State Electrochemistry, 2005, 9, 403-411.	1.2	25

#	Article	IF	Citations
91	In Situ Quantification of the Swelling of Graphite Composite Electrodes by Scanning Electrochemical Microscopy. Journal of the Electrochemical Society, 2016, 163, A27-A34.	1.3	25
92	Electron transfer through an immunoglobulin layer via an immobilized redox mediator. Electroanalysis, 1996, 8, 143-146.	1.5	24
93	Inkjet Printing in Liquid Environments. Small, 2018, 14, e1801212.	5.2	24
94	An Electrically Conducting Threeâ€Dimensional Ironâ€“Catecholate Porous Framework. Angewandte Chemie - International Edition, 2021, 60, 18065-18072.	7.2	24
95	New methods in flotation researchâ€”application of synchrotron radiation to investigation of adsorbates on modified galena surfaces. International Journal of Mineral Processing, 1997, 51, 151-161.	2.6	23
96	Imaging the activity of nitrate reductase by means of a scanning electrochemical microscope. Fresenius' Journal of Analytical Chemistry, 2000, 367, 352-355.	1.5	23
97	Diffusion in porous silicon: effects on the reactivity of alkenes and electrochemistry of alkylated porous silicon. Electrochimica Acta, 2002, 47, 2653-2663.	2.6	23
98	Scanning Electrochemical Microscopy for the Inâ€…Situ Characterization of Solidâ€“Electrolyte Interphases: Highly Oriented Pyrolytic Graphite versus Graphite Composite. Energy Technology, 2016, 4, 1486-1494.	1.8	23
99	Inkjet-Printed Thiol Self-Assembled Monolayer Structures on Gold: Quality Control and Microarray Electrode Fabrication. Langmuir, 2008, 24, 9110-9117.	1.6	22
100	Scanning electrochemical microscopy of oxygen permeation through air-electrodes in lithiumâ€“air batteries. Journal of Electroanalytical Chemistry, 2015, 740, 82-87.	1.9	22
101	Independent control over residual silver content of nanoporous gold by galvanodynamically controlled dealloying. Nanoscale, 2018, 10, 17166-17173.	2.8	22
102	Nascent SEI-Surface Films on Single Crystalline Silicon Investigated by Scanning Electrochemical Microscopy. ACS Applied Energy Materials, 2019, 2, 1388-1392.	2.5	21
103	Localisation of electrochemical oxidation processes in nickel and cobalt hexacyanoferrates investigated by analysis of the multiplet patterns in X-ray photoelectron spectra. Physical Chemistry Chemical Physics, 2001, 3, 562-569.	1.3	20
104	Localized electropolymerization on oxidized boron-doped diamond electrodes modified with pyrrolyl units. Physical Chemistry Chemical Physics, 2006, 8, 4924.	1.3	20
105	Electrochemical detection of Cd2+ ions by a self-assembled monolayer of 1,9-nonanedithiol on gold. Electrochimica Acta, 2008, 53, 6753-6758.	2.6	20
106	Scanning electrochemical microscopy activity mapping of electrodes modified with laccase encapsulated in solâ€“gel processed matrix. Bioelectrochemistry, 2010, 79, 101-107.	2.4	20
107	Microfabrication of Patterns of Adherent Marine Bacterium Phaeobacter inhibens Using Soft Lithography and Scanning Probe Lithography. Langmuir, 2010, 26, 8641-8647.	1.6	20
108	Characterization of different plasma-treated cobalt oxide catalysts for oxygen reduction reaction in alkaline media. Science Bulletin, 2016, 61, 612-618.	4.3	20

#	Article	IF	Citations
109	Characterization of Photoactivity of Nanostructured BiVO₄ at Polarized Liquidâ€“Liquid Interfaces by Scanning Electrochemical Microscopy. Journal of Physical Chemistry C, 2017, 121, 25941-25948.	1.5	20
110	A Platform for Electric Field Aided and Wireâ€Guided Droplet Manipulation. Small, 2017, 13, 1601691.	5.2	20
111	Diverging surface reactions at TiO₂- or ZnO-based photoanodes in dye-sensitized solar cells. Physical Chemistry Chemical Physics, 2019, 21, 13047-13057.	1.3	20
112	Application of Thin Titanium/Titanium Oxide Layers Deposited on Gold for Infrared Reflection Absorption Spectroscopy: Structural Studies of Lipid Bilayers. Langmuir, 2008, 24, 7378-7387.	1.6	19
113	Control over binding stoichiometry and specificity in the supramolecular immobilization of cytochrome c on a molecular printboard. Organic and Biomolecular Chemistry, 2008, 6, 1553.	1.5	19
114	Digital Simulation of Scanning Electrochemical Microscopy Approach Curves to Enzyme Films with Michaelisâ^'Menten Kinetics. Analytical Chemistry, 2009, 81, 4857-4863.	3.2	19
115	Electrochemical analysis of nanostructured iron oxides using cyclic voltammetry and scanning electrochemical microscopy. Electrochimica Acta, 2016, 222, 1326-1334.	2.6	19
116	Investigation of the Electron Transfer at Si Electrodes: Impact and Removal of the Native SiO₂Layer. Journal of the Electrochemical Society, 2016, 163, A504-A512.	1.3	19
117	Printing with Satellite Droplets. Small, 2018, 14, e1802583.	5.2	19
118	Application of scanning electrochemical microscopy and scanning electron microscopy for the characterization of carbon-spray modified electrodes. Fresenius' Journal of Analytical Chemistry, 1994, 348, 712-718.	1.5	18
119	Structural Analysis of HS(CD2)12(Oâ^'CH2â^'CH2)6OCH3 Monolayers on Gold by Means of Polarization Modulation Infrared Reflection Absorption Spectroscopy. Progress of the Reaction with Bromine. Langmuir, 2010, 26, 362-370.	1.6	18
120	Reactive oxygen species formed in organic lithiumâ€“oxygen batteries. Physical Chemistry Chemical Physics, 2016, 18, 10774-10780.	1.3	18
121	Temperature propagation in prismatic lithium-ion-cells after short term thermal stress. Journal of Power Sources, 2016, 313, 30-36.	4.0	17
122	Infrared spectroelectrochemical analysis of potential dependent changes in cobalt hexacyanoferrate and copper hexacyanoferrate films on gold electrodes. Journal of Electroanalytical Chemistry, 2018, 812, 199-206.	1.9	17
123	Solid Electrolyte Interphase Evolution on Lithium Metal Electrodes Followed by Scanning Electrochemical Microscopy Under Realistic Battery Cycling Current Densities. ChemElectroChem, 2020, 7, 3590-3596.	1.7	17
124	Effect of a Cocatalyst on a Photoanode in Water Splitting: A Study of Scanning Electrochemical Microscopy. Analytical Chemistry, 2021, 93, 12221-12229.	3.2	17
125	New oxygen evolution anodes for metal electrowinning: investigation of local physicochemical processes on composite electrodes with conductive atomic force microscopy and scanning electrochemical microscopy. Journal of Applied Electrochemistry, 2010, 40, 581-592.	1.5	16
126	Catalysis at the room temperature ionic liquid|water interface: H₂O₂ generation. Chemical Communications, 2015, 51, 6851-6853.	2.2	16

#	Article	IF	Citations
127	Photocatalytic degradation of the herbicide chloridazon on mesoporous titania/zirconia nanopowders. Environmental Science and Pollution Research, 2018, 25, 34873-34883.	2.7	16
128	Correlations of Crystal and Electronic Structure via NMR and X-ray Photoelectron Spectroscopies in the RETMAl₂ (RE = Sc, Y, Laâ€“Nd, Sm, Gdâ€“Tm, Lu; TM = Ni, Pd, Pt) Series. Inorganic Chemistry, 2019, 58, 7010-7025.	1.9	16
129	Diffusion and Reaction in Microbead Agglomerates. Analytical Chemistry, 2010, 82, 2626-2635.	3.2	15
130	Effect of solid loading on the processing and behavior of PEDOT:PSS binder based composite cathodes for lithium ion batteries. Synthetic Metals, 2016, 215, 86-94.	2.1	15
131	Local control of protein binding and cell adhesion by patterned organic thin films. Analytical and Bioanalytical Chemistry, 2013, 405, 3673-3691.	1.9	14
132	Electropolymerization of quinone-polymers onto grafted quinone monolayers: a route towards non-passivating, catalytically active film. Electrochimica Acta, 2015, 155, 474-482.	2.6	14
133	A Simple Liquidâ€“Liquid Biphasic System for Hydrogen Peroxide Generation. Journal of Physical Chemistry C, 2015, 119, 20011-20015.	1.5	14
134	Corrosion of Graphite-Polypropylene Current Collectors during Overcharging in Negative and Positive Vanadium Redox Flow Battery Half-Cell Electrolytes. Journal of the Electrochemical Society, 2018, 165, A963-A969.	1.3	14
135	Oxygen Reduction Reaction Activity of Mesostructured Cobaltâ€Based Metal Oxides Studied with the Cavityâ€Microelectrode Technique. ChemElectroChem, 2019, 6, 3460-3467.	1.7	14
136	Mass Transport in Porous Electrodes Studied by Scanning Electrochemical Microscopy: Example of Nanoporous Gold. ChemElectroChem, 2019, 6, 3160-3166.	1.7	14
137	Morphology and Conductivity of Copper Hexacyanoferrate Films. Journal of Physical Chemistry C, 2020, 124, 16849-16859.	1.5	14
138	Promoting Effect of the Residual Silver on the Electrocatalytic Oxidation of Methanol and Its Intermediates on Nanoporous Gold. ACS Catalysis, 2022, 12, 4415-4429.	5.5	14
139	Modification of silicon oxide surfaces by monolayers of an oligoethylene glycol-terminated perfluoroalkyl silane. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2014, 449, 31-41.	2.3	13
140	Investigation on the electrochemistry and cytotoxicity of the natural product marcanine A and its synthetic derivatives. RSC Advances, 2015, 5, 58561-58565.	1.7	13
141	Local studies of photoelectrochemical reactions at nanostructured oxides. Current Opinion in Electrochemistry, 2019, 13, 25-32.	2.5	13
142	Restructuring of Nanoporous Gold Surfaces During Electrochemical Cycling in Acidic and Alkaline Media. ChemElectroChem, 2020, 7, 3670-3678.	1.7	13
143	Formation of polymer-modified electrodes from 2-mercaptobenzoxazole in aqueous solution. Journal of Solid State Electrochemistry, 2001, 6, 29-38.	1.2	12
144	Photoactivity and scattering behavior of anodically and cathodically deposited hematite photoanodes â€“ a comparison by scanning photoelectrochemical microscopy. Electrochimica Acta, 2016, 202, 224-230.	2.6	12

#	Article	IF	Citations
145	Chemical Stability of Graphite-Polypropylene Bipolar Plates for the Vanadium Redox Flow Battery at Resting State. Journal of the Electrochemical Society, 2016, 163, A2318-A2325.	1.3	12
146	Speciation of nanoscale objects by nanoparticle imprinted matrices. Nanoscale, 2016, 8, 13934-13943.	2.8	12
147	Combinatorial screening of photoanode materials - Uniform platform for compositional arrays and macroscopic electrodes. Electrochimica Acta, 2018, 259, 204-212.	2.6	12
148	Impact of the Crystalline Li₁₅Si₄ Phase on the Self-Discharge Mechanism of Silicon Negative Electrodes in Organic Electrolytes. ACS Applied Materials & Interfaces, 2020, 12, 55903-55912.	4.0	12
149	Plasmonic nanofocusing spectral interferometry. Nanophotonics, 2020, 9, 491-508.	2.9	12
150	Characterization and Manipulation of Microscopic Biochemically Active Regions by Scanning Electrochemical Microscopy (SECM).. Analytical Sciences, 2002, 18, 1199-1204.	0.8	11
151	Sensor arrays and array sensors. Analytical and Bioanalytical Chemistry, 2002, 372, 16-17.	1.9	11
152	Imaging Localized Reactivities of Surfaces by Scanning Electrochemical Microscopy. , 2003, , 335-364.		11
153	In situ determination of potential-driven structural changes in a redox-active plumbagin polymer film on a glassy carbon electrode using PM IRRAS under electrochemical control. Electrochimica Acta, 2017, 255, 298-308.	2.6	11
154	Bulk Aging of Graphite-Polypropylene Current Collectors Induced by Electrochemical Cycling in the Positive Electrolyte of Vanadium Redox Flow Batteries. Journal of the Electrochemical Society, 2017, 164, A2566-A2572.	1.3	11
155	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.	2.4	11
156	Effect of Aromatic Rings and Substituent on the Performance of Lithium Batteries with Rylene Imide Cathodes. ChemElectroChem, 2020, 7, 1160-1165.	1.7	11
157	Electrochemical investigation of the influence of thin SiOx films deposited on gold on charge transfer characteristics. Electrochimica Acta, 2008, 53, 7908-7914.	2.6	10
158	Finger Probe Array for Topography-Tolerant Scanning Electrochemical Microscopy of Extended Samples. Analytical Chemistry, 2014, 86, 713-720.	3.2	10
159	Generating ultra-small droplets based on a double-orifice technique. Sensors and Actuators B: Chemical, 2018, 255, 2011-2017.	4.0	10
160	Catalytic Activity of Alkali Metal Cations for the Chemical Oxygen Reduction Reaction in a Biphasic Liquid System Probed by Scanning Electrochemical Microscopy. Chemistry - A European Journal, 2020, 26, 10882-10890.	1.7	10
161	Electro-oxidative nanopatterning of silane monolayers on boron-doped diamond electrodes. Nanotechnology, 2009, 20, 075302.	1.3	9
162	Localized Deposition of Chitosan as Matrix for Enzyme Immobilization. Electroanalysis, 2009, 21, 804-810.	1.5	9

#	Article	IF	Citations
163	Surface selection, adhesion, and retention behavior of marine bacteria on synthetic organic surfaces using self-assembled monolayers and atomic force microscopy. Ocean Dynamics, 2009, 59, 305-315.	0.9	9
164	Micropatterned Multienzyme Devices with Adjustable Amounts of Immobilized Enzymes. Langmuir, 2013, 29, 15090-15099.	1.6	9
165	Nanoparticleâ€Imprinted Matrices as Sensing Layers for Sizeâ€Selective Recognition of Silver Nanoparticles. ChemElectroChem, 2016, 3, 2116-2124.	1.7	9
166	Combined detection of electrochemical reactions and topographical effects - imaging with scanning ohmic microscopy. Electrochimica Acta, 2016, 197, 318-329.	2.6	9
167	Crystal Structure, Spectroscopic Investigations, and Physical Properties of the Ternary Intermetallic REPt2Al3 (RE = Y, Dyâ€“Tm) and RE2Pt3Al4 Representatives (RE = Tm, Lu). Crystals, 2018, 8, 169.	1.0	9
168	Coulometric Titration of Active Sites at Mesostructured Cobalt Oxide Spinel by Surface Interrogation Mode of Scanning Electrochemical Microscopy. Journal of Physical Chemistry C, 2020, 124, 7737-7748.	1.5	9
169	Redox titration of gold and platinum surface oxides at porous microelectrodes. Physical Chemistry Chemical Physics, 2017, 19, 22915-22925.	1.3	8
170	In Situ Microtitration of Intermediates of Water Oxidation Reaction at Nanoparticles Assembled at Water/Oil Interfaces. Journal of Physical Chemistry C, 2018, 122, 12963-12969.	1.5	8
171	Synthesis, Crystal Structures, and Magnetic and Electrochemical Properties of Highly Phenyl Substituted Trinuclear 5,6,11,12,17,18-Hexaazatrinaphthylene (HATNPh₆)-Bridged Titanium Complexes. Inorganic Chemistry, 2018, 57, 11165-11174.	1.9	8
172	Analyse von Wechselwirkungen in gemusterten Multienzymschichten mit elektrochemischer Rastermikroskopie. Angewandte Chemie, 2003, 115, 2350-2353.	1.6	7
173	Carbon Nanoparticulate Film Electrode Prepared by Electrophoretic Deposition. Electrochemical oxidation of Thiocholine and Topography Imaging with SECM Equipment in Dry Conditions. Electrochimica Acta, 2014, 144, 136-140.	2.6	7
174	Impact of temperature and electrical potentials on the stability and structure of collagen adsorbed on the gold electrode. Surface Science, 2015, 631, 220-228.	0.8	7
175	Effect of the residual silver and adsorbed lead anions towards the electrocatalytic methanol oxidation on nanoporous gold in alkaline media. Electrochimica Acta, 2021, 383, 138348.	2.6	7
176	Performance and the Characteristics of Thermally Stressed Anodes in Lithium Ion Cells. Journal of the Electrochemical Society, 2015, 162, A3110-A3115.	1.3	6
177	Spatially Resolved Analysis of Screen Printed Photoanodes of Dye-Sensitized Solar Cells by Scanning Electrochemical Microscopy. Electrochimica Acta, 2016, 222, 735-746.	2.6	6
178	Fourier-transform spatial modulation spectroscopy of single gold nanorods. Nanophotonics, 2018, 7, 715-726.	2.9	6
179	Electronic Transitions in Different Redox States of Trinuclear 5,6,11,12,17,18â€Hexaazatrinaphthyleneâ€Bridged Titanium Complexes: Spectroelectrochemistry and Quantum Chemistry. ChemPhysChem, 2020, 21, 2506-2514.	1.0	6
180	Combinatorial Screening of Cuâ€“W Oxide-Based Photoanodes for Photoelectrochemical Water Splitting. ACS Applied Materials & Interfaces, 2022, 14, 6590-6603.	4.0	6

#	Article	IF	Citations
181	Determination of surfactant coverage of electrodesâ€"a simple and efficient approach. Electrochimica Acta, 1992, 37, 2395-2401.	2.6	5
182	Oxidation of 2-mercaptobenzoxazole in aqueous solution: solid phase formation at glassy carbon electrodes. Journal of Solid State Electrochemistry, 1999, 3, 361-369.	1.2	5
183	Structurally stressed PT09SBA: A close look at the properties of large pore photoluminescent, redox active mesoporous hybrid silica. RSC Advances, 2013, 3, 8242.	1.7	5
184	Electrochemical characterization of temperature dependence of plasma-treated cobalt-oxide catalyst for oxygen reduction reaction in alkaline media. International Journal of Hydrogen Energy, 2016, 41, 22554-22559.	3.8	5
185	Influence of Chemical Structure and Temperature on Oxygen Reduction Reaction and Transport in Ionic Liquids. Zeitschrift Fur Physikalische Chemie, 2017, 231, 1077-1092.	1.4	5
186	Local Evaluation of Processed Membrane Electrode Assemblies by Scanning Electrochemical Microscopy. Journal of the Electrochemical Society, 2017, 164, F873-F878.	1.3	5
187	Synthesis, Crystal Structure, and Selected Properties of [Au(S₂CNH₂)₂]SCN: A Precursor for Gold Macroâ€Needles Consisting of Gold Nanoparticles Glued by Graphitic Carbon Nitride. Chemistry - A European Journal, 2019, 25, 6763-6772.	1.7	5
188	Modification and Patterning of Selfâ€Assembled Monolayers Using Electrogenerated Etchants and Homogeneous Scavenging Reactions in a Scanning Electrochemical Microscope. ChemElectroChem, 2021, 8, 3192-3202.	1.7	5
189	Redox Mediators for Faster Lithium Peroxide Oxidation in a Lithiumâ€"Oxygen Cell: A Scanning Electrochemical Microscopy Study. ACS Applied Energy Materials, 2022, 5, 3724-3733.	2.5	5
190	Voltammetric determination of ubiquinone adsorption at mercury electrodes. Electroanalysis, 1997, 9, 449-453.	1.5	4
191	Electrochemistry of CdSe Quantum Dots Studied by Single Molecule Spectroscopy. ChemElectroChem, 2019, 6, 1884-1893.	1.7	4
192	An Electrically Conducting Threeâ€Dimensional Ironâ€"Catecholate Porous Framework. Angewandte Chemie, 2021, 133, 18213-18220.	1.6	4
193	Analytical in situ characterization of chemical reactivities at interfaces in aqueous systems. Marine Chemistry, 1996, 53, 17-23.	0.9	3
194	Electrogeneration of O₂^{.â¯} and H₂O₂ Using Polymerâ€modified Microelectrodes in the Environment of Living Cells. Electroanalysis, 2016, 28, 2400-2407.	1.5	3
195	Electrocatalysis: Holding the Keys to Advanced Energy Materials and Systems. ChemElectroChem, 2016, 3, 1518-1518.	1.7	3
196	Biological Systems. , 2001, , .		3
197	Chapter 37 Scanning electrochemical microscopy in biosensor research. Comprehensive Analytical Chemistry, 2007, 49, 907-939.	0.7	2
198	Procedure 51 Kinetic analysis of titanium nitride thin films by scanning electrochemical microscopy. Comprehensive Analytical Chemistry, 2007, , e363-e370.	0.7	2

#	Article	IF	Citations
199	Applications of Scanning Electrochemical Microscopy (SECM). Nanoscience and Technology, 2007, , 259-299.	1.5	2
200	Nonlinear Boundary Conditions in Simulations of Electrochemical Experiments Using the Boundary Element Method.. AIP Conference Proceedings, 2007, , .	0.3	2
201	Farbeffekte auf Knopfdruck. Chemkon - Chemie Konkret, Forum Fuer Unterricht Und Didaktik, 2007, 14, 189-191.	0.2	2
202	Direct Local Mapping of Ion Transfer Reactions by Scanning Ohmic Microscopy. Energy Technology, 2016, 4, 1495-1501.	1.8	2
203	Electron Transfer and Electron Excitation Processes in 2,5â€Diaminoterephthalate Derivatives with Broad Scope for Functionalization. ChemistryOpen, 2019, 8, 1176-1182.	0.9	2
204	Conceptual Membraneless Fuel Cell Device Based On Ionic Liquid|Water Interface. ChemElectroChem, 2021, 8, 1626-1631.	1.7	2
205	Helical Anthraceneâ€“Ethyne-Based MOF-74 Analogue. Crystal Growth and Design, 2022, 22, 2849-2853.	1.4	2
206	Sensor Technology for Scanning Probe Microscopy and New Applications. Nanoscience and Technology, 2006, , 165-203.	1.5	1
207	Switching On Cell Adhesion with Microelectrodes. Angewandte Chemie - International Edition, 2006, 45, 7660-7660.	7.2	1
208	Short Synthesis of a Specifically Perdeuterated Hexaethylene Glycol Terminated Alkanethiol. Synlett, 2008, 2008, 1219-1221.	1.0	1
209	Magnetically Controlled Release of Dispersed Iron Oxide Nanoparticles from Imprinted Organic Thin Films. ECS Transactions, 2015, 66, 1-7.	0.3	1
210	Diaminoterephthalateâ€“Î±-lipoic acid conjugates with fluorinated residues. Beilstein Journal of Organic Chemistry, 2019, 15, 981-991.	1.3	1
211	Solid Electrolyte Interphase Evolution on Lithium Metal Electrodes Followed by Scanning Electrochemical Microscopy Under Realistic Battery Cycling Current Densities. ChemElectroChem, 2020, 7, 3544-3544.	1.7	1
212	Effect of TiO2 Photoanodes Morphology and Dye Structure on Dye-Regeneration Kinetics Investigated by Scanning Electrochemical Microscopy. Electrochem, 2020, 1, 329-343.	1.7	1
213	Pneumatic Conveying Printing Based on Super Hydrophobic Surface. Advanced Materials Interfaces, 2020, 7, 1902131.	1.9	1
214	Electron Transfer Reactions in Three-Nuclear Ti Complexes with Ï€-Acceptor Ligands. ECS Meeting Abstracts, 2018, MA2018-02, 1783-1783.	0.0	1
215	Dispensing Single Drops as Electrochemical Reactors. ChemElectroChem, 0, , .	1.7	1
216	A new programmable dipping robot. Electrochemical Science Advances, 0, , .	1.2	1

#	Article	IF	Citations
217	Microsensors and Microsystems. Mikrochimica Acta, 1999, 131, 1-1.	2.5	0
218	Vom tropfenden Quecksilber zu integrierten Mikrosystemen. Nachrichten Aus Der Chemie, 2002, 50, 1353-1355.	0.0	0
219	Physikalische Chemie 2002. Nachrichten Aus Der Chemie, 2003, 51, 330-339.	0.0	0
220	Soft Microelectrode Arrays as SECM Probes for Biological Samples. ECS Meeting Abstracts, 2012, , .	0.0	0
221	Supercapacitor Electrodes: Investigation of Charge Transfer Kinetics of Polyaniline Supercapacitor Electrodes by Scanning Electrochemical Microscopy (Adv. Mater. Interfaces 1/2015). Advanced Materials Interfaces, 2015, 2, n/a-n/a.	1.9	0
222	Improved Synthesis of Pinacol Dimethyl Ether â€“ A Superior Solvent for Lithiumâ€“Oxygen Batteries. Synlett, 2017, 28, 705-706.	1.0	0
223	Titelbild: An Electrically Conducting Threeâ€Dimensional Ironâ€“Catecholate Porous Framework (Angew.) Tj ETQq1 1 0.784314 rgBT	1.6	0
224	Photosensitive Electrified Water/Oil Interfaces Studied By Scanning Electrochemical Microscopy. ECS Meeting Abstracts, 2018, , .	0.0	0
225	(Invited) Morphology and Conductivity of Copper Hexacyanoferrate Films. ECS Meeting Abstracts, 2020, MA2020-01, 2810-2810.	0.0	0
226	Electrochemical Activation of Self-Assembled Monolayers for the Binding of Effectors. Langmuir, 2020, 36, 14623-14632.	1.6	0
227	Dispensing Single Drops as Electrochemical Reactors. ChemElectroChem, 0, , .	1.7	0