Achim Walter Hassel

List of Publications by Year
in descending order

225	5,590	109137 35	110170 64
papers	citations	h-index	g-index

231	231	231	5603
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Mixed anodic oxides for forming-free memristors revealed by combinatorial screening of hafnium-tantalum system. Applied Materials Today, 2022, 26, 101270.	2.3	9
2	Comparative Behavior of Viscose-Based Supercapacitor Electrodes Activated by KOH, H2O, and CO2. Nanomaterials, 2022, 12, 677.	1.9	5
3	Impact of Electrolyte Incorporation in Anodized Niobium on Its Resistive Switching. Nanomaterials, 2022, 12, 813.	1.9	8
4	Growth of mixed anodic films on combinatorial Al-Gd alloys and their superimposed potential-pH diagrams. Journal of Electroanalytical Chemistry, 2022, 911, 116227.	1.9	1
5	Hydrogen Insertion into Complex-Phase High-Strength Steel during Atmospheric Corrosion at Low Relative Humidity. Metals, 2022, 12, 624.	1.0	3
6	Incremental lines in human acellular tooth cementum â€“ New insights by SEM analysis. Annals of Anatomy, 2022, 243, 151933.	1.0	2
7	Memristive Characteristics of Composite Hafnium/Tantalum Anodic Oxides. Physica Status Solidi (A) Applications and Materials Science, 2022, 219, .	0.8	2
8	State of the Art of Chemosensors in a Biomedical Context. Chemosensors, 2022, 10, 199.	1.8	3
9	A theoretical and experimental framework for the formation of mixed anodic films on combinatorial aluminium-cerium alloys. Electrochimica Acta, 2021, 367, 137173.	2.6	2
10	Combinatorial Passivation Study in the Aluminium-Samarium System for Basic Property Mapping and Identification of Secondary Phase Influence. Journal of the Electrochemical Society, 2021, 168, 011503.	1.3	1
11	Viscoseâ€based porous carbon fibers: improving yield and porosity through optimization of the carbonization process by design of experiment. Journal of Porous Materials, 2021, 28, 727-739.	1.3	17
12	Electrolyte-Dependent Modification of Resistive Switching in Anodic Hafnia. Nanomaterials, 2021, 11, 666.	1.9	13
13	Femtosecond Laser-Processing of Pre-Anodized Ti-Based Bone Implants for Cell-Repellent Functionalization. Nanomaterials, 2021, 11, 1342.	1.9	9
14	Influence of Fuel and Shroud Gas on the Corrosion Resistance of Highâ€Velocity Oxyâ€Fuel Nickel Coatings. Physica Status Solidi (A) Applications and Materials Science, 2021, 218, 2000024.	0.8	1
15	Phosphate incorporation in anodic hafnium oxide memristors. Applied Surface Science, 2021, 548, 149093.	3.1	13
16	Biomass-Derived Carbons as Versatile Materials for Energy-Related Applications: Capacitive Properties vs. Oxygen Reduction Reaction Catalysis. Journal of Carbon Research, 2021, 7, 55.	1.4	6
17	Passivity of Holmium Studied Theoretically by Potential-pH Diagrams for Selection of Electrolytes and Experimental Proof of the Formation of Ultra-Thin Anodic Films. Journal of the Electrochemical Society, 2021, 168, 081509.	1.3	0
18	Overcoming intra-molecular repulsions in PEDTT by sulphate counter-ion. Science and Technology of Advanced Materials, 2021, 22, 985-997.	2.8	5

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19	Composite Memristors by Nanoscale Modification of Hf/Ta Anodic Oxides. Journal of Physical Chemistry Letters, 2021, 12, 8917-8923.	2.1	7
20	Influence of electrolyte selection on performance of tantalum anodic oxide memristors. Applied Surface Science, 2021, 565, 150608.	3.1	14
21	Gallium-Enhanced Aluminum and Copper Electromigration Performance for Flexible Electronics. ACS Applied Materials & Interfaces, 2021, 13, 6960-6974.	4.0	8
22	Development of dispersion layers for dental drills with reduced nickel release. Physics in Medicine, 2021, , 100045.	0.6	0
23	Electrochemical Screening of Tungsten Trioxideâ€“Nickel Oxide Thin Film Combinatorial Library at Low Nickel Concentrations. ACS Combinatorial Science, 2020, 22, 61-69.	3.8	2
24	Combinatorial surface nanostructuring in aluminium-niobium system. Applied Surface Science, 2020, 499, 143943.	3.1	3
25	A Thermodynamic Approach for Selection of Anodizing Electrolytes in Aluminiumâ€Holmium System. ChemElectroChem, 2020, 7, 1342-1357.	1.7	1
26	Combinatorial screening of dysprosium-magnesium-zinc alloys for bioresorptive implants. Electrochimica Acta, 2020, 363, 137106.	2.6	3
27	Loss of Olfactory Functionâ€”Early Indicator for Covid-19, Other Viral Infections and Neurodegenerative Disorders. Frontiers in Neurology, 2020, 11, 569333.	1.1	42
28	Pervasive electrochemistry. Journal of Solid State Electrochemistry, 2020, 24, 2083-2085.	1.2	2
29	Metalâ€Free Hydrogenâ€Bonded Polymers Mimic Noble Metal Electrocatalysts. Advanced Materials, 2020, 32, e1902177.	11.1	24
30	Supercapacitor Electrodes from Viscose-Based Activated Carbon Fibers: Significant Yield and Performance Improvement Using Diammonium Hydrogen Phosphate as Impregnating Agent. Journal of Carbon Research, 2020, 6, 17.	1.4	14
31	Samarium influence on current induced atomic displacement in Aluminium and Copper combinatorial thin film alloys. Thin Solid Films, 2020, 702, 137949.	0.8	4
32	Impact of Femtosecond Laser Treatment Accompanied with Anodization of Titanium Alloy on Fibroblast Cell Growth. Physica Status Solidi (A) Applications and Materials Science, 2020, 217, 1900838.	0.8	10
33	Corrosion and Structural Properties of Erbiumâ€“Zinc Thin Films at Lowâ€toâ€Medium Erbium Concentrations. Physica Status Solidi (A) Applications and Materials Science, 2020, 217, 1900841.	0.8	0
34	Electrocatalytic glucose oxidation on a combinatorially electrodeposited cobalt-copper-nickel thin film material library. Electrochimica Acta, 2020, 341, 135744.	2.6	4
35	Electrochemical Impedance Spectroscopy on UVâ€Aged Polyester Coatings: Possibilities and Limits of Modeling Water Diffusion. Physica Status Solidi (A) Applications and Materials Science, 2020, 217, 1901038.	0.8	4
36	Repellent rings at titanium cylinders against overgrowth by fibroblasts. Advanced Optical Technologies, 2020, 9, 113-120.	0.9	8

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37	Binary Aluminium-Lanthanoid Material Libraries Studied in a Combinatorial Approach. ECS Meeting Abstracts, 2020, MA2020-02, 1250-1250.	0.0	0
38	(Invited) High Precision Corrosion Measurements from Flow Type Scanning Droplet Microscopy with Downstream Analysis By Inductively Coupled Optical Emission Spectroscopy or Inductively Coupled Mass Spectrometry. ECS Meeting Abstracts, 2020, MA2020-02, 1277-1277.	0.0	0
39	Customized 2D Structures for High Throughput Electromigration Measurements. Physica Status Solidi (A) Applications and Materials Science, 2019, 216, 1800869.	0.8	2
40	Annealing Conditionsâ€™ Influence on the Oxidation of Siliconâ€Aluminiumâ€Alloys in Combinatorial Thinâ€Film Libraries. Physica Status Solidi (A) Applications and Materials Science, 2019, 216, 1801009.	0.8	1
41	Structural, Electrical, and Optical Effects of Metal Doping on ZnO Thin Films. Physica Status Solidi (A) Applications and Materials Science, 2019, 216, 1800942.	0.8	4
42	Review on the Versatility of Tungsten Oxide Coatings. Physica Status Solidi (A) Applications and Materials Science, 2019, 216, 1900047.	0.8	84
43	Insight into Antimicrobial Properties via Self-Acidification of Compounds from the Molybdenumâ€“Tungstenâ€“Oxygen System. ACS Applied Bio Materials, 2019, 2, 1477-1489.	2.3	3
44	Strong Volta potential change in doped zinc oxide as a photoresponse to UV irradiation. RSC Advances, 2019, 9, 35579-35587.	1.7	5
45	Testosterone- and vitamin-grafted cellulose ethers for sustained release of camptothecin. Carbohydrate Polymers, 2019, 206, 641-652.	5.1	9
46	Enhanced Bioâ€Electrochemical Reduction of Carbon Dioxide by Using Neutral Red as a Redox Mediator. ChemBioChem, 2019, 20, 1196-1205.	1.3	35
47	Formation of nano-scale composite anodic films on aluminium-holmium alloys. Electrochimica Acta, 2019, 297, 888-904.	2.6	8
48	Localized-Plasmon Voltammetry to Detect pH Dependent Gold Oxidation. Journal of Physical Chemistry C, 2018, 122, 4565-4571.	1.5	12
49	Nanofibrous cobalt oxide for electrocatalysis of CO2 reduction to carbon monoxide and formate in an acetonitrile-water electrolyte solution. Applied Catalysis B: Environmental, 2018, 229, 163-170.	10.8	63
50	Downstream analytics quantification of ion release during high-voltage anodisation of niobium. Journal of Solid State Electrochemistry, 2018, 22, 2457-2464.	1.2	4
51	Influence of atmospheric oxygen on hydrogen detection on Pd using Kelvin probe technique. Journal of Solid State Electrochemistry, 2018, 22, 495-504.	1.2	10
52	Anodization behaviour and basic property mapping in the aluminium-erbium system. Journal of Solid State Electrochemistry, 2018, 22, 869-876.	1.2	5
53	Optimum Copper-Palladium Catalyst from a Combinatorial Library for Sensitive Non-Enzymatic Glucose Sensors. Electrocatalysis, 2018, 9, 359-369.	1.5	8
54	Direct writing of anodic oxides for plastic electronics. Npj Flexible Electronics, 2018, 2, .	5.1	16

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55	In Situ Mass Spectrometric Reaction Monitoring of Atmospheric Corrosion Processes. Physica Status Solidi (A) Applications and Materials Science, 2018, 215, 1700860.	0.8	3
56	Suitability of Various Materials for Probes in Scanning Kelvin Probe Measurements. Physica Status Solidi (A) Applications and Materials Science, 2018, 215, 1700952.	0.8	9
57	On the Electropolishing Mechanism of Nickel Titanium in Methanolic Sulfuric acid â˜’ An Electrochemical Impedance Study. Physica Status Solidi (A) Applications and Materials Science, 2018, 215, 1800011.	0.8	7
58	Basic properties mapping of anodic oxides in the hafniumâ€“niobiumâ€“tantalum ternary system. Science and Technology of Advanced Materials, 2018, 19, 554-568.	2.8	4
59	Electrocatalysis on copperâ€“palladium alloys for amperometric formaldehyde sensing. RSC Advances, 2017, 7, 6031-6039.	1.7	10
60	Solar water splitting on porous-alumina-assisted TiO2-doped WOx nanorod photoanodes: Paradoxes and challenges. Nano Energy, 2017, 33, 72-87.	8.2	33
61	Self-assembled cellulose particles for agrochemical applications. European Polymer Journal, 2017, 93, 706-716.	2.6	18
62	Preparation and investigation of combinatorially electrodeposited zinc-nickel, zinc-cobalt, and zinc-nickel-cobalt material libraries. Physica Status Solidi (A) Applications and Materials Science, 2017, 214, 1600706.	0.8	2
63	Manganese / zinc ratio influence on the thermal oxide nanostructure in the Mn-Zn-O system. Physica Status Solidi (A) Applications and Materials Science, 2017, 214, 1600809.	0.8	2
64	In situmonitoring of the electrochemical dissolution of tungsten. Physica Status Solidi (A) Applications and Materials Science, 2017, 214, 1600803.	0.8	10
65	Andersonâ€Localization and the Mottâ€“Ioffeâ€“Regel Limit in Glassyâ€Metallic PEDOT. Advanced Electronic Materials, 2017, 3, 1700050.	2.6	34
66	Non-enzymatic glucose sensing on copper-nickel thin film alloy. Applied Surface Science, 2017, 417, 48-53.	3.1	22
67	Compositionally Dependent Nonlinear Optical Bandgap Behavior of Mixed Anodic Oxides in Niobiumâ€“Titanium System. ACS Combinatorial Science, 2017, 19, 121-129.	3.8	9
68	{110}â€Terminated Squareâ€Shaped Gold Nanoplates and Their Electrochemical Surface Reactivity. ChemElectroChem, 2017, 4, 557-564.	1.7	9
69	Copper-nickel combinatorial library screening for electrocatalytic formaldehyde oxidation. Physica Status Solidi (A) Applications and Materials Science, 2017, 214, 1600552.	0.8	4
70	Biofunctionalized conductive polymers enable efficient CO ₂ electroreduction. Science Advances, 2017, 3, e1700686.	4.7	89
71	In Situ Monitoring of Ionic Metal Dissolution During Anodization of Titanium and Quantification of Parallel Electronic Oxygen Evolution. ChemElectroChem, 2017, 4, 1846-1848.	1.7	12
72	Evolution and interaction of corrosive species during the initial NaCl particle induced corrosion on zinc coated skin-passed steel. Corrosion Science, 2017, 127, 222-229.	3.0	10

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73	In-Situ Monitoring of Metal Dissolution during Anodization of Tantalum. Journal of the Electrochemical Society, 2017, 164, C598-C601.	1.3	7
74	Silver-, calcium-, and copper molybdate compounds: Preparation, antibacterial activity, and mechanisms. Biointerphases, 2017, 12, 05G607.	0.6	26
75	Challenges in hydrogen quantification using Kelvin probe technique at different levels of relative humidity. Journal of Solid State Electrochemistry, 2017, 21, 1785-1796.	1.2	16
76	Direct observation of metal dissolution during anodization of niobium. Electrochemistry Communications, 2017, 74, 5-8.	2.3	15
77	Rolling Direction Dependent Diffusion Coefficients of Hydrogen in Ferritic Steel by SDCM Charging and SKP Probing. ISIJ International, 2016, 56, 487-491.	0.6	7
78	Maximum electrocatalytic oxidation performance for formaldehyde in a combinatorial copper-palladium thin film library. Applied Catalysis A: General, 2016, 525, 110-118.	2.2	16
79	Growth inhibition of Escherichia coli by zinc molybdate with different crystalline structures. Physica Status Solidi (A) Applications and Materials Science, 2016, 213, 1471-1478.	0.8	21
80	Cobaltâ€“nickel material libraries obtained from electrodeposition using citrate or glycine as additives. Physica Status Solidi (A) Applications and Materials Science, 2016, 213, 1417-1426.	0.8	12
81	Anodic oxide formation on aluminium-terbium alloys. Journal of Solid State Electrochemistry, 2016, 20, 1673-1681.	1.2	14
82	Heterogeneous Zieglerâ€“Natta catalysts with various sizes of MgCl2 crystallites: synthesis and characterization. Iranian Polymer Journal (English Edition), 2016, 25, 321-337.	1.3	24
83	Spectroscopic ellipsometry for compositionally induced bandgap tuning of combinatorial niobiumâ€“tantalum anodic oxides. RSC Advances, 2016, 6, 79934-79942.	1.7	5
84	3D printed double flow cell for local through-thickness anodisation in aluminium. Electrochemistry Communications, 2016, 69, 84-88.	2.3	4
85	Gold Nanoparticle@Polyhedral Oligomeric Silsesquioxane Hybrid Scaffolds in Microfluidic Format â€“ Highly Efficient and Green Catalytic Platforms. European Journal of Inorganic Chemistry, 2016, 2016, 951-955.	1.0	9
86	Combinatorial Electrodeposition of Cobalt-Copper Material Libraries. Journal of the Electrochemical Society, 2016, 163, D3069-D3075.	1.3	8
87	Film dissolution kinetics of aluminium at precisely adjusted pHâ€values. Physica Status Solidi (A) Applications and Materials Science, 2016, 213, 1410-1416.	0.8	0
88	Hydrogel-based flexible micro-reference electrodes for use in alkaline and neutral pH solutions. Journal of Solid State Electrochemistry, 2016, 20, 2749-2757.	1.2	8
89	Electrocatalytic oxidation of glucose by screening combinatorial copperâ€“nickel alloys. Physica Status Solidi (A) Applications and Materials Science, 2016, 213, 1434-1440.	0.8	9
90	Lateral resolution in scanning Kelvin probe microscopy. Corrosion Science, 2016, 104, 1-8.	3.0	23

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91	Compositional dependent high temperature crystalline phase formation on manganeseâ€“silicon thin film combinatorial libraries in controlled oxidizing atmospheres. Journal of Alloys and Compounds, 2016, 664, 351-362.	2.8	4
92	In situ quantification of electrochemical dissolution of hafnium-tantalum alloys in acidic media. Electrochemistry Communications, 2015, 59, 5-8.	2.3	7
93	Electrodeposition of cobaltâ€“nickel material libraries. Physica Status Solidi (A) Applications and Materials Science, 2015, 212, 1216-1222.	0.8	15
94	Analysis of main failure pattern using discrete Fourier transform on metalâ€epoxyâ€based adherentâ€laminates. Physica Status Solidi (A) Applications and Materials Science, 2015, 212, 1242-1248.	0.8	2
95	Screening of catalytic effects on copperâ€“zinc thin film combinatorial libraries for formaldehyde oxidation. Physica Status Solidi (A) Applications and Materials Science, 2015, 212, 1184-1190.	0.8	10
96	Palladium thin films for hydrogen sensing in aqueous electrolytes. Physica Status Solidi (A) Applications and Materials Science, 2015, 212, 1273-1280.	0.8	6
97	Downsizing of single crystalline high aspect ratio tungsten nanowires. Physica Status Solidi (A) Applications and Materials Science, 2015, 212, 1223-1228.	0.8	0
98	Highly customisable scanning droplet cell microscopes using 3D-printing. Journal of Electroanalytical Chemistry, 2015, 740, 53-60.	1.9	57
99	Effect of Different Cobalt Concentrations on Tungsten Trioxide Photoelectrodes for Use in Solar Water Oxidation. Journal of the Electrochemical Society, 2015, 162, H187-H193.	1.3	9
100	Interfacial Oxide Formation during Anodization of Hafnium/Aluminium Superimposed Layers. Electrochimica Acta, 2015, 178, 344-352.	2.6	6
101	Aluminiumâ€“copperâ€“nickel thin film compositional spread: Nickel influence on fundamental alloy properties and chemical stability of copper. Thin Solid Films, 2015, 580, 36-44.	0.8	13
102	Water content and high temperature influence on the oxidation behavior of manganese and silicon thin films on iron matrix. Surface and Coatings Technology, 2015, 265, 145-153.	2.2	3
103	Morphology and size effects on the reduction of silver oxide by hydrogen. Physica Status Solidi (A) Applications and Materials Science, 2015, 212, 1202-1209.	0.8	8
104	Anodization Behavior of Glassy Metallic Hafnium Thin Films. Journal of the Electrochemical Society, 2015, 162, E30-E36.	1.3	11
105	Localised electrochemical impedance spectroscopy using a scanning droplet cell microscope. Journal of Electroanalytical Chemistry, 2015, 737, 93-99.	1.9	9
106	Potentiodynamic hydrogen permeation on Palladium-Kelvin probe compared to 3D printed microelectrochemical cell. Electrochemistry Communications, 2015, 60, 208-211.	2.3	16
107	Multi-Scanning Droplet Cell Microscopy (multi-SDCM) for truly parallel high throughput electrochemical experimentation. Electrochimica Acta, 2015, 179, 32-37.	2.6	25
108	EIS study of blister formation on coated galvanised steel in oxidising alkaline solutions. Corrosion Science, 2015, 96, 6-13.	3.0	21

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109	Mechanistic approaches on the antibacterial activity of poly(acrylic acid) copolymers. Colloids and Surfaces B: Biointerfaces, 2015, 126, 98-105.	2.5	28
110	Corrosion of high-level radioactive waste iron-canisters in contact with bentonite. Journal of Hazardous Materials, 2015, 285, 464-473.	6.5	35
111	Microvials with tungsten nanowire arrays. Journal of Solid State Electrochemistry, 2014, 18, 2955-2961.	1.2	2
112	Properties of anodic oxides grown on a hafniumâ€“tantalumâ€“titanium thin film library. Science and Technology of Advanced Materials, 2014, 15, 015006.	2.8	21
113	Raman imaging for surface characterisation of annealed electrical steel surfaces. Physica Status Solidi (A) Applications and Materials Science, 2014, 211, 1429-1438.	0.8	8
114	Copperâ€“nickel oxide thin film library reactively co-sputtered from a metallic sectioned cathode. Journal of Materials Research, 2014, 29, 148-157.	1.2	12
115	Localized photovoltaic investigations on organic semiconductors and bulk heterojunction solar cells. Science and Technology of Advanced Materials, 2014, 15, 054201.	2.8	1
116	Coating substrate relationship after initial electrolyte contact in the electrodeposition of zinc on steel. Surface and Coatings Technology, 2014, 253, 8-13.	2.2	4
117	On the pHâ€sensing properties of differently prepared tungsten oxide films. Physica Status Solidi (A) Applications and Materials Science, 2014, 211, 1340-1345.	0.8	16
118	Combined chemical and EIS study of the reaction of zinc coatings under alkaline conditions. Electrochimica Acta, 2014, 131, 130-136.	2.6	31
119	Photoelectrochemical scanning droplet cell microscopy for localized photovoltaic investigations on organic semiconductors. Physical Chemistry Chemical Physics, 2014, 16, 3739.	1.3	11
120	Investigations on Bactericidal Properties of Molybdenumâ€“Tungsten Oxides Combinatorial Thin Film Material Libraries. ACS Combinatorial Science, 2014, 16, 631-639.	3.8	29
121	Rhodium-Coordinated Poly(arylene-ethynylene)-alt-Poly(arylene-vinylene) Copolymer Acting as Photocatalyst for Visible-Light-Powered NAD⁺/NADH Reduction. Journal of the American Chemical Society, 2014, 136, 12721-12729.	6.6	70
122	Photoelectrochemical and Electrochemical Characterization of Sub-Micro-Gram Amounts of Organic Semiconductors Using Scanning Droplet Cell Microscopy. Journal of Physical Chemistry C, 2014, 118, 16919-16926.	1.5	12
123	Photoelectrochemical water splitting in a tungsten oxide - nickel oxide thin film material library. Electrochimica Acta, 2014, 140, 275-281.	2.6	17
124	Electrochemistry on binary valve metal combinatorial libraries: niobium-tantalum thin films. Electrochimica Acta, 2014, 140, 366-375.	2.6	12
125	An electrochemical calibration unit for hydrogen analysers. Talanta, 2014, 125, 257-264.	2.9	5
126	Synthesis and characterization of Alâ€“<scp>M</scp>gâ€“<scp>Z</scp>n thin film alloys coâ€deposited from vapour phase. Physica Status Solidi (A) Applications and Materials Science, 2013, 210, 1000-1005.	0.8	6

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127	Vapour phase coâ€deposition of Alâ€”Cu thin film alloys. Physica Status Solidi (A) Applications and Materials Science, 2013, 210, 1006-1012.	0.8	18
128	A combinatorial properties study of thin film Alï£¿ Fe alloys. Physica Status Solidi (A) Applications and Materials Science, 2013, 210, 1025-1029.	0.8	4
129	Surface patterned dielectrics by direct writing of anodic oxides using scanning droplet cell microscopy. Electrochimica Acta, 2013, 113, 755-761.	2.6	12
130	Electrochemical characterization of sub-micro-gram amounts of organic semiconductors using scanning droplet cell microscopy. Journal of Electroanalytical Chemistry, 2013, 691, 77-82.	1.9	22
131	Scanning droplet cell microscopy on a wide range hafniumâ€“niobium thin film combinatorial library. Electrochimica Acta, 2013, 110, 539-549.	2.6	25
132	Characterization of local electrochemical doping of high performance conjugated polymer for photovoltaics using scanning droplet cell microscopy. Electrochimica Acta, 2013, 113, 834-839.	2.6	13
133	Epitaxial growth of zinc on ferritic steel under high current density electroplating conditions. Electrochimica Acta, 2013, 113, 797-802.	2.6	7
134	Tuning the Magnetic Properties of Metal Oxide Nanocrystal Heterostructures by Cation Exchange. Nano Letters, 2013, 13, 586-593.	4.5	91
135	Copperâ€“zinc thin films reactively coâ€sputtered from a twoâ€component sectioned cathode. Physica Status Solidi (A) Applications and Materials Science, 2013, 210, 994-999.	0.8	4
136	Photoelectrochemical Scanning Droplet Cell Microscopy (PEâ€SDCM). ChemPhysChem, 2013, 14, 560-567.	1.0	27
137	Accelerated cathodic reaction in microbial corrosion of iron due to direct electron uptake by sulfate-reducing bacteria. Corrosion Science, 2013, 66, 88-96.	3.0	403
138	Localized Photoelectrochemistry on a Tungsten Oxideâ€“Iron Oxide Thin Film Material Library. ACS Combinatorial Science, 2013, 15, 601-608.	3.8	26
139	Effects of thickness and field strength of anodic oxide film on aluminum on its compressive rupture. Corrosion Reviews, 2012, 30, .	1.0	2
140	In situ identification and quantification in a flow cell with AAS downstream analytics. Journal of Solid State Electrochemistry, 2012, 16, 3473-3478.	1.2	9
141	Surface and Coating Analysis of Pressâ€Hardened Hotâ€Dip Galvanized Steel Sheet. Steel Research International, 2012, 83, 1005-1011.	1.0	26
142	Thermal stability of {110} facet terminated gold nanobelts. Applied Surface Science, 2012, 258, 6224-6231.	3.1	6
143	Corrosion of press-hardened galvanized steel. Corrosion Science, 2012, 63, 12-19.	3.0	73
144	Characterization of thin anodic oxides of Tiâ€“Nb alloys by electrochemical impedance spectroscopy. Electrochimica Acta, 2012, 82, 324-332.	2.6	63

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145	Ultraâ€thin anodic alumina capacitor films for plastic electronics. Physica Status Solidi (A) Applications and Materials Science, 2012, 209, 813-818.	0.8	59
146	Biaxially textured copper-iron alloys for coated conductors. Physica Status Solidi (A) Applications and Materials Science, 2012, 209, 875-879.	0.8	14
147	Selective dissolution in AlFeNb alloys. Physica Status Solidi (A) Applications and Materials Science, 2012, 209, 854-858.	0.8	7
148	Back Cover: Ultraâ€thin anodic alumina capacitor films for plastic electronics (Phys. Status Solidi A) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 5	0.8	0
149	Marine sulfateâ€reducing bacteria cause serious corrosion of iron under electroconductive biogenic mineral crust. Environmental Microbiology, 2012, 14, 1772-1787.	1.8	324
150	Electrochemical texturing of Al-doped ZnO thin films for photovoltaic applications. Journal of Solid State Electrochemistry, 2012, 16, 283-290.	1.2	22
151	Combinatorial corrosion study of the passivation of aluminium copper alloys. Corrosion Science, 2011, 53, 1-6.	3.0	29
152	High throughput electrochemical screening and dissolution monitoring of Mgâ€“Zn material libraries. Electrochimica Acta, 2011, 56, 9627-9636.	2.6	38
153	Enhancement of the Electrocatalytic Activity of Gold Nanoparticles Towards Methanol Oxidation. Electrocatalysis, 2011, 2, 106-113.	1.5	8
154	A novel concept for the preparation of alloy nanowires. Physica Status Solidi (A) Applications and Materials Science, 2011, 208, 1259-1264.	0.8	5
155	Grain boundary electrochemistry of Î²â€type Nbâ€“Ti alloy using a scanning droplet cell. Physica Status Solidi (A) Applications and Materials Science, 2011, 208, 1246-1251.	0.8	19
156	Anodic repassivation of low energy Auâ€implanted ultraâ€thin anodic Al₂O₃. Physica Status Solidi (A) Applications and Materials Science, 2011, 208, 1270-1274.	0.8	2
157	Anodized Aluminum Oxide Thin Films for Roomâ€Temperatureâ€Processed, Flexible, Lowâ€Voltage Organic Nonâ€Volatile Memory Elements with Excellent Charge Retention. Advanced Materials, 2011, 23, 4892-4896.	11.1	102
158	A microelectrochemical scanning flow cell with downstream analytics. Electrochimica Acta, 2011, 56, 4315-4321.	2.6	57
159	Electro-dissolution of 30Nbâ€“Ti alloys in methanolic sulfuric acidâ€”Optimal conditions for electropolishing. Electrochimica Acta, 2011, 56, 6678-6682.	2.6	20
160	Reactivity of Gold Nanobelts with Unique {110} Facets. ChemPhysChem, 2010, 11, 2838-2843.	1.0	13
161	Combinatorial investigation of Hfâ€“Ta thin films and their anodic oxides. Electrochimica Acta, 2010, 55, 7884-7891.	2.6	37
162	Theoretical simulation and preparation of binary and ternary combinatorial libraries by thermal PVD. Physica Status Solidi (A) Applications and Materials Science, 2010, 207, 801-806.	0.8	16

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163	Surface chemistry and topographical changes of an electropolished NiTi shape memory alloy. Physica Status Solidi (A) Applications and Materials Science, 2010, 207, 807-811.	0.8	13
164	Large scale synthesis of single crystalline tungsten nanowires with extreme aspect ratios. Physica Status Solidi (A) Applications and Materials Science, 2010, 207, 858-863.	0.8	26
165	Anodic oxides on a beta type Nbâ€“Ti alloy and their characterization by electrochemical impedance spectroscopy. Physica Status Solidi (A) Applications and Materials Science, 2010, 207, 812-816.	0.8	5
166	Preparation and specific properties of single crystalline metallic nanowires. Physica Status Solidi (B): Basic Research, 2010, 247, 2380-2392.	0.7	20
167	Back Cover (Phys. Status Solidi B 10/2010). Physica Status Solidi (B): Basic Research, 2010, 247, .	0.7	0
168	An in situ tensile tester for studying electrochemical repassivation behavior: Fabrication and challenges. Review of Scientific Instruments, 2010, 81, 033902.	0.6	5
169	Quantitative optical recognition of highly reproducible ultrathin oxide films in microelectrochemical anodization. Review of Scientific Instruments, 2009, 80, 046106.	0.6	38
170	The impedanceâ€titrator : A novel setup to perform automated pHâ€dependent electrochemical experiments. Materials and Corrosion - Werkstoffe Und Korrosion, 2009, 60, 855-858.	0.8	6
171	Spatial features control of selfâ€organised tungsten nanowire arrays. Physica Status Solidi (A) Applications and Materials Science, 2009, 206, 455-461.	0.8	17
172	Electrocatalysis on gold nanostructures: Is the {110} facet more active than the {111} facet?. Electrochemistry Communications, 2009, 11, 2036-2039.	2.3	51
173	High-throughput study of the anodic oxidation of Hfâ€“Ti thin films. Electrochimica Acta, 2009, 54, 5171-5178.	2.6	20
174	Nanostructuring of NiAlâ€“Mo eutectic alloys by selective phase dissolution. Electrochimica Acta, 2009, 54, 6015-6021.	2.6	21
175	High-throughput synthesis and characterization of anodic oxides on Nbâ€“Ti alloys. Electrochimica Acta, 2009, 54, 5973-5980.	2.6	39
176	Gold Nanoparticles Partially Embedded in Ultrathin Anodic Alumina Films. Journal of Physical Chemistry C, 2009, 113, 3105-3109.	1.5	5
177	Selective matrix dissolution in an Alâ€“Si eutectic. Corrosion Science, 2009, 51, 1490-1495.	3.0	30
178	A combinatorial passivation study of Taâ€“Ti alloys. Corrosion Science, 2009, 51, 1519-1527.	3.0	50
179	Selective surface oxidation and nitridation of NiTi shape memory alloys by reduction annealing. Corrosion Science, 2009, 51, 635-641.	3.0	37
180	Fabrication of single crystalline gold nanobelts. Journal of Materials Chemistry, 2009, 19, 924-927.	6.7	34

#	Article	IF	Citations
181	Electropolishing of a Nickelâ€“Titaniumâ€“Copper Shape Memory Alloy in Methanolic Sulfuric Acid. Electrochemical and Solid-State Letters, 2009, 12, C1.	2.2	3
182	Single Crystalline Molybdenum Nanowires, Nanowire Arrays and Nanopore Arrays in Nickel-Aluminium. Journal of Nanoscience and Nanotechnology, 2009, 9, 3411-3417.	0.9	7
183	Electrodeposition of gold on tungsten nanowires present in NiAlâ€“W eutectics. Journal of Electroanalytical Chemistry, 2008, 618, 11-16.	1.9	16
184	Reactivity imaging of a passive ferritic FeAlCr steel. Journal of Applied Electrochemistry, 2008, 38, 1339-1345.	1.5	12
185	A universal alternating immersion simulator for accelerated cyclic corrosion tests. Materials and Corrosion - Werkstoffe Und Korrosion, 2008, 59, 175-180.	0.8	10
186	Structural characterisation of gold nanowire arrays. Journal of Crystal Growth, 2008, 311, 194-199.	0.7	9
187	Single tungsten nanowires as pH sensitive electrodes. Electrochemistry Communications, 2008, 10, 1125-1128.	2.3	46
188	Arrays of Iso-Oriented Gold Nanobelts. Nano Letters, 2008, 8, 737-742.	4.5	39
189	Nanostructured Columnlike Tungsten Oxide Film by Anodizing Al/W/Ti Layers on Si. Chemistry of Materials, 2008, 20, 6482-6493.	3.2	67
190	Selective de-alloying of NiTi by oxochloridation. Corrosion Science, 2008, 50, 1368-1375.	3.0	16
191	Combinatorial electrochemistry on Alâ€“Fe alloys. Science and Technology of Advanced Materials, 2008, 9, 035009.	2.8	39
192	Nanomechanics of Single Crystalline Tungsten Nanowires. Journal of Nanomaterials, 2008, 2008, 1-9.	1.5	44
193	Passivity of a Nanostructured Directionally Solidified NiAlâ€“Re Alloy as Substrate for Electrodeposition of Gold. Journal of the Electrochemical Society, 2008, 155, K31.	1.3	12
194	High Voltage Pulse Anodization of a NiTi Shape Memory Alloy. Journal of the Electrochemical Society, 2007, 154, C294.	1.3	35
195	Modification of Trap Distributions in Anodic Aluminum Tunnel Barriers. Journal of the Electrochemical Society, 2007, 154, C558.	1.3	10
196	Single particle impact experiments for studying particle induced flow corrosion. Corrosion Science, 2007, 49, 231-239.	3.0	25
197	Model Systems with Extreme Aspect Ratio, Tunable Geometry, and Surface Functionality for a Quantitative Investigation of the Lotus Effect. Langmuir, 2007, 23, 2091-2094.	1.6	29
198	Potassium sorbate solutions as copper chemical mechanical planarization (CMP) based slurries. Electrochimica Acta, 2007, 52, 5150-5158.	2.6	15

#	Article	IF	Citations
199	Copper nanowires and silver micropit arrays from the electrochemical treatment of a directionally solidified silverâ€“copper eutectic. Electrochimica Acta, 2007, 53, 324-329.	2.6	20
200	Reprint of â€œPotassium sorbate solutions as copper chemical mechanical planarization (CMP) based slurriesâ€• Electrochimica Acta, 2007, 53, 1021-1029.	2.6	3
201	Microelectrochemical lithography: A method for direct writing of surface oxides. Electrochimica Acta, 2007, 52, 7865-7869.	2.6	45
202	Rotating disc electrode study of the electropolishing mechanism of NiTi in methanolic sulfuric acid. Electrochimica Acta, 2007, 53, 915-919.	2.6	28
203	Effect of the Growth Conditions on the Spatial Features of Re Nanowires Produced by Directional Solidification. Nano Letters, 2006, 6, 794-799.	4.5	34
204	Electropolishing of NiTi shape memory alloys in methanolic H2SO4. Electrochimica Acta, 2006, 52, 1290-1295.	2.6	61
205	Nanostructures from directionally solidified NiAlâ€“W eutectic alloys. Electrochimica Acta, 2006, 52, 1799-1804.	2.6	52
206	Investigation of the effect of impingement angle on tribocorrosion using single impacts. Electrochimica Acta, 2006, 51, 6521-6526.	2.6	30
207	Temperature stability of thin anodic oxide films in metal/insulator/metal structures: A comparison between tantalum and aluminium oxide. Thin Solid Films, 2006, 500, 330-335.	0.8	26
208	A combined Î¼-mercury reference electrode/Au counter-electrode system for microelectrochemical applications. Journal of Solid State Electrochemistry, 2006, 10, 941-946.	1.2	48
209	Gold nanostructures by directional solid-state decomposition. Gold Bulletin, 2006, 39, 185-191.	3.2	24
210	Discrete electrochemical transients of aluminium alloys generated by slurry jet impingement. Journal Physics D: Applied Physics, 2006, 39, 3157-3164.	1.3	11
211	Copper Repassivation Characteristics in Carbonate-Based Solutions. Journal of the Electrochemical Society, 2006, 153, B337.	1.3	19
212	Preparation of Ultramicroelectrode Array of Gold Hemispheres on Nanostructured NiAlâ€“Re. Journal of the Electrochemical Society, 2006, 153, C33.	1.3	14
213	Fabrication of rhenium nanowires by selective etching of eutectic alloys. Electrochimica Acta, 2005, 51, 795-801.	2.6	33
214	Scanning droplet cell investigations on single grains of a FeAlCr light weight ferritic steel. Electrochimica Acta, 2005, 51, 978-983.	2.6	51
215	Electrochemical production of nanopore arrays in a nickel aluminium alloy. Electrochimica Acta, 2005, 50, 3033-3039.	2.6	38
216	Iron corrosion by novel anaerobic microorganisms. Nature, 2004, 427, 829-832.	13.7	643

#	Article	IF	Citations
217	Electrochemical characterizations of precipitates formed on zinc in alkaline sulphate solution with increasing pH values. Electrochemistry Communications, 2004, 6, 800-804.	2.3	39
218	Surface treatment of NiTi for medical applications. Minimally Invasive Therapy and Allied Technologies, 2004, 13, 240-247.	0.6	56
219	Trapping of transient processes in aluminium oxide thin films in a voltage pulse experiment. Electrochemistry Communications, 2002, 4, 1-4.	2.3	20
220	Breakdown of ultrathin anodic valve metal oxide films in metal-insulator-metal-contacts compared with metal-insulator-electrolyte contacts. Thin Solid Films, 2002, 414, 296-303.	0.8	57
221	Cathodic Decomposition and Anodic Dissolution and Changes in Surface Morphology of n-Type InP in HCl. Journal of the Electrochemical Society, 2001, 148, B400.	1.3	7
222	Formation and corrosion of InP/In contacts in hydrochloric acid. Electrochimica Acta, 2000, 45, 4673-4682.	2.6	7
223	An agar-based silver	silver chloride reference electrode for use in micro-electrochemistry. Electrochemistry Communications, 1999, 1, 180-183.	2.3	152
224	Localised investigation of coarse grain gold with the scanning droplet cell and by the Laue method. Electrochimica Acta, 1999, 44, 3769-3777.	2.6	34
225	Mixed oxide growth on combinatorial aluminiumâ€“gadolinium alloys â€” a thermodynamic and first-principles approach. Journal of Solid State Electrochemistry, 0, , 1.	1.2	0