

Achim Walter Hassel

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/7093127/publications.pdf>

Version: 2024-02-01

225
papers

5,590
citations

109137

35
h-index

110170

64
g-index

231
all docs

231
docs citations

231
times ranked

5603
citing authors

#	ARTICLE	IF	CITATIONS
1	Iron corrosion by novel anaerobic microorganisms. <i>Nature</i> , 2004, 427, 829-832.	13.7	643
2	Accelerated cathodic reaction in microbial corrosion of iron due to direct electron uptake by sulfate-reducing bacteria. <i>Corrosion Science</i> , 2013, 66, 88-96.	3.0	403
3	Marine sulfate-reducing bacteria cause serious corrosion of iron under electroconductive biogenic mineral crust. <i>Environmental Microbiology</i> , 2012, 14, 1772-1787.	1.8	324
4	An agar-based silver silver chloride reference electrode for use in micro-electrochemistry. <i>Electrochemistry Communications</i> , 1999, 1, 180-183.	2.3	152
5	Anodized Aluminum Oxide Thin Films for Room-Temperature-Processed, Flexible, Low-Voltage Organic Non-Volatile Memory Elements with Excellent Charge Retention. <i>Advanced Materials</i> , 2011, 23, 4892-4896.	11.1	102
6	Tuning the Magnetic Properties of Metal Oxide Nanocrystal Heterostructures by Cation Exchange. <i>Nano Letters</i> , 2013, 13, 586-593.	4.5	91
7	Biofunctionalized conductive polymers enable efficient CO ₂ electroreduction. <i>Science Advances</i> , 2017, 3, e1700686.	4.7	89
8	Review on the Versatility of Tungsten Oxide Coatings. <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2019, 216, 1900047.	0.8	84
9	Corrosion of press-hardened galvanized steel. <i>Corrosion Science</i> , 2012, 63, 12-19.	3.0	73
10	Rhodium-Coordinated Poly(arylene-ethynylene)- <i>alt</i> -Poly(arylene-vinylene) Copolymer Acting as Photocatalyst for Visible-Light-Powered NAD ⁺ /NADH Reduction. <i>Journal of the American Chemical Society</i> , 2014, 136, 12721-12729.	6.6	70
11	Nanostructured Columnlike Tungsten Oxide Film by Anodizing Al/W/Ti Layers on Si. <i>Chemistry of Materials</i> , 2008, 20, 6482-6493.	3.2	67
12	Characterization of thin anodic oxides of Ti-Nb alloys by electrochemical impedance spectroscopy. <i>Electrochimica Acta</i> , 2012, 82, 324-332.	2.6	63
13	Nanofibrous cobalt oxide for electrocatalysis of CO ₂ reduction to carbon monoxide and formate in an acetonitrile-water electrolyte solution. <i>Applied Catalysis B: Environmental</i> , 2018, 229, 163-170.	10.8	63
14	Electropolishing of NiTi shape memory alloys in methanolic H ₂ SO ₄ . <i>Electrochimica Acta</i> , 2006, 52, 1290-1295.	2.6	61
15	Ultra-thin anodic alumina capacitor films for plastic electronics. <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2012, 209, 813-818.	0.8	59
16	Breakdown of ultrathin anodic valve metal oxide films in metal-insulator-metal-contacts compared with metal-insulator-electrolyte contacts. <i>Thin Solid Films</i> , 2002, 414, 296-303.	0.8	57
17	A microelectrochemical scanning flow cell with downstream analytics. <i>Electrochimica Acta</i> , 2011, 56, 4315-4321.	2.6	57
18	Highly customisable scanning droplet cell microscopes using 3D-printing. <i>Journal of Electroanalytical Chemistry</i> , 2015, 740, 53-60.	1.9	57

#	ARTICLE	IF	CITATIONS
19	Surface treatment of NiTi for medical applications. Minimally Invasive Therapy and Allied Technologies, 2004, 13, 240-247.	0.6	56
20	Nanostructures from directionally solidified NiAl-W eutectic alloys. Electrochimica Acta, 2006, 52, 1799-1804.	2.6	52
21	Scanning droplet cell investigations on single grains of a FeAlCr light weight ferritic steel. Electrochimica Acta, 2005, 51, 978-983.	2.6	51
22	Electrocatalysis on gold nanostructures: Is the {110} facet more active than the {111} facet?. Electrochemistry Communications, 2009, 11, 2036-2039.	2.3	51
23	A combinatorial passivation study of Ta-Ti alloys. Corrosion Science, 2009, 51, 1519-1527.	3.0	50
24	A combined 1/4-mercury reference electrode/Au counter-electrode system for microelectrochemical applications. Journal of Solid State Electrochemistry, 2006, 10, 941-946.	1.2	48
25	Single tungsten nanowires as pH sensitive electrodes. Electrochemistry Communications, 2008, 10, 1125-1128.	2.3	46
26	Microelectrochemical lithography: A method for direct writing of surface oxides. Electrochimica Acta, 2007, 52, 7865-7869.	2.6	45
27	Nanomechanics of Single Crystalline Tungsten Nanowires. Journal of Nanomaterials, 2008, 2008, 1-9.	1.5	44
28	Loss of Olfactory Function - Early Indicator for Covid-19, Other Viral Infections and Neurodegenerative Disorders. Frontiers in Neurology, 2020, 11, 569333.	1.1	42
29	Electrochemical characterizations of precipitates formed on zinc in alkaline sulphate solution with increasing pH values. Electrochemistry Communications, 2004, 6, 800-804.	2.3	39
30	Arrays of Iso-Oriented Gold Nanobelts. Nano Letters, 2008, 8, 737-742.	4.5	39
31	Combinatorial electrochemistry on Al-Fe alloys. Science and Technology of Advanced Materials, 2008, 9, 035009.	2.8	39
32	High-throughput synthesis and characterization of anodic oxides on Nb-Ti alloys. Electrochimica Acta, 2009, 54, 5973-5980.	2.6	39
33	Electrochemical production of nanopore arrays in a nickel aluminium alloy. Electrochimica Acta, 2005, 50, 3033-3039.	2.6	38
34	Quantitative optical recognition of highly reproducible ultrathin oxide films in microelectrochemical anodization. Review of Scientific Instruments, 2009, 80, 046106.	0.6	38
35	High throughput electrochemical screening and dissolution monitoring of Mg-Zn material libraries. Electrochimica Acta, 2011, 56, 9627-9636.	2.6	38
36	Selective surface oxidation and nitridation of NiTi shape memory alloys by reduction annealing. Corrosion Science, 2009, 51, 635-641.	3.0	37

#	ARTICLE	IF	CITATIONS
37	Combinatorial investigation of Hf-Ta thin films and their anodic oxides. <i>Electrochimica Acta</i> , 2010, 55, 7884-7891.	2.6	37
38	High Voltage Pulse Anodization of a NiTi Shape Memory Alloy. <i>Journal of the Electrochemical Society</i> , 2007, 154, C294.	1.3	35
39	Corrosion of high-level radioactive waste iron-canisters in contact with bentonite. <i>Journal of Hazardous Materials</i> , 2015, 285, 464-473.	6.5	35
40	Enhanced Bio-Electrochemical Reduction of Carbon Dioxide by Using Neutral Red as a Redox Mediator. <i>ChemBioChem</i> , 2019, 20, 1196-1205.	1.3	35
41	Localised investigation of coarse grain gold with the scanning droplet cell and by the Laue method. <i>Electrochimica Acta</i> , 1999, 44, 3769-3777.	2.6	34
42	Effect of the Growth Conditions on the Spatial Features of Re Nanowires Produced by Directional Solidification. <i>Nano Letters</i> , 2006, 6, 794-799.	4.5	34
43	Fabrication of single crystalline gold nanobelts. <i>Journal of Materials Chemistry</i> , 2009, 19, 924-927.	6.7	34
44	Anderson-Localization and the Mott-Ioffe-Regel Limit in Glassy-Metallic PEDOT. <i>Advanced Electronic Materials</i> , 2017, 3, 1700050.	2.6	34
45	Fabrication of rhenium nanowires by selective etching of eutectic alloys. <i>Electrochimica Acta</i> , 2005, 51, 795-801.	2.6	33
46	Solar water splitting on porous-alumina-assisted TiO ₂ -doped WO _x nanorod photoanodes: Paradoxes and challenges. <i>Nano Energy</i> , 2017, 33, 72-87.	8.2	33
47	Combined chemical and EIS study of the reaction of zinc coatings under alkaline conditions. <i>Electrochimica Acta</i> , 2014, 131, 130-136.	2.6	31
48	Investigation of the effect of impingement angle on tribocorrosion using single impacts. <i>Electrochimica Acta</i> , 2006, 51, 6521-6526.	2.6	30
49	Selective matrix dissolution in an Al-Si eutectic. <i>Corrosion Science</i> , 2009, 51, 1490-1495.	3.0	30
50	Model Systems with Extreme Aspect Ratio, Tunable Geometry, and Surface Functionality for a Quantitative Investigation of the Lotus Effect. <i>Langmuir</i> , 2007, 23, 2091-2094.	1.6	29
51	Combinatorial corrosion study of the passivation of aluminium copper alloys. <i>Corrosion Science</i> , 2011, 53, 1-6.	3.0	29
52	Investigations on Bactericidal Properties of Molybdenum-Tungsten Oxides Combinatorial Thin Film Material Libraries. <i>ACS Combinatorial Science</i> , 2014, 16, 631-639.	3.8	29
53	Rotating disc electrode study of the electropolishing mechanism of NiTi in methanolic sulfuric acid. <i>Electrochimica Acta</i> , 2007, 53, 915-919.	2.6	28
54	Mechanistic approaches on the antibacterial activity of poly(acrylic acid) copolymers. <i>Colloids and Surfaces B: Biointerfaces</i> , 2015, 126, 98-105.	2.5	28

#	ARTICLE	IF	CITATIONS
55	Photoelectrochemical Scanning Droplet Cell Microscopy (PE-SDCM). <i>ChemPhysChem</i> , 2013, 14, 560-567.	1.0	27
56	Temperature stability of thin anodic oxide films in metal/insulator/metal structures: A comparison between tantalum and aluminium oxide. <i>Thin Solid Films</i> , 2006, 500, 330-335.	0.8	26
57	Large scale synthesis of single crystalline tungsten nanowires with extreme aspect ratios. <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2010, 207, 858-863.	0.8	26
58	Surface and Coating Analysis of Press-Hardened Hot-Dip Galvanized Steel Sheet. <i>Steel Research International</i> , 2012, 83, 1005-1011.	1.0	26
59	Localized Photoelectrochemistry on a Tungsten Oxide-Iron Oxide Thin Film Material Library. <i>ACS Combinatorial Science</i> , 2013, 15, 601-608.	3.8	26
60	Silver-, calcium-, and copper molybdate compounds: Preparation, antibacterial activity, and mechanisms. <i>Biointerphases</i> , 2017, 12, 05G607.	0.6	26
61	Single particle impact experiments for studying particle induced flow corrosion. <i>Corrosion Science</i> , 2007, 49, 231-239.	3.0	25
62	Scanning droplet cell microscopy on a wide range hafnium-niobium thin film combinatorial library. <i>Electrochimica Acta</i> , 2013, 110, 539-549.	2.6	25
63	Multi-Scanning Droplet Cell Microscopy (multi-SDCM) for truly parallel high throughput electrochemical experimentation. <i>Electrochimica Acta</i> , 2015, 179, 32-37.	2.6	25
64	Gold nanostructures by directional solid-state decomposition. <i>Gold Bulletin</i> , 2006, 39, 185-191.	3.2	24
65	Heterogeneous Ziegler-Natta catalysts with various sizes of MgCl ₂ crystallites: synthesis and characterization. <i>Iranian Polymer Journal (English Edition)</i> , 2016, 25, 321-337.	1.3	24
66	Metal-Free Hydrogen-Bonded Polymers Mimic Noble Metal Electrocatalysts. <i>Advanced Materials</i> , 2020, 32, e1902177.	11.1	24
67	Lateral resolution in scanning Kelvin probe microscopy. <i>Corrosion Science</i> , 2016, 104, 1-8.	3.0	23
68	Electrochemical texturing of Al-doped ZnO thin films for photovoltaic applications. <i>Journal of Solid State Electrochemistry</i> , 2012, 16, 283-290.	1.2	22
69	Electrochemical characterization of sub-micro-gram amounts of organic semiconductors using scanning droplet cell microscopy. <i>Journal of Electroanalytical Chemistry</i> , 2013, 691, 77-82.	1.9	22
70	Non-enzymatic glucose sensing on copper-nickel thin film alloy. <i>Applied Surface Science</i> , 2017, 417, 48-53.	3.1	22
71	Nanostructuring of Ni-Al-Mo eutectic alloys by selective phase dissolution. <i>Electrochimica Acta</i> , 2009, 54, 6015-6021.	2.6	21
72	Properties of anodic oxides grown on a hafnium-tantalum-titanium thin film library. <i>Science and Technology of Advanced Materials</i> , 2014, 15, 015006.	2.8	21

#	ARTICLE	IF	CITATIONS
73	EIS study of blister formation on coated galvanised steel in oxidising alkaline solutions. <i>Corrosion Science</i> , 2015, 96, 6-13.	3.0	21
74	Growth inhibition of <i>Escherichia coli</i> by zinc molybdate with different crystalline structures. <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2016, 213, 1471-1478.	0.8	21
75	Trapping of transient processes in aluminium oxide thin films in a voltage pulse experiment. <i>Electrochemistry Communications</i> , 2002, 4, 1-4.	2.3	20
76	Copper nanowires and silver micropit arrays from the electrochemical treatment of a directionally solidified silver-copper eutectic. <i>Electrochimica Acta</i> , 2007, 53, 324-329.	2.6	20
77	High-throughput study of the anodic oxidation of Hf-Ti thin films. <i>Electrochimica Acta</i> , 2009, 54, 5171-5178.	2.6	20
78	Preparation and specific properties of single crystalline metallic nanowires. <i>Physica Status Solidi (B): Basic Research</i> , 2010, 247, 2380-2392.	0.7	20
79	Electro-dissolution of 30Nb-Ti alloys in methanolic sulfuric acid—Optimal conditions for electropolishing. <i>Electrochimica Acta</i> , 2011, 56, 6678-6682.	2.6	20
80	Copper Repassivation Characteristics in Carbonate-Based Solutions. <i>Journal of the Electrochemical Society</i> , 2006, 153, B337.	1.3	19
81	Grain boundary electrochemistry of β -type Nb-Ti alloy using a scanning droplet cell. <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2011, 208, 1246-1251.	0.8	19
82	Vapour phase co-deposition of Al-Cu thin film alloys. <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2013, 210, 1006-1012.	0.8	18
83	Self-assembled cellulose particles for agrochemical applications. <i>European Polymer Journal</i> , 2017, 93, 706-716.	2.6	18
84	Spatial features control of self-organised tungsten nanowire arrays. <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2009, 206, 455-461.	0.8	17
85	Photoelectrochemical water splitting in a tungsten oxide - nickel oxide thin film material library. <i>Electrochimica Acta</i> , 2014, 140, 275-281.	2.6	17
86	Viscose-based porous carbon fibers: improving yield and porosity through optimization of the carbonization process by design of experiment. <i>Journal of Porous Materials</i> , 2021, 28, 727-739.	1.3	17
87	Electrodeposition of gold on tungsten nanowires present in NiAl-W eutectics. <i>Journal of Electroanalytical Chemistry</i> , 2008, 618, 11-16.	1.9	16
88	Selective de-alloying of NiTi by oxochloridation. <i>Corrosion Science</i> , 2008, 50, 1368-1375.	3.0	16
89	Theoretical simulation and preparation of binary and ternary combinatorial libraries by thermal PVD. <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2010, 207, 801-806.	0.8	16
90	On the pH-sensing properties of differently prepared tungsten oxide films. <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2014, 211, 1340-1345.	0.8	16

#	ARTICLE	IF	CITATIONS
91	Potentiodynamic hydrogen permeation on Palladium-Kelvin probe compared to 3D printed microelectrochemical cell. <i>Electrochemistry Communications</i> , 2015, 60, 208-211.	2.3	16
92	Maximum electrocatalytic oxidation performance for formaldehyde in a combinatorial copper-palladium thin film library. <i>Applied Catalysis A: General</i> , 2016, 525, 110-118.	2.2	16
93	Challenges in hydrogen quantification using Kelvin probe technique at different levels of relative humidity. <i>Journal of Solid State Electrochemistry</i> , 2017, 21, 1785-1796.	1.2	16
94	Direct writing of anodic oxides for plastic electronics. <i>Npj Flexible Electronics</i> , 2018, 2, .	5.1	16
95	Potassium sorbate solutions as copper chemical mechanical planarization (CMP) based slurries. <i>Electrochimica Acta</i> , 2007, 52, 5150-5158.	2.6	15
96	Electrodeposition of cobalt-nickel material libraries. <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2015, 212, 1216-1222.	0.8	15
97	Direct observation of metal dissolution during anodization of niobium. <i>Electrochemistry Communications</i> , 2017, 74, 5-8.	2.3	15
98	Preparation of Ultramicroelectrode Array of Gold Hemispheres on Nanostructured NiAl-Re. <i>Journal of the Electrochemical Society</i> , 2006, 153, C33.	1.3	14
99	Biaxially textured copper-iron alloys for coated conductors. <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2012, 209, 875-879.	0.8	14
100	Anodic oxide formation on aluminium-terbium alloys. <i>Journal of Solid State Electrochemistry</i> , 2016, 20, 1673-1681.	1.2	14
101	Supercapacitor Electrodes from Viscose-Based Activated Carbon Fibers: Significant Yield and Performance Improvement Using Diammonium Hydrogen Phosphate as Impregnating Agent. <i>Journal of Carbon Research</i> , 2020, 6, 17.	1.4	14
102	Influence of electrolyte selection on performance of tantalum anodic oxide memristors. <i>Applied Surface Science</i> , 2021, 565, 150608.	3.1	14
103	Reactivity of Gold Nanobelts with Unique {110} Facets. <i>ChemPhysChem</i> , 2010, 11, 2838-2843.	1.0	13
104	Surface chemistry and topographical changes of an electropolished NiTi shape memory alloy. <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2010, 207, 807-811.	0.8	13
105	Characterization of local electrochemical doping of high performance conjugated polymer for photovoltaics using scanning droplet cell microscopy. <i>Electrochimica Acta</i> , 2013, 113, 834-839.	2.6	13
106	Aluminium-copper-nickel thin film compositional spread: Nickel influence on fundamental alloy properties and chemical stability of copper. <i>Thin Solid Films</i> , 2015, 580, 36-44.	0.8	13
107	Electrolyte-Dependent Modification of Resistive Switching in Anodic Hafnia. <i>Nanomaterials</i> , 2021, 11, 666.	1.9	13
108	Phosphate incorporation in anodic hafnium oxide memristors. <i>Applied Surface Science</i> , 2021, 548, 149093.	3.1	13

#	ARTICLE	IF	CITATIONS
109	Reactivity imaging of a passive ferritic FeAlCr steel. <i>Journal of Applied Electrochemistry</i> , 2008, 38, 1339-1345.	1.5	12
110	Passivity of a Nanostructured Directionally Solidified NiAl ¹⁰⁰ Re Alloy as Substrate for Electrodeposition of Gold. <i>Journal of the Electrochemical Society</i> , 2008, 155, K31.	1.3	12
111	Surface patterned dielectrics by direct writing of anodic oxides using scanning droplet cell microscopy. <i>Electrochimica Acta</i> , 2013, 113, 755-761.	2.6	12
112	Copper ¹⁰⁰ nickel oxide thin film library reactively co-sputtered from a metallic sectioned cathode. <i>Journal of Materials Research</i> , 2014, 29, 148-157.	1.2	12
113	Photoelectrochemical and Electrochemical Characterization of Sub-Micro-Gram Amounts of Organic Semiconductors Using Scanning Droplet Cell Microscopy. <i>Journal of Physical Chemistry C</i> , 2014, 118, 16919-16926.	1.5	12
114	Electrochemistry on binary valve metal combinatorial libraries: niobium-tantalum thin films. <i>Electrochimica Acta</i> , 2014, 140, 366-375.	2.6	12
115	Cobalt ¹⁰⁰ nickel material libraries obtained from electrodeposition using citrate or glycine as additives. <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2016, 213, 1417-1426.	0.8	12
116	In Situ Monitoring of Ionic Metal Dissolution During Anodization of Titanium and Quantification of Parallel Electronic Oxygen Evolution. <i>ChemElectroChem</i> , 2017, 4, 1846-1848.	1.7	12
117	Localized-Plasmon Voltammetry to Detect pH Dependent Gold Oxidation. <i>Journal of Physical Chemistry C</i> , 2018, 122, 4565-4571.	1.5	12
118	Discrete electrochemical transients of aluminium alloys generated by slurry jet impingement. <i>Journal Physics D: Applied Physics</i> , 2006, 39, 3157-3164.	1.3	11
119	Photoelectrochemical scanning droplet cell microscopy for localized photovoltaic investigations on organic semiconductors. <i>Physical Chemistry Chemical Physics</i> , 2014, 16, 3739.	1.3	11
120	Anodization Behavior of Glassy Metallic Hafnium Thin Films. <i>Journal of the Electrochemical Society</i> , 2015, 162, E30-E36.	1.3	11
121	Modification of Trap Distributions in Anodic Aluminum Tunnel Barriers. <i>Journal of the Electrochemical Society</i> , 2007, 154, C558.	1.3	10
122	A universal alternating immersion simulator for accelerated cyclic corrosion tests. <i>Materials and Corrosion - Werkstoffe Und Korrosion</i> , 2008, 59, 175-180.	0.8	10
123	Screening of catalytic effects on copper ¹⁰⁰ zinc thin film combinatorial libraries for formaldehyde oxidation. <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2015, 212, 1184-1190.	0.8	10
124	Electrocatalysis on copper ¹⁰⁰ palladium alloys for amperometric formaldehyde sensing. <i>RSC Advances</i> , 2017, 7, 6031-6039.	1.7	10
125	<i>In situ</i> monitoring of the electrochemical dissolution of tungsten. <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2017, 214, 1600803.	0.8	10
126	Evolution and interaction of corrosive species during the initial NaCl particle induced corrosion on zinc coated skin-passed steel. <i>Corrosion Science</i> , 2017, 127, 222-229.	3.0	10

#	ARTICLE	IF	CITATIONS
127	Influence of atmospheric oxygen on hydrogen detection on Pd using Kelvin probe technique. <i>Journal of Solid State Electrochemistry</i> , 2018, 22, 495-504.	1.2	10
128	Impact of Femtosecond Laser Treatment Accompanied with Anodization of Titanium Alloy on Fibroblast Cell Growth. <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2020, 217, 1900838.	0.8	10
129	Structural characterisation of gold nanowire arrays. <i>Journal of Crystal Growth</i> , 2008, 311, 194-199.	0.7	9
130	In situ identification and quantification in a flow cell with AAS downstream analytics. <i>Journal of Solid State Electrochemistry</i> , 2012, 16, 3473-3478.	1.2	9
131	Effect of Different Cobalt Concentrations on Tungsten Trioxide Photoelectrodes for Use in Solar Water Oxidation. <i>Journal of the Electrochemical Society</i> , 2015, 162, H187-H193.	1.3	9
132	Localised electrochemical impedance spectroscopy using a scanning droplet cell microscope. <i>Journal of Electroanalytical Chemistry</i> , 2015, 737, 93-99.	1.9	9
133	Gold Nanoparticle@Polyhedral Oligomeric Silsesquioxane Hybrid Scaffolds in Microfluidic Format – Highly Efficient and Green Catalytic Platforms. <i>European Journal of Inorganic Chemistry</i> , 2016, 2016, 951-955.	1.0	9
134	Electrocatalytic oxidation of glucose by screening combinatorial copper–nickel alloys. <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2016, 213, 1434-1440.	0.8	9
135	Compositionally Dependent Nonlinear Optical Bandgap Behavior of Mixed Anodic Oxides in Niobium–Titanium System. <i>ACS Combinatorial Science</i> , 2017, 19, 121-129.	3.8	9
136	{110}–Terminated Square–Shaped Gold Nanoplates and Their Electrochemical Surface Reactivity. <i>ChemElectroChem</i> , 2017, 4, 557-564.	1.7	9
137	Suitability of Various Materials for Probes in Scanning Kelvin Probe Measurements. <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2018, 215, 1700952.	0.8	9
138	Testosterone- and vitamin-grafted cellulose ethers for sustained release of camptothecin. <i>Carbohydrate Polymers</i> , 2019, 206, 641-652.	5.1	9
139	Femtosecond Laser-Processing of Pre-Anodized Ti-Based Bone Implants for Cell-Repellent Functionalization. <i>Nanomaterials</i> , 2021, 11, 1342.	1.9	9
140	Mixed anodic oxides for forming-free memristors revealed by combinatorial screening of hafnium-tantalum system. <i>Applied Materials Today</i> , 2022, 26, 101270.	2.3	9
141	Enhancement of the Electrocatalytic Activity of Gold Nanoparticles Towards Methanol Oxidation. <i>Electrocatalysis</i> , 2011, 2, 106-113.	1.5	8
142	Raman imaging for surface characterisation of annealed electrical steel surfaces. <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2014, 211, 1429-1438.	0.8	8
143	Morphology and size effects on the reduction of silver oxide by hydrogen. <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2015, 212, 1202-1209.	0.8	8
144	Combinatorial Electrodeposition of Cobalt-Copper Material Libraries. <i>Journal of the Electrochemical Society</i> , 2016, 163, D3069-D3075.	1.3	8

#	ARTICLE	IF	CITATIONS
145	Hydrogel-based flexible micro-reference electrodes for use in alkaline and neutral pH solutions. <i>Journal of Solid State Electrochemistry</i> , 2016, 20, 2749-2757.	1.2	8
146	Optimum Copper-Palladium Catalyst from a Combinatorial Library for Sensitive Non-Enzymatic Glucose Sensors. <i>Electrocatalysis</i> , 2018, 9, 359-369.	1.5	8
147	Formation of nano-scale composite anodic films on aluminium-holmium alloys. <i>Electrochimica Acta</i> , 2019, 297, 888-904.	2.6	8
148	Gallium-Enhanced Aluminum and Copper Electromigration Performance for Flexible Electronics. <i>ACS Applied Materials & Interfaces</i> , 2021, 13, 6960-6974.	4.0	8
149	Repellent rings at titanium cylinders against overgrowth by fibroblasts. <i>Advanced Optical Technologies</i> , 2020, 9, 113-120.	0.9	8
150	Impact of Electrolyte Incorporation in Anodized Niobium on Its Resistive Switching. <i>Nanomaterials</i> , 2022, 12, 813.	1.9	8
151	Formation and corrosion of InP/In contacts in hydrochloric acid. <i>Electrochimica Acta</i> , 2000, 45, 4673-4682.	2.6	7
152	Cathodic Decomposition and Anodic Dissolution and Changes in Surface Morphology of n-Type InP in HCl. <i>Journal of the Electrochemical Society</i> , 2001, 148, B400.	1.3	7
153	Single Crystalline Molybdenum Nanowires, Nanowire Arrays and Nanopore Arrays in Nickel-Aluminium. <i>Journal of Nanoscience and Nanotechnology</i> , 2009, 9, 3411-3417.	0.9	7
154	Selective dissolution in AlFeNb alloys. <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2012, 209, 854-858.	0.8	7
155	Epitaxial growth of zinc on ferritic steel under high current density electroplating conditions. <i>Electrochimica Acta</i> , 2013, 113, 797-802.	2.6	7
156	In situ quantification of electrochemical dissolution of hafnium-tantalum alloys in acidic media. <i>Electrochemistry Communications</i> , 2015, 59, 5-8.	2.3	7
157	Rolling Direction Dependent Diffusion Coefficients of Hydrogen in Ferritic Steel by SDCM Charging and SKP Probing. <i>ISIJ International</i> , 2016, 56, 487-491.	0.6	7
158	In-Situ Monitoring of Metal Dissolution during Anodization of Tantalum. <i>Journal of the Electrochemical Society</i> , 2017, 164, C598-C601.	1.3	7
159	On the Electropolishing Mechanism of Nickel Titanium in Methanolic Sulfuric acid ~ An Electrochemical Impedance Study. <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2018, 215, 1800011.	0.8	7
160	Composite Memristors by Nanoscale Modification of Hf/Ta Anodic Oxides. <i>Journal of Physical Chemistry Letters</i> , 2021, 12, 8917-8923.	2.1	7
161	The impedance~titrator : A novel setup to perform automated pH~dependent electrochemical experiments. <i>Materials and Corrosion - Werkstoffe Und Korrosion</i> , 2009, 60, 855-858.	0.8	6
162	Thermal stability of {110} facet terminated gold nanobelts. <i>Applied Surface Science</i> , 2012, 258, 6224-6231.	3.1	6

#	ARTICLE	IF	CITATIONS
163	Synthesis and characterization of Al _M Z _n thin film alloys co-deposited from vapour phase. <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2013, 210, 1000-1005.	0.8	6
164	Palladium thin films for hydrogen sensing in aqueous electrolytes. <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2015, 212, 1273-1280.	0.8	6
165	Interfacial Oxide Formation during Anodization of Hafnium/Aluminium Superimposed Layers. <i>Electrochimica Acta</i> , 2015, 178, 344-352.	2.6	6
166	Biomass-Derived Carbons as Versatile Materials for Energy-Related Applications: Capacitive Properties vs. Oxygen Reduction Reaction Catalysis. <i>Journal of Carbon Research</i> , 2021, 7, 55.	1.4	6
167	Gold Nanoparticles Partially Embedded in Ultrathin Anodic Alumina Films. <i>Journal of Physical Chemistry C</i> , 2009, 113, 3105-3109.	1.5	5
168	Anodic oxides on a beta type Nb-Ti alloy and their characterization by electrochemical impedance spectroscopy. <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2010, 207, 812-816.	0.8	5
169	An in situ tensile tester for studying electrochemical repassivation behavior: Fabrication and challenges. <i>Review of Scientific Instruments</i> , 2010, 81, 033902.	0.6	5
170	A novel concept for the preparation of alloy nanowires. <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2011, 208, 1259-1264.	0.8	5
171	An electrochemical calibration unit for hydrogen analysers. <i>Talanta</i> , 2014, 125, 257-264.	2.9	5
172	Spectroscopic ellipsometry for compositionally induced bandgap tuning of combinatorial niobium-tantalum anodic oxides. <i>RSC Advances</i> , 2016, 6, 79934-79942.	1.7	5
173	Anodization behaviour and basic property mapping in the aluminium-erbium system. <i>Journal of Solid State Electrochemistry</i> , 2018, 22, 869-876.	1.2	5
174	Strong Volta potential change in doped zinc oxide as a photoresponse to UV irradiation. <i>RSC Advances</i> , 2019, 9, 35579-35587.	1.7	5
175	Overcoming intra-molecular repulsions in PEDTT by sulphate counter-ion. <i>Science and Technology of Advanced Materials</i> , 2021, 22, 985-997.	2.8	5
176	Comparative Behavior of Viscose-Based Supercapacitor Electrodes Activated by KOH, H ₂ O, and CO ₂ . <i>Nanomaterials</i> , 2022, 12, 677.	1.9	5
177	A combinatorial properties study of thin film Al _x Fe alloys. <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2013, 210, 1025-1029.	0.8	4
178	Copper-zinc thin films reactively co-sputtered from a two-component sectioned cathode. <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2013, 210, 994-999.	0.8	4
179	Coating substrate relationship after initial electrolyte contact in the electrodeposition of zinc on steel. <i>Surface and Coatings Technology</i> , 2014, 253, 8-13.	2.2	4
180	3D printed double flow cell for local through-thickness anodisation in aluminium. <i>Electrochemistry Communications</i> , 2016, 69, 84-88.	2.3	4

#	ARTICLE	IF	CITATIONS
181	Compositional dependent high temperature crystalline phase formation on manganese-silicon thin film combinatorial libraries in controlled oxidizing atmospheres. <i>Journal of Alloys and Compounds</i> , 2016, 664, 351-362.	2.8	4
182	Copper-nickel combinatorial library screening for electrocatalytic formaldehyde oxidation. <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2017, 214, 1600552.	0.8	4
183	Downstream analytics quantification of ion release during high-voltage anodisation of niobium. <i>Journal of Solid State Electrochemistry</i> , 2018, 22, 2457-2464.	1.2	4
184	Basic properties mapping of anodic oxides in the hafnium-niobium-tantalum ternary system. <i>Science and Technology of Advanced Materials</i> , 2018, 19, 554-568.	2.8	4
185	Structural, Electrical, and Optical Effects of Metal Doping on ZnO Thin Films. <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2019, 216, 1800942.	0.8	4
186	Samarium influence on current induced atomic displacement in Aluminium and Copper combinatorial thin film alloys. <i>Thin Solid Films</i> , 2020, 702, 137949.	0.8	4
187	Electrocatalytic glucose oxidation on a combinatorially electrodeposited cobalt-copper-nickel thin film material library. <i>Electrochimica Acta</i> , 2020, 341, 135744.	2.6	4
188	Electrochemical Impedance Spectroscopy on UV-Aged Polyester Coatings: Possibilities and Limits of Modeling Water Diffusion. <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2020, 217, 1901038.	0.8	4
189	Reprint of "Potassium sorbate solutions as copper chemical mechanical planarization (CMP) based slurries". <i>Electrochimica Acta</i> , 2007, 53, 1021-1029.	2.6	3
190	Electropolishing of a Nickel-Titanium-Copper Shape Memory Alloy in Methanolic Sulfuric Acid. <i>Electrochemical and Solid-State Letters</i> , 2009, 12, C1.	2.2	3
191	Water content and high temperature influence on the oxidation behavior of manganese and silicon thin films on iron matrix. <i>Surface and Coatings Technology</i> , 2015, 265, 145-153.	2.2	3
192	In Situ Mass Spectrometric Reaction Monitoring of Atmospheric Corrosion Processes. <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2018, 215, 1700860.	0.8	3
193	Insight into Antimicrobial Properties via Self-Acidification of Compounds from the Molybdenum-Tungsten-Oxygen System. <i>ACS Applied Bio Materials</i> , 2019, 2, 1477-1489.	2.3	3
194	Combinatorial surface nanostructuring in aluminium-niobium system. <i>Applied Surface Science</i> , 2020, 499, 143943.	3.1	3
195	Combinatorial screening of dysprosium-magnesium-zinc alloys for bioresorptive implants. <i>Electrochimica Acta</i> , 2020, 363, 137106.	2.6	3
196	Hydrogen Insertion into Complex-Phase High-Strength Steel during Atmospheric Corrosion at Low Relative Humidity. <i>Metals</i> , 2022, 12, 624.	1.0	3
197	State of the Art of Chemosensors in a Biomedical Context. <i>Chemosensors</i> , 2022, 10, 199.	1.8	3
198	Anodic repassivation of low energy Au implanted ultra-thin anodic Al ₂ O ₃ . <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2011, 208, 1270-1274.	0.8	2

#	ARTICLE	IF	CITATIONS
199	Effects of thickness and field strength of anodic oxide film on aluminum on its compressive rupture. Corrosion Reviews, 2012, 30, .	1.0	2
200	Microvials with tungsten nanowire arrays. Journal of Solid State Electrochemistry, 2014, 18, 2955-2961.	1.2	2
201	Analysis of main failure pattern using discrete Fourier transform on metal-epoxy-based adherent-aminates. Physica Status Solidi (A) Applications and Materials Science, 2015, 212, 1242-1248.	0.8	2
202	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
203	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
204	Customized 2D Structures for High Throughput Electromigration Measurements. Physica Status Solidi (A) Applications and Materials Science, 2019, 216, 1800869.	0.8	2
205	Electrochemical Screening of Tungsten Trioxide-Nickel Oxide Thin Film Combinatorial Library at Low Nickel Concentrations. ACS Combinatorial Science, 2020, 22, 61-69.	3.8	2
206	Pervasive electrochemistry. Journal of Solid State Electrochemistry, 2020, 24, 2083-2085.	1.2	2
207	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
208	Incremental lines in human acellular tooth cementum - New insights by SEM analysis. Annals of Anatomy, 2022, 243, 151933.	1.0	2
209	Memristive Characteristics of Composite Hafnium/Tantalum Anodic Oxides. Physica Status Solidi (A) Applications and Materials Science, 2022, 219, .	0.8	2
210	Localized photovoltaic investigations on organic semiconductors and bulk heterojunction solar cells. Science and Technology of Advanced Materials, 2014, 15, 054201.	2.8	1
211	Annealing Conditions™ Influence on the Oxidation of Silicon-Aluminium-Alloys in Combinatorial Thin-Film Libraries. Physica Status Solidi (A) Applications and Materials Science, 2019, 216, 1801009.	0.8	1
212	A Thermodynamic Approach for Selection of Anodizing Electrolytes in Aluminium-Holmium System. ChemElectroChem, 2020, 7, 1342-1357.	1.7	1
213	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
214	Influence of Fuel and Shroud Gas on the Corrosion Resistance of High-Velocity Oxygen-Fuel Nickel Coatings. Physica Status Solidi (A) Applications and Materials Science, 2021, 218, 2000024.	0.8	1
215	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
216	Back Cover (Phys. Status Solidi B 10/2010). Physica Status Solidi (B): Basic Research, 2010, 247, .	0.7	0

#	ARTICLE	IF	CITATIONS
217	Back Cover: Ultra-thin anodic alumina capacitor films for plastic electronics (Phys. Status Solidi A) Tj ETQq1 1 0.784314 rgBJ /Overl	0.8	0
218	Downsizing of single crystalline high aspect ratio tungsten nanowires. Physica Status Solidi (A) Applications and Materials Science, 2015, 212, 1223-1228.	0.8	0
219	Film dissolution kinetics of aluminium at precisely adjusted pH-values. Physica Status Solidi (A) Applications and Materials Science, 2016, 213, 1410-1416.	0.8	0
220	Corrosion and Structural Properties of Erbium-Zinc Thin Films at Low to Medium Erbium Concentrations. Physica Status Solidi (A) Applications and Materials Science, 2020, 217, 1900841.	0.8	0
221	Mixed oxide growth on combinatorial aluminium-gadolinium alloys a thermodynamic and first-principles approach. Journal of Solid State Electrochemistry, 0, , 1.	1.2	0
222	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
223	Development of dispersion layers for dental drills with reduced nickel release. Physics in Medicine, 2021, , 100045.	0.6	0
224	Binary Aluminium-Lanthanoid Material Libraries Studied in a Combinatorial Approach. ECS Meeting Abstracts, 2020, MA2020-02, 1250-1250.	0.0	0
225	(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