

Associa€Profâ€Dr Andrei Ionut Mardare

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/9162200/publications.pdf>

Version: 2024-02-01

88
papers

1,073
citations

471509

17
h-index

501196

28
g-index

90
all docs

90
docs citations

90
times ranked

1007
citing authors

#	ARTICLE	IF	CITATIONS
1	Ultra-thin anodic alumina capacitor films for plastic electronics. <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2012, 209, 813-818.	1.8	59
2	Highly customisable scanning droplet cell microscopes using 3D-printing. <i>Journal of Electroanalytical Chemistry</i> , 2015, 740, 53-60.	3.8	57
3	Deposition of bioactive glass-ceramic thin-films by RF magnetron sputtering. <i>Journal of the European Ceramic Society</i> , 2003, 23, 1027-1030.	5.7	53
4	A combinatorial passivation study of Ta-Ti alloys. <i>Corrosion Science</i> , 2009, 51, 1519-1527.	6.6	50
5	Microelectrochemical lithography: A method for direct writing of surface oxides. <i>Electrochimica Acta</i> , 2007, 52, 7865-7869.	5.2	45
6	Combinatorial electrochemistry on Al-Fe alloys. <i>Science and Technology of Advanced Materials</i> , 2008, 9, 035009.	6.1	39
7	High-throughput synthesis and characterization of anodic oxides on Nb-Ti alloys. <i>Electrochimica Acta</i> , 2009, 54, 5973-5980.	5.2	39
8	Quantitative optical recognition of highly reproducible ultrathin oxide films in microelectrochemical anodization. <i>Review of Scientific Instruments</i> , 2009, 80, 046106.	1.3	38
9	Combinatorial investigation of Hf-Ta thin films and their anodic oxides. <i>Electrochimica Acta</i> , 2010, 55, 7884-7891.	5.2	37
10	Photoelectrochemical Scanning Droplet Cell Microscopy (PE-SDCM). <i>ChemPhysChem</i> , 2013, 14, 560-567.	2.1	27
11	Localized Photoelectrochemistry on a Tungsten-Iron Oxide Thin Film Material Library. <i>ACS Combinatorial Science</i> , 2013, 15, 601-608.	3.8	26
12	Scanning droplet cell microscopy on a wide range hafnium-niobium thin film combinatorial library. <i>Electrochimica Acta</i> , 2013, 110, 539-549.	5.2	25
13	Multi-Scanning Droplet Cell Microscopy (multi-SDCM) for truly parallel high throughput electrochemical experimentation. <i>Electrochimica Acta</i> , 2015, 179, 32-37.	5.2	25
14	Effects of adhesion layer (Ti or Zr) and Pt deposition temperature on the properties of PZT thin films deposited by RF magnetron sputtering. <i>Applied Surface Science</i> , 2005, 243, 113-124.	6.1	23
15	Non-enzymatic glucose sensing on copper-nickel thin film alloy. <i>Applied Surface Science</i> , 2017, 417, 48-53.	6.1	22
16	Properties of anodic oxides grown on a hafnium-tantalum-titanium thin film library. <i>Science and Technology of Advanced Materials</i> , 2014, 15, 015006.	6.1	21
17	High-throughput study of the anodic oxidation of Hf-Ti thin films. <i>Electrochimica Acta</i> , 2009, 54, 5171-5178.	5.2	20
18	Vapour phase co-deposition of Al-Cu thin film alloys. <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2013, 210, 1006-1012.	1.8	18

#	ARTICLE	IF	CITATIONS
19	Photoelectrochemical water splitting in a tungsten oxide - nickel oxide thin film material library. <i>Electrochimica Acta</i> , 2014, 140, 275-281.	5.2	17
20	Direct writing of anodic oxides for plastic electronics. <i>Npj Flexible Electronics</i> , 2018, 2, .	10.7	16
21	Direct observation of metal dissolution during anodization of niobium. <i>Electrochemistry Communications</i> , 2017, 74, 5-8.	4.7	15
22	Anodic oxide formation on aluminium-terbium alloys. <i>Journal of Solid State Electrochemistry</i> , 2016, 20, 1673-1681.	2.5	14
23	Influence of electrolyte selection on performance of tantalum anodic oxide memristors. <i>Applied Surface Science</i> , 2021, 565, 150608.	6.1	14
24	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.	5.2	13
25	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.	1.8	13
26	Electrolyte-Dependent Modification of Resistive Switching in Anodic Hafnia. <i>Nanomaterials</i> , 2021, 11, 666.	4.1	13
27	Phosphate incorporation in anodic hafnium oxide memristors. <i>Applied Surface Science</i> , 2021, 548, 149093.	6.1	13
28	Surface patterned dielectrics by direct writing of anodic oxides using scanning droplet cell microscopy. <i>Electrochimica Acta</i> , 2013, 113, 755-761.	5.2	12
29	Copper-nickel oxide thin film library reactively co-sputtered from a metallic sectioned cathode. <i>Journal of Materials Research</i> , 2014, 29, 148-157.	2.6	12
30	Electrochemistry on binary valve metal combinatorial libraries: niobium-tantalum thin films. <i>Electrochimica Acta</i> , 2014, 140, 366-375.	5.2	12
31	Localized-Plasmon Voltammetry to Detect pH Dependent Gold Oxidation. <i>Journal of Physical Chemistry C</i> , 2018, 122, 4565-4571.	3.1	12
32	Photoelectrochemical scanning droplet cell microscopy for localized photovoltaic investigations on organic semiconductors. <i>Physical Chemistry Chemical Physics</i> , 2014, 16, 3739.	2.8	11
33	Anodization Behavior of Glassy Metallic Hafnium Thin Films. <i>Journal of the Electrochemical Society</i> , 2015, 162, E30-E36.	2.9	11
34	Screening of catalytic effects on copper-zinc thin film combinatorial libraries for formaldehyde oxidation. <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2015, 212, 1184-1190.	1.8	10
35	Electrocatalysis on copper-palladium alloys for amperometric formaldehyde sensing. <i>RSC Advances</i> , 2017, 7, 6031-6039.	3.6	10
36	Pulsed laser deposition of SiO ₂ - P ₂ O ₅ - CaO - MgO glass coatings on titanium substrates. <i>Materials Research</i> , 2004, 7, 431-436.	1.3	10

#	ARTICLE	IF	CITATIONS
37	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.	2.9	9
38	Localised electrochemical impedance spectroscopy using a scanning droplet cell microscope. <i>Journal of Electroanalytical Chemistry</i> , 2015, 737, 93-99.	3.8	9
39	Electrocatalytic oxidation of glucose by screening combinatorial copper-nickel alloys. <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2016, 213, 1434-1440.	1.8	9
40	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
41	Mixed anodic oxides for forming-free memristors revealed by combinatorial screening of hafnium-tantalum system. <i>Applied Materials Today</i> , 2022, 26, 101270.	4.3	9
42	Optimized Design Principles for Silicon-Coated Nanostructured Electrode Materials and their Application in High-Capacity Lithium-Ion Batteries. <i>Energy Technology</i> , 2017, 5, 2253-2264.	3.8	8
43	Formation of nano-scale composite anodic films on aluminium-holmium alloys. <i>Electrochimica Acta</i> , 2019, 297, 888-904.	5.2	8
44	Gallium-Enhanced Aluminum and Copper Electromigration Performance for Flexible Electronics. <i>ACS Applied Materials & Interfaces</i> , 2021, 13, 6960-6974.	8.0	8
45	Impact of Electrolyte Incorporation in Anodized Niobium on Its Resistive Switching. <i>Nanomaterials</i> , 2022, 12, 813.	4.1	8
46	Simple Method for Crystallizing Ceramic Thin Films Using Platinum Bottom Electrodes as Resistive Heating Elements. <i>Japanese Journal of Applied Physics</i> , 2003, 42, L863-L865.	1.5	7
47	Bottom electrode crystallization of PZT thin films for ferroelectric capacitors. <i>Journal of the European Ceramic Society</i> , 2005, 25, 735-741.	5.7	7
48	In situ quantification of electrochemical dissolution of hafnium-tantalum alloys in acidic media. <i>Electrochemistry Communications</i> , 2015, 59, 5-8.	4.7	7
49	In-Situ Monitoring of Metal Dissolution during Anodization of Tantalum. <i>Journal of the Electrochemical Society</i> , 2017, 164, C598-C601.	2.9	7
50	Composite Memristors by Nanoscale Modification of Hf/Ta Anodic Oxides. <i>Journal of Physical Chemistry Letters</i> , 2021, 12, 8917-8923.	4.6	7
51	Bottom Electrode Crystallization of PZT Thin Films Deposited by Laser Ablation. <i>Japanese Journal of Applied Physics</i> , 2004, 43, 1527-1531.	1.5	6
52	Palladium thin films for hydrogen sensing in aqueous electrolytes. <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2015, 212, 1273-1280.	1.8	6
53	Interfacial Oxide Formation during Anodization of Hafnium/Aluminium Superimposed Layers. <i>Electrochimica Acta</i> , 2015, 178, 344-352.	5.2	6
54	The performance of Zr as barrier layer for Pt bottom electrodes in Pb(Zr,Ti)O ₃ thin film capacitors. <i>Thin Solid Films</i> , 2005, 483, 21-26.	1.8	5

#	ARTICLE	IF	CITATIONS
55	Gold Nanoparticles Partially Embedded in Ultrathin Anodic Alumina Films. <i>Journal of Physical Chemistry C</i> , 2009, 113, 3105-3109.	3.1	5
56	Spectroscopic ellipsometry for compositionally induced bandgap tuning of combinatorial niobium-tantalum anodic oxides. <i>RSC Advances</i> , 2016, 6, 79934-79942.	3.6	5
57	Anodization behaviour and basic property mapping in the aluminium-erbium system. <i>Journal of Solid State Electrochemistry</i> , 2018, 22, 869-876.	2.5	5
58	Strong Volta potential change in doped zinc oxide as a photoresponse to UV irradiation. <i>RSC Advances</i> , 2019, 9, 35579-35587.	3.6	5
59	Comparative Behavior of Viscose-Based Supercapacitor Electrodes Activated by KOH, H ₂ O, and CO ₂ . <i>Nanomaterials</i> , 2022, 12, 677.	4.1	5
60	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.	1.8	4
61	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.	5.5	4
62	Copper-nickel combinatorial library screening for electrocatalytic formaldehyde oxidation. <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2017, 214, 1600552.	1.8	4
63	Downstream analytics quantification of ion release during high-voltage anodisation of niobium. <i>Journal of Solid State Electrochemistry</i> , 2018, 22, 2457-2464.	2.5	4
64	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.	6.1	4
65	Samarium influence on current induced atomic displacement in Aluminium and Copper combinatorial thin film alloys. <i>Thin Solid Films</i> , 2020, 702, 137949.	1.8	4
66	Electrocatalytic glucose oxidation on a combinatorially electrodeposited cobalt-copper-nickel thin film material library. <i>Electrochimica Acta</i> , 2020, 341, 135744.	5.2	4
67	Effect of the deposition conditions of platinum electrodes on their performance as resistive heating elements. <i>Materials Research</i> , 2004, 7, 427-430.	1.3	3
68	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.	4.8	3
69	Combinatorial surface nanostructuring in aluminium-niobium system. <i>Applied Surface Science</i> , 2020, 499, 143943.	6.1	3
70	Combinatorial screening of dysprosium-magnesium-zinc alloys for bioresorptive implants. <i>Electrochimica Acta</i> , 2020, 363, 137106.	5.2	3
71	Barium Metaplumbate Thin Film Electrodes for Ferroelectric Devices. <i>Ferroelectrics</i> , 2003, 293, 177-188.	0.6	2
72	Bottom electrode crystallization method for heat treatments on thin films. <i>Review of Scientific Instruments</i> , 2004, 75, 2950-2954.	1.3	2

#	ARTICLE	IF	CITATIONS
73	Anodic repassivation of low energy Au-implanted ultra-thin anodic Al ₂ O ₃ . Physica Status Solidi (A) Applications and Materials Science, 2011, 208, 1270-1274.	1.8	2
74	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.	1.8	2
75	Customized 2D Structures for High Throughput Electromigration Measurements. Physica Status Solidi (A) Applications and Materials Science, 2019, 216, 1800869.	1.8	2
76	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
77	A theoretical and experimental framework for the formation of mixed anodic films on combinatorial aluminium-cerium alloys. Electrochimica Acta, 2021, 367, 137173.	5.2	2
78	Memristive Characteristics of Composite Hafnium/Tantalum Anodic Oxides. Physica Status Solidi (A) Applications and Materials Science, 2022, 219, .	1.8	2
79	Bottom electrode crystallization of Pb(Zr,Ti)O ₃ thin films made by RF magnetron sputtering. Journal of Physics Condensed Matter, 2005, 17, 7263-7273.	1.8	1
80	Localized photovoltaic investigations on organic semiconductors and bulk heterojunction solar cells. Science and Technology of Advanced Materials, 2014, 15, 054201.	6.1	1
81	A Thermodynamic Approach for Selection of Anodizing Electrolytes in Aluminium-Holmium System. ChemElectroChem, 2020, 7, 1342-1357.	3.4	1
82	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.	2.9	1
83	Growth of mixed anodic films on combinatorial Al-Gd alloys and their superimposed potential-pH diagrams. Journal of Electroanalytical Chemistry, 2022, 911, 116227.	3.8	1
84	Back Cover: Ultra-thin anodic alumina capacitor films for plastic electronics (Phys. Status Solidi A) Tj ETQq0 0 0 r gBT /Overlock 10 Tf 5	1.8	0
85	A Thermodynamic Approach for Selection of Anodizing Electrolytes in Aluminium-Holmium System. ChemElectroChem, 2020, 7, 1290-1290.	3.4	0
86	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.	1.8	0
87	Mixed oxide growth on combinatorial aluminium-gadolinium alloys - a thermodynamic and first-principles approach. Journal of Solid State Electrochemistry, 0, , 1.	2.5	0
88	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.	2.9	0