

Joachim Broetz

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/1330555/publications.pdf>

Version: 2024-02-01

65
papers

2,048
citations

201385

27
h-index

253896

43
g-index

65
all docs

65
docs citations

65
times ranked

3546
citing authors

#	ARTICLE	IF	CITATIONS
1	Energy Band Alignment between Anatase and Rutile TiO ₂ . Journal of Physical Chemistry Letters, 2013, 4, 4182-4187.	2.1	210
2	Interface properties and band alignment of Cu ₂ S/CdS thin film solar cells. Thin Solid Films, 2003, 431-432, 477-482.	0.8	160
3	Co _x thin film deposited by CVD as efficient water oxidation catalyst: change of oxidation state in XPS and its correlation to electrochemical activity. Physical Chemistry Chemical Physics, 2016, 18, 10708-10718.	1.3	99
4	Etched heavy ion tracks in polycarbonate as template for copper nanowires. Nuclear Instruments & Methods in Physics Research B, 2001, 185, 192-197.	0.6	90
5	Reactive magnetron sputtering of Cu ₂ O: Dependence on oxygen pressure and interface formation with indium tin oxide. Journal of Applied Physics, 2011, 109, .	1.1	87
6	Electroless synthesis of nanostructured nickel and nickel-boron tubes and their performance as unsupported ethanol electrooxidation catalysts. Journal of Power Sources, 2013, 222, 243-252.	4.0	82
7	Controlled fabrication of poly- and single-crystalline bismuth nanowires. Nanotechnology, 2005, 16, S246-S249.	1.3	67
8	Preferred growth orientation of metallic fcc nanowires under direct and alternating electrodeposition conditions. Nanotechnology, 2007, 18, 135709.	1.3	55
9	Temperature dependent phosphorous oxynitride growth for all-solid-state batteries. Journal of Power Sources, 2011, 196, 6911-6914.	4.0	49
10	Deep and Shallow TiO ₂ Gap States on Cleaved Anatase Single Crystal (101) Surfaces, Nanocrystalline Anatase Films, and ALD Titania Ante and Post Annealing. Journal of Physical Chemistry C, 2015, 119, 9890-9898.	1.5	48
11	Bridged Polystannoxane: A New Route toward Nanoporous Tin Dioxide. Chemistry of Materials, 2006, 18, 6364-6372.	3.2	46
12	Characterization of tellurium layers for back contact formation on close to technology treated CdTe surfaces. Journal of Applied Physics, 2003, 94, 3589-3598.	1.1	44
13	Reactively magnetron sputtered Bi ₂ O ₃ thin films: Analysis of structure, optoelectronic, interface, and photovoltaic properties. Physica Status Solidi (A) Applications and Materials Science, 2014, 211, 93-100.	0.8	43
14	Nanoscaled tin dioxide films processed from organotin-based hybrid materials: an organometallic route toward metal oxide gas sensors. Nanoscale, 2012, 4, 6806.	2.8	40
15	Controlled modification of interfacial strain and twinning in YBa ₂ Cu ₃ O _{7-δ} films on vicinal SrTiO ₃ (001). Physical Review B, 1998, 57, 3679-3682.	1.1	37
16	Field emission of copper nanowires grown in polymer ion-track membranes. Nuclear Instruments & Methods in Physics Research B, 2006, 245, 337-341.	0.6	36
17	Orientation dependent ionization potential of In ₂ O ₃ : a natural source for inhomogeneous barrier formation at electrode interfaces in organic electronics. Journal of Physics Condensed Matter, 2011, 23, 334203.	0.7	36
18	Electroless synthesis of platinum and platinum-ruthenium nanotubes and their application in methanol oxidation. Journal of Materials Chemistry, 2011, 21, 6286.	6.7	35

#	ARTICLE	IF	CITATIONS
19	Fabrication of nitrogen-doped TiO ₂ monolith with well-defined macroporous and bicrystalline framework and its photocatalytic performance under visible light. <i>Journal of the European Ceramic Society</i> , 2014, 34, 809-816.	2.8	35
20	Long-range superconducting proximity effect in polycrystalline Co nanowires. <i>Applied Physics Letters</i> , 2014, 104, .	1.5	34
21	Investigations on RF-magnetron sputtered Co ₃ O ₄ thin films regarding the solar energy conversion properties. <i>Journal Physics D: Applied Physics</i> , 2016, 49, 155306.	1.3	34
22	Thermal and irradiation induced interdiffusion in magnetite thin films grown on magnesium oxide (001) substrates. <i>Surface Science</i> , 2009, 603, 1175-1181.	0.8	32
23	Sputter-deposited polycrystalline tantalum-doped SnO ₂ layers. <i>Thin Solid Films</i> , 2014, 555, 173-178.	0.8	29
24	Template-Free Electroless Plating of Gold Nanowires: Direct Surface Functionalization with Shape-Selective Nanostructures for Electrochemical Applications. <i>ACS Applied Materials & Interfaces</i> , 2017, 9, 31142-31152.	4.0	29
25	Structure, composition and crystallinity of epitaxial magnetite thin films. <i>Surface Science</i> , 2008, 602, 2358-2362.	0.8	28
26	Hybrid Organotin and Tin Oxide-based Thin Films Processed from Alkynylorganotins: Synthesis, Characterization, and Gas Sensing Properties.. <i>ACS Applied Materials & Interfaces</i> , 2014, 6, 17093-17101.	4.0	28
27	CMOS-MEMS resonant RF mixer-filters. , 0, , .		27
28	PVD of copper sulfide (Cu ₂ S) for PIN-structured solar cells. <i>Journal Physics D: Applied Physics</i> , 2013, 46, 495112.	1.3	27
29	Fabrication of porous rhodium nanotube catalysts by electroless plating. <i>Journal of Materials Chemistry</i> , 2012, 22, 12784.	6.7	26
30	Lightweight aggregates produced from sand sludge and zeolitic rocks. <i>Construction and Building Materials</i> , 2015, 85, 22-29.	3.2	26
31	Electroless decoration of macroscale foam with nickel nano-spikes: A scalable route toward efficient catalyst electrodes. <i>Electrochemistry Communications</i> , 2016, 65, 39-43.	2.3	26
32	High-Pressure Multianvil Synthesis and Structure Refinement of Oxygen-Bearing Cubic Zirconium(IV) Nitride. <i>Advanced Materials</i> , 2007, 19, 1869-1873.	11.1	24
33	Growth and surface properties of epitaxial SnO ₂ . <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2014, 211, 1997-2004.	0.8	24
34	NiCo nanotubes plated on Pd seeds as a designed magnetically collectable catalyst with high noble metal utilisation. <i>RSC Advances</i> , 2016, 6, 70033-70039.	1.7	24
35	Magnetic and structural approach for understanding the electrochemical behavior of LiNi _{0.33} Co _{0.33} Mn _{0.33} O ₂ positive electrode material. <i>Electrochimica Acta</i> , 2013, 111, 567-574.	2.6	21
36	Segmented All-Platinum Nanowires with Controlled Morphology through Manipulation of the Local Electrolyte Distribution in Fluidic Nanochannels during Electrodeposition. <i>Journal of Physical Chemistry C</i> , 2010, 114, 22502-22507.	1.5	20

#	ARTICLE	IF	CITATIONS
37	Low-temperature H ₂ sensing in self-assembled organotin thin films. <i>Chemical Communications</i> , 2011, 47, 1464-1466.	2.2	20
38	Mechanical alloying of Fe-Si and milling of $\hat{1}\pm$ - and $\hat{1}^2$ -FeSi ₂ bulk phases. <i>Journal of Alloys and Compounds</i> , 2010, 508, 51-54.	2.8	19
39	LixCo _{0.4} Ni _{0.3} Mn _{0.3} O ₂ electrode materials: Electrochemical and structural studies. <i>Materials Research Bulletin</i> , 2012, 47, 1936-1941.	2.7	18
40	Self-Supporting Metal Nanotube Networks Obtained by Highly Conformal Electroless Plating. <i>ChemPlusChem</i> , 2015, 80, 1448-1456.	1.3	18
41	Systematic Investigation of the Electronic Structure of Hematite Thin Films. <i>Advanced Materials Interfaces</i> , 2017, 4, 1700542.	1.9	16
42	Field emission properties of bare and gold-coated nickel nanowires grown in polymer ion-track membranes. <i>Journal of Vacuum Science & Technology B</i> , 2007, 25, 586.	1.3	15
43	Preparation and characterization of macroporous TiO ₂ -SrTiO ₃ heterostructured monolithic photocatalyst. <i>Materials Letters</i> , 2014, 116, 353-355.	1.3	15
44	Facile wet-chemical synthesis of differently shaped cuprous oxide particles and a thin film: Effect of catalyst morphology on the glucose sensing performance. <i>Sensors and Actuators B: Chemical</i> , 2015, 214, 189-196.	4.0	15
45	Platinum nanowires with pronounced texture, controlled crystallite size and excellent growth homogeneity fabricated by optimized pulsed electrodeposition. <i>RSC Advances</i> , 2014, 4, 4804.	1.7	14
46	Electrocatalytic applications of platinum-decorated TiO ₂ nanotubes prepared by a fully wet-chemical synthesis. <i>Journal of Materials Science</i> , 2017, 52, 7754-7767.	1.7	14
47	Double-Walled Ag-Pt Nanotubes Fabricated by Galvanic Replacement and Dealloying: Effect of Composition on the Methanol Oxidation Activity. <i>Nano</i> , 2015, 10, 1550085.	0.5	13
48	Effects of Size Reduction on the Electrical Transport Properties of 3D Bi Nanowire Networks. <i>Advanced Electronic Materials</i> , 2021, 7, 2001069.	2.6	12
49	Thermal and irradiation induced interdiffusion in Fe ₃ O ₄ /MgO(001) thin film. <i>Nuclear Instruments & Methods in Physics Research B</i> , 2009, 267, 1484-1488.	0.6	11
50	Hierarchically porous carbon membranes containing designed nanochannel architectures obtained by pyrolysis of ion-track etched polyimide. <i>Materials Chemistry and Physics</i> , 2014, 148, 846-853.	2.0	11
51	Influence of stabilizing agents on structure and protection performance of zirconium oxide films. <i>Surface and Coatings Technology</i> , 2010, 204, 2064-2067.	2.2	10
52	A new route towards nanoporous TiO ₂ as powders or thin films from the thermal treatment of titanium-based hybrid materials. <i>Dalton Transactions</i> , 2012, 41, 292-299.	1.6	9
53	Electrical Properties of Low-Temperature Processed Sn-Doped In ₂ O ₃ Thin Films: The Role of Microstructure and Oxygen Content and the Potential of Defect Modulation Doping. <i>Materials</i> , 2019, 12, 2232.	1.3	8
54	Stress change in YBa ₂ Cu ₃ O _{7-x} close to the superconducting transition. <i>Physical Review B</i> , 2002, 66, .	1.1	7

#	ARTICLE	IF	CITATIONS
55	Characterization of protective sol-gel coatings on magnesium based on phenyl-triethoxysilane precursor. <i>Thin Solid Films</i> , 2010, 518, 5223-5226.	0.8	7
56	Enhancing electrical conductivity of room temperature deposited Sn-doped In ₂ O ₃ thin films by hematite seed layers. <i>Applied Physics Letters</i> , 2018, 112, 152105.	1.5	7
57	Sputter deposition of indium tin oxide onto zinc phthalocyanine: Chemical and electronic properties of the interface studied by photoelectron spectroscopy. <i>Applied Surface Science</i> , 2012, 258, 3913-3919.	3.1	6
58	Dual Metastability in Electroless Plating: Complex Inertness Enabling the Deposition of Composition-Tunable Platinum Copper Alloy Nanostructures. <i>Chemistry - A European Journal</i> , 2020, 26, 3030-3033.	1.7	6
59	Origin of Surface Reduction upon Water Adsorption on Oriented NiO Thin Films and Its Relation to Electrochemical Activity. <i>Journal of Physical Chemistry C</i> , 2022, 126, 1303-1315.	1.5	6
60	Detwinning in YBa ₂ Cu ₃ O _{7-δ} films on vicinal SrTiO ₃ (001) due to anisotropic strain at the interface. <i>Physica C: Superconductivity and Its Applications</i> , 2000, 339, 75-78.	0.6	5
61	Crack growth resistance behavior of lanthanum doped bismuth ferrite-lead titanate: Effect of tetragonality and mixed phase crystal structures. <i>Engineering Fracture Mechanics</i> , 2012, 96, 267-275.	2.0	3
62	Interface Behaviour and Work Function Modification of Self-Assembled Monolayers on Sn-Doped In ₂ O ₃ . <i>Surfaces</i> , 2019, 2, 241-256.	1.0	3
63	Anisotropic strain in YBa ₂ Cu ₃ O _{7-δ} films analysed by deconvolution of two-dimensional intensity data. <i>Journal of Applied Crystallography</i> , 2001, 34, 13-15.	1.9	1
64	Chemical and physical properties in layers and interfaces of nanolayered Si(100)/Ni/BC _x N _y stacks. <i>X-Ray Spectrometry</i> , 2015, 44, 48-53.	0.9	1
65	Structural characterisation of textured gold nanowires. <i>International Journal of Nanotechnology</i> , 2011, 8, 855.	0.1	0