

Michael Bruns

List of Publications by Year in descending order

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223
papers

8,545
citations

44069

48
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docs citations

231
times ranked

11969
citing authors

#	ARTICLE	IF	CITATIONS
1	Molecular Insight in Structure and Activity of Highly Efficient, Low-Ir Ir ⁴⁺ /Ni Oxide Catalysts for Electrochemical Water Splitting (OER). <i>Journal of the American Chemical Society</i> , 2015, 137, 13031-13040.	13.7	565
2	One-Pot Synthesis of Near-Infrared Fluorescent Gold Clusters for Cellular Fluorescence Lifetime Imaging. <i>Small</i> , 2011, 7, 2614-2620.	10.0	334
3	Facile preparation of water-soluble fluorescent gold nanoclusters for cellular imaging applications. <i>Nanoscale</i> , 2011, 3, 2009.	5.6	278
4	Multicolor Silicon Light-Emitting Diodes (SiLEDs). <i>Nano Letters</i> , 2013, 13, 475-480.	9.1	273
5	Microwave-assisted rapid synthesis of luminescent gold nanoclusters for sensing Hg ²⁺ in living cells using fluorescence imaging. <i>Nanoscale</i> , 2012, 4, 4155.	5.6	211
6	Controlled Cell Adhesion on Poly(dopamine) Interfaces Photopatterned with Non-Fouling Brushes. <i>Advanced Materials</i> , 2013, 25, 6123-6127.	21.0	180
7	Adding Spatial Control to Click Chemistry: Phototriggered Diels-Alder Surface (Bio)functionalization at Ambient Temperature. <i>Angewandte Chemie - International Edition</i> , 2012, 51, 1071-1074.	13.8	170
8	CuO catalytic membrane as selectivity trimmer for metal oxide gas sensors. <i>Sensors and Actuators B: Chemical</i> , 2000, 65, 379-381.	7.8	166
9	Effect of Protein Adsorption on the Fluorescence of Ultrasmall Gold Nanoclusters. <i>Small</i> , 2012, 8, 661-665.	10.0	159
10	Chloride ion battery: A new member in the rechargeable battery family. <i>Journal of Power Sources</i> , 2014, 245, 706-711.	7.8	148
11	Enhanced Electron Injection into Inverted Polymer Light-Emitting Diodes by Combined Solution-Processed Zinc Oxide/Polyethylenimine Interlayers. <i>Advanced Materials</i> , 2014, 26, 2750-2754.	21.0	147
12	Photoclickable Surfaces for Profluorescent Covalent Polymer Coatings. <i>Advanced Functional Materials</i> , 2012, 22, 304-312.	14.9	133
13	Ultrasmall fluorescent silver nanoclusters: Protein adsorption and its effects on cellular responses. <i>Nano Research</i> , 2012, 5, 531-542.	10.4	129
14	Solution Processed, White Emitting Tandem Organic Light-Emitting Diodes with Inverted Device Architecture. <i>Advanced Materials</i> , 2014, 26, 5155-5159.	21.0	114
15	Volume Expansion during Lithiation of Amorphous Silicon Thin Film Electrodes Studied by In-Operando Neutron Reflectometry. <i>Journal of Physical Chemistry C</i> , 2014, 118, 9395-9399.	3.1	111
16	Effect of oxygen plasma treatment on the electrochemical performance of the rayon and polyacrylonitrile based carbon felt for the vanadium redox flow battery application. <i>Journal of Power Sources</i> , 2016, 332, 240-248.	7.8	111
17	(Bio)Molecular Surface Patterning by Phototriggered Oxime Ligation. <i>Angewandte Chemie - International Edition</i> , 2012, 51, 9181-9184.	13.8	106
18	Garnet-Type Li ₇ La ₃ Zr ₂ O ₁₂ Solid Electrolyte Thin Films Grown by CO ₂ -Laser Assisted CVD for All-Solid-State Batteries. <i>Journal of the Electrochemical Society</i> , 2017, 164, A6131-A6139.	2.9	103

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19	Nonequilibrium structure of Zn ₂ SnO ₄ spinel nanoparticles. Journal of Materials Chemistry, 2012, 22, 3117.	6.7	96
20	Degradation of all-vanadium redox flow batteries (VRFB) investigated by electrochemical impedance and X-ray photoelectron spectroscopy: Part 2 electrochemical degradation. Journal of Power Sources, 2016, 325, 351-359.	7.8	96
21	Bandgap determination and charge separation in Ag@TiO ₂ core shell nanoparticle films. Surface and Interface Analysis, 2010, 42, 835-841.	1.8	90
22	Laser-assisted modification of polystyrene surfaces for cell culture applications. Applied Surface Science, 2007, 253, 9177-9184.	6.1	87
23	Mechanosynthesized BiFeO ₃ Nanoparticles with Highly Reactive Surface and Enhanced Magnetization. Journal of Physical Chemistry C, 2011, 115, 7209-7217.	3.1	82
24	Pseudocapacitance of Mesoporous Spinel-Type MCo ₂ O ₄ (M = Co, Zn, and Ni) Rods Fabricated by a Facile Solvothermal Route. ACS Omega, 2017, 2, 6003-6013.	3.5	79
25	Neutron reflectometry studies on the lithiation of amorphous silicon electrodes in lithium-ion batteries. Physical Chemistry Chemical Physics, 2013, 15, 7777.	2.8	78
26	Lithium/Oxygen Incorporation and Microstructural Evolution during Synthesis of Li-Rich Layered Li[Li _{0.2} Ni _{0.2} Mn _{0.6}]O ₂ Oxides. Advanced Energy Materials, 2019, 9, 1803094.	19.5	78
27	One-Step Functionalization of Single-Walled Carbon Nanotubes (SWCNTs) with Cyclopentadienyl-Capped Macromolecules via Diels-Alder Chemistry. Macromolecules, 2011, 44, 3374-3380.	4.8	76
28	Surface properties and graphitization of polyacrylonitrile based fiber electrodes affecting the negative half-cell reaction in vanadium redox flow batteries. Journal of Power Sources, 2016, 321, 210-218.	7.8	76
29	Laser- and UV-assisted modification of polystyrene surfaces for control of protein adsorption and cell adhesion. Applied Surface Science, 2009, 255, 5453-5457.	6.1	71
30	Mild and Modular Surface Modification of Cellulose via Hetero Diels-Alder (HDA) Cycloaddition. Biomacromolecules, 2011, 12, 1137-1145.	5.4	70
31	Quantifying bacterial adhesion on antifouling polymer brushes via single-cell force spectroscopy. Polymer Chemistry, 2015, 6, 5740-5751.	3.9	70
32	An interpenetrating, microstructurable and covalently attached conducting polymer hydrogel for neural interfaces. Acta Biomaterialia, 2017, 58, 365-375.	8.3	70
33	Partially Oxidized Ti ₃ C ₂ T _x MXenes for Fast and Selective Detection of Organic Vapors at Part-per-Million Concentrations. ACS Applied Nano Materials, 2020, 3, 3195-3204.	5.0	66
34	Al ₂ Cl ₂₀ ·12L (L = THF, THP): The First Polyhedral Aluminum Chlorides. Journal of the American Chemical Society, 2001, 123, 9099-9106.	13.7	65
35	Single-Nanobelt Electronic Nose: Engineering and Tests of the Simplest Analytical Element. ACS Nano, 2010, 4, 4487-4494.	14.6	64
36	Tungsten Oxide Buffer Layers Fabricated in an Inert Sol-Gel Process at Room Temperature for Blue Organic Light-Emitting Diodes. Advanced Materials, 2013, 25, 4113-4116.	21.0	64

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37	Polymer Brush-Functionalized Chitosan Hydrogels as Antifouling Implant Coatings. <i>Biomacromolecules</i> , 2017, 18, 1983-1992.	5.4	61
38	Understanding the Influence of N-Doping on the CO ₂ Adsorption Characteristics in Carbon Nanomaterials. <i>Journal of Physical Chemistry C</i> , 2017, 121, 616-626.	3.1	61
39	Unravelling the growth mechanism of hierarchically structured Ni _{1/3} Co _{1/3} Mn _{1/3} (OH) ₂ and their application as precursors for high-power cathode materials. <i>Electrochimica Acta</i> , 2017, 232, 123-131.	5.2	60
40	Oxide scales formed on Fe-Cr-Al-based model alloys exposed to oxygen containing molten lead. <i>Journal of Nuclear Materials</i> , 2013, 437, 282-292.	2.7	58
41	Photochemical Generation of Light Responsive Surfaces. <i>Advanced Functional Materials</i> , 2013, 23, 4011-4019.	14.9	58
42	Polymer Brushes Interfacing Blood as a Route Toward High Performance Blood Contacting Devices. <i>Macromolecular Bioscience</i> , 2015, 15, 636-646.	4.1	56
43	Monolithic High Performance Surface Anchored Metal-Organic Framework Bragg Reflector for Optical Sensing. <i>Chemistry of Materials</i> , 2015, 27, 1991-1996.	6.7	54
44	Surface- and microanalytical characterization of silicon-carbonitride thin films prepared by means of radio-frequency magnetron co-sputtering. <i>Thin Solid Films</i> , 1998, 332, 230-234.	1.8	53
45	Improving Hemocompatibility of Membranes for Extracorporeal Membrane Oxygenators by Grafting Nonthrombogenic Polymer Brushes. <i>Macromolecular Bioscience</i> , 2018, 18, 1700359.	4.1	53
46	Exploiting end group functionalization for the design of antifouling bioactive brushes. <i>Polymer Chemistry</i> , 2014, 5, 4124-4131.	3.9	51
47	Benzylguanine Thiol Self-Assembled Monolayers for the Immobilization of SNAP-tag Proteins on Microcontact-Printed Surface Structures. <i>Langmuir</i> , 2010, 26, 6097-6101.	3.5	50
48	Nitrogen Diffusion in Amorphous Silicon Nitride Isotope Multilayers Probed by Neutron Reflectometry. <i>Physical Review Letters</i> , 2006, 96, 055901.	7.8	49
49	Structure-Activity Relationship for Quaternary Ammonium Compounds Hybridized with Poly(methyl methacrylate) on Graphene Oxide. <i>Journal of Materials Chemistry B</i> , 2017, 5, 10784-10791.	8.0	49
50	Laser microstructuring and annealing processes for lithium manganese oxide cathodes. <i>Applied Surface Science</i> , 2011, 257, 9968-9976.	6.1	49
51	Polymer surface patterning via Diels-Alder trapping of photo-generated thioaldehydes. <i>Chemical Communications</i> , 2013, 49, 633-635.	4.1	48
52	Charge Generation Layers for Solution Processed Tandem Organic Light Emitting Diodes with Regular Device Architecture. <i>ACS Applied Materials & Interfaces</i> , 2015, 7, 8132-8137.	8.0	47
53	Development of Thin Film Electrodes Based on Sputtered Amorphous Carbon. <i>Journal of the Electrochemical Society</i> , 1997, 144, 6-15.	2.9	46
54	Spatially Controlled Photochemical Peptide and Polymer Conjugation on Biosurfaces. <i>Biomacromolecules</i> , 2013, 14, 4340-4350.	5.4	46

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55	Isothiocyanate-functionalized RGD peptides for tailoring cell-adhesive surface patterns. <i>Biomaterials</i> , 2008, 29, 3004-3013.	11.4	45
56	Phototriggered Functionalization of Hierarchically Structured Polymer Brushes. <i>Langmuir</i> , 2015, 31, 5899-5907.	3.5	43
57	Characterization of artificially produced copper and bronze patina by XPS. <i>Surface and Interface Analysis</i> , 2000, 30, 135-139.	1.8	42
58	Thermal stability and crystallization kinetics of sputtered amorphous Si ₃ N ₄ films. <i>Thin Solid Films</i> , 2004, 450, 346-351.	1.8	42
59	Dynamic Covalent Chemistry on Surfaces Employing Highly Reactive Cyclopentadienyl Moieties. <i>Advanced Materials</i> , 2011, 23, 4435-4439.	21.0	42
60	Surface analytical approaches to reliably characterize lithium ion battery electrodes. <i>Surface and Interface Analysis</i> , 2018, 50, 43-51.	1.8	42
61	Efficient and mild modification of Si surfaces via orthogonal hetero Diels-Alder chemistry. <i>Journal of Polymer Science Part A</i> , 2009, 47, 7090-7095.	2.3	41
62	How to measure atomic diffusion processes in the sub-nanometer range. <i>Acta Materialia</i> , 2008, 56, 464-470.	7.9	40
63	NO _x reduction by H ₂ on WO _x /ZrO ₂ -supported Pd catalysts under lean conditions. <i>Applied Catalysis B: Environmental</i> , 2012, 117-118, 275-282.	20.2	39
64	Relationship of chemical and structural properties with the tribological behavior of sputtered SiCN films. <i>Surface and Coatings Technology</i> , 2008, 202, 5567-5571.	4.8	38
65	Charge Transport in Low-Temperature Processed Thin-Film Transistors Based on Indium Oxide/Zinc Oxide Heterostructures. <i>ACS Applied Materials & Interfaces</i> , 2018, 10, 20661-20671.	8.0	37
66	Tracer and surface spectroscopy studies of sensitivity mechanism of mercury ion chalcogenide glass sensors. <i>Sensors and Actuators B: Chemical</i> , 1999, 57, 171-178.	7.8	35
67	Structure, phase transformations, and defects of HfO ₂ and ZrO ₂ nanoparticles studied by Ta ₁₈₁ and Cd ₁₁₁ perturbed angular correlations, H ₁ magic-angle spinning NMR, XPS, and x-ray and electron diffraction. <i>Physical Review B</i> , 2008, 77, .	3.2	35
68	Conducting Polymer/SWCNTs Modular Hybrid Materials via Diels-Alder Ligation. <i>Macromolecules</i> , 2013, 46, 2606-2615.	4.8	35
69	Investigation of the degradation of SnO ₂ electrodes for use in Li-ion cells. <i>Journal of Power Sources</i> , 2013, 233, 139-147.	7.8	34
70	Crystallization kinetics of amorphous SiC films: Influence of substrate. <i>Applied Surface Science</i> , 2005, 252, 1460-1470.	6.1	33
71	Clickable Antifouling Polymer Brushes for Polymer Pen Lithography. <i>ACS Applied Materials & Interfaces</i> , 2017, 9, 12109-12117.	8.0	33
72	Scalable Processing of Low-Temperature TiO ₂ Nanoparticles for High-Efficiency Perovskite Solar Cells. <i>ACS Applied Energy Materials</i> , 2019, 2, 47-58.	5.1	33

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73	Synthesis of a cellulose thiosulfate and its immobilization on gold surfaces. <i>Polymer</i> , 1999, 40, 1593-1601.	3.8	32
74	Toward new gas-analytical multisensor chips based on titanium oxide nanotube array. <i>Scientific Reports</i> , 2017, 7, 9732.	3.3	32
75	Structural and optical properties of size controlled Si nanocrystals in Si ₃ N ₄ matrix: The nature of photoluminescence peak shift. <i>Journal of Applied Physics</i> , 2013, 114, .	2.5	31
76	Rapid Thiolâ€‘Mediated Fabrication and Dual Postfunctionalization of Microâ€‘Resolved 3D Mesostructures. <i>Advanced Functional Materials</i> , 2015, 25, 3735-3744.	14.9	31
77	Adsorption of pure SO ₂ on nanoscaled graphene oxide. <i>RSC Advances</i> , 2016, 6, 36834-36839.	3.6	31
78	Spatially Controlled Surface Immobilization of Nonmodified Peptides. <i>Angewandte Chemie - International Edition</i> , 2013, 52, 9714-9718.	13.8	30
79	Intrinsic device-to-device variation in graphene field-effect transistors on a Si/SiO ₂ substrate as a platform for discriminative gas sensing. <i>Applied Physics Letters</i> , 2014, 104, .	3.3	30
80	A bioinspired light induced avenue for the design of patterned functional interfaces. <i>Journal of Materials Chemistry B</i> , 2014, 2, 36-40.	5.8	30
81	Simultaneous diffusion of Si and N in silicon nitride. <i>Physical Review B</i> , 2006, 74, .	3.2	29
82	Modular ambient temperature functionalization of carbon nanotubes with stimuli-responsive polymer strands. <i>Polymer Chemistry</i> , 2013, 4, 1525-1537.	3.9	29
83	Protection of yttria-stabilized zirconia for dental applications by oxidic PVD coating. <i>Acta Biomaterialia</i> , 2015, 11, 488-493.	8.3	29
84	Surface Analytical Study Regarding the Solid Electrolyte Interphase Composition of Nanoparticulate SnO ₂ Anodes for Li-Ion Batteries. <i>Journal of Physical Chemistry C</i> , 2016, 120, 24706-24714.	3.1	29
85	Roomâ€‘Temperature Processing of Printed Oxide FETs Using Ultraviolet Photonic Curing. <i>Advanced Electronic Materials</i> , 2017, 3, 1600476.	5.1	29
86	Charging of carbon thin films in scanning and phase-plate transmission electron microscopy. <i>Ultramicroscopy</i> , 2018, 184, 252-266.	1.9	29
87	Conical surface structures on model thin-film electrodes and tape-cast electrode materials for lithium-ion batteries. <i>Applied Physics A: Materials Science and Processing</i> , 2013, 112, 77-85.	2.3	28
88	Formation of size controlled silicon nanocrystals in nitrogen free silicon dioxide matrix prepared by plasma enhanced chemical vapor deposition. <i>Journal of Applied Physics</i> , 2014, 116, .	2.5	28
89	Enhancing the gas selectivity of single-crystal SnO ₂ :Pt thin-film chemiresistor microarray by SiO ₂ membrane coating. <i>Sensors and Actuators B: Chemical</i> , 2013, 185, 59-69.	7.8	27
90	Tuning the performance of vanadium redox flow batteries by modifying the structural defects of the carbon felt electrode. <i>Beilstein Journal of Nanotechnology</i> , 2019, 10, 1698-1706.	2.8	26

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91	Strain Relaxation and Vacancy Creation in Thin Platinum Films. <i>Physical Review Letters</i> , 2011, 107, 265501.	7.8	25
92	Photo-Induced Macromolecular Functionalization of Cellulose via Nitroxide Spin Trapping. <i>Biomacromolecules</i> , 2012, 13, 1700-1705.	5.4	25
93	Stability domain of alumina thermally grown on Fe-Cr-Al-based model alloys and modified surface layers exposed to oxygen-containing molten Pb. <i>Journal of Nuclear Materials</i> , 2016, 470, 68-75.	2.7	25
94	Hetero Diels-Alder Chemistry for the Functionalization of Single-Walled Carbon Nanotubes with Cyclopentadienyl End-Capped Polymer Strands. <i>Macromolecular Rapid Communications</i> , 2013, 34, 672-680.	3.9	24
95	Li-Si thin films for battery applications produced by ion-beam co-sputtering. <i>RSC Advances</i> , 2015, 5, 7192-7195.	3.6	23
96	Comparative surface analysis study of the solid electrolyte interphase formation on graphite anodes in lithium-ion batteries depending on the electrolyte composition. <i>Surface and Interface Analysis</i> , 2017, 49, 361-369.	1.8	23
97	Tungsten oxide nanorod architectures as 3D anodes in binder-free lithium-ion batteries. <i>Nanoscale</i> , 2019, 11, 598-610.	5.6	23
98	Love waves in SiO ₂ layers on STW-resonators based on LiTaO ₃ . <i>Talanta</i> , 2004, 62, 71-79.	5.5	22
99	A detailed surface analytical study of degradation processes in (meth)acrylic polymers. <i>Journal of Polymer Science Part A</i> , 2012, 50, 1801-1811.	2.3	22
100	Continuous Hydrothermal Synthesis of In Situ Functionalized Iron Oxide Nanoparticles: A General Strategy to Produce Metal Oxide Nanoparticles With Clickable Anchors. <i>Particle and Particle Systems Characterization</i> , 2013, 30, 229-234.	2.3	22
101	Structural features of N-containing titanium dioxide thin films deposited by magnetron sputtering. <i>Thin Solid Films</i> , 2017, 627, 9-16.	1.8	22
102	Direct Photopatterning of Solution-Processed Amorphous Indium Zinc Oxide and Zinc Tin Oxide Semiconductors: A Chimie Douce Molecular Precursor Approach to Thin Film Electronic Oxides. <i>Advanced Materials Interfaces</i> , 2018, 5, 1800324.	3.7	22
103	Lithium orthosilicate surfaces: Characterization and effect on tritium release. <i>Journal of Nuclear Materials</i> , 2012, 427, 126-132.	2.7	21
104	Designing Molecular Printboards: A Photolithographic Platform for Recodable Surfaces. <i>Chemistry - A European Journal</i> , 2015, 21, 13186-13190.	3.3	21
105	Non-Fouling Biodegradable Poly(ϵ -caprolactone) Nanofibers for Tissue Engineering. <i>Macromolecular Bioscience</i> , 2016, 16, 83-94.	4.1	21
106	Understanding the lithiation/delithiation process in SnP ₂ O ₇ anode material for lithium-ion batteries. <i>Electrochimica Acta</i> , 2017, 252, 446-452.	5.2	21
107	Synthesis, dielectric properties and application in a thin film transistor device of amorphous aluminum oxide Al _x O _y using a molecular based precursor route. <i>Journal of Materials Chemistry C</i> , 2019, 7, 1048-1056.	5.5	21
108	Investigating the Effect of Microstructure and Surface Functionalization of Mesoporous N-Doped Carbons on V ⁴⁺ /V ⁵⁺ Kinetics. <i>ACS Applied Energy Materials</i> , 2020, 3, 11627-11640.	5.1	21

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109	Reaktionen und Strukturen von [(C ₂ H ₅) ₄ N][OsCl ₆] und [(n-C ₄ H ₉) ₄ N] ₂ [Os ₂ Cl ₁₀] / Reactions and Structures of [(C ₂ H ₅) ₄ N][OsCl ₆] and [(n-C ₄ H ₉) ₄ N] ₂ [Os ₂ Cl ₁₀]. Zeitschrift Fur Naturforschung - Section B Journal of Chemical Sciences, 1984, 39, 843-849.	0.7	20
110	Diode laser heat treatment of lithium manganese oxide films. Applied Surface Science, 2012, 258, 5146-5152.	6.1	20
111	Unprecedented CO ₂ uptake in vertically aligned carbon nanotubes. Carbon, 2017, 125, 327-335.	10.3	20
112	Post-doping via spray-drying: a novel sol-gel process for the batch synthesis of doped LiNi _{0.5} Mn _{1.5} O ₄ spinel material. Journal of Materials Science, 2013, 48, 3404-3414.	3.7	19
113	Ambient Temperature Ligation of Diene Functional Polymer and Peptide Strands onto Cellulose via Photochemical and Thermal Protocols. Macromolecular Rapid Communications, 2014, 35, 1121-1127.	3.9	19
114	Spatial separation of photogenerated electron-hole pairs in solution-grown ZnO tandem core-shell nanowire arrays toward highly sensitive photoelectrochemical detection of hydrogen peroxide. Journal of Materials Chemistry A, 2017, 5, 14397-14405.	10.3	19
115	High electrochemical performance of 3D highly porous Zn _{0.2} Ni _{0.8} Co ₂ O ₄ microspheres as an electrode material for electrochemical energy storage. CrystEngComm, 2018, 20, 2159-2168.	2.6	19
116	High performance printed oxide field-effect transistors processed using photonic curing. Nanotechnology, 2018, 29, 235205.	2.6	19
117	Formation and structural features of nitrogen-doped titanium dioxide thin films grown by reactive magnetron sputtering. Applied Surface Science, 2020, 534, 147572.	6.1	19
118	Development of scalable and versatile nanomaterial libraries for nanosafety studies: polyvinylpyrrolidone (PVP) capped metal oxide nanoparticles. RSC Advances, 2017, 7, 3894-3906.	3.6	18
119	Surface analytical characterization of LiNi _{0.8} Mn _{0.2} Co _{0.2} O ₂ (O ₁₀) compounds for lithium-ion battery electrodes. Surface and Interface Analysis, 2018, 50, 1132-1137.		18
120	Surface analytical investigation of the tritium getter ZrCO after exposure to various gases. Mikrochimica Acta, 1992, 107, 207-217.	5.0	17
121	Synthesis of silicon carbonitride thin films by means of r.f.-sputtering and ion implantation. Surface and Coatings Technology, 1999, 116-119, 419-423.	4.8	17
122	Surface modification of thin polystyrene films. Colloid and Polymer Science, 1999, 277, 673-679.	2.1	17
123	Nitrogen self-diffusion in silicon nitride thin films probed with isotope heterostructures. Applied Physics Letters, 2004, 85, 582-584.	3.3	17
124	Synthesis of in situ functionalized iron oxide nanoparticles presenting alkyne groups via a continuous process using near-critical and supercritical water. Journal of Supercritical Fluids, 2013, 82, 83-95.	3.2	17
125	Synthesis of nanostructured Pt/oxide catalyst particles by MOCVD process at ambient pressure. Surface and Coatings Technology, 2013, 230, 284-289.	4.8	17
126	Synthesis of Pt/SiO ₂ Catalyst Nanoparticles from a Continuous Aerosol Process using Novel Cyclooctadienylplatinum Precursors. Chemical Vapor Deposition, 2013, 19, 274-283.	1.3	17

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127	Organic solar cells with graded absorber layers processed from nanoparticle dispersions. <i>Nanoscale</i> , 2016, 8, 6721-6727.	5.6	17
128	In-situ Measurement of Self-Atom Diffusion in Solids Using Amorphous Germanium as a Model System. <i>Scientific Reports</i> , 2018, 8, 17607.	3.3	17
129	SO ₂ gas adsorption on carbon nanomaterials: a comparative study. <i>Beilstein Journal of Nanotechnology</i> , 2018, 9, 1782-1792.	2.8	17
130	Surface analytical characterization of the hydrogen getter material ZrCo. <i>Fresenius Zeitschrift für Analytische Chemie</i> , 1989, 335, 669-674.	0.8	16
131	Structural and chemical characterization of SnO ₂ -based nanoparticles as electrode material in Li-ion batteries. <i>Journal of Materials Science</i> , 2012, 47, 4383-4391.	3.7	16
132	Bud type carbon nanohorns: materials for high pressure CO ₂ capture and Li-ion storage. <i>Journal of Materials Chemistry A</i> , 2016, 4, 14267-14275.	10.3	16
133	Quantitative study of ruthenium cross-over in direct methanol fuel cells during early operation hours. <i>Journal of Power Sources</i> , 2016, 301, 210-218.	7.8	16
134	A 3D MoO _x /carbon composite array as a binder-free anode in lithium-ion batteries. <i>Dalton Transactions</i> , 2018, 47, 14897-14907.	3.3	16
135	Turning a Killing Mechanism into an Adhesion and Antifouling Advantage. <i>Advanced Materials Interfaces</i> , 2019, 6, 1900847.	3.7	16
136	Photothermal catalytic properties of layered titanium chalcogenide nanomaterials. <i>Dalton Transactions</i> , 2020, 49, 1032-1047.	3.3	16
137	Fluorine incorporation into SnO ₂ nanoparticles by co-milling with polyvinylidene fluoride. <i>Solid State Sciences</i> , 2014, 30, 36-43.	3.2	15
138	A Secondary Ion Mass Spectrometry Study on the Mechanisms of Amorphous Silicon Electrode Lithiation in Li-Ion Batteries. <i>Zeitschrift für Physikalische Chemie</i> , 2015, 229, 1375-1385.	2.8	15
139	Support Effect on the Water Gas Shift Activity of Chemical Vapor Deposition-Tailored-Pt/TiO ₂ Catalysts. <i>Industrial & Engineering Chemistry Research</i> , 2017, 56, 3194-3203.	3.7	15
140	Quasi-metallic behavior of ZnO grown by atomic layer deposition: The role of hydrogen. <i>Journal of Applied Physics</i> , 2017, 122, .	2.5	15
141	Lithium Tracer Diffusion in Amorphous Li _x Si for Low Li Concentrations. <i>Journal of Physical Chemistry C</i> , 2018, 122, 6508-6513.	3.1	15
142	Darstellung und spektroskopische Charakterisierung von Hexachloroosmat(V) / Preparation and Spectroscopical Characterisation of Hexachloroosmate(V). <i>Zeitschrift für Naturforschung - Section B Journal of Chemical Sciences</i> , 1983, 38, 680-686.	0.7	14
143	Cu ²⁺ -selective thin films for chemical microsensors based on sputtered copper-arsenic-selenium glass. <i>Sensors and Actuators B: Chemical</i> , 1995, 25, 733-736.	7.8	14
144	Atomic transport in metastable compounds: Case study of self-diffusion in SiC using neutron reflectometry. <i>Physical Review B</i> , 2009, 80, .	3.2	14

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145	Characterization of core/shell nanoparticle thin films for gas analytical applications. Surface and Interface Analysis, 2010, 42, 1131-1134.	1.8	14
146	Reversible activation of pH-sensitive cell penetrating peptides attached to gold surfaces. Chemical Communications, 2015, 51, 273-275.	4.1	14
147	Catalyst-free site-specific surface modifications of nanocrystalline diamond films via microchannel cantilever spotting. RSC Advances, 2016, 6, 57820-57827.	3.6	14
148	Laser-assisted modification of polymers for microfluidic, micro-optics, and cell culture applications. , 2007, , .		13
149	Structural relaxation and self-diffusion in covalent amorphous solids: Silicon nitride as a model system. Journal of Applied Physics, 2007, 102, .	2.5	13
150	Synthesis, oxide formation, properties and thin film transistor properties of yttrium and aluminium oxide thin films employing a molecular-based precursor route. RSC Advances, 2019, 9, 31386-31397.	3.6	13
151	Production and surface analytical characterization of various chalcogenide glass thin films for analytical microdevices. Surface and Coatings Technology, 1997, 97, 707-712.	4.8	12
152	Laser-assisted welding of transparent polymers for microchemical engineering and life science. , 2005, , .		12
153	High purity Siâ€“Câ€“N thin films with tailored composition on the tie line SiCâ€“Si3N4. Diamond and Related Materials, 2007, 16, 1273-1277.	3.9	12
154	Structure and chemical composition of mixed benzylguaninea€and methoxyâ€terminated selfâ€assembled monolayers for immobilization of biomolecules. Surface and Interface Analysis, 2012, 44, 909-913.	1.8	12
155	Interface-controlled calcium phosphate mineralization: effect of oligo(aspartic acid)-rich interfaces. CrystEngComm, 2015, 17, 6901-6913.	2.6	12
156	Formation of blade and slot die coated small molecule multilayers for OLED applications studied theoretically and by XPS depth profiling. AIP Advances, 2016, 6, .	1.3	12
157	Anionic Polymer Brushes for Biomimetic Calcium Phosphate Mineralizationâ€”A Surface with Application Potential in Biomaterials. Polymers, 2018, 10, 1165.	4.5	12
158	Functionalization of multi-walled carbon nanotubes with indazole. Electrochimica Acta, 2019, 298, 884-892.	5.2	11
159	Schwingungs- und Elektronenspektren der Dekahalogenodiosmate(IV), [Os2X10]2?, X ? Cl, Br. Zeitschrift Fur Anorganische Und Allgemeine Chemie, 1986, 537, 88-96.	1.2	10
160	Nanogranular SnO2 Layers for Gas Sensing Applications by In Situ Deposition of Nanoparticles Produced by the Karlsruhe Microwave Plasma Process. Plasma Processes and Polymers, 2007, 4, S865-S870.	3.0	10
161	Copper thick-film substrates for power electronic applications. , 2014, , .		10
162	Electrochemical performance of tin-based nano-composite electrodes using a vinylene carbonate-containing electrolyte for Li-ion cells. Journal of Power Sources, 2014, 263, 145-153.	7.8	10

#	ARTICLE	IF	CITATIONS
163	Light-induced cross-linking and post-cross-linking modification of polyglycidol. Chemical Communications, 2018, 54, 1647-1650.	4.1	10
164	Aqueous Solution Processing of Combustible Precursor Compounds into Amorphous Indium Gallium Zinc Oxide (IGZO) Semiconductors for Thin Film Transistor Applications. Chemistry - an Asian Journal, 2018, 13, 3912-3919.	3.3	10
165	C and N depth profiles of SiCN layers determined with nuclear reaction analyses and AES. Nuclear Instruments & Methods in Physics Research B, 1998, 139, 268-272.	1.4	9
166	Comparative study of trap-limited hydrogen diffusion in amorphous SiC, Si _{0.66} C _{0.33} N _{1.33} , and SiN _{1.33} films. Journal of Physics Condensed Matter, 2006, 18, 5363-5370.	1.8	9
167	Laser annealing of textured thin film cathode material for lithium ion batteries. Proceedings of SPIE, 2010, , .	0.8	9
168	Fe-doped sodium aluminosilicate thin films: conductivity, microstructural organization and sensor properties. Solid State Ionics, 1994, 74, 165-178.	2.7	8
169	The diffusion of ion implanted hydrogen in amorphous Si ₃ N ₄ :H films. Journal of Physics Condensed Matter, 2004, 16, 4233-4244.	1.8	8
170	Tailored stoichiometries of silicon carbonitride thin films prepared by combined radio frequency magnetron sputtering and ion beam synthesis. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2005, 23, 1114-1119.	2.1	8
171	Fabrication and characterization of iron and fluorine co-doped BST thin films for microwave applications. Journal of Materials Science, 2013, 48, 3586-3596.	3.7	8
172	Synthesis of polymers with phosphorus containing side chains via modular conjugation. Polymer Chemistry, 2013, 4, 2406.	3.9	8
173	Effect of Protein Adsorption on the Fluorescence of Ultrasmall Gold Nanoclusters. Small, 2014, 10, 1667-1667.	10.0	8
174	Iodide ion-sensitive field-effect structures. Sensors and Actuators B: Chemical, 1993, 15, 192-194.	7.8	7
175	Synthesis and characterization of nanoscale Al-Si-O gradient membranes. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2007, 25, 927-931.	2.1	7
176	Design of Chemically Activated Polymer Microwells by One-Step UV-Lithography for Stem Cell Adhesion. Langmuir, 2010, 26, 2050-2056.	3.5	7
177	Laser modification and characterization of Li-Mn-O thin film cathodes for lithium-ion batteries. Proceedings of SPIE, 2011, , .	0.8	7
178	n-Doping of organic semiconductors for enhanced electron extraction from solution processed solar cells using alkali metals. Journal of Materials Chemistry A, 2016, 4, 14703-14708.	10.3	7
179	Formation of dense cellulose monolayers on silver surfaces. Journal of the Brazilian Chemical Society, 2000, 11, 11.	0.6	6
180	Nitrogen self-diffusion in magnetron sputtered Si-C-N films. Journal of Applied Physics, 2011, 109, 093522.	2.5	6

#	ARTICLE	IF	CITATIONS
181	Characterization of non-stoichiometric co-sputtered Ba _{0.6} Sr _{0.4} (Ti _{1-x} Fe _x) ₂ O ₃ thin films for tunable passive microwave applications. <i>Analytical and Bioanalytical Chemistry</i> , 2012, 403, 643-650.	3.7	6
182	Corrosion behaviour of the steel 1.4361 studied by combined XPS, electrochemistry and radionuclide techniques. <i>Fresenius Zeitschrift für Analytische Chemie</i> , 1989, 333, 406-407.	0.8	5
183	Laser adjusted three-dimensional Li-Mn-O cathode architectures for secondary lithium-ion cells. <i>Proceedings of SPIE</i> , 2012, , .	0.8	5
184	Laser processes and analytics for high power 3D battery materials. , 2016, , .		5
185	Surface- and microanalytical characterization of ion-implanted Si-C-N layers. <i>Fresenius' Journal of Analytical Chemistry</i> , 1998, 361, 630-633.	1.5	4
186	Characterization and modification of polymer blend films. <i>Colloid and Polymer Science</i> , 2001, 279, 1013-1019.	2.1	4
187	Surface analytical characterization of SiO ₂ gradient membrane coatings on gas sensor microarrays. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , 2003, 21, 1109-1114.	2.1	4
188	Si diffusion in magnetron sputtered silicon carbide films deposited on silicon and carbon substrates. <i>Thin Solid Films</i> , 2009, 518, 396-398.	1.8	4
189	Cholesteryl Hemisuccinate Monolayers Efficiently Control Calcium Phosphate Nucleation and Growth. <i>Crystal Growth and Design</i> , 2017, 17, 5764-5774.	3.0	4
190	Dry adhesives from carbon nanofibers grown in an open ethanol flame. <i>Beilstein Journal of Nanotechnology</i> , 2017, 8, 2719-2728.	2.8	4
191	Thermal transformations of manufactured nanomaterials as a proposed proxy for ageing. <i>Environmental Science: Nano</i> , 2018, 5, 1618-1627.	4.3	4
192	Electrochemical Microanalytical System for Ionometric Measurements. , 1995, , 215-218.		4
193	Darstellung, spektroskopische und elektrochemische Charakterisierung von Pentachloromonocarbonylosmat(IV), [OsCl ₅ (CO)]- / Preparation, Spectroscopical and Electrochemical Characterization of Pentachlorom onocarbonylosm ate(IV), [OsCl ₅ (CO)]-. <i>Zeitschrift Fur Naturforschung - Section B Journal of Chemical Sciences</i> , 1986, 41, 25-31.	0.7	3
194	Copper(II)-ion response of Cu-As-Se thin-film sensors in a flow-through microcell. <i>Sensors and Actuators B: Chemical</i> , 1995, 27, 384-387.	7.8	3
195	Quality control of gas sensor microarrays using Auger electron spectroscopy. <i>Thin Solid Films</i> , 2000, 366, 265-271.	1.8	3
196	Nanoparticle SnO ₂ films as gas sensitive membranes. <i>Materials Research Society Symposia Proceedings</i> , 2005, 900, 1.	0.1	3
197	Self-Diffusion in Covalent Amorphous Solids – A Comparative Study Using Neutron Reflectometry and SIMS. <i>Defect and Diffusion Forum</i> , 2007, 263, 51-56.	0.4	3
198	Silicon carbonitrides: On the attainability of stable compounds with high nitrogen content. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , 2008, 26, 1018-1022.	2.1	3

#	ARTICLE	IF	CITATIONS
199	The Gas-Sensing Characteristics Of Percolating 2-D SnO ₂ Nanowire Mats As A Platform For Electronic Nose Devices. , 2009, , .		3
200	Crystallisation of magnetron sputtered amorphous Si _{1-x} C _x films (x= 1/3) studied by grazing incidence X-ray diffractometry. Philosophical Magazine, 2010, 90, 3855-3865.	1.6	3
201	Room temperature oxidation of magnetron sputtered Si ¹⁶ N films. Applied Surface Science, 2012, 258, 2944-2947.	6.1	3
202	High coercivity in large exchange-bias Co/CoO-MgO nano-granular films. Chinese Physics B, 2015, 24, 034501.	1.4	3
203	<i>Bombyx mori</i> silk/titania/gold hybrid materials for photocatalytic water splitting: combining renewable raw materials with clean fuels. Beilstein Journal of Nanotechnology, 2018, 9, 187-204.	2.8	3
204	Synergistic Physical and Chemical Enhancement Effects Observed on Surface-Enhanced Raman Spectroscopy Substrates of Silver-Coated, Barrier-Type Anodic Alumina. Journal of Physical Chemistry C, 2020, 124, 13316-13328.	3.1	3
205	Development of Na ⁺ -sensitive membranes based on sputtered Na-Al-Si glasses. Mikrochimica Acta, 1995, 121, 73-85.	5.0	2
206	ISFETs with sputtered sodium alumino-silicate glass membranes. Analytical and Bioanalytical Chemistry, 1996, 354, 852-856.	3.7	2
207	Patterning of polystyrene by UV-laser radiation for the fabrication of devices for patch clamping. , 2008, , .		2
208	Effects of thermal processing and iron doping in co-sputtered barium strontium titanate thin films. Journal of Materials Science, 2012, 47, 6929-6938.	3.7	2
209	Combined in-depth X-ray Photoelectron Spectroscopy and Time-of-Flight Secondary Ion Mass Spectroscopy study of the effect of deposition pressure and substrate bias on the electrical properties and composition of Ga-doped ZnO thin films grown by magnetron sputtering. Thin Solid Films, 2018, 665, 184-192.	1.8	2
210	Locally Controlled Growth of Individual Lambda-Shaped Carbon Nanofibers. Small, 2019, 15, e1803944.	10.0	2
211	Reliability Assessment of a Gas Microsensor. IEEE Transactions on Device and Materials Reliability, 2004, 4, 549-555.	2.0	1
212	Nitrogen Self-Diffusion in Polycrystalline Si ₃ N ₄ Films: Isotope Heterostructures vs. Gas-Exchange. Defect and Diffusion Forum, 2005, 237-240, 512-517.	0.4	1
213	Diffusion in Isotope Heterostructures Investigated by Neutron Reflectometry. Defect and Diffusion Forum, 0, 289-292, 697-703.	0.4	1
214	Low-temperature silver sintering processes on high performance ENIG, EPIG, ENEPIG and ISIG surfaces for power electronic systems and huge battery systems. , 2016, , .		1
215	The characterization of nanostructured copper-doped tin oxide films for gas sensor microarrays. , 0, , .		0
216	Novel processing for a polymer patch clamping system. , 2009, , .		0

#	ARTICLE	IF	CITATIONS
217	Could We Apply a NeuroProcessor For Analyzing a Gas Response Of Multisensor Arrays?. , 2009, , .		0
218	Laser-induced self-organizing surface structures on cathode materials for lithium-ion batteries. Proceedings of SPIE, 2013, , .	0.8	0
219	Thin film passivation of laser generated 3D micro patterns in lithium manganese oxide cathodes. , 2013, , .		0
220	Charge generation layers for all-solution processed organic tandem light emitting diodes with regular device architecture. , 2015, , .		0
221	Metal Oxide Semiconductors: Direct Photopatterning of Solution-Processed Amorphous Indium Zinc Oxide and Zinc Tin Oxide Semiconductors-A Chimie Douce Molecular Precursor Approach to Thin Film Electronic Oxides (Adv. Mater. Interfaces 15/2018). Advanced Materials Interfaces, 2018, 5, 1870073.	3.7	0
222	Laser-assisted surface functionalization. , 2010, , .		0
223	Enhancement of ionic conductivity in novel LiON-ALOX multilayer heterostructures prepared by atomic layer deposition. Solid State Ionics, 2021, 373, 115796.	2.7	0