

# Michael Bruns

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/2615825/publications.pdf>

Version: 2024-02-01

223  
papers

8,545  
citations

44069

48  
h-index

58581

82  
g-index

231  
all docs

231  
docs citations

231  
times ranked

11969  
citing authors

#	ARTICLE	IF	CITATIONS
1	Enhancement of ionic conductivity in novel LiON-AlO <sub>x</sub> multilayer heterostructures prepared by atomic layer deposition. <i>Solid State Ionics</i> , 2021, 373, 115796.	2.7	0
2	Photothermal catalytic properties of layered titanium chalcogenide nanomaterials. <i>Dalton Transactions</i> , 2020, 49, 1032-1047.	3.3	16
3	Investigating the Effect of Microstructure and Surface Functionalization of Mesoporous N-Doped Carbons on V <sup>4+</sup> /V <sup>5+</sup> Kinetics. <i>ACS Applied Energy Materials</i> , 2020, 3, 11627-11640.	5.1	21
4	Formation and structural features of nitrogen-doped titanium dioxide thin films grown by reactive magnetron sputtering. <i>Applied Surface Science</i> , 2020, 534, 147572.	6.1	19
5	Partially Oxidized Ti <sub>3</sub> C <sub>2</sub> T <sub>x</sub> MXenes for Fast and Selective Detection of Organic Vapors at Part-per-Million Concentrations. <i>ACS Applied Nano Materials</i> , 2020, 3, 3195-3204.	5.0	66
6	Synergistic Physical and Chemical Enhancement Effects Observed on Surface-Enhanced Raman Spectroscopy Substrates of Silver-Coated, Barrier-Type Anodic Alumina. <i>Journal of Physical Chemistry C</i> , 2020, 124, 13316-13328.	3.1	3
7	Turning a Killing Mechanism into an Adhesion and Antifouling Advantage. <i>Advanced Materials Interfaces</i> , 2019, 6, 1900847.	3.7	16
8	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
9	Synthesis, dielectric properties and application in a thin film transistor device of amorphous aluminum oxide Al <sub>x</sub> O <sub>y</sub> using a molecular based precursor route. <i>Journal of Materials Chemistry C</i> , 2019, 7, 1048-1056.	5.5	21
10	Tungsten oxide nanorod architectures as 3D anodes in binder-free lithium-ion batteries. <i>Nanoscale</i> , 2019, 11, 598-610.	5.6	23
11	Synthesis, oxide formation, properties and thin film transistor properties of yttrium and aluminium oxide thin films employing a molecular-based precursor route. <i>RSC Advances</i> , 2019, 9, 31386-31397.	3.6	13
12	Scalable Processing of Low-Temperature TiO <sub>2</sub> Nanoparticles for High-Efficiency Perovskite Solar Cells. <i>ACS Applied Energy Materials</i> , 2019, 2, 47-58.	5.1	33
13	Functionalization of multi-walled carbon nanotubes with indazole. <i>Electrochimica Acta</i> , 2019, 298, 884-892.	5.2	11
14	Locally Controlled Growth of Individual Lambda-Shaped Carbon Nanofibers. <i>Small</i> , 2019, 15, e1803944.	10.0	2
15	Lithium/Oxygen Incorporation and Microstructural Evolution during Synthesis of Li-Rich Layered Li <sub>0.2</sub> Ni <sub>0.2</sub> Mn <sub>0.6</sub> O <sub>2</sub> Oxides. <i>Advanced Energy Materials</i> , 2019, 9, 1803094.	19.5	78
16	High electrochemical performance of 3D highly porous Zn <sub>0.2</sub> Ni <sub>0.8</sub> Co <sub>2</sub> O <sub>4</sub> microspheres as an electrode material for electrochemical energy storage. <i>CrystEngComm</i> , 2018, 20, 2159-2168.	2.6	19
17	Surface analytical characterization of LiNi <sub>0.8</sub> Mn <sub>x</sub> Co <sub>0.2</sub> O <sub>2</sub> (0 ≤ x ≤ 1) compounds for lithium-ion battery electrodes. <i>Surface and Interface Analysis</i> , 2018, 50, 1132-1137.		18
18	Light-induced cross-linking and post-cross-linking modification of polyglycidol. <i>Chemical Communications</i> , 2018, 54, 1647-1650.	4.1	10

#	ARTICLE	IF	CITATIONS
19	Improving Hemocompatibility of Membranes for Extracorporeal Membrane Oxygenators by Grafting Nonthrombogenic Polymer Brushes. <i>Macromolecular Bioscience</i> , 2018, 18, 1700359.	4.1	53
20	High performance printed oxide field-effect transistors processed using photonic curing. <i>Nanotechnology</i> , 2018, 29, 235205.	2.6	19
21	Lithium Tracer Diffusion in Amorphous Li <sub>x</sub> Si for Low Li Concentrations. <i>Journal of Physical Chemistry C</i> , 2018, 122, 6508-6513.	3.1	15
22	Charging of carbon thin films in scanning and phase-plate transmission electron microscopy. <i>Ultramicroscopy</i> , 2018, 184, 252-266.	1.9	29
23	Surface analytical approaches to reliably characterize lithium ion battery electrodes. <i>Surface and Interface Analysis</i> , 2018, 50, 43-51.	1.8	42
24	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
25	Aqueous Solution Processing of Combustible Precursor Compounds into Amorphous Indium Gallium Zinc Oxide (IGZO) Semiconductors for Thin Film Transistor Applications. <i>Chemistry - an Asian Journal</i> , 2018, 13, 3912-3919.	3.3	10
26	Anionic Polymer Brushes for Biomimetic Calcium Phosphate Mineralizationâ€”A Surface with Application Potential in Biomaterials. <i>Polymers</i> , 2018, 10, 1165.	4.5	12
27	SO <sub>2</sub> gas adsorption on carbon nanomaterials: a comparative study. <i>Beilstein Journal of Nanotechnology</i> , 2018, 9, 1782-1792.	2.8	17
28	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. <i>Thin Solid Films</i> , 2018, 665, 184-192.	1.8	2
29	<i>Bombyx mori</i> silk/titania/gold hybrid materials for photocatalytic water splitting: combining renewable raw materials with clean fuels. <i>Beilstein Journal of Nanotechnology</i> , 2018, 9, 187-204.	2.8	3
30	Thermal transformations of manufactured nanomaterials as a proposed proxy for ageing. <i>Environmental Science: Nano</i> , 2018, 5, 1618-1627.	4.3	4
31	Direct Photopatterning of Solution-Processed Amorphous Indium Zinc Oxide and Zinc Tin Oxide Semiconductorsâ€”A Chimie Douce Molecular Precursor Approach to Thin Film Electronic Oxides. <i>Advanced Materials Interfaces</i> , 2018, 5, 1800324.	3.7	22
32	A 3D MoO <sub>x</sub> /carbon composite array as a binder-free anode in lithium-ion batteries. <i>Dalton Transactions</i> , 2018, 47, 14897-14907.	3.3	16
33	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 ( <i>Adv. Mater. Interfaces</i> 15/2018). <i>Advanced Materials Interfaces</i> , 2018, 5, 1870073.	3.7	0
34	Charge Transport in Low-Temperature Processed Thin-Film Transistors Based on Indium Oxide/Zinc Oxide Heterostructures. <i>ACS Applied Materials &amp; Interfaces</i> , 2018, 10, 20661-20671.	8.0	37
35	Unravelling the growth mechanism of hierarchically structured Ni <sub>1/3</sub> Co <sub>1/3</sub> Mn <sub>1/3</sub> (OH) <sub>2</sub> and their application as precursors for high-power cathode materials. <i>Electrochimica Acta</i> , 2017, 232, 123-131.	5.2	60
36	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

#	ARTICLE	IF	CITATIONS
37	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
38	Support Effect on the Water Gas Shift Activity of Chemical Vapor Deposition-Tailored-Pt/TiO <sub>2</sub> Catalysts. <i>Industrial &amp; Engineering Chemistry Research</i> , 2017, 56, 3194-3203.	3.7	15
39	Polymer Brush-Functionalized Chitosan Hydrogels as Antifouling Implant Coatings. <i>Biomacromolecules</i> , 2017, 18, 1983-1992.	5.4	61
40	Spatial separation of photogenerated electron-hole pairs in solution-grown ZnO tandem core-shell nanowire arrays toward highly sensitive photoelectrochemical detection of hydrogen peroxide. <i>Journal of Materials Chemistry A</i> , 2017, 5, 14397-14405.	10.3	19
41	Development of scalable and versatile nanomaterial libraries for nanosafety studies: polyvinylpyrrolidone (PVP) capped metal oxide nanoparticles. <i>RSC Advances</i> , 2017, 7, 3894-3906.	3.6	18
42	Clickable Antifouling Polymer Brushes for Polymer Pen Lithography. <i>ACS Applied Materials &amp; Interfaces</i> , 2017, 9, 12109-12117.	8.0	33
43	Understanding the Influence of N-Doping on the CO <sub>2</sub> Adsorption Characteristics in Carbon Nanomaterials. <i>Journal of Physical Chemistry C</i> , 2017, 121, 616-626.	3.1	61
44	Unprecedented CO <sub>2</sub> uptake in vertically aligned carbon nanotubes. <i>Carbon</i> , 2017, 125, 327-335.	10.3	20
45	Cholesteryl Hemisuccinate Monolayers Efficiently Control Calcium Phosphate Nucleation and Growth. <i>Crystal Growth and Design</i> , 2017, 17, 5764-5774.	3.0	4
46	Toward new gas-analytical multisensor chips based on titanium oxide nanotube array. <i>Scientific Reports</i> , 2017, 7, 9732.	3.3	32
47	Pseudocapacitance of Mesoporous Spinel-Type MCo <sub>2</sub> O <sub>4</sub> (M = Co, Zn, and Ni) Rods Fabricated by a Facile Solvothermal Route. <i>ACS Omega</i> , 2017, 2, 6003-6013.	3.5	79
48	Understanding the lithiation/delithiation process in SnP <sub>2</sub> O <sub>7</sub> anode material for lithium-ion batteries. <i>Electrochimica Acta</i> , 2017, 252, 446-452.	5.2	21
49	Room-Temperature Processing of Printed Oxide FETs Using Ultraviolet Photonic Curing. <i>Advanced Electronic Materials</i> , 2017, 3, 1600476.	5.1	29
50	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
51	An interpenetrating, microstructurable and covalently attached conducting polymer hydrogel for neural interfaces. <i>Acta Biomaterialia</i> , 2017, 58, 365-375.	8.3	70
52	Garnet-Type Li <sub>7</sub> La <sub>3</sub> Zr <sub>2</sub> O <sub>12</sub> Solid Electrolyte Thin Films Grown by CO <sub>2</sub> -Laser Assisted CVD for All-Solid-State Batteries. <i>Journal of the Electrochemical Society</i> , 2017, 164, A6131-A6139.	2.9	103
53	Dry adhesives from carbon nanofibers grown in an open ethanol flame. <i>Beilstein Journal of Nanotechnology</i> , 2017, 8, 2719-2728.	2.8	4
54	Laser processes and analytics for high power 3D battery materials. , 2016, , .		5

#	ARTICLE	IF	CITATIONS
55	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
56	Low-temperature silver sintering processes on high performance ENIG, EPIG, ENEPIG and ISIG surfaces for power electronic systems and huge battery systems. , 2016, , .		1
57	Adsorption of pure SO <sub>2</sub> on nanoscaled graphene oxide. RSC Advances, 2016, 6, 36834-36839.	3.6	31
58	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
59	Bud type carbon nanohorns: materials for high pressure CO <sub>2</sub> capture and Li-ion storage. Journal of Materials Chemistry A, 2016, 4, 14267-14275.	10.3	16
60	Effect of oxygen plasma treatment on the electrochemical performance of the rayon and polyacrylonitrile based carbon felt for the vanadium redox flow battery application. Journal of Power Sources, 2016, 332, 240-248.	7.8	111
61	Surface Analytical Study Regarding the Solid Electrolyte Interphase Composition of Nanoparticulate SnO <sub>2</sub> Anodes for Li-Ion Batteries. Journal of Physical Chemistry C, 2016, 120, 24706-24714.	3.1	29
62	Non-Fouling Biodegradable Poly( $\epsilon$ -caprolactone) Nanofibers for Tissue Engineering. Macromolecular Bioscience, 2016, 16, 83-94.	4.1	21
63	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
64	Catalyst-free site-specific surface modifications of nanocrystalline diamond films via microchannel cantilever spotting. RSC Advances, 2016, 6, 57820-57827.	3.6	14
65	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
66	Organic solar cells with graded absorber layers processed from nanoparticle dispersions. Nanoscale, 2016, 8, 6721-6727.	5.6	17
67	Stability domain of alumina thermally grown on Fe-Cr-Al-based model alloys and modified surface layers exposed to oxygen-containing molten Pb. Journal of Nuclear Materials, 2016, 470, 68-75.	2.7	25
68	Quantitative study of ruthenium cross-over in direct methanol fuel cells during early operation hours. Journal of Power Sources, 2016, 301, 210-218.	7.8	16
69	Designing Molecular Printboards: A Photolithographic Platform for Recodable Surfaces. Chemistry - A European Journal, 2015, 21, 13186-13190.	3.3	21
70	Rapid Thiol-Cyne-Mediated Fabrication and Dual Postfunctionalization of Micro-Resolved 3D Mesostructures. Advanced Functional Materials, 2015, 25, 3735-3744.	14.9	31
71	Phototriggered Functionalization of Hierarchically Structured Polymer Brushes. Langmuir, 2015, 31, 5899-5907.	3.5	43
72	Polymer Brushes Interfacing Blood as a Route Toward High Performance Blood Contacting Devices. Macromolecular Bioscience, 2015, 15, 636-646.	4.1	56

#	ARTICLE	IF	CITATIONS
73	High coercivity in large exchange-bias Co/CoO-MgO nano-granular films. Chinese Physics B, 2015, 24, 034501.	1.4	3
74	Monolithic High Performance Surface Anchored Metal-Organic Framework Bragg Reflector for Optical Sensing. Chemistry of Materials, 2015, 27, 1991-1996.	6.7	54
75	Charge Generation Layers for Solution Processed Tandem Organic Light Emitting Diodes with Regular Device Architecture. ACS Applied Materials & Interfaces, 2015, 7, 8132-8137.	8.0	47
76	Quantifying bacterial adhesion on antifouling polymer brushes via single-cell force spectroscopy. Polymer Chemistry, 2015, 6, 5740-5751.	3.9	70
77	Interface-controlled calcium phosphate mineralization: effect of oligo(aspartic acid)-rich interfaces. CrystEngComm, 2015, 17, 6901-6913.	2.6	12
78	Charge generation layers for all-solution processed organic tandem light emitting diodes with regular device architecture. , 2015, , .		0
79	Molecular Insight in Structure and Activity of Highly Efficient, Low-Ir Ni Oxide Catalysts for Electrochemical Water Splitting (OER). Journal of the American Chemical Society, 2015, 137, 13031-13040.	13.7	565
80	A Secondary Ion Mass Spectrometry Study on the Mechanisms of Amorphous Silicon Electrode Lithiation in Li-Ion Batteries. Zeitschrift Fur Physikalische Chemie, 2015, 229, 1375-1385.	2.8	15
81	Li-Si thin films for battery applications produced by ion-beam co-sputtering. RSC Advances, 2015, 5, 7192-7195.	3.6	23
82	Reversible activation of pH-sensitive cell penetrating peptides attached to gold surfaces. Chemical Communications, 2015, 51, 273-275.	4.1	14
83	Protection of yttria-stabilized zirconia for dental applications by oxidic PVD coating. Acta Biomaterialia, 2015, 11, 488-493.	8.3	29
84	Copper thick-film substrates for power electronic applications. , 2014, , .		10
85	Formation of size controlled silicon nanocrystals in nitrogen free silicon dioxide matrix prepared by plasma enhanced chemical vapor deposition. Journal of Applied Physics, 2014, 116, .	2.5	28
86	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
87	Enhanced Electron Injection into Inverted Polymer Light-Emitting Diodes by Combined Solution-Processed Zinc Oxide/Polyethylenimine Interlayers. Advanced Materials, 2014, 26, 2750-2754.	21.0	147
88	Intrinsic device-to-device variation in graphene field-effect transistors on a Si/SiO <sub>2</sub> substrate as a platform for discriminative gas sensing. Applied Physics Letters, 2014, 104, .	3.3	30
89	A bioinspired light induced avenue for the design of patterned functional interfaces. Journal of Materials Chemistry B, 2014, 2, 36-40.	5.8	30
90	Effect of Protein Adsorption on the Fluorescence of Ultrasmall Gold Nanoclusters. Small, 2014, 10, 1667-1667.	10.0	8

#	ARTICLE	IF	CITATIONS
91	Exploiting end group functionalization for the design of antifouling bioactive brushes. <i>Polymer Chemistry</i> , 2014, 5, 4124-4131.	3.9	51
92	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
93	Solution Processed, White Emitting Tandem Organic Light-Emitting Diodes with Inverted Device Architecture. <i>Advanced Materials</i> , 2014, 26, 5155-5159.	21.0	114
94	Electrochemical performance of tin-based nano-composite electrodes using a vinylene carbonate-containing electrolyte for Li-ion cells. <i>Journal of Power Sources</i> , 2014, 263, 145-153.	7.8	10
95	Fluorine incorporation into SnO <sub>2</sub> nanoparticles by co-milling with polyvinylidene fluoride. <i>Solid State Sciences</i> , 2014, 30, 36-43.	3.2	15
96	Chloride ion battery: A new member in the rechargeable battery family. <i>Journal of Power Sources</i> , 2014, 245, 706-711.	7.8	148
97	Synthesis of in situ functionalized iron oxide nanoparticles presenting alkyne groups via a continuous process using near-critical and supercritical water. <i>Journal of Supercritical Fluids</i> , 2013, 82, 83-95.	3.2	17
98	Post-doping via spray-drying: a novel sol-gel process for the batch synthesis of doped LiNi <sub>0.5</sub> Mn <sub>1.5</sub> O <sub>4</sub> spinel material. <i>Journal of Materials Science</i> , 2013, 48, 3404-3414.	3.7	19
99	Fabrication and characterization of iron and fluorine co-doped BST thin films for microwave applications. <i>Journal of Materials Science</i> , 2013, 48, 3586-3596.	3.7	8
100	Tungsten Oxide Buffer Layers Fabricated in an Inert Sol-Gel Process at Room Temperature for Blue Organic Light-Emitting Diodes. <i>Advanced Materials</i> , 2013, 25, 4113-4116.	21.0	64
101	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
102	Synthesis of nanostructured Pt/oxide catalyst particles by MOCVD process at ambient pressure. <i>Surface and Coatings Technology</i> , 2013, 230, 284-289.	4.8	17
103	Controlled Cell Adhesion on Poly(dopamine) Interfaces Photopatterned with Non-Fouling Brushes. <i>Advanced Materials</i> , 2013, 25, 6123-6127.	21.0	180
104	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
105	Modular ambient temperature functionalization of carbon nanotubes with stimuli-responsive polymer strands. <i>Polymer Chemistry</i> , 2013, 4, 1525-1537.	3.9	29
106	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
107	Spatially Controlled Photochemical Peptide and Polymer Conjugation on Biosurfaces. <i>Biomacromolecules</i> , 2013, 14, 4340-4350.	5.4	46
108	Investigation of the degradation of SnO <sub>2</sub> electrodes for use in Li-ion cells. <i>Journal of Power Sources</i> , 2013, 233, 139-147.	7.8	34

#	ARTICLE	IF	CITATIONS
109	Neutron reflectometry studies on the lithiation of amorphous silicon electrodes in lithium-ion batteries. <i>Physical Chemistry Chemical Physics</i> , 2013, 15, 7777.	2.8	78
110	Synthesis of polymers with phosphorus containing side chains via modular conjugation. <i>Polymer Chemistry</i> , 2013, 4, 2406.	3.9	8
111	Polymer surface patterning via Diels-Alder trapping of photo-generated thioaldehydes. <i>Chemical Communications</i> , 2013, 49, 633-635.	4.1	48
112	Multicolor Silicon Light-Emitting Diodes (SiLEDs). <i>Nano Letters</i> , 2013, 13, 475-480.	9.1	273
113	Laser-induced self-organizing surface structures on cathode materials for lithium-ion batteries. <i>Proceedings of SPIE</i> , 2013, , .	0.8	0
114	Conducting Polymer/SWCNTs Modular Hybrid Materials via Diels-Alder Ligation. <i>Macromolecules</i> , 2013, 46, 2606-2615.	4.8	35
115	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
116	Enhancing the gas selectivity of single-crystal SnO <sub>2</sub> :Pt thin-film chemiresistor microarray by SiO <sub>2</sub> membrane coating. <i>Sensors and Actuators B: Chemical</i> , 2013, 185, 59-69.	7.8	27
117	Thin film passivation of laser generated 3D micro patterns in lithium manganese oxide cathodes. , 2013, , .		0
118	Synthesis of Pt/S <sub>2</sub> O <sub>2</sub> Catalyst Nanoparticles from a Continuous Aerosol Process using Novel Cyclo-octadienylplatinum Precursors. <i>Chemical Vapor Deposition</i> , 2013, 19, 274-283.	1.3	17
119	Structural and optical properties of size controlled Si nanocrystals in Si <sub>3</sub> N <sub>4</sub> matrix: The nature of photoluminescence peak shift. <i>Journal of Applied Physics</i> , 2013, 114, .	2.5	31
120	Spatially Controlled Surface Immobilization of Nonmodified Peptides. <i>Angewandte Chemie - International Edition</i> , 2013, 52, 9714-9718.	13.8	30
121	Photochemical Generation of Light Responsive Surfaces. <i>Advanced Functional Materials</i> , 2013, 23, 4011-4019.	14.9	58
122	Laser adjusted three-dimensional Li-Mn-O cathode architectures for secondary lithium-ion cells. <i>Proceedings of SPIE</i> , 2012, , .	0.8	5
123	Photo-Induced Macromolecular Functionalization of Cellulose via Nitroxide Spin Trapping. <i>Biomacromolecules</i> , 2012, 13, 1700-1705.	5.4	25
124	Room temperature oxidation of magnetron sputtered Si-C-N films. <i>Applied Surface Science</i> , 2012, 258, 2944-2947.	6.1	3
125	Diode laser heat treatment of lithium manganese oxide films. <i>Applied Surface Science</i> , 2012, 258, 5146-5152.	6.1	20
126	(Bio)Molecular Surface Patterning by Phototriggered Oxime Ligation. <i>Angewandte Chemie - International Edition</i> , 2012, 51, 9181-9184.	13.8	106



#	ARTICLE	IF	CITATIONS
127	Ultrasml fluorescent silver nanoclusters: Protein adsorption and its effects on cellular responses. Nano Research, 2012, 5, 531-542.	10.4	129
128	Nonequilibrium structure of Zn <sub>2</sub> SnO <sub>4</sub> spinel nanoparticles. Journal of Materials Chemistry, 2012, 22, 3117.	6.7	96
129	Structure and chemical composition of mixed benzylguanidine- and methoxy-terminated self-assembled monolayers for immobilization of biomolecules. Surface and Interface Analysis, 2012, 44, 909-913.	1.8	12
130	Effect of Protein Adsorption on the Fluorescence of Ultrasml Gold Nanoclusters. Small, 2012, 8, 661-665.	10.0	159
131	A detailed surface analytical study of degradation processes in (meth)acrylic polymers. Journal of Polymer Science Part A, 2012, 50, 1801-1811.	2.3	22
132	Microwave-assisted rapid synthesis of luminescent gold nanoclusters for sensing Hg <sup>2+</sup> in living cells using fluorescence imaging. Nanoscale, 2012, 4, 4155.	5.6	211
133	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
134	Characterization of non-stoichiometric co-sputtered Ba <sub>0.6</sub> Sr <sub>0.4</sub> (Ti <sub>1-x</sub> Fe <sub>x</sub> ) <sub>1-x</sub> O <sub>3</sub> thin films for tunable passive microwave applications. Analytical and Bioanalytical Chemistry, 2012, 403, 643-650.	3.7	6
135	NO <sub>x</sub> reduction by H <sub>2</sub> on WO <sub>x</sub> /ZrO <sub>2</sub> -supported Pd catalysts under lean conditions. Applied Catalysis B: Environmental, 2012, 117-118, 275-282.	20.2	39
136	Lithium orthosilicate surfaces: Characterization and effect on tritium release. Journal of Nuclear Materials, 2012, 427, 126-132.	2.7	21
137	Photoclickable Surfaces for Profluorescent Covalent Polymer Coatings. Advanced Functional Materials, 2012, 22, 304-312.	14.9	133
138	Adding Spatial Control to Click Chemistry: Phototriggered Diels-Alder Surface (Bio)functionalization at Ambient Temperature. Angewandte Chemie - International Edition, 2012, 51, 1071-1074.	13.8	170
139	Structural and chemical characterization of SnO <sub>2</sub> -based nanoparticles as electrode material in Li-ion batteries. Journal of Materials Science, 2012, 47, 4383-4391.	3.7	16
140	Facile preparation of water-soluble fluorescent gold nanoclusters for cellular imaging applications. Nanoscale, 2011, 3, 2009.	5.6	278
141	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
142	Structure-Activity Relationship for Quaternary Ammonium Compounds Hybridized with Poly(methyl) Tj ETQq 0,0 rgBT /Oyrlck 10	8.0	49
143	Laser microstructuring and annealing processes for lithium manganese oxide cathodes. Applied Surface Science, 2011, 257, 9968-9976.	6.1	49
144	Mechanosynthesized BiFeO <sub>3</sub> Nanoparticles with Highly Reactive Surface and Enhanced Magnetization. Journal of Physical Chemistry C, 2011, 115, 7209-7217.	3.1	82

#	ARTICLE	IF	CITATIONS
145	Mild and Modular Surface Modification of Cellulose via Hetero Diels-Alder (HDA) Cycloaddition. Biomacromolecules, 2011, 12, 1137-1145.	5.4	70
146	Strain Relaxation and Vacancy Creation in Thin Platinum Films. Physical Review Letters, 2011, 107, 265501.	7.8	25
147	One-Pot Synthesis of Near-Infrared Fluorescent Gold Clusters for Cellular Fluorescence Lifetime Imaging. Small, 2011, 7, 2614-2620.	10.0	334
148	Dynamic Covalent Chemistry on Surfaces Employing Highly Reactive Cyclopentadienyl Moieties. Advanced Materials, 2011, 23, 4435-4439.	21.0	42
149	Nitrogen self-diffusion in magnetron sputtered Si-C-N films. Journal of Applied Physics, 2011, 109, 093522.	2.5	6
150	Laser modification and characterization of Li-Mn-O thin film cathodes for lithium-ion batteries. Proceedings of SPIE, 2011, , .	0.8	7
151	Design of Chemically Activated Polymer Microwells by One-Step UV-Lithography for Stem Cell Adhesion. Langmuir, 2010, 26, 2050-2056.	3.5	7
152	Characterization of core/shell nanoparticle thin films for gas analytical applications. Surface and Interface Analysis, 2010, 42, 1131-1134.	1.8	14
153	Bandgap determination and charge separation in Ag@TiO <sub>2</sub> core shell nanoparticle films. Surface and Interface Analysis, 2010, 42, 835-841.	1.8	90
154	Laser annealing of textured thin film cathode material for lithium ion batteries. Proceedings of SPIE, 2010, , .	0.8	9
155	Crystallisation of magnetron sputtered amorphous Si <sub>1-x</sub> C <sub>x</sub> films (x= 1/3) studied by grazing incidence X-ray diffractometry. Philosophical Magazine, 2010, 90, 3855-3865.	1.6	3
156	Single-Nanobelt Electronic Nose: Engineering and Tests of the Simplest Analytical Element. ACS Nano, 2010, 4, 4487-4494.	14.6	64
157	Benzylguanine Thiol Self-Assembled Monolayers for the Immobilization of SNAP-tag Proteins on Microcontact-Printed Surface Structures. Langmuir, 2010, 26, 6097-6101.	3.5	50
158	Laser-assisted surface functionalization. , 2010, , .		0
159	Atomic transport in metastable compounds: Case study of self-diffusion in $\text{Si}_3\text{C}_2\text{N}_3$ using neutron reflectometry. Physical Review B, 2009, 80, .	3.2	14
160	Novel processing for a polymer patch clamping system. , 2009, , .		0
161	Could We Apply a NeuroProcessor For Analyzing a Gas Response Of Multisensor Arrays?. , 2009, , .		0
162	The Gas-Sensing Characteristics Of Percolating 2-D SnO <sub>2</sub> Nanowire Mats As A Platform For Electronic Nose Devices. , 2009, , .		3

#	ARTICLE	IF	CITATIONS
163	Laser- and UV-assisted modification of polystyrene surfaces for control of protein adsorption and cell adhesion. <i>Applied Surface Science</i> , 2009, 255, 5453-5457.	6.1	71
164	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
165	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
166	Isothiocyanate-functionalized RGD peptides for tailoring cell-adhesive surface patterns. <i>Biomaterials</i> , 2008, 29, 3004-3013.	11.4	45
167	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
168	How to measure atomic diffusion processes in the sub-nanometer range. <i>Acta Materialia</i> , 2008, 56, 464-470.	7.9	40
169	Structure, phase transformations, and defects of HfO <sub>2</sub> and ZrO <sub>2</sub> 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
170	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
171	Patterning of polystyrene by UV-laser radiation for the fabrication of devices for patch clamping. , 2008, , .		2
172	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
173	Laser-assisted modification of polymers for microfluidic, micro-optics, and cell culture applications. , 2007, , .		13
174	Structural relaxation and self-diffusion in covalent amorphous solids: Silicon nitride as a model system. <i>Journal of Applied Physics</i> , 2007, 102, .	2.5	13
175	Synthesis and characterization of nanoscale Al-Si-O gradient membranes. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , 2007, 25, 927-931.	2.1	7
176	High purity Si-C-N thin films with tailored composition on the tie line SiC-Si <sub>3</sub> N <sub>4</sub> . <i>Diamond and Related Materials</i> , 2007, 16, 1273-1277.	3.9	12
177	Laser-assisted modification of polystyrene surfaces for cell culture applications. <i>Applied Surface Science</i> , 2007, 253, 9177-9184.	6.1	87
178	Nanogranular SnO <sub>2</sub> Layers for Gas Sensing Applications by In Situ Deposition of Nanoparticles Produced by the Karlsruhe Microwave Plasma Process. <i>Plasma Processes and Polymers</i> , 2007, 4, S865-S870.	3.0	10
179	Comparative study of trap-limited hydrogen diffusion in amorphous SiC, Si <sub>0.66</sub> C <sub>0.33</sub> N <sub>1.33</sub> , and SiN <sub>1.33</sub> films. <i>Journal of Physics Condensed Matter</i> , 2006, 18, 5363-5370.	1.8	9
180	Simultaneous diffusion of Si and N in silicon nitride. <i>Physical Review B</i> , 2006, 74, .	3.2	29

#	ARTICLE	IF	CITATIONS
181	Nitrogen Diffusion in Amorphous Silicon Nitride Isotope Multilayers Probed by Neutron Reflectometry. <i>Physical Review Letters</i> , 2006, 96, 055901.	7.8	49
182	Laser-assisted welding of transparent polymers for microchemical engineering and life science. , 2005, , ,		12
183	Crystallization kinetics of amorphous SiC films: Influence of substrate. <i>Applied Surface Science</i> , 2005, 252, 1460-1470.	6.1	33
184	Tailored stoichiometries of silicon carbonitride thin films prepared by combined radio frequency magnetron sputtering and ion beam synthesis. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , 2005, 23, 1114-1119.	2.1	8
185	Nitrogen Self-Diffusion in Polycrystalline Si <sub>3</sub> N <sub>4</sub> Films: Isotope Heterostructures vs. Gas-Exchange. <i>Defect and Diffusion Forum</i> , 2005, 237-240, 512-517.	0.4	1
186	Nanoparticle SnO <sub>2</sub> films as gas sensitive membranes. <i>Materials Research Society Symposia Proceedings</i> , 2005, 900, 1.	0.1	3
187	The diffusion of ion implanted hydrogen in amorphous Si <sub>3</sub> N <sub>4</sub> :H films. <i>Journal of Physics Condensed Matter</i> , 2004, 16, 4233-4244.	1.8	8
188	Reliability Assessment of a Gas Microsensor. <i>IEEE Transactions on Device and Materials Reliability</i> , 2004, 4, 549-555.	2.0	1
189	Nitrogen self-diffusion in silicon nitride thin films probed with isotope heterostructures. <i>Applied Physics Letters</i> , 2004, 85, 582-584.	3.3	17
190	Thermal stability and crystallization kinetics of sputtered amorphous Si <sub>3</sub> N <sub>4</sub> films. <i>Thin Solid Films</i> , 2004, 450, 346-351.	1.8	42
191	Love waves in SiO <sub>2</sub> layers on STW-resonators based on LiTaO <sub>3</sub> . <i>Talanta</i> , 2004, 62, 71-79.	5.5	22
192	Surface analytical characterization of SiO <sub>2</sub> 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
193	Al <sub>2</sub> Cl <sub>2</sub> ·12L (L = THF, THP): The First Polyhedral Aluminum Chlorides. <i>Journal of the American Chemical Society</i> , 2001, 123, 9099-9106.	13.7	65
194	Characterization and modification of polymer blend films. <i>Colloid and Polymer Science</i> , 2001, 279, 1013-1019.	2.1	4
195	Characterization of artificially produced copper and bronze patina by XPS. <i>Surface and Interface Analysis</i> , 2000, 30, 135-139.	1.8	42
196	Quality control of gas sensor microarrays using Auger electron spectroscopy. <i>Thin Solid Films</i> , 2000, 366, 265-271.	1.8	3
197	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
198	Formation of dense cellulose monolayers on silver surfaces. <i>Journal of the Brazilian Chemical Society</i> , 2000, 11, 11.	0.6	6

#	ARTICLE	IF	CITATIONS
199	Synthesis of a cellulose thiosulfate and its immobilization on gold surfaces. <i>Polymer</i> , 1999, 40, 1593-1601.	3.8	32
200	Synthesis of silicon carbonitride thin films by means of r.f.-sputtering and ion implantation. <i>Surface and Coatings Technology</i> , 1999, 116-119, 419-423.	4.8	17
201	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
202	Surface modification of thin polystyrene films. <i>Colloid and Polymer Science</i> , 1999, 277, 673-679.	2.1	17
203	C and N depth profiles of SiCN layers determined with nuclear reaction analyses and AES. <i>Nuclear Instruments &amp; Methods in Physics Research B</i> , 1998, 139, 268-272.	1.4	9
204	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
205	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
206	Development of Thin Film Electrodes Based on Sputtered Amorphous Carbon. <i>Journal of the Electrochemical Society</i> , 1997, 144, 6-15.	2.9	46
207	Production and surface analytical characterization of various chalcogenide glass thin films for analytical microdevices. <i>Surface and Coatings Technology</i> , 1997, 97, 707-712.	4.8	12
208	ISFETs with sputtered sodium aluminosilicate glass membranes. <i>Analytical and Bioanalytical Chemistry</i> , 1996, 354, 852-856.	3.7	2
209	Development of Na <sup>+</sup> -sensitive membranes based on sputtered Na-Al-Si glasses. <i>Mikrochimica Acta</i> , 1995, 121, 73-85.	5.0	2
210	Copper(II)-ion response of Cu <sup>+</sup> -As <sup>+</sup> -Se thin-film sensors in a flow-through microcell. <i>Sensors and Actuators B: Chemical</i> , 1995, 27, 384-387.	7.8	3
211	Cu <sup>2+</sup> -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
212	Electrochemical Microanalytical System for Ionometric Measurements. , 1995, , 215-218.		4
213	Fe-doped sodium aluminosilicate thin films: conductivity, microstructural organization and sensor properties. <i>Solid State Ionics</i> , 1994, 74, 165-178.	2.7	8
214	Iodide ion-sensitive field-effect structures. <i>Sensors and Actuators B: Chemical</i> , 1993, 15, 192-194.	7.8	7
215	Surface analytical investigation of the tritium getter ZrCO after exposure to various gases. <i>Mikrochimica Acta</i> , 1992, 107, 207-217.	5.0	17
216	Surface analytical characterization of the hydrogen getter material ZrCo. <i>Fresenius Zeitschrift für Analytische Chemie</i> , 1989, 335, 669-674.	0.8	16

#	ARTICLE	IF	CITATIONS
217	Corrosion behaviour of the steel 1.4361 studied by combined XPS, electrochemistry and radionuclide techniques. Fresenius Zeitschrift für Analytische Chemie, 1989, 333, 406-407.	0.8	5
218	Darstellung, spektroskopische und elektrochemische Charakterisierung von Pentachloromonocarbonylosmat(IV), [OsCl <sub>5</sub> (CO)]- / Preparation, Spectroscopical and Electrochemical Characterization of Pentachloromonocarbonylosmate(IV), [OsCl <sub>5</sub> (CO)]-. Zeitschrift für Naturforschung - Section B Journal of Chemical Sciences, 1986, 41, 25-31.	0.7	3
219	Schwingungs- und Elektronenspektren der Dekahalogenodiosmate(IV), [Os <sub>2</sub> X <sub>10</sub> ] <sup>2+</sup> , X = Cl, Br. Zeitschrift für Anorganische und Allgemeine Chemie, 1986, 537, 88-96.	1.2	10
220	Reaktionen und Strukturen von [(C <sub>2</sub> H <sub>5</sub> ) <sub>4</sub> N][OsCl <sub>6</sub> ] und [(n-C <sub>4</sub> H <sub>9</sub> ) <sub>4</sub> N] <sub>2</sub> [Os <sub>2</sub> Cl <sub>10</sub> ] / Reactions and Structures of [(C <sub>2</sub> H <sub>5</sub> ) <sub>4</sub> N][OsCl <sub>6</sub> ] and [(n-C <sub>4</sub> H <sub>9</sub> ) <sub>4</sub> N] <sub>2</sub> [Os <sub>2</sub> Cl <sub>10</sub> ]. Zeitschrift für Naturforschung - Section B Journal of Chemical Sciences, 1984, 39, 843-849.	0.7	20
221	Darstellung und spektroskopische Charakterisierung von Hexachloroosmat(V) / Preparation and Spectroscopical Characterisation of Hexachloroosmate(V). Zeitschrift für Naturforschung - Section B Journal of Chemical Sciences, 1983, 38, 680-686.	0.7	14
222	The characterization of nanostructured copper-doped tin oxide films for gas sensor microarrays. , 0, , .		0
223	Diffusion in Isotope Heterostructures Investigated by Neutron Reflectometry. Defect and Diffusion Forum, 0, 289-292, 697-703.	0.4	1