Rainer Adelung

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/3649135/publications.pdf

Version: 2024-02-01

324 papers	12,188 citations	23500 58 h-index	34900 98 g-index

335 all docs	335 docs citations	335 times ranked	12733 citing authors

#	Article	IF	Citations
1	From water strider to research â€“ interrelationships of structure and characteristics from three perspectives. Chemkon - Chemie Konkret, Forum Fuer Unterricht Und Didaktik, 2023, 30, 13-22.	0.2	1
2	Sensing performance of CuO/Cu2O/ZnO:Fe heterostructure coated with thermally stable ultrathin hydrophobic PV3D3 polymer layer for battery application. Materials Today Chemistry, 2022, 23, 100642.	1.7	8
3	Thermoresponsive Hydrogels with Improved Actuation Function by Interconnected Microchannels. Advanced Intelligent Systems, 2022, 4, 2100081.	3.3	10
4	Mechanical Interactions in Interpenetrating Composites. IFMBE Proceedings, 2022, , 579-586.	0.2	0
5	Functional polymer materials for modern marine biofouling control. Progress in Polymer Science, 2022, 127, 101516.	11.8	118
6	Preventing algae adhesion using lubricant-modified polydimethylsiloxane/polythiourethane nanocomposite. Materials and Design, 2022, 214, 110389.	3.3	7
7	Sparse CNT networks with implanted AgAu nanoparticles: A novel memristor with short-term memory bordering between diffusive and bipolar switching. PLoS ONE, 2022, 17, e0264846.	1.1	1
8	Graphene Oxide Framework Structures and Coatings: Impact on Cell Adhesion and Pre-Vascularization Processes for Bone Grafts. International Journal of Molecular Sciences, 2022, 23, 3379.	1.8	3
9	Localized Drug Delivery Systems in Highâ€Grade Glioma Therapyâ€”From Construction to Application. Advanced Therapeutics, 2022, 5, .	1.6	5
10	Fabrication and Modelling of a Reservoir-Based Drug Delivery System for Customizable Release. Pharmaceutics, 2022, 14, 777.	2.0	6
11	Tuneable conductivity at extreme electric fields in ZnO tetrapod-silicone composites for high-voltage power cable insulation. Scientific Reports, 2022, 12, 6035.	1.6	3
12	Injectable Thermosensitive Chitosan-Collagen Hydrogel as A Delivery System for Marine Polysaccharide Fucoidan. Marine Drugs, 2022, 20, 402.	2.2	9
13	Al₂O₃/ZnO Heterostructure-Based Sensors for Volatile Organic Compounds in Safety Applications. ACS Applied Materials & Interfaces, 2022, 14, 29331-29344.	4.0	15
14	Structural anisotropy in three dimensional macroporous graphene: A polarized XANES investigation. Diamond and Related Materials, 2021, 111, 108171.	1.8	7
15	Luminescent silver nanoclusters decorated on ZnO tetrapods: a detailed understanding of their role in photoluminescence features. Journal of Materials Chemistry C, 2021, 9, 7014-7026.	2.7	9
16	Polydimethylsiloxane Microdomains Formation at the Polythiourethane/Air Interface and Its Influence on Barnacle Release. ACS Applied Materials & Interfaces, 2021, 13, 4545-4552.	4.0	13
17	Lightâ€Controlled Growth Factors Release on Tetrapodal ZnOâ€Incorporated 3Dâ€Printed Hydrogels for Developing Smart Wound Scaffold. Advanced Functional Materials, 2021, 31, 2007555.	7.8	65
18	Comparison of Thermal Annealing versus Hydrothermal Treatment Effects on the Detection Performances of ZnO Nanowires. ACS Applied Materials & Interfaces, 2021, 13, 10537-10552.	4.0	14

#	Article	IF	Citations
19	Microengineered Hollow Graphene Tube Systems Generate Conductive Hydrogels with Extremely Low Filler Concentration. Nano Letters, 2021, 21, 3690-3697.	4.5	29
20	Improved Longâ€Term Stability and Reduced Humidity Effect in Gas Sensing: SiO₂ Ultraâ€Thin Layered ZnO Columnar Films. Advanced Materials Technologies, 2021, 6, 2001137.	3.0	24
21	Highly Porous and Ultra-Lightweight Aero-Ga2O3: Enhancement of Photocatalytic Activity by Noble Metals. Materials, 2021, 14, 1985.	1.3	9
22	Electrochemical Surface Structuring for Strong SMA Wireâ€“Polymer Interface Adhesion. ACS Applied Materials & Interfaces, 2021, 13, 21924-21935.	4.0	8
23	Electrically powered repeatable air explosions using microtubular graphene assemblies. Materials Today, 2021, 48, 7-17.	8.3	12
24	VerschleiÃŸverhalten von additiv gefertigten Kunststoff-Kunststoff-Gleitpaarungen. Tribologie Und Schmierungstechnik, 2021, 68, .	0.1	1
25	TiO₂/Cu₂O/CuO Multi-Nanolayers as Sensors for H₂ and Volatile Organic Compounds: An Experimental and Theoretical Investigation. ACS Applied Materials & Interfaces, 2021, 13, 32363-32380.	4.0	39
26	Visualizing Intrinsic 3Dâ€Strain Distribution in Gold Coated ZnO Microstructures by Bragg Coherent Xâ€Ray Diffraction Imaging and Transmission Electron Microscopy with Respect to Piezotronic Applications. Advanced Electronic Materials, 2021, 7, 2100546.	2.6	2
27	Role of structural specificity of ZnO particles in preserving functionality of proteins in their corona. Scientific Reports, 2021, 11, 15945.	1.6	2
28	Additive Manufacturing as a Means of Gas Sensor Development for Battery Health Monitoring. Chemosensors, 2021, 9, 252.	1.8	5
29	Nanoscaleâ€Sculptured Al Microparticles as Universal Hierarchical Adhesion Promoters. Physica Status Solidi - Rapid Research Letters, 2021, 15, 2100296.	1.2	0
30	Self-Propelled Aero-GaN Based Liquid Marbles Exhibiting Pulsed Rotation on the Water Surface. Materials, 2021, 14, 5086.	1.3	3
31	Heterostructure-based devices with enhanced humidity stability for H2 gas sensing applications in breath tests and portable batteries. Sensors and Actuators A: Physical, 2021, 329, 112804.	2.0	17
32	Tailoring the selectivity of ultralow-power heterojunction gas sensors by noble metal nanoparticle functionalization. Nano Energy, 2021, 88, 106241.	8.2	21
33	Core-shell structured nets for biofouling control in aquaculture. Aquaculture Reports, 2021, 21, 100781.	0.7	4
34	Development of Polythiourethane/ZnO-Based Anti-Fouling Materials and Evaluation of the Adhesion of Staphylococcus aureus and Candida glabrata Using Single-Cell Force Spectroscopy. Nanomaterials, 2021, 11, 271.	1.9	12
35	Glial cell responses on tetrapod-shaped graphene oxide and reduced graphene oxide 3D scaffolds in brain in vitro and ex vivo models of indirect contact. Biomedical Materials (Bristol), 2021, 16, 015008.	1.7	4
36	High-Performance Gas Sensors Using Heterostructures based on Binary and Ternary Metal Oxides. , 2021, , .		0

#	Article	IF	Citations
37	Double Hierarchical 3D Carbon Nanotube Network with Tailored Structure as a Lithium Sulfur Cathode. , 2021, , .		0
38	Semiconducting Oxide - Based Micro- and Nano-Sensors for Environmental and Biomedical Monitoring. , 2021, , .		0
39	Tunable 3D Hydrogel Microchannel Networks to Study Confined Mammalian Cell Migration. Advanced Healthcare Materials, 2021, 10, e2100625.	3.9	12
40	Nanoengineered Antiviral Fibrous Arrays with Rose-Thorn-Inspired Architectures. , 2021, 3, 1566-1571.		5
41	Evaporation kinetics in highly porous tetrapodal zinc oxide networks studied using in situ SRÂµCT. Scientific Reports, 2021, 11, 20272.	1.6	2
42	Modification of Nylon Nets with Poly(dimethylsiloxane)/Tetrapodal-Shaped ZnO Composite for Aquaculture Biofouling Control. ACS Applied Polymer Materials, 2021, 3, 6598-6607.	2.0	1
43	Tunable 3D Hydrogel Microchannel Networks to Study Confined Mammalian Cell Migration (Adv.) Tj ETQq1 1 0.784314 rgBT /Overlock	3.9	0
44	Fabrication of ZnO Nanobrushes by H₂â€“C₂H₂ Plasma Etching for H₂ Sensing Applications. ACS Applied Materials & Interfaces, 2021, 13, 61758-61769.	4.0	9
45	Fundamental Aspects Concerning the Validity of the Standard Equivalent Circuit for Largeâ€Area Silicon Solar Cells. Physica Status Solidi (A) Applications and Materials Science, 2020, 217, 1900612.	0.8	3
46	Self-reporting mechanochromic coating: a glassfiber reinforced polymer composite that predicts impact induced damage. Materials Horizons, 2020, 7, 598-604.	6.4	27
47	Establishment of a glioblastoma in vitro (in)complete resection dual co-culture model suitable for drug testing. Annals of Anatomy, 2020, 228, 151440.	1.0	10
48	Facile fabrication of semiconducting oxide nanostructures by direct ink writing of readily available metal microparticles and their application as low power acetone gas sensors. Nano Energy, 2020, 70, 104420.	8.2	62
49	Advanced Hybrid GaN/ZnO Nanoarchitectured Microtubes for Fluorescent Micromotors Driven by UV Light. Small, 2020, 16, 1905141.	5.2	18
50	Temperature-Dependent Vapor Infiltration of Sulfur into Highly Porous Hierarchical Three-Dimensional Conductive Carbon Networks for Lithium Ion Battery Applications. ACS Omega, 2020, 5, 28196-28203.	1.6	3
51	Aerographite phonon density of states affects double resonant Raman scattering. Journal of Applied Physics, 2020, 128, .	1.1	4
52	Solar light assisted degradation of dyes and adsorption of heavy metal ions from water by CuOâ€“ZnO tetrapodal hybrid nanocomposite. Materials Today Chemistry, 2020, 17, 100336.	1.7	58
53	Detection of prostate cancer DNA using tetrapods based disposable paper ecofriendly biosensor device. Medical Devices & Sensors, 2020, 3, e10122.	2.7	7
54	Single CuO/Cu₂O/Cu Microwire Covered by a Nanowire Network as a Gas Sensor for the Detection of Battery Hazards. ACS Applied Materials & Interfaces, 2020, 12, 42248-42263.	4.0	36

#	Article	IF	Citations
55	Pd-Functionalized ZnO:Eu Columnar Films for Room-Temperature Hydrogen Gas Sensing: A Combined Experimental and Computational Approach. ACS Applied Materials & Interfaces, 2020, 12, 24951-24964.	4.0	34
56	Surface functionalization of ZnO:Ag columnar thin films with AgAu and AgPt bimetallic alloy nanoparticles as an efficient pathway for highly sensitive gas discrimination and early hazard detection in batteries. Journal of Materials Chemistry A, 2020, 8, 16246-16264.	5.2	38
57	Highly selective and ultra-low power consumption metal oxide based hydrogen gas sensor employing graphene oxide as molecular sieve. Sensors and Actuators B: Chemical, 2020, 320, 128363.	4.0	56
58	Aero-Ga2O3 Nanomaterial Electromagnetically Transparent from Microwaves to Terahertz for Internet of Things Applications. Nanomaterials, 2020, 10, 1047.	1.9	12
59	Aero-ZnS architectures with dual hydrophilicâ€“hydrophobic properties for microfluidic applications. APL Materials, 2020, 8, .	2.2	9
60	Conversionless efficient and broadband laser light diffusers for high brightness illumination applications. Nature Communications, 2020, 11, 1437.	5.8	52
61	ZnAl2O4 decorated Al-doped ZnO tetrapodal 3D networks: microstructure, Raman and detailed temperature dependent photoluminescence analysis. Nanoscale Advances, 2020, 2, 2114-2126.	2.2	15
62	Wetting Properties of Graphene Aerogels. Scientific Reports, 2020, 10, 1916.	1.6	12
63	Three-Dimensional Tetrapodal ZnO Microstructured Network Based Flexible Surface Acoustic Wave Device for Ultraviolet and Respiration Monitoring Applications. ACS Applied Nano Materials, 2020, 3, 1468-1478.	2.4	33
64	Necklaceâ€like Nitrogenâ€Doped Tubular Carbon 3D Frameworks for Electrochemical Energy Storage. Advanced Functional Materials, 2020, 30, 1909725.	7.8	89
65	Macroscopic Silicone Microchannel Matrix for Tailored Drug Release and Localized Glioblastoma Therapy. ACS Biomaterials Science and Engineering, 2020, 6, 3388-3397.	2.6	12
66	Mechanochromic Microfibers Stabilized by Polymer Blending. ACS Applied Polymer Materials, 2020, 2, 2055-2062.	2.0	8
67	Formation of micro-mechanical interlocking sites by nanoscale sculpturing for composites or hybrid materials with stainless steel. Journal of Materials Research, 2020, 35, 3145-3156.	1.2	2
68	TEM and Electrochemical Investigation of Different Morphology Silicon Anodes. IFMBE Proceedings, 2020, , 93-96.	0.2	0
69	Static Versus Novel Dynamic Biofouling-Testing of Fouling-Release Coatings for Marine Applications: Pros and Cons. IFMBE Proceedings, 2020, , 779-783.	0.2	1
70	Acetone Sensing Properties of Nanostructured Copper Oxide Films on Glass Substrate. IFMBE Proceedings, 2020, , 285-290.	0.2	0
71	Aluminium-BSF Versus PERC Solar Cells: Study of Rear Side Passivation Quality and Diffusion Length. IFMBE Proceedings, 2020, , 745-748.	0.2	0
72	3D-Printed Sensor Array of Semiconducting Oxides. IFMBE Proceedings, 2020, , 3-6.	0.2	1

#	Article	IF	Citations
73	Sensorial and Local Reflectivity Properties of the Columnar ZnO:Eu Films. IFMBE Proceedings, 2020, , 253-257.	0.2	0
74	Au-NPs/ZnO Single Nanowire Nanosensors for Health Care Applications. , 2020, , .		0
75	Low-Temperature Solution Synthesis of Au-Modified ZnO Nanowires for Highly Efficient Hydrogen Nanosensors. ACS Applied Materials & Interfaces, 2019, 11, 32115-32126.	4.0	49
76	Atomic structure and crystallography of joints in SnO2 nanowire networks. Applied Microscopy, 2019, 49, 1.	0.8	10
77	UV nanophotodetectors: A case study of individual Au-modified ZnO nanowires. Sensors and Actuators A: Physical, 2019, 296, 400-408.	2.0	19
78	Modulation of Electrical Conductivity and Lattice Distortions in Bulk HVPE-Grown GaN. ECS Journal of Solid State Science and Technology, 2019, 8, Q141-Q146.	0.9	5
79	Tuning ZnO Sensors Reactivity toward Volatile Organic Compounds via Ag Doping and Nanoparticle Functionalization. ACS Applied Materials & Interfaces, 2019, 11, 31452-31466.	4.0	78
80	Understanding the Interaction of Escherichia coli with ZnO Tetrapods at Microwave Frequencies. , 2019, , .		0
81	Terahertz shielding properties of aero-GaN. Semiconductor Science and Technology, 2019, 34, 12LT02.	1.0	13
82	Averaging the unaverageable: Defining a meaningful local series resistance for large-area silicon solar cells. AIP Conference Proceedings, 2019, , .	0.3	4
83	Wet-Chemical Assembly of 2D Nanomaterials into Lightweight, Microtube-Shaped, and Macroscopic 3D Networks. ACS Applied Materials & Interfaces, 2019, 11, 44652-44663.	4.0	30
84	Efficient oil removal from wastewater based on polymer coated superhydrophobic tetrapodal magnetic nanocomposite adsorbent. Applied Materials Today, 2019, 17, 130-141.	2.3	38
85	Room temperature gas nanosensors based on individual and multiple networked Au-modified ZnO nanowires. Sensors and Actuators B: Chemical, 2019, 299, 126977.	4.0	38
86	Probing surface states in C₆₀decorated ZnO microwires: detailed photoluminescence and cathodoluminescence investigations. Nanoscale Advances, 2019, 1, 1516-1526.	2.2	18
87	Systematically Designed Periodic Electrophoretic Deposition for Decorating 3D Carbon-Based Scaffolds with Bioactive Nanoparticles. ACS Biomaterials Science and Engineering, 2019, 5, 4393-4404.	2.6	10
88	3D-Printed Chemiresistive Sensor Array on Nanowire CuO/Cu₂O/Cu Heterojunction Nets. ACS Applied Materials & Interfaces, 2019, 11, 25508-25515.	4.0	52
89	Fabrication of silicon microwires by a combination of chemical etching steps and their analysis as anode material in Li-ion batteries. Materials Technology, 2019, 34, 785-791.	1.5	8
90	Individual CdS-covered aerographite microtubes for room temperature VOC sensing with high selectivity. Materials Science in Semiconductor Processing, 2019, 100, 275-282.	1.9	8

#	Article	IF	Citations
91	Electromagnetic interference shielding in X-band with aero-GaN. Nanotechnology, 2019, 30, 34LT01.	1.3	12
92	Effect of noble metal functionalization and film thickness on sensing properties of sprayed TiO2 ultra-thin films. Sensors and Actuators A: Physical, 2019, 293, 242-258.	2.0	19
93	Sensing up to 40â€‰atm Using Pressureâ€Sensitive Aeroâ€GaN. Physica Status Solidi - Rapid Research Letters, 2019, 13, 1900012.	1.2	13
94	Mutual interplay of ZnO micro- and nanowires and methylene blue during cyclic photocatalysis process. Journal of Environmental Chemical Engineering, 2019, 7, 103016.	3.3	92
95	Theoretical Computational Fluid Dynamics Study of the Chemical Vapor Deposition Process for the Manufacturing of a Highly Porous 3D Carbon Foam. Chemical Engineering and Technology, 2019, 42, 1240-1246.	0.9	1
96	An Intra-Vaginal Zinc Oxide Tetrapod Nanoparticles (ZOTEN) and Genital Herpesvirus Cocktail Can Provide a Novel Platform for Live Virus Vaccine. Frontiers in Immunology, 2019, 10, 500.	2.2	41
97	Concept and modelling of memsensors as two terminal devices with enhanced capabilities in neuromorphic engineering. Scientific Reports, 2019, 9, 4361.	1.6	19
98	The impact of O₂/Ar ratio on morphology and functional properties in reactive sputtering of metal oxide thin films. Nanotechnology, 2019, 30, 235603.	1.3	20
99	Optically Controlled Abnormal Photovoltaic Current Modulation with Temperature in BiFeO₃. Advanced Electronic Materials, 2019, 5, 1800791.	2.6	35
100	Perfect polymer interlocking by spherical particles: capillary force shapes hierarchical composite undercuts. Nanoscale Horizons, 2019, 4, 947-952.	4.1	10
101	Visible-light photocatalysis by carbon-nano-onion-functionalized ZnO tetrapods: degradation of 2,4-dinitrophenol and a plant-model-based ecological assessment. NPG Asia Materials, 2019, 11, .	3.8	130
102	Thermal and electrical transport properties in multi-walled carbon nanotube-coated ZnO tetrapods and self-entangled multi-walled carbon nanotube tubes. Carbon, 2019, 144, 423-432.	5.4	17
103	Biomimetic Carbon Fiber Systems Engineering: A Modular Design Strategy To Generate Biofunctional Composites from Graphene and Carbon Nanofibers. ACS Applied Materials & Interfaces, 2019, 11, 5325-5335.	4.0	24
104	Nanogenerator and piezotronic inspired concepts for energy efficient magnetic field sensors. Nano Energy, 2019, 56, 420-425.	8.2	14
105	Self-organized and self-propelled aero-GaN with dual hydrophilic-hydrophobic behaviour. Nano Energy, 2019, 56, 759-769.	8.2	26
106	Maximizing bearing fatigue lifetime and CAI capability of fibre metal laminates by nanoscale sculptured Al plies. Composites Part A: Applied Science and Manufacturing, 2019, 117, 144-155.	3.8	12
107	3D Hydrogels Containing Interconnected Microchannels of Subcellular Size for Capturing Human Pathogenic Acanthamoeba Castellanii. ACS Biomaterials Science and Engineering, 2019, 5, 1784-1792.	2.6	19
108	Achieving Lightâ€Induced Ultrahigh Pyroelectric Charge Density Toward Selfâ€Powered UV Light Detection. Advanced Electronic Materials, 2019, 5, 1800413.	2.6	59

#	Article	IF	Citations
109	Processing, growth mechanism and thermodynamic calculations of carbon foam with a hollow tetrapodal morphology â€“ Aerographite. Applied Surface Science, 2019, 470, 535-542.	3.1	7
110	Tailored crystalline width and wall thickness of an annealed 3D carbon foam composites and their mechanical properties. Carbon, 2019, 142, 60-67.	5.4	6
111	Improving gas sensing by CdTe decoration of individual Aerographite microtubes. Nanotechnology, 2019, 30, 065501.	1.3	8
112	The effect of morphology and functionalization on UV detection properties of ZnO networked tetrapods and single nanowires. Vacuum, 2019, 166, 393-398.	1.6	22
113	ZnO tetrapods and activated carbon based hybrid composite: Adsorbents for enhanced decontamination of hexavalent chromium from aqueous solution. Chemical Engineering Journal, 2019, 358, 540-551.	6.6	170
114	Crystallography at the nanoscale: planar defects in ZnO nanospikes. Journal of Applied Crystallography, 2019, 52, 1009-1015.	1.9	3
115	Buckminsterfullerene hybridized zinc oxide tetrapods: defects and charge transfer induced optical and electrical response. Nanoscale, 2018, 10, 10050-10062.	2.8	44
116	ZnAl₂O₄â€Functionalized Zinc Oxide Microstructures for Highly Selective Hydrogen Gas Sensing Applications. Physica Status Solidi (A) Applications and Materials Science, 2018, 215, 1700772.	0.8	16
117	Enhanced Photocurrent in BiFeO₃ Materials by Coupling Temperature and Thermo-Phototronic Effects for Self-Powered Ultraviolet Photodetector System. ACS Applied Materials & Interfaces, 2018, 10, 13712-13719.	4.0	115
118	Zinc oxide nanotetrapods with four different arm morphologies for versatile nanosensors. Sensors and Actuators B: Chemical, 2018, 262, 425-435.	4.0	50
119	Corset-like solid electrolyte interface for fast charging of silicon wire anodes. Journal of Power Sources, 2018, 381, 8-17.	4.0	7
120	Characterization of core/shell structures based on CdTe and GaAs nanocrystalline layers deposited on SnO 2 microwires. Superlattices and Microstructures, 2018, 116, 64-70.	1.4	1
121	Tissue Regeneration: A Multifunctional Polymeric Periodontal Membrane with Osteogenic and Antibacterial Characteristics (Adv. Funct. Mater. 3/2018). Advanced Functional Materials, 2018, 28, 1870021.	7.8	6
122	Fundamentals of the temperature-dependent electrical conductivity of a 3D carbon foamâ€”Aerographite. Synthetic Metals, 2018, 235, 145-152.	2.1	19
123	Self-Organized Growth of Crystallographic Macropores in Multicrystalline Zn by Nanoscale Sculpturing. Journal of the Electrochemical Society, 2018, 165, H3099-H3106.	1.3	4
124	Alâ€Doped ZnO Nanowires by Electrochemical Deposition for Selective VOC Nanosensor and Nanophotodetector. Physica Status Solidi (A) Applications and Materials Science, 2018, 215, 1700824.	0.8	17
125	Flexible pressure sensor based on graphene aerogel microstructures functionalized with CdS nanocrystalline thin film. Superlattices and Microstructures, 2018, 117, 418-422.	1.4	13
126	(CuO-Cu2O)/ZnO:Al heterojunctions for volatile organic compound detection. Sensors and Actuators B: Chemical, 2018, 255, 1362-1375.	4.0	47

#	Article	IF	Citations
127	Properties of a single SnO2:Zn2SnO4 â€“ Functionalized nanowire based nanosensor. Ceramics International, 2018, 44, 4859-4867.	2.3	34
128	Material characterisation with methods of nonlinear optics. Journal Physics D: Applied Physics, 2018, 51, 043001.	1.3	15
129	ZnO tetrapod materials for functional applications. Materials Today, 2018, 21, 631-651.	8.3	473
130	A Multifunctional Polymeric Periodontal Membrane with Osteogenic and Antibacterial Characteristics. Advanced Functional Materials, 2018, 28, 1703437.	7.8	152
131	Functionalized Pd/ZnO Nanowires for Nanosensors. Physica Status Solidi - Rapid Research Letters, 2018, 12, 1700321.	1.2	33
132	Ultra-sensitive and selective hydrogen nanosensor with fast response at room temperature based on a single Pd/ZnO nanowire. Sensors and Actuators B: Chemical, 2018, 254, 1259-1270.	4.0	118
133	Development and Characterization of Mechanically Durable Silicone-Polythiourethane Composites Modified with Tetrapodal Shaped ZnO Particles for the Potential Application as Fouling-Release Coating in the Marine Sector. Materials, 2018, 11, 2413.	1.3	29
134	Tuning doping and surface functionalization of columnar oxide films for volatile organic compound sensing: experiments and theory. Journal of Materials Chemistry A, 2018, 6, 23669-23682.	5.2	36
135	Bioactive Carbon-Based Hybrid 3D Scaffolds for Osteoblast Growth. ACS Applied Materials & Interfaces, 2018, 10, 43874-43886.	4.0	32
136	Piezotronic sensors. MRS Bulletin, 2018, 43, 941-945.	1.7	32
137	Stretchable CNTsâ€Ecoflex Composite as Variableâ€Transmittance Skin for Ultrasensitive Strain Sensing. Advanced Materials Technologies, 2018, 3, 1800248.	3.0	35
138	Hierarchical Aerographite 3D flexible networks hybridized by InP micro/nanostructures for strain sensor applications. Scientific Reports, 2018, 8, 13880.	1.6	7
139	Light-Mediated Growth of Noble Metal Nanostructures (Au, Ag, Cu, Pt, Pd, Ru, Ir, Rh) From Micro- and Nanoscale ZnO Tetrapodal Backbones. Frontiers in Chemistry, 2018, 6, 411.	1.8	26
140	Structure changes of aligned carbon nanotubes in thermoplastics below percolation revealed by impedance spectroscopy. Applied Nanoscience (Switzerland), 2018, 8, 2071-2075.	1.6	1
141	Individual Bi2O3-Functionalized ZnO Microwire for Hydrogen Gas Detection. NATO Science for Peace and Security Series B: Physics and Biophysics, 2018, , 445-450.	0.2	1
142	Effects of sequentially applied single and combined temozolomide, hydroxychloroquine and AT101 treatment in a long-term stimulation glioblastoma in vitro model. Journal of Cancer Research and Clinical Oncology, 2018, 144, 1475-1485.	1.2	15
143	PdO/PdO₂ functionalized ZnOâ€‰:â€‰Pd films for lower operating temperature H₂ gas sensing. Nanoscale, 2018, 10, 14107-14127.	2.8	114
144	Ultra-thin TiO2 films by atomic layer deposition and surface functionalization with Au nanodots for sensing applications. Materials Science in Semiconductor Processing, 2018, 87, 44-53.	1.9	30

#	Article	IF	Citations
145	Reaching maximum inter-laminar properties in GFRP/nanoscale sculptured aluminium ply laminates. Composites Science and Technology, 2018, 167, 32-41.	3.8	6
146	A critical review and discussion of different methods to determine the series resistance of solar cells: Rs,dark vs. Rs,light?. AIP Conference Proceedings, 2018, , .	0.3	5
147	Zinc Oxide Tetrapods Based Biohybrid Interface for Voltammetric Sensing ofHelicobacter pylori. ACS Applied Materials & Interfaces, 2018, 10, 30631-30639.	4.0	45
148	Detectors based on Pd-doped and PdO-functionalized ZnO nanostructures. , 2018, , .		1
149	Size-dependent UV and gas sensing response of individual Fe2O3-ZnO:Fe micro- and nanowire based devices. Journal of Alloys and Compounds, 2017, 701, 920-925.	2.8	28
150	Enhanced UV and ethanol vapour sensing of a single 3-D ZnO tetrapod alloyed with Fe2O3 nanoparticles. Sensors and Actuators B: Chemical, 2017, 245, 448-461.	4.0	46
151	Hybridization of Zinc Oxide Tetrapods for Selective Gas Sensing Applications. ACS Applied Materials & Interfaces, 2017, 9, 4084-4099.	4.0	135
152	Generierung einer mikroâ€•und nanostrukturierten KupferoberflÃche mit Lotosâ€Effekt â€“ Ein Versuch fÃ¼r die Sekundarstufen I und II. Chemkon - Chemie Konkret, Forum Fuer Unterricht Und Didaktik, 2017, 24, 31-38.	0.2	3
153	Hierarchical Aerographite nano-microtubular tetrapodal networks based electrodes as lightweight supercapacitor. Nano Energy, 2017, 34, 570-577.	8.2	67
154	H₂ gas sensing properties of a ZnO/CuO and ZnO/CuO/Cu₂O Heterostructures. Proceedings of SPIE, 2017, , .	0.8	0
155	Size-dependent physicochemical and mechanical interactions inÂbattery paste anodes of Si-microwires revealed by Fast-Fourier-Transform Impedance Spectroscopy. Journal of Power Sources, 2017, 349, 1-10.	4.0	12
156	UV radiation and CH4 gas detection with a single ZnO:Pd nanowire. , 2017, , .		1
157	Nanosensors: Multifunctional Materials: A Case Study of the Effects of Metal Doping on ZnO Tetrapods with Bismuth and Tin Oxides (Adv. Funct. Mater. 6/2017). Advanced Functional Materials, 2017, 27, .	7.8	2
158	Localized Synthesis of Iron Oxide Nanowires and Fabrication of High Performance Nanosensors Based on a Single Fe₂O₃ Nanowire. Small, 2017, 13, 1602868.	5.2	111
159	Nanomechanics of individual aerographite tetrapods. Nature Communications, 2017, 8, 14982.	5.8	32
160	Direct Synthesis of Electrowettable Carbon Nanowallâ€“Diamond Hybrid Materials from Sacrificial Ceramic Templates Using HFCVD. Advanced Materials Interfaces, 2017, 4, 1700019.	1.9	16
161	Functional NiTi grids for in situ straining in the TEM. Ultramicroscopy, 2017, 182, 10-16.	0.8	1
162	(Re-)crystallization mechanism of highly oriented Si-microwire arrays by TEM analysis. Journal of Solid State Electrochemistry, 2017, 21, 3421-3427.	1.2	1

#	Article	IF	Citations
163	Composite Materials: Direct Synthesis of Electrowettable Carbon Nanowallâ€“Diamond Hybrid Materials from Sacrificial Ceramic Templates Using HFCVD (Adv. Mater. Interfaces 10/2017). Advanced Materials Interfaces, 2017, 4, .	1.9	0
164	UV detection properties of hybrid ZnO tetrapod 3-D networks. Vacuum, 2017, 146, 492-500.	1.6	30
165	Photoresponsive hierarchical ZnO-PDMS surfaces with azobenzene-polydopamine coated nanoparticles for reversible wettability tuning. Vacuum, 2017, 146, 386-395.	1.6	15
166	Titelbild: Generierung einer mikroâ€•und nanostrukturierten KupferoberflÃche mit Lotosâ€Effekt â€“ Ein Versuch fÃ¼r die Sekundarstufen I und II (CHEMKON 1/2017). Chemkon - Chemie Konkret, Forum Fuer Unterricht Und Didaktik, 2017, 24, 1-1.	0.2	0
167	Multifunctional Materials: A Case Study of the Effects of Metal Doping on ZnO Tetrapods with Bismuth and Tin Oxides. Advanced Functional Materials, 2017, 27, 1604676.	7.8	140
168	Light, Force, and Heat: A Multi-Stimuli Composite that Reveals its Violent Past. ACS Applied Materials & Interfaces, 2017, 9, 38000-38007.	4.0	37
169	Hierarchical self-entangled carbon nanotube tube networks. Nature Communications, 2017, 8, 1215.	5.8	120
170	Distributed series resistance in a one-dimensional two-diode model revisited. Energy Procedia, 2017, 124, 197-206.	1.8	7
171	Nanoscale electromechanical and electronic properties of free-standing ZnO nano- and microstructured platelets. Nanotechnology, 2017, 28, 405701.	1.3	3
172	Schottky Diode Based on a Single Carbonâ€“Nanotubeâ€“ZnO Hybrid Tetrapod for Selective Sensing Applications. Advanced Materials Interfaces, 2017, 4, 1700507.	1.9	32
173	Porous ceramics based on hybrid inorganic tetrapodal networks for efficient photocatalysis and water purification. Ceramics International, 2017, 43, 14915-14922.	2.3	78
174	Nanostructured Fibrous Membranes with Rose Spike-Like Architecture. Nano Letters, 2017, 17, 6235-6240.	4.5	72
175	Sensing performances of pure and hybridized carbon nanotubes-ZnO nanowire networks: A detailed study. Scientific Reports, 2017, 7, 14715.	1.6	56
176	Morphology dependent UV photoresponse of Sn-doped ZnO microstructures. Solid State Sciences, 2017, 71, 75-86.	1.5	32
177	Piezoresistive Response of Quasi-One-Dimensional ZnO Nanowires Using an in Situ Electromechanical Device. ACS Omega, 2017, 2, 2985-2993.	1.6	72
178	Individual hollow and mesoporous aero-graphitic microtube based devices for gas sensing applications. Applied Physics Letters, 2017, 110, .	1.5	26
179	Tunable Strain in Magnetoelectric ZnO Microrod Composite Interfaces. ACS Applied Materials & Interfaces, 2017, 9, 25571-25577.	4.0	13
180	Single and Networked ZnOâ€“CNT Hybrid Tetrapods for Selective Room-Temperature High-Performance Ammonia Sensors. ACS Applied Materials & Interfaces, 2017, 9, 23107-23118.	4.0	125

#	Article	IF	Citations
181	Flame based growth of ZnO nano- and microstructures for advanced optical, multifunctional devices, and biomedical applications (Conference Presentation). , 2017, , .		1
182	3D carbon networks and their polymer composites: Fabrication and electromechanical investigations of neat Aerographite and Aerographite-based PNCs under compressive load. Carbon, 2017, 111, 103-112.	5.4	57
183	Struktur-Eigenschafts-Beziehungen an aktuellen Beispielen aus der Forschung weitergedacht: â€žMikro-â€œ und â€žnano-â€œSchichten sowie OberflÃchen fÃ¼r Schule und SchÃ¼lerlabor. Chemkon - Chemie Konkret, Forum Fuer Unterricht Und Didaktik, 2017, 24, 192-196.	0.2	1
184	Characterization of a polydimethylsiloxane-polythiourethane polymer blend with potential as fouling-release coating. , 2017, , .		5
185	Single nanowire nanosensors: Fabrication and detailed studies. , 2017, , .		0
186	Enhancing the conductivity of ZnO micro- and nanowire networks with gallium oxide. , 2017, , .		0
187	Detection properties of individual and networked CNT-ZnO-hybrid tetrapods. , 2017, , .		0
188	Interlocked by nanoscale sculpturing: pure aluminum copper contacts (Conference Presentation). , 2017, , .		0
189	Zinc oxide tetrapods inhibit herpes simplex virus infection of cultured corneas. Molecular Vision, 2017, 23, 26-38.	1.1	14
190	Single and networked CuO nanowires for highly sensitive p-type semiconductor gas sensor applications. Physica Status Solidi - Rapid Research Letters, 2016, 10, 260-266.	1.2	96
191	Piezotronicâ€based magnetoelectric sensor: Fabrication and response. Physica Status Solidi (A) Applications and Materials Science, 2016, 213, 2208-2215.	0.8	19
192	Influence of the porosity on the photoresponse of a liquid crystal elastomer. Royal Society Open Science, 2016, 3, 150700.	1.1	12
193	Local Transmittance Measurements as Large Area Diagnostic Tool for the Optimization of Porous Si Foils for Li-Ion Battery Anodes. Journal of the Electrochemical Society, 2016, 163, A3036-A3045.	1.3	4
194	Chemical Sculpturing of Al Micro-Particles for Polymer Composites and Universal Polymer-Polymer Joints. ECS Transactions, 2016, 75, 113-122.	0.3	2
195	Properties of ZnO:Fe nanostructured films grown by successive chemical synthesis. , 2016, , .		0
196	Synthesis, characterization and DFT studies of zinc-doped copper oxide nanocrystals for gas sensing applications. Journal of Materials Chemistry A, 2016, 4, 6527-6539.	5.2	157
197	Non-planar nanoscale pâ€“p heterojunctions formation in Zn Cu1O nanocrystals by mixed phases for enhanced sensors. Sensors and Actuators B: Chemical, 2016, 230, 832-843.	4.0	70
198	Low temperature preparation of Ag-doped ZnO nanowire arrays for sensor and light-emitting diode applications. , 2016, , .		2

#	Article	IF	Citations
199	Intravaginal Zinc Oxide Tetrapod Nanoparticles as Novel Immunoprotective Agents against Genital Herpes. Journal of Immunology, 2016, 196, 4566-4575.	0.4	122
200	Making metal surfaces strong, resistant, and multifunctional by nanoscale-sculpturing. Nanoscale Horizons, 2016, 1, 467-472.	4.1	19
201	Linear-response Description of the Series Resistance of Large-area Silicon Solar Cells: Resolving the Difference between Dark and Illuminated Behavior. Energy Procedia, 2016, 92, 255-264.	1.8	10
202	Low powered, tunable and ultra-light aerographite sensor for climate relevant gas monitoring. Journal of Materials Chemistry A, 2016, 4, 16723-16730.	5.2	49
203	Crystallographically-Oriented Macropores in Multi-Crystalline Zn. ECS Transactions, 2016, 75, 9-18.	0.3	0
204	Electro-mechanical piezoresistive properties of three dimensionally interconnected carbon aerogel (Aerographite)-epoxy composites. Composites Science and Technology, 2016, 134, 226-233.	3.8	44
205	Influence of CuO nanostructures morphology on hydrogen gas sensing performances. Microelectronic Engineering, 2016, 164, 63-70.	1.1	62
206	Visibleâ€Light Driven Nanoscale Photoconductivity of Grain Boundaries in Selfâ€Supported ZnO Nanoâ€and Microstructured Platelets. Advanced Electronic Materials, 2016, 2, 1600138.	2.6	52
207	Sacrificial Template Synthesis and Properties of 3D Hollow-Silicon Nano- and Microstructures. ACS Applied Materials & Interfaces, 2016, 8, 20491-20498.	4.0	60
208	Biaxial flexural strength of new Bis-GMA/TEGDMA based composites with different fillers for dental applications. Dental Materials, 2016, 32, 1073-1078.	1.6	34
209	Strong light scattering and broadband (UV to IR) photoabsorption in stretchable 3D hybrid architectures based on Aerographite decorated by ZnO nanocrystallites. Scientific Reports, 2016, 6, 32913.	1.6	56
210	A Tunable Scaffold of Microtubular Graphite for 3D Cell Growth. ACS Applied Materials & Interfaces, 2016, 8, 14980-14985.	4.0	23
211	FFT-impedance spectroscopy analysis of the growth of magnetic metal nanowires in ultra-high aspect ratio InP membranes. Semiconductor Science and Technology, 2016, 31, 014005.	1.0	1
212	Multifunctional device based on ZnO:Fe nanostructured films with enhanced UV and ultra-fast ethanol vapour sensing. Materials Science in Semiconductor Processing, 2016, 49, 20-33.	1.9	73
213	Self-Organized Three-Dimensional Nanostructured Architectures in Bulk GaN Generated by Spatial Modulation of Doping. ECS Journal of Solid State Science and Technology, 2016, 5, P218-P227.	0.9	18
214	Complex shaped ZnO nano- and microstructure based polymer composites: mechanically stable and environmentally friendly coatings for potential antifouling applications. Physical Chemistry Chemical Physics, 2016, 18, 7114-7123.	1.3	60
215	Three-dimensional flexible ceramics based on interconnected network of highly porous pure and metal alloyed ZnO tetrapods. Ceramics International, 2016, 42, 8664-8676.	2.3	66
216	Fracture, failure and compression behaviour of a 3D interconnected carbon aerogel (Aerographite) epoxy composite. Composites Science and Technology, 2016, 122, 50-58.	3.8	31

#	Article	IF	Citations
217	Photocatalytic Applications of Doped Zinc Oxide Porous Films Grown by Magnetron Sputtering. IFMBE Proceedings, 2016, , 353-356.	0.2	0
218	Effect of Dopant on Selectivity of CuO Nanostructured Films â€“ Based Sensors. IFMBE Proceedings, 2016, , 349-352.	0.2	0
219	Enhanced ethanol vapour sensing performances of copper oxide nanocrystals with mixed phases. Sensors and Actuators B: Chemical, 2016, 224, 434-448.	4.0	140
220	Single Nanowire Nanosensors: A Case Study of the Effects of Metal Doping on ZnO. IFMBE Proceedings, 2016, , 115-118.	0.2	0
221	Sensing Properties of Ultra-Thin TiO2 Nanostructured Films Based Sensors. IFMBE Proceedings, 2016, , 149-152.	0.2	1
222	Silver-doped zinc oxide single nanowire multifunctional nanosensor with a significant enhancement in response. Sensors and Actuators B: Chemical, 2016, 223, 893-903.	4.0	170
223	Functional Ecofriendly Coatings for Marine Applications. IFMBE Proceedings, 2016, , 250-253.	0.2	4
224	Characterisation of Silicon Nanolayers Deposited by Plasma Enhanced Chemical Vapor Deposition on 3-D ZnO Templates for Hollow Silicon Microstructures. IFMBE Proceedings, 2016, , 30-34.	0.2	1
225	Tetrapodal ZnO Particles for Substrate Mode Scattering in Flexible Organic Light-Emitting Diodes. , 2016, , .		0
226	Spiropyran Based Smart Composites: Memorizing Polymer with Enhanced Molecular Switches. IFMBE Proceedings, 2016, , 146-148.	0.2	0
227	Surface Structuring of Ti-Al-V and Al-Mg Alloys by Chemical Etching for Advanced Polymer Adhesion. ECS Transactions, 2015, 66, 19-27.	0.3	2
228	Nanowire Networks: Three-Dimensional SnO2Nanowire Networks for Multifunctional Applications: From High-Temperature Stretchable Ceramics to Ultraresponsive Sensors (Adv. Electron. Mater.) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 2	2.6	
229	Threeâ€Dimensional SnO₂ Nanowire Networks for Multifunctional Applications: From Highâ€Temperature Stretchable Ceramics to Ultraresponsive Sensors. Advanced Electronic Materials, 2015, 1, 1500081.	2.6	116
230	Direct Growth of Freestanding ZnO Tetrapod Networks for Multifunctional Applications in Photocatalysis, UV Photodetection, and Gas Sensing. ACS Applied Materials & Interfaces, 2015, 7, 14303-14316.	4.0	433
231	Micro-nano-technologies of zinc and copper oxides for sensor and medicine applications. , 2015, , .		0
232	Control of persistent photoconductivity in nanostructured InP through morphology design. Semiconductor Science and Technology, 2015, 30, 035014.	1.0	12
233	Integration of individual TiO₂ nanotube on the chip: Nanodevice for hydrogen sensing. Physica Status Solidi - Rapid Research Letters, 2015, 9, 171-174.	1.2	56
234	Rapid switching and ultra-responsive nanosensors based on individual shellâ€“core Ga2O3/GaN:O @SnO2 nanobelt with nanocrystalline shell in mixed phases. Sensors and Actuators B: Chemical, 2015, 221, 544-555.	4.0	62

#	Article	IF	Citations
235	Three-dimensional Aerographite-GaN hybrid networks: Single step fabrication of porous and mechanically flexible materials for multifunctional applications. Scientific Reports, 2015, 5, 8839.	1.6	45
236	Ultra-wide bandwidth with enhanced microwave absorption of electroless Niâ€“P coated tetrapod-shaped ZnO nano- and microstructures. Physical Chemistry Chemical Physics, 2015, 17, 22923-22933.	1.3	79
237	Toxicity of Functional Nano-Micro Zinc Oxide Tetrapods: Impact of Cell Culture Conditions, Cellular Age and Material Properties. PLoS ONE, 2014, 9, e84983.	1.1	95
238	Versatile Fabrication of Complex Shaped Metal Oxide Nano-Microstructures and Their Interconnected Networks for Multifunctional Applications. KONA Powder and Particle Journal, 2014, 31, 92-110.	0.9	113
239	Rapid Fabrication Technique for Interpenetrated ZnO Nanotetrapod Networks for Fast UV Sensors. Advanced Materials, 2014, 26, 1541-1550.	11.1	428
240	Microelectromechanical magnetic field sensor based on Î”E effect. Applied Physics Letters, 2014, 105, .	1.5	59
241	Single Step Integration of ZnO Nano- and Microneedles in Si Trenches by Novel Flame Transport Approach: Whispering Gallery Modes and Photocatalytic Properties. ACS Applied Materials & Interfaces, 2014, 6, 7806-7815.	4.0	156
242	Challenges and Solutions for Joining Polymer Materials. Macromolecular Rapid Communications, 2014, 35, 1551-1570.	2.0	34
243	Versatile Growth of Freestanding Orthorhombic Î±-Molybdenum Trioxide Nano- and Microstructures by Rapid Thermal Processing for Gas Nanosensors. Journal of Physical Chemistry C, 2014, 118, 15068-15078.	1.5	114
244	Investigation of optical properties and electronic transitions in bulk and nano-microribbons of molybdenum trioxide. Journal Physics D: Applied Physics, 2014, 47, 085302.	1.3	32
245	Integration of Metal and Metal Oxide Nanowires Directly on Chip by Top-Down Technology and Their Electrical Characteristics. Journal of Nanoelectronics and Optoelectronics, 2014, 9, 239-246.	0.1	3
246	Magnetron Sputtering and Characterization of Doped Zinc Oxide Nanofibrous Films and Their Applications. Journal of Nanoelectronics and Optoelectronics, 2014, 9, 257-264.	0.1	9
247	Study of Tetrapodal ZnO-PDMS Composites: A Comparison of Fillers Shapes in Stiffness and Hydrophobicity Improvements. PLoS ONE, 2014, 9, e106991.	1.1	51
248	<I>A Special Section on</I> Nanotechnologies and Nanomaterials for Electronic and Photonic Applications. Journal of Nanoelectronics and Optoelectronics, 2014, 9, 193-195.	0.1	0
249	The impact of the discreteness of low-fluence ion beam processing on the spatial architecture of GaN nanostructures fabricated by surface charge lithography. Surface Engineering and Applied Electrochemistry, 2013, 49, 1-3.	0.3	3
250	Formation of Self-organized Silver Nanocup-Type Structures and Their Plasmonic Absorption. Plasmonics, 2013, 8, 811-815.	1.8	75
251	A Novel Concept for Selfâ€Reporting Materials: Stress Sensitive Photoluminescence in ZnO Tetrapod Filled Elastomers. Advanced Materials, 2013, 25, 1342-1347.	11.1	162
252	Local magnetization and strain in single magnetoelectric microrod composites. Applied Physics Letters, 2013, 103, 123111.	1.5	8

#	Article	IF	Citations
253	Fabrication of Macroscopically Flexible and Highly Porous 3D Semiconductor Networks from Interpenetrating Nanostructures by a Simple Flame Transport Approach. Particle and Particle Systems Characterization, 2013, 30, 775-783.	1.2	278
254	Superposition twinning supported by texture in ZnO nanospikes. Journal of Applied Crystallography, 2013, 46, 396-403.	1.9	30
255	Effect of Al Sn — Doping on properties of zinc oxide nanostructured films grown by magnetron sputtering. , 2013, , .		1
256	In Situ Electromechanical Study of ZnO Nanowires. Microscopy and Microanalysis, 2013, 19, 434-435.	0.2	7
257	High aspect ratio free standing ZnO-magnetostrictive mesoscale cylindrical magnetoelectric core shell composite. Materials Research Society Symposia Proceedings, 2012, 1398, 9.	0.1	1
258	Photochemical Hydrogen Generation Using Nitrogen-Doped TiO₂â€“Pd Nanoparticles: Facile Synthesis and Effect of Ti³⁺ Incorporation. Journal of Physical Chemistry C, 2012, 116, 12462-12467.	1.5	105
259	Crystal growth behaviour in Au-ZnO nanocomposite under different annealing environments and photoswitchability. Journal of Applied Physics, 2012, 112, .	1.1	117
260	Joining the Unâ€Joinable: Adhesion Between Low Surface Energy Polymers Using Tetrapodal ZnO Linkers. Advanced Materials, 2012, 24, 5676-5680.	11.1	88
261	Prophylactic, therapeutic and neutralizing effects of zinc oxide tetrapod structures against herpes simplex virus type-2 infection. Antiviral Research, 2012, 96, 363-375.	1.9	167
262	Solvent Free Fabrication of Micro and Nanostructured Drug Coatings by Thermal Evaporation for Controlled Release and Increased Effects. PLoS ONE, 2012, 7, e40746.	1.1	18
263	Procedures and Properties for a Direct Nano-Micro Integration of Metal and Semiconductor Nanowires on Si Chips. Journal of Nanotechnology, 2012, 2012, 1-13.	1.5	5
264	Aerographite: Ultra Lightweight, Flexible Nanowall, Carbon Microtube Material with Outstanding Mechanical Performance. Advanced Materials, 2012, 24, 3486-3490.	11.1	343
265	Tin Oxide Nanowires Suppress Herpes Simplex Virus-1 Entry and Cell-to-Cell Membrane Fusion. PLoS ONE, 2012, 7, e48147.	1.1	44
266	Fully integrable magnetic field sensor based on delta-E effect. Applied Physics Letters, 2011, 99, 223502.	1.5	82
267	ZnO core spike particles and nano-networks and their wide range of applications. Proceedings of SPIE, 2011, , .	0.8	0
268	Virostatic potential of microâ€“nano filopodia-like ZnO structures against herpes simplex virus-1. Antiviral Research, 2011, 92, 305-312.	1.9	188
269	Open volume in bioadhesive detected by positron annihilation lifetime spectroscopy. Acta Biomaterialia, 2010, 6, 2690-2694.	4.1	12
270	Examples for the integration of selfâ€organized nanowires for functional devices by a fracture approach. Physica Status Solidi (B): Basic Research, 2010, 247, 2571-2580.	0.7	10

#	Article	IF	Citations
271	Using Thin Film Stress for Nanoscaled Sensors. Materials Science Forum, 2010, 638-642, 2028-2033.	0.3	0
272	Epitactically Interpenetrated High Quality ZnO Nanostructured Junctions on Microchips Grown by the Vaporâ^'Liquidâ^'Solid Method. Crystal Growth and Design, 2010, 10, 2842-2846.	1.4	62
273	Investigation of the surface morphology on epitaxially grown fullerene structures. Vacuum, 2009, 84, 152-154.	1.6	11
274	Simple Ways to Complex Nanowires and Their Application. Advances in Solid State Physics, 2009, , 27-38.	0.8	5
275	Tuning of electrical and structural properties of metal-polymer nanocomposite films prepared by co-evaporation technique. Applied Physics A: Materials Science and Processing, 2008, 92, 345-350.	1.1	57
276	Integration of Thinâ€Filmâ€Fractureâ€Based Nanowires into Microchip Fabrication. Small, 2008, 4, 2214-2221.	5.2	24
277	Influence of top layer geometries on the electronic properties of pentacene and diindenoperylene thin films. Physica Status Solidi (A) Applications and Materials Science, 2008, 205, 578-590.	0.8	14
278	Catalytically active CNTâ€“polymer-membrane assemblies: From synthesis to application. Journal of Membrane Science, 2008, 321, 123-130.	4.1	41
279	Direction sensitive bending sensors based on multi-wall carbon nanotube/epoxy nanocomposites. Nanotechnology, 2008, 19, 475503.	1.3	84
280	Influence of saliva contamination on zirconia ceramic bonding. Dental Materials, 2008, 24, 508-513.	1.6	117
281	Self-Assembled Monolayers of Benzylmercaptan and p-Cyanobenzylmercaptan on Au(111) Surfaces: Structural and Spectroscopic Characterization. Langmuir, 2008, 24, 5726-5733.	1.6	31
282	Nanotunnel Formation Induced by Cu Electrodeposition on 1T-TaS[sub 2]. Journal of the Electrochemical Society, 2008, 155, D666.	1.3	5
283	Tuning the threshold voltage of organic field-effect transistors by an electret encapsulating layer. Applied Physics Letters, 2007, 90, 013501.	1.5	36
284	Influence of Contamination on Zirconia Ceramic Bonding. Journal of Dental Research, 2007, 86, 749-753.	2.5	84
285	Model Systems with Extreme Aspect Ratio, Tunable Geometry, and Surface Functionality for a Quantitative Investigation of the Lotus Effect. Langmuir, 2007, 23, 2091-2094.	1.6	29
286	Anti-Lotus Effect for Nanostructuring at the Leidenfrost Temperature. Advanced Materials, 2007, 19, 1262-1266.	11.1	48
287	Influence of contamination on bonding to zirconia ceramic. Journal of Biomedical Materials Research - Part B Applied Biomaterials, 2007, 81B, 283-290.	1.6	51
288	Adsorption and diffusion of an alkali-metal adatom on transition-metal dichalcogenides. Physical Review B, 2006, 73, .	1.1	5

#	Article	IF	Citations
289	Micro-tensile bond strength of three luting resins to human regional dentin. Dental Materials, 2006, 22, 45-56.	1.6	138
290	Employing Thin-Film Delamination for the Formation of Shadow Masks for Nanostructure Fabrication. Advanced Materials, 2006, 18, 1059-1062.	11.1	19
291	Radiotracer Diffusion Measurements of Noble Metal Atoms in Semiconducting Organic Films.. Materials Research Society Symposia Proceedings, 2005, 871, 1.	0.1	2
292	Ag-Diffusion in the Organic Semiconductor Diindenoperylene. Defect and Diffusion Forum, 2005, 237-240, 993-997.	0.4	7
293	Effect of structural change of collagen fibrils on the durability of dentin bonding. Biomaterials, 2005, 26, 5021-5031.	5.7	80
294	Radiotracer measurements as a sensitive tool for the detection of metal penetration in molecular-based organic electronics. Applied Physics Letters, 2005, 86, 024104.	1.5	33
295	Lithium adsorption byTiSe2of varying concentration via density functional theory. Physical Review B, 2005, 71, .	1.1	17
296	Employing Thin Film Failure Mechanisms to Form Templates for Nano-electronics. Materials Research Society Symposia Proceedings, 2005, 863, B7.3-1.	0.1	0
297	In situ nanoscale observation and control of electron-beam-induced cluster formation. Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena, 2004, 22, 1797.	1.6	5
298	Contributions of the escape depth to the photoelectron intensity of a well-defined initial state. Physical Review B, 2004, 70, .	1.1	2
299	Arrays of wirelike microstructures of Ag with visible wavelength transparent plasmonic response at near-ultraviolet and midinfrared regions. Applied Physics Letters, 2004, 85, 1952-1954.	1.5	2
300	A Production Method for Aligned Nanowires on Arbitrary Materials. Materials Research Society Symposia Proceedings, 2004, 818, 275.	0.1	0
301	Strain-controlled growth of nanowires within thin-film cracks. Nature Materials, 2004, 3, 375-379.	13.3	140
302	Self-assembled nanowire formation during Cu deposition on atomically flat Vse2 surfaces studied by microscopic methods. Materials Science and Engineering C, 2003, 23, 171-179.	3.8	17
303	Valence and conduction band states ofHfS2:From bulk to a single layer. Physical Review B, 2003, 68, .	1.1	27
304	Low Density Two-Dimensional Electron Systems Studied by Scanning Tunneling Spectroscopy. Japanese Journal of Applied Physics, 2003, 42, 4809-4815.	0.8	1
305	Direct Comparison between Potential Landscape and Local Density of States in a Disordered Two-Dimensional Electron System. Physical Review Letters, 2002, 89, 136806.	2.9	72
306	Surface resonances at transition metal dichalcogenide heterostructures. Physical Review B, 2002, 65, .	1.1	9

#	Article	IF	Citations
307	Self-Assembled Nanowire Networks by Deposition of Copper onto Layered-Crystal Surfaces. Advanced Materials, 2002, 14, 1056.	11.1	36
308	Fabrication of Cu-induced networks of linear nanostructures on different length scales. Acta Materialia, 2002, 50, 4925-4933.	3.8	6
309	Sharper images by focusing soft X-rays with photon sieves. Nature, 2001, 414, 184-188.	13.7	358
310	Reconfiguration of charge density waves by surface nanostructures onTaS2. Physical Review B, 2001, 63, .	1.1	17
311	Structural properties of chlorinated epitaxialC60films. Physical Review B, 2001, 63, .	1.1	3
312	Tuning Dimensionality by Nanowire Adsorption on Layered Materials. Physical Review Letters, 2001, 86, 1303-1306.	2.9	20
313	Charge density waves affected by Rb nanowire network formation on 1T-TaS2. Applied Surface Science, 2000, 162-163, 666-669.	3.1	6
314	Tracing the valence band maximum during epitaxial growth of HfS2 on WSe2. Applied Surface Science, 2000, 166, 17-22.	3.1	15
315	k parallel -resolved electronic structure of quasi-free 2-dimensional HfS 2 clusters. Europhysics Letters, 2000, 52, 189-195.	0.7	2
316	Cetineites: Electronic, optical, and conduction properties of nanoporous chalcogenoantimonates. Physical Review B, 2000, 61, 15697-15706.	1.1	10
317	Epitaxial thin-film growth ofC60onVSe2studied with scanning tunneling microscopy and x-ray diffraction. Physical Review B, 1999, 59, 13394-13400.	1.1	10
318	Extrinsic surface states traced by surface photovoltage in photoemission. Applied Physics Letters, 1999, 74, 1836-1838.	1.5	8
319	Nanowire networks on perfectly flat surfaces. Applied Physics Letters, 1999, 74, 3053-3055.	1.5	24
320	Band bending, surface photovoltage and tunnelling microscopy on WSe2:Rb. Applied Surface Science, 1998, 123-124, 91-94.	3.1	11
321	Encapsulating the active Layer of organic Thin-Film Transistors. , 0, , .		2
322	Influence of Metal Diffusion on the Electronic Properties of Pentacene and Diindenoperylene Thin Films. , 0, , 401-426.		0
323	Zinc oxide micro- and nanostructures as multifunctional materials. SPIE Newsroom, 0, , .	0.1	0
324	Local Strain Distribution in ZnO Microstructures Visualized with Scanning Nano Xâ€Ray Diffraction and Impact on Electrical Properties. Advanced Engineering Materials, 0, , 2100201.	1.6	2