

CITATION REPORT

List of articles citing

ZnO nanowire and nanobelt platform for nanotechnology

DOI: 10.1016/j.mser.2009.02.001

Materials Science and Engineering Reports, 2009, 64, 33-71.

Source: <https://exaly.com/paper-pdf/46428392/citation-report.pdf>

Version: 2024-04-28

This report has been generated based on the citations recorded by exaly.com for the above article. For the latest version of this publication list, visit the link given above.

The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

#	Paper	IF	Citations
987	Assembly and Interfacial Effects in Hybrid Nanostructures of Zinc Oxide and Gold. 2009 , 1217, 1		
986	Optical Fiber/Nanowire Hybrid Structures for Efficient Three-Dimensional Dye-Sensitized Solar Cells. 2009 , 121, 9143-9147		53
985	Optical fiber/nanowire hybrid structures for efficient three-dimensional dye-sensitized solar cells. 2009 , 48, 8981-5		207
984	Sculpturing nanowires with ion beams. 2009 , 5, 2687-91		15
983	4D ultrafast electron microscopy: imaging of atomic motions, acoustic resonances, and moiré fringe dynamics. 2009 , 110, 7-19		55
982	ZnO and ZnS Nanostructures: Ultraviolet-Light Emitters, Lasers, and Sensors. <i>Critical Reviews in Solid State and Materials Sciences</i> , 2009 , 34, 190-223	10.1	274
981	Bioinspired Synthesis of Vertically Aligned ZnO Nanorod Arrays: Toward Greener Chemistry. 2009 , 9, 4793-4796		24
980	Optimizing and Improving the Growth Quality of ZnO Nanowire Arrays Guided by Statistical Design of Experiments. 2009 , 3, 1803-12		128
979	Bioinspired preparation of ultrathin SiO ₂ shell on ZnO nanowire array for ultraviolet-durable superhydrophobicity. 2009 , 25, 13619-24		50
978	Hierarchical assembly of ZnO nanostructures on SnO ₂ backbone nanowires: low-temperature hydrothermal preparation and optical properties. 2009 , 3, 3069-76		242
977	Mechanistic investigation of ZnO nanowire growth. 2009 , 95, 183114		34
976	Synthesis and Structure Characterization of Ternary Zn ₂ GeO ₄ Nanowires by Chemical Vapor Transport. 2009 , 113, 14135-14139		71
975	Transient drain current characteristics of ZnO nanowire field effect transistors. 2009 , 95, 123101		21
974	Study of Radiative Defects Using Current-Voltage Characteristics in ZnO Rods Catalytically Grown on 4H-p-SiC. 2010 , 2010, 1-5		9
973	Pulsed laser deposition of ZnO in N ₂ O atmosphere. <i>Applied Physics A: Materials Science and Processing</i> , 2010 , 101, 665-669	2.6	1
972	n-ZnO nanorods/p-CuSCN heterojunction light-emitting diodes fabricated by electrochemical method. 2010 , 55, 4889-4894		33
971	In-situ visualization of a super-accelerated synthesis of zinc oxide nanostructures through CO ₂ laser heating. 2010 , 312, 3564-3568		3

970	ZnO nanorod arrays fabrication via chemical bath deposition: Ligand concentration effect study. 2010 , 48, 408-415		25
969	Synthesis of porous and nonporous ZnO nanobelt, multipod, and hierarchical nanostructure from Zn-HDS. 2010 , 183, 1835-1840		27
968	Synthesis of zinc oxide nanotetrapods by a novel fast microemulsion-based hydrothermal method. 2010 , 64, 2191-2193		14
967	Growth and Transfer of Monolithic Horizontal ZnO Nanowire Superstructures onto Flexible Substrates. 2010 , 20, 1493-1497		35
966	Recent Developments in One-Dimensional Inorganic Nanostructures for Photodetectors. 2010 , 20, 4233-4248	277	
965	Electricity generation based on one-dimensional group-III nitride nanomaterials. 2010 , 22, 2155-8		127
964	Strain-gated piezotronic logic nanodevices. 2010 , 22, 4711-5		160
963	ChemInform Abstract: ZnO Nanowire and Nanobelt Platform for Nanotechnology. 2010 , 41, no-no		
962	Controllable growth of well-aligned ZnO nanorod arrays by low-temperature wet chemical bath deposition method. <i>Applied Surface Science</i> , 2010 , 256, 1698-1702	6.7	116
961	Characterization and aging effect study of nitrogen-doped ZnO nanofilm. <i>Applied Surface Science</i> , 2010 , 256, 6164-6167	6.7	28
960	Comparative study of ZnO thin film and nanopillar growth on YSZ(111) and sapphire (0001) substrates by pulsed laser deposition. 2010 , 312, 2012-2018		13
959	Removal of zinc by live, dead, and dried biomass of <i>Fusarium</i> spp. isolated from the abandoned-metal mine in South Korea and its perspective of producing nanocrystals. <i>Journal of Hazardous Materials</i> , 2010 , 182, 317-24	12.8	73
958	Lateral nanowire/nanobelt based nanogenerators, piezotronics and piezo-phototronics. <i>Materials Science and Engineering Reports</i> , 2010 , 70, 320-329	30.9	185
957	Surfactant free hydrothermally derived ZnO nanowires, nanorods, microrods and their characterization. <i>Materials Science in Semiconductor Processing</i> , 2010 , 13, 21-28	4.3	35
956	Periodic surface nanostructures on polycrystalline ZnO induced by femtosecond laser pulses. 2010 , 283, 2385-2389		8
955	Crystal growth of ZnO micro and nanostructures by PVT on c-sapphire and amorphous quartz substrates. 2010 , 8, 121-125		1
954	Well-aligned arrays of vertically oriented ZnO nanowires electrodeposited on ITO-coated glass and their integration in dye sensitized solar cells. <i>Journal of Photochemistry and Photobiology A: Chemistry</i> , 2010 , 211, 65-73	4.7	225
953	Fabrication of ZnO micro- and nano-structures by electrodeposition using nanoporous and lithography defined templates. 2010 , 170, 107-112		20

952	Piezopotential gated nanowire devices: Piezotronics and piezo-phototronics. 2010 , 5, 540-552		579
951	Growth control of ZnO nanorod density by sol-gel method. 2010 , 518, e136-e138		13
950	Structural transformation and crystallization of amorphous copper phthalocyanine nanostructures. 2010 , 518, 6720-6728		11
949	Surfactant assisted low temperature synthesis of nanocrystalline ZnO and its gas sensing properties. 2010 , 151, 212-218		96
948	Effect of zinc nitrate concentration on the structural and the optical properties of ZnO nanostructures. <i>Applied Surface Science</i> , 2010 , 256, 6117-6120	6.7	24
947	Unique surface textures of ZnO films deposited by chemical bath deposition. 2010 , 207, 724-729		1
946	Current-transport studies and trap extraction of hydrothermally grown ZnO nanotubes using gold Schottky diode. 2010 , 207, 748-752		16
945	Characterizations of individual ZnMgO nanowires synthesized by a vapor-transport method. 2010 , 207, 2478-2482		8
944	One-Step Synthesis of Zn to Single-Phase Nanocrystalline ZnO by Solid-Liquid Reaction Ball Milling Assisted by Ultrasonic Wave. 2010 , 93, 2675-2678		9
943	Nanostructured Ceramic Materials for Chemical Sensors: Present Status and Future Prospects. 2010 , 69, 1-23		11
942	Localized heating induced chemical vapor deposition for one-dimensional nanostructure synthesis. 2010 , 107, 051101		36
941	Carbon-assisted growth technology for ZnO nanowires. 2010 ,		
940	Electrical bistability and negative differential resistance in single Sb-doped ZnO nanobelts/SiO _x /p-Si heterostructured devices. 2010 , 96, 093107		24
939	Growth and Structure of ZnO Nanorods on a Sub-Micrometer Glass Pipette and Their Application as Intracellular Potentiometric Selective Ion Sensors. 2010 , 3, 4657-4667		19
938	Electrical Characterization of Metal-Silicon Microwire Interface Using Conductive Atomic Force Microscope. <i>Japanese Journal of Applied Physics</i> , 2010 , 49, 045003	1.4	2
937	Highly UV luminescent ZnO microtetrapod-on-nanowire hybrids. 2010 , 21, 175603		12
936	Resistive switching behaviors of ZnO nanorod layers. 2010 , 96, 242109		103
935	One-dimensional CdS nanostructures: synthesis, properties, and applications. 2010 , 2, 168-87		276

934	Planar waveguide-nanowire integrated three-dimensional dye-sensitized solar cells. 2010 , 10, 2092-6	92
933	Electronic structures of fully fluorinated and semifluorinated zinc oxide sheets. 2010 , 96, 213117	24
932	Density Control of ZnO Nanorod Arrays on Mixed Self-Assembled Monolayers. 2010 , 10, 4697-4700	6
931	Epitactically Interpenetrated High Quality ZnO Nanostructured Junctions on Microchips Grown by the Vapor-Liquid-Solid Method. 2010 , 10, 2842-2846	60
930	Tuning of electronic transport characteristics of ZnO micro/nanowire piezotronic Schottky diodes by bending: threshold voltage shift. 2010 , 12, 14868-72	17
929	Enhanced p-Type Conductivity of ZnTe Nanoribbons by Nitrogen Doping. 2010 , 114, 7980-7985	48
928	From Preannealing of Bilayer Catalysts To Explore the Growth Micromechanisms of ZnO Nanorods. 2010 , 10, 977-982	8
927	Electron transport through Al ₂ O ₃ : An ab initio calculation. 2010 , 108, 033704	6
926	Enhancing sensitivity of a single ZnO micro-/nanowire photodetector by piezo-phototronic effect. 2010 , 4, 6285-91	381
925	Tunable Nanostructure and Photoluminescence of Columnar ZnO Films Grown by Plasma Deposition. 2010 , 114, 20932-20940	25
924	Nanocrystalline zinc oxide thin films by novel double pulse single step electrodeposition. 2010 , 495, 76-81	30
923	Antibacterial and photocatalytic activities of sonochemically prepared ZnO and Ag ₂ O. 2010 , 508, 587-591	97
922	Solution synthesis of one-dimensional ZnO nanomaterials and their applications. 2010 , 2, 1573-87	288
921	Single-crystalline ZnO nanowire bundles: synthesis, mechanism and their application in dielectric composites. 2010 , 16, 10220-5	29
920	Mass production of micro/nanostructured porous ZnO plates and their strong structurally enhanced and selective adsorption performance for environmental remediation. 2010 , 20, 8582	183
919	A New Twist on Nanowire Formation: Screw-Dislocation-Driven Growth of Nanowires and Nanotubes. 2010 , 1, 1472-1480	127
918	Precursor template synthesis of three-dimensional mesoporous ZnO hierarchical structures and their photocatalytic properties. 2010 , 12, 2166	64
917	One-dimensional hexagonal-phase NaYF ₄ : Controlled synthesis, self-assembly, and morphology-dependent up-conversion luminescence properties. 2010 , 12, 1650	51

916	Core-shell Zn-doped TiO ₂ /ZnO nanofibers fabricated via a combination of electrospinning and metal-organic chemical vapour deposition. 2010 , 12, 3858	51
915	Designing the electric transport characteristics of ZnO micro/nanowire devices by coupling piezoelectric and photoexcitation effects. 2010 , 4, 1234-40	169
914	Tuning the Shape and Strain in Micro/Nanowires by a Sideways Physical Deposition Process. 2010 , 114, 21277-21280	7
913	Nanocrystalline/nanoporous ZnO spheres, hexapods and disks transformed from zinc fluorohydroxide, their self-assembly and patterned growth. 2011 , 13, 4741	16
912	Group III element-doped ZnO twinning nanostructures. 2011 , 13, 4251	6
911	High index, reactive facet-controlled synthesis of one-dimensional single crystalline rare earth hydroxide nanobelts. 2011 , 13, 5367	3
910	Synthesis of ZnO nanorod grafted TiO ₂ nanotube 3-D arrayed heterostructure as supporting platform for nanoparticle deposition. 2011 , 21, 14056	31
909	Green co-precipitation byproduct-assisted thermal conversion route to submicron Mg ₂ B ₂ O ₅ whiskers. 2011 , 13, 1654-1663	20
908	Novel ZnO nanowires/silicon hierarchical structures for superhydrophobic, low reflection, and high efficiency solar cells. 2011 ,	2
907	Few-Layer ZnO Nanosheets: Preparation, Properties, and Films with Exposed {001} Facets. 2011 , 115, 24702-24706	22
906	Stimulated Optical Emission from ZnO Nanobelts Grown with a Simple Carbothermal Evaporation Method. 2011 , 115, 1702-1707	16
905	Phase Segregation and Transformations in Arsenic-Implanted ZnO Thin Films. 2011 , 115, 8798-8807	1
904	Controllable ZnO Architectures by Ethanolamine-Assisted Hydrothermal Reaction for Enhanced Photocatalytic Activity. 2011 , 115, 2769-2775	164
903	Self-healing of fractured GaAs nanowires. 2011 , 11, 1546-9	44
902	Formation of ZnO Nanosheets Grown by Catalyst-Assisted Pulsed Laser Deposition. 2011 , 11, 5298-5304	16
901	Highly Sensitive Reversible Light-Driven Switches Using Electrospun Porous Aluminum-Doped Zinc Oxide Nanofibers. 2011 , 115, 3956-3961	26
900	Electronic transport properties of In-doped ZnO nanobelts with different concentration. 2011 , 3, 2182-7	24
899	Wafer-scale high-throughput ordered arrays of Si and coaxial Si/Si(1-x)Ge(x) wires: fabrication, characterization, and photovoltaic application. 2011 , 5, 6629-36	62

898	Effect of annealing on the structural and luminescent properties of ZnO nanorod arrays grown at low temperature. 2011 , 109, 103508	34
897	C-doped ZnO nanowires: electronic structures, magnetic properties, and a possible spintronic device. 2011 , 134, 104706	33
896	High-performance Schottky solar cells using ZrS ₂ nanobelt networks. 2011 , 4, 2586	54
895	Nanorod decorated nanowires as highly efficient SERS-active hybrids. 2011 , 21, 15218	30
894	"Firecracker-shaped" ZnO/polyimide hybrid nanofibers via electrospinning and hydrothermal process. 2011 , 47, 4427-9	65
893	ZnO nanorod array/CuAlO ₂ nanofiber heterojunction on Ni substrate: synthesis and photoelectrochemical properties. 2011 , 22, 295706	3
892	Catalyst/dopant-free growth of ZnO nanobelts with different optical properties from nanowires grown via a catalyst-assisted method. 2011 , 13, 4282	10
891	Multilayer assembly of nanowire arrays for dye-sensitized solar cells. 2011 , 133, 8122-5	206
890	ZnO Nanomaterials Grown with Fe-Based Catalysts. 2011 , 115, 12260-12268	9
889	Nanophotonic Devices Based on ZnO Nanowires. 2011 , 317-362	1
888	ZnO based nanowires grown by chemical vapour deposition for selective hydrogenation of acetylene alcohols. 2011 , 1, 768	71
887	Chapter 3:Inorganic Nanowires. <i>RSC Nanoscience and Nanotechnology</i> , 2011 , 343-530	
886	TiO ₂ thin film encapsulated ZnO nanorod and nanoflower dye sensitized solar cells. 2011 , 125, 12-14	35
885	Electromechanical response of a curved piezoelectric nanobeam with the consideration of surface effects. 2011 , 44, 365301	45
884	Selective homoepitaxial growth and luminescent properties of ZnO nanopillars. 2011 , 22, 185603	17
883	Single nanowire-based UV photodetectors for fast switching. 2011 , 6, 348	48
882	Lyotropic self-assembly of high-aspect-ratio semiconductor nanowires of single-crystal ZnO. 2011 , 27, 11616-21	24
881	Microstructural Study of ZnO Nanostructures by Rietveld Analysis. 2011 , 2011, 1-11	6

880	The Annealing Effect on the Microstructures and Phase Transformation of the TiO ₂ Layer in ZnO/TiO ₂ Core-shell Nanostructures. 2011 , 11, 367-371		14
879	Effect of AZO seed layer on electrochemical growth and optical properties of ZnO nanorod arrays on ITO glass. 2011 , 22, 445602		52
878	Three-Dimensional Nanoarchitectures. 2011 ,		16
877	Anisotropic outputs of a nanogenerator from oblique-aligned ZnO nanowire arrays. 2011 , 5, 6707-13		53
876	Rapid synthesis and luminescence of the Eu ³⁺ , Er ³⁺ codoped ZnO quantum-dot chain via chemical precipitation method. <i>Applied Surface Science</i> , 2011 , 257, 9574-9577	6.7	29
875	Synthesis of Mn-doped ZnS architectures in ternary solution and their optical properties. <i>Applied Surface Science</i> , 2011 , 257, 10898-10902	6.7	27
874	Electrical properties of ZnO nanorods studied by conductive atomic force microscopy. 2011 , 110, 052005		38
873	Growth of ZnO nanowires through thermal oxidation of metallic zinc films on CdTe substrates. 2011 , 509, 5400-5407		13
872	Rare-earth hexaborides nanostructures: Recent advances in materials, characterization and investigations of physical properties. 2011 , 39, 51-69		71
871	Synthesis of Aligned ZnO Nanorod Array on Silicon and Sapphire Substrates by Thermal Evaporation Technique. 2011 , 27, 701-706		25
870	One-dimensional inorganic nanostructures: synthesis, field-emission and photodetection. <i>Chemical Society Reviews</i> , 2011 , 40, 2986-3004	58.5	321
869	Fabrication of patterned polymer nanowire arrays. 2011 , 5, 1476-82		26
868	Photodeposited Surface Ag on ZnO Nanocrystals and the Optical, Electrical, Photocatalytic, and Bactericidal Properties. 2011 , 41, 369-375		12
867	Direct synthesis and integration of functional nanostructures in microfluidic devices. 2011 , 11, 1946-51		45
866	Optical, electrical, photocatalytic, and bactericidal properties of microwave synthesized nanocrystalline Ag/ZnO and ZnO. 2011 , 13, 923-928		116
865	Comparative study of hydrothermal treatment and thermal annealing effects on the properties of electrodeposited micro-columnar ZnO thin films. 2011 , 519, 7738-7749		33
864	Optical properties of ZnO nanowire arrays electrodeposited on n- and p-type Si(111): Effects of thermal annealing. 2011 , 176, 1277-1284		24
863	Synthesis and optical properties of Eu-doped ZnO nanosheets by hydrothermal method. <i>Materials Science in Semiconductor Processing</i> , 2011 , 14, 247-252	4.3	72

862	Fully transparent vertically aligned ZnO nanostructure-based ultraviolet photodetectors with high responsivity. 2011 , 160, 740-746		22
861	Sorting ZnO particles of different shapes with low frequency AC electric fields. 2011 , 65, 632-635		18
860	Dye sensitized solar cells based on zinc oxide bottle brush. 2011 , 65, 2235-2237		30
859	ZnO cacti. 2011 , 14, 447		5
858	Effect of catalyst layer on morphology and optical properties of zinc-oxide nanostructures fabricated by carbothermal evaporation method. 2011 , 6, 650		6
857	Effect of the TiO ₂ shell thickness on the dye-sensitized solar cells with ZnO@TiO ₂ core-shell nanorod electrodes. 2011 , 58, 19-24		52
856	Solvothermal synthesis of microsphere ZnO nanostructures in DEA media. 2011 , 37, 3657-3663		68
855	Ultra-high-responsivity broadband detection of Si metal-semiconductor-metal Schottky photodetectors improved by ZnO nanorod arrays. 2011 , 5, 7748-53		132
854	Solution processing of transparent conductors: from flask to film. <i>Chemical Society Reviews</i> , 2011 , 40, 5406-41	58.5	276
853	Liquid crystalline order and magnetocrystalline anisotropy in magnetically doped semiconducting ZnO nanowires. 2011 , 5, 8357-64		34
852	Electronic properties of polyvinylpyrrolidone at the zinc oxide nanoparticle surface. <i>Journal of Materials Science</i> , 2011 , 46, 7776-7783	4.3	19
851	Preparation and Optical Property of Long Single Crystalline ZnO Nanofibers. 2011 , 21, 954-957		
850	General approach for fabricating nanoparticle arrays via patterned block copolymer nanoreactors. 2011 , 13, 1-13		27
849	Evolution of the zinc compound nanostructures in zinc acetate single-source solution. 2011 , 13, 5193-5202		40
848	On the correlation of crystal defects and band gap properties of ZnO nanobelts. <i>Applied Physics A: Materials Science and Processing</i> , 2011 , 105, 909-914	2.6	22
847	Short-circuit diffusion growth of long bi-crystal CuO nanowires. 2011 , 504, 41-45		32
846	DC-field-induced synthesis of ZnO nanowiskers in water-in-oil microemulsions. 2011 , 37, 287-292		7
845	ZnS nanostructures: From synthesis to applications. 2011 , 56, 175-287		957

844	One-dimensional ZnO nanostructures: Solution growth and functional properties. 2011 , 4, 1013-1098		1049
843	Characterization of structural and electrical properties of ZnO tetrapods. 2011 , 18, 686-690		2
842	Effects of substrate annealing on the gold-catalyzed growth of ZnO nanostructures. 2011 , 6, 566		5
841	Cu ₂ S nanowires and MnS/Cu ₂ S nanojunctions derived from MnS nanowires via selective cation-exchange reaction. 2011 , 208, 123-128		4
840	Catalytic growth of hexagonally aligned ZnO nanorods. 2011 , 248, 1915-1918		5
839	Study of the Piezoelectric Power Generation of ZnO Nanowire Arrays Grown by Different Methods. 2011 , 21, 628-633		95
838	Air/Liquid-pressure and heartbeat-driven flexible fiber nanogenerators as a micro/nano-power source or diagnostic sensor. 2011 , 23, 84-9		166
837	Super deformability and Young's modulus of GaAs nanowires. 2011 , 23, 1356-60		99
836	Fundamental theory of piezotronics. 2011 , 23, 3004-13		372
835	Synthesis of Exciton Luminescent ZnO Nanocrystals Using Continuous Supercritical Microfluidics. 2011 , 123, 12277-12280		13
834	Synthesis of exciton luminescent ZnO nanocrystals using continuous supercritical microfluidics. 2011 , 50, 12071-4		53
833	Growth, modulation and photoresponse characteristics of vertically aligned ZnO nanowires. <i>Applied Surface Science</i> , 2011 , 257, 4973-4977	6.7	14
832	Fabrication of diameter-modulated and ultrathin porous nanowires in anodic aluminum oxide templates. 2011 , 56, 4972-4979		93
831	Synthesis and characterization of ZnO/NiO p-n heterojunctions: ZnO nanorods grown on NiO thin film by thermal evaporation. 2011 , 9, 132-139		82
830	Enhanced photocatalytic and antibacterial activities of sol-gel synthesized ZnO and Ag-ZnO. <i>Materials Science in Semiconductor Processing</i> , 2011 , 14, 133-138	4.3	111
829	Vibrating ZnO/CNT nanotubes as pressure/stress sensors. <i>Physica E: Low-Dimensional Systems and Nanostructures</i> , 2011 , 43, 1288-1293	3	9
828	ZnO-CNT composite nanotubes as nanoresonators. 2011 , 375, 2171-2175		27
827	Aqueous chemical growth of ZnO disks, rods, spindles and flowers: pH dependency and photoelectrochemical properties. 2011 , 85, 1119-1127		56

- 826 Current Biased Resistive Switching in ZnO Whiskers. *Japanese Journal of Applied Physics*, **2011**, 50, 04DJ014 4
- 825 Thin film silicon solar cell fabricated on etched ZnO nanowire grown by hydrothermal method. **2011**,
- 824 Sublattice-specific ordering of ZnO layers during the heteroepitaxial growth at different temperatures. **2011**, 110, 113516 8
- 823 Morphology-Controlled Synthesis of 1D ZnO Nanostructures by Hydrothermal Technique. **2011**, 266, 17-21
- 822 Effect of the Substrate Temperature on Crystalline and Optical Properties of ZnO Thin Films Prepared by CVD. **2011**, 239-242, 881-885 1
- 821 Fabrication and Photoluminescence of ZnO Nanobelt with Superlength Nanocantilevers. **2011**, 694, 385-390
- 820 Aligned Growth of Zinc Oxide Nanorods on Catalyst-Seeded Si Substrate by Aqueous-Solution Immersion Method. **2011**, 312-315, 104-109 3
- 819 Two-Step Green Hydrothermal Synthesis of ZnO Powders. **2011**, 284-286, 654-657 1
- 818 Highly Sensitive ZnO Nanowire Ultraviolet Photodetectors Based on Mechanical Schottky Contact. **2011**, 159, K10-K14 25
- 817 Mechanism and Growth of Flexible ZnO Nanostructure Arrays in a Facile Controlled Way. **2011**, 2011, 1-12 6
- 816 Growth Behaviors of ZnO Nanorods Grown with the Sn-Based Bilayer Catalyst-Covered Substrates. **2011**, 2011, 1-9 5
- 815 Prediction of the thermal conductivity of ZnO nanobelts. **2012**, 112, 084907 2
- 814 Green Preparation of TiO₂-ZnO Nanocomposite Photoanodes by Aqueous Electrophoretic Deposition. **2012**, 159, B602-B610 17
- 813 Fundamental mechanism for electrically actuated mechanical resonances in ZnO nanowhiskers. **2012**, 86, 1
- 812 Surface effect on the buckling of piezoelectric nanofilms. **2012**, 45, 285301 48
- 811 A Theoretical Study of a Single-Walled ZnO Nanotube as a Sensor for H₂O Molecules. **2012**, 58, 275-279 9
- 810 From nanogenerators to piezotronics: A decade-long study of ZnO nanostructures. **2012**, 37, 814-827 149
- 809 Study of piezoelectricity in structures based on nanofibrous ZnO layers and polysilane. **2012**,

808	High aspect ratio free standing ZnO-magnetostrictive mesoscale cylindrical magnetoelectric core shell composite. 2012 , 1398, 9		
807	Microstructural Properties and Formation Mechanisms of Zn Nanocrystal Embedded Polydimethylsiloxane Nanofibers. 2012 , 159, K122-K126		1
806	Growth-induced Stacking Faults of ZnO Nanorods Probed by Spatial Resolved Cathodoluminescence. 2012 , 29, 077803		4
805	Silicon-on-insulator based ZnO nanowire photodetector. 2012 , 30, 061801		2
804	Synthesis of ZnO nanostructures for low temperature CO and UV sensing. 2012 , 12, 13842-51		27
803	Prediction of the Thermal Conductivity of ZnO Nanostructures. 2012 , 134,		7
802	High resolution x-ray diffraction methodology for the structural analysis of one-dimensional nanostructures. 2012 , 112, 014305		4
801	Effect of the gas composition on the structural and electrical properties of ZnO nanostructures obtained by oxidation of Zn at atmospheric pressure. 2012 , 398, 012020		
800	Piezotronics and Piezo-Phototronics. 2012 , 1		2
799	Introduction to Active Smart Materials for Biomedical Applications. 2012 , 1-27		5
798	ZnO meso-mechano-thermo physical chemistry. 2012 , 112, 2833-52		68
797	Growth of porous ZnO nanosheets by electrodeposition with $Zn_4SO_4(OH)_6 \cdot 4H_2O$ as precursor. 2012 , 85, 438-443		19
796	ZnO nanostructures: growth, properties and applications. 2012 , 22, 6526		460
795	Nanobasierte Energiegewinnung in autarken Mikro-/Nanosystemen. 2012 , 124, 11868-11891		19
794	Nanotechnology-enabled energy harvesting for self-powered micro-/nanosystems. 2012 , 51, 11700-21		747
793	Dipole field guided orientated attachment of nanocrystals to twin-brush ZnO mesocrystals. 2012 , 18, 16104-13		30
792	Investigation of the geometrical effect on photoelectric properties of nano-ZnO with doped liquid crystal technique. <i>Applied Physics A: Materials Science and Processing</i> , 2012 , 108, 745-750	2.6	3
791	Applications of metalorganic coordination polymers as precursors for preparation of nano-materials. 2012 , 256, 2921-2943		321

790	Progress in nanogenerators for portable electronics. 2012 , 15, 532-543	351
789	Identification of Adhesive Bond in Carbon Fiber Composites with a ZnO Nanowire Interphase. 2012 ,	1
788	Catalyst-free synthesis of single crystalline ZnO nanonails with ultra-thin caps. 2012 , 14, 8330	35
787	Morphology-controlled synthesis of ZnO 3D hierarchical structures and their photocatalytic performance. 2012 , 14, 8626	67
786	Effects of annealing temperature on morphology and Crystallinity of nitrogen doped zinc oxide (ZnO:N) nano films. 2012 ,	
785	Seedless synthesis of patterned ZnO nanowire arrays on metal thin films (Au, Ag, Cu, Sn) and their application for flexible electromechanical sensing. 2012 , 22, 9469	76
784	Well-aligned ZnO nanowires with excellent field emission and photocatalytic properties. 2012 , 4, 1471-5	96
783	Superhydrophobic supported Ag-NPs@ZnO-nanorods with photoactivity in the visible range. 2012 , 22, 1341-1346	34
782	Vibrating piezoelectric nanofilms as sandwich nanoplates. 2012 , 111, 094303	42
781	Electrodeposition Growth of Oriented ZnO Deposits in Ionic Liquid Media. 2012 , 159, D691-D698	23
780	Synthesis of vertically aligned ultra-long ZnO nanowires on heterogeneous substrates with catalyst at the root. 2012 , 23, 055604	63
779	Confinement in Oriented Mesopores Induces Piezoelectric Behavior of Polymeric Nanowires. 2012 , 24, 4215-4221	55
778	Role of Carrier Gas Flow and Species Diffusion in Nanowire Growth from Thermal CVD. 2012 , 116, 5524-5530	21
777	Kinetic competition model and size-dependent phase selection in 1-D nanostructures. 2012 , 12, 3115-20	37
776	Scaling rules of piezoelectric nanowires in view of sensor and energy harvester integration. 2012 ,	12
775	Investigation on simultaneous doping of Sn and F with ZnO nanopowders synthesized using a simple soft chemical route. 2012 , 52, 528-540	34
774	The effect of substrate roughness on the static friction of CuO nanowires. 2012 , 606, 1393-1399	19
773	ZnTe Nanowires with Oxygen Intermediate Band Grown by Bismuth-Catalyzed Physical Vapor Transport. 2012 , 116, 10368-10374	12

772	Crystal growth behaviour in Au-ZnO nanocomposite under different annealing environments and photoswitchability. 2012 , 112, 064308		101
771	Following the wetting of one-dimensional photoactive surfaces. 2012 , 28, 15047-55		10
770	In situ measurement of the kinetic friction of ZnO nanowires inside a scanning electron microscope. <i>Applied Surface Science</i> , 2012 , 258, 3227-3231	6.7	16
769	Photocatalytic properties of hierarchical ZnO flowers synthesized by a sucrose-assisted hydrothermal method. <i>Applied Surface Science</i> , 2012 , 259, 557-561	6.7	22
768	Surface morphology effects on the light-controlled wettability of ZnO nanostructures. <i>Applied Surface Science</i> , 2012 , 258, 8146-8152	6.7	88
767	Luminescence anisotropy of ZnO microrods. 2012 , 132, 2643-2647		41
766	Optical characteristics of Tb-doped InBO ₃ nanocrystals. 2012 , 132, 2608-2611		11
765	Recent progress of one-dimensional ZnO nanostructured solar cells. 2012 , 1, 91-106		167
764	Energy harvesting based on semiconducting piezoelectric ZnO nanostructures. 2012 , 1, 342-355		275
763	Imaging transport in nanowires using near-field detection of light. 2012 , 352, 218-223		5
762	Growth and microstructural study of CuO covered ZnO nanorods. 2012 , 351, 77-82		15
761	Epitaxial relationships of ZnO nanostructures grown by Au-assisted pulsed laser deposition on c- and a-plane sapphire. 2012 , 355, 52-58		15
760	Morphology transitions in ZnO nanorods grown by MOCVD. 2012 , 359, 122-128		38
759	Nonlocal effects in the free longitudinal vibration of axially functionally graded tapered nanorods. 2012 , 61, 257-265		83
758	Bending effects of ZnO nanorod metal-semiconductor-metal photodetectors on flexible polyimide substrate. 2012 , 7, 214		27
757	Synthesis and photoluminescence properties of comb-like CdS nanobelt/ZnO nanorod heterostructures. <i>Applied Surface Science</i> , 2012 , 261, 385-389	6.7	4
756	Piezoelectric ZnO-CNT nanotubes under axial strain and electrical voltage. <i>Physica E: Low-Dimensional Systems and Nanostructures</i> , 2012 , 46, 105-112	3	14
755	Ultraviolet whispering-gallery-mode lasing in ZnO micro/nano sphere crystal. 2012 , 101, 211105		33

754	Nanomaterials: Laser-Based Processing in Gas Phase. 2012 , 105-201		
753	Screen printed ZnO ultraviolet photoconductive sensor on pencil drawn circuitry over paper. 2012 , 100, 211104		62
752	A facile method to fabricate vertically aligned (K,Na)NbO ₃ lead-free piezoelectric nanorods. 2012 , 22, 23221		31
751	Synthesis, optical and electrochemical properties of ZnO nanorod hybrids loaded with high-density gold nanoparticles. 2012 , 14, 5158		30
750	Tuning quantum corrections and magnetoresistance in ZnO nanowires by ion implantation. 2012 , 12, 666-72		38
749	Simple, large-scale patterning of hydrophobic ZnO nanorod arrays. 2012 , 4, 3910-5		32
748	[100] Directed Cu-doped h-CoO nanorods: elucidation of the growth mechanism and application to lithium-ion batteries. 2012 , 4, 473-7		30
747	Probing surface band bending of surface-engineered metal oxide nanowires. 2012 , 6, 9366-72		136
746	Piezotronics and Piezo-Phototronics. <i>Microtechnology and MEMS</i> , 2012 ,	0.6	46
745	Semiconductor Nanowire Lasers. 2012 , 455-486		20
744	Controlled synthesis of carbon nanostructures using aligned ZnO nanorods as templates. 2012 , 50, 5472-5480	21	
743	Thermoelectric-mechanical vibration of piezoelectric nanobeams based on the nonlocal theory. <i>Smart Materials and Structures</i> , 2012 , 21, 025018	3-4	140
742	Procedures and Properties for a Direct Nano-Micro Integration of Metal and Semiconductor Nanowires on Si Chips. 2012 , 2012, 1-13		3
741	Diameter-dependent thermal transport in individual ZnO nanowires and its correlation with surface coating and defects. 2012 , 8, 738-45		49
740	Effects of humidity on the electrical characteristics of ZnO nanowire devices. 2012 , 209, 972-976		4
739	Diameter- and density-controlled synthesis of well-aligned ZnO nanowire arrays and their properties using a thermal evaporation technique. 2012 , 209, 1498-1510		12
738	High efficiency dye-sensitized solar cells based on three-dimensional multilayered ZnO nanowire arrays with "caterpillar-like" structure. 2012 , 12, 3656-62		193
737	New crystal structure: synthesis and characterization of hexagonal wurtzite MnO. 2012 , 134, 8392-5		35

736	Full solution-processed synthesis of all metal oxide-based tree-like heterostructures on fluorine-doped tin oxide for water splitting. 2012 , 24, 5374-8	123
735	Local Structure of ZnO micro flowers and nanoparticles obtained by micro-segmented flow synthesis. 2012 , 13, 1557-61	7
734	n-ZnO/p-Si 3D heterojunction solar cells in Si holey arrays. 2012 , 4, 737-41	19
733	Nanostructured solar cells harvesting multi-type energies. 2012 , 5, 6040	26
732	Manufacturing of inorganic nanomaterials: concepts and perspectives. 2012 , 4, 2813-25	37
731	Impact of Parylene-A Encapsulation on ZnO Nanobridge Sensors and Sensitivity Enhancement via Continuous Ultraviolet Illumination. 2012 , 41, 873-880	1
730	Growth of ZnO nanodisk, nanospindles and nanoflowers for gas sensor: pH dependency. 2012 , 12, 778-783	62
729	Nonlinear vibration of the piezoelectric nanobeams based on the nonlocal theory. 2012 , 94, 2038-2047	259
728	Ultrathin and nanostructured ZnO-based films for fluorescence biosensing applications. 2012 , 365, 90-6	14
727	Preparation of ZnO nanosheets by a novel microemulsion-based hydrothermal method. 2012 , 132, 735-739	3
726	Growth of superhydrophobic Zinc oxide nanowire thin films. 2012 , 75, 51-53	37
725	Facilitating ZnO nanostructure growths by making seeds for self-catalytic reactions. 2012 , 187, 58-63	3
724	Suppression of gallium inhomogeneity in ZnO nanostructures on GaN using seed layers. 2012 , 83, 31-34	1
723	Effects of uniaxial strain on magnetic interactions in Co-doped ZnO nanowires: First-principles calculations. 2012 , 152, 19-23	13
722	Comparison of structural and photoluminescence properties of zinc oxide nanowires grown by vapor-solid and vapor-liquid-solid methods. 2012 , 520, 4642-4645	3
721	Comparative PL study of individual ZnO nanorods, grown by APMOCVD and CBD techniques. 2012 , 407, 1538-1542	25
720	Mechanical control of nanomaterials and nanosystems. 2012 , 24, 158-76	353
719	Progress in piezotronics and piezo-phototronics. 2012 , 24, 4632-46	464

7 ¹⁸	Hybridizing ZnO Nanowires with Micropyramid Silicon Wafers as Superhydrophobic High-Efficiency Solar Cells. 2012 , 2, 47-51		81
7 ¹⁷	Sulfur-doped zinc oxide (ZnO) Nanostars: Synthesis and simulation of growth mechanism. 2012 , 5, 20-26		35
7 ¹⁶	Synthesis of Vertically Aligned ZnO Nanorods on Ni-Based Buffer Layers Using a Thermal Evaporation Process. 2012 , 41, 451-456		5
7 ¹⁵	Synthesis and photoluminescence properties of the ZnO@SnO ₂ core-shell nanorod arrays. <i>Journal of Materials Science</i> , 2012 , 47, 1541-1545	4-3	8
7 ¹⁴	Surfactant mediated growth of ZnO nanostructures and their dye sensitized solar cell properties. <i>Journal of Materials Science: Materials in Electronics</i> , 2012 , 23, 349-355	2.1	10
7 ¹³	DNA hybridization assay at individual, biofunctionalized zinc oxide nanowires. 2013 , 6, 143-7		6
7 ¹²	Thermo-electro-mechanical vibration of piezoelectric nanoplates based on the nonlocal theory. 2013 , 106, 167-174		158
7 ¹¹	Synthesizing tubular and trapezoidal shaped ZnO nanowires by an aqueous solution method. 2013 , 5, 3505-13		9
7 ¹⁰	Development of an alcohol sensor based on ZnO nanorods synthesized using a scalable solvothermal method. 2013 , 185, 735-742		41
7 ⁰⁹	Structural and electronic properties of graphene-ZnO interfaces: dispersion-corrected density functional theory investigations. 2013 , 24, 305401		59
7 ⁰⁸	Improvement of ultraviolet photoresponse of bent ZnO microwires by coupling piezoelectric and surface oxygen adsorption/desorption effects. 2013 , 5, 916-20		27
7 ⁰⁷	Optical and Electrical Properties of Hierarchical Nanostructured Al-Doped ZnO Powders Prepared through a Mild Solution Route. 2013 , 2013, 3491-3496		5
7 ⁰⁶	Strain-induced large exciton energy shifts in buckled CdS nanowires. 2013 , 13, 3836-42		46
7 ⁰⁵	Synthesis and characterization of nanostructured zinc oxide layers for sensor applications. 2013 , 47, 586-591		13
7 ⁰⁴	Solution-processed Ag-doped ZnO nanowires grown on flexible polyester for nanogenerator applications. 2013 , 5, 9609-14		48
7 ⁰³	Patterned horizontal growth of ZnO nanowires on SiO ₂ surface. 2013 , 13, 425-429		7
7 ⁰²	A novel concept for self-reporting materials: stress sensitive photoluminescence in ZnO tetrapod filled elastomers. 2013 , 25, 1342-7		149
7 ⁰¹	Role of the Exposed Polar Facets in the Performance of Thermally and UV Activated ZnO Nanostructured Gas Sensors. 2013 , 117, 17850-17858		208

700	Comparison between ZnO nanowires grown by chemical vapor deposition and hydrothermal synthesis. <i>Applied Physics A: Materials Science and Processing</i> , 2013 , 113, 623-632	2.6	71
699	Modification of the optical and structural properties of ZnO nanowires by low-energy Ar ⁺ ion sputtering. 2013 , 8, 162		12
698	Wet chemical growth of ultra-long ZnO nanoplates and their optical property. 2013 , 584, 155-158		6
697	Tunable field emission characteristics of ZnO nanowires coated with varied thickness of lanthanum boride thin films. 2013 , 132, 36-40		7
696	Synthesis of multi-dimensional ZnO nanostructures in aqueous medium for the application of gas sensor. 2013 , 187, 323-330		62
695	Local magnetization and strain in single magnetoelectric microrod composites. 2013 , 103, 123111		7
694	Triboelectric nanogenerators as new energy technology for self-powered systems and as active mechanical and chemical sensors. 2013 , 7, 9533-57		1700
693	Effect of crack face residual surface stress on nanoscale fracture of piezoelectric materials. 2013 , 110, 68-80		14
692	Strengthening brittle semiconductor nanowires through stacking faults: insights from in situ mechanical testing. 2013 , 13, 4369-73		42
691	Controlled synthesis of tellurium nanowires and nanotubes via a facile, efficient, and relatively green solution phase method. 2013 , 1, 15046		41
690	Soft processing of hierarchical oxide nanostructures for dye-sensitized solar cell applications. 2013 , 2, 1354-1372		25
689	Effect of Co doping on morphology, optical and magnetic properties of ZnO 1-D nanostructures. <i>Journal of Materials Science: Materials in Electronics</i> , 2013 , 24, 4393-4398	2.1	15
688	Fabrication of Macroscopically Flexible and Highly Porous 3D Semiconductor Networks from Interpenetrating Nanostructures by a Simple Flame Transport Approach. 2013 , 30, 775-783		240
687	ZnO Nanorod Arrays and Hollow Spheres through a Facile Room-Temperature Solution Route and Their Enhanced Ethanol Gas-Sensing Properties. 2013 , 78, 1266-1272		24
686	ZnO hollow microspheres with exposed porous nanosheets surface: Structurally enhanced adsorption towards heavy metal ions. 2013 , 422, 199-205		63
685	Theoretical study of piezotronic heterojunction. 2013 , 56, 2615-2621		10
684	Effect of synthesized temperature on microstructure, infrared emissivity and dielectric property of Fe-doped ZnO powder. <i>Journal of Materials Science: Materials in Electronics</i> , 2013 , 24, 4974-4979	2.1	7
683	Introduction. 2013 , 1-19		

682	The Influence of Resistance and Carrier Concentration on the Output Voltage of a ZnO Nanogenerator. 2013 , 12, 1012-1017	3
681	Engineering of efficiency limiting free carriers and an interfacial energy barrier for an enhancing piezoelectric generation. 2013 , 6, 97-104	104
680	Millimeter-sized single crystalline ZnO networks composed of nanostructures. 2013 , 15, 5398	1
679	High-throughput fabrication of large-scale highly ordered ZnO nanorod arrays via three-beam interference lithography. 2013 , 15, 8416	11
678	Role of surface chemistry in adhesion between ZnO nanowires and carbon fibers in hybrid composites. 2013 , 5, 635-45	82
677	Photoluminescence study of ZnO nanowires with Zn residue. 2013 , 136, 26-31	16
676	Improved field emission and photocatalysis properties of cacti-like zinc oxide nanostructures. 2013 , 68, 142-145	18
675	Enabling aqueous electrophoretic growth of adherent nanotitania mesoporous films via intrafilm cathodic deposition of hydrous zinc oxide. 2013 , 87, 169-179	12
674	Emerging chirality in nanoscience. <i>Chemical Society Reviews</i> , 2013 , 42, 2930-62	58.5 391
673	One-Dimensional Nanostructures for Energy Harvesting. 2013 , 237-270	3
672	One-Dimensional Nanostructures in Plasmonics. 2013 , 455-471	
671	More Recent Advances in One-Dimensional Metal Oxide Nanostructures: Optical and Optoelectronic Applications. 2013 , 359-379	1
670	Study of Zinc Oxide nano/micro rods grown on ITO and glass substrates. 2013 , 124, 4167-4171	24
669	Carbonaceous spheres in unusual template for solid metal oxide mesoscale spheres: Application to ZnO spheres. 2013 , 202, 291-299	15
668	Synthesis of ZnO microwires and tetrapods by optical furnace. 2013 , 107, 194-196	10
667	Superhydrophobic properties of cotton fabrics functionalized with ZnO by electroless deposition. 2013 , 138, 253-261	51
666	Attraction of semiconductor nanowires: An in situ observation. 2013 , 61, 7166-7172	9
665	ZnO nano-platelets by laser induced plasma assisted-irradiation with a pulse KrF laser. 2013 , 105, 206-208	8

664	Fundamental formulations and recent achievements in piezoelectric nano-structures: a review. 2013 , 5, 1716-26	145
663	ZnO nanowire array-templated LbL self-assembled polyelectrolyte nanotube arrays and application for charged drug delivery. 2013 , 24, 045605	9
662	p-Type ZnO materials: Theory, growth, properties and devices. 2013 , 58, 874-985	300
661	First-principles based multiscale model of piezoelectric nanowires with surface effects. 2013 , 113, 014309	43
660	Polarity-Free Epitaxial Growth of Heterostructured ZnO/ZnS Core/Shell Nanobelts. 2013 , 4, 740-4	15
659	Superposition twinning supported by texture in ZnO nanospikes. 2013 , 46, 396-403	27
658	Highly regular and ultra-thin porous ZnO nanosheets: An indirect electrodeposition method using acetate-containing precursor and their application in quantum dots-sensitized solar cells. 2013 , 94, 72-79	22
657	Metal oxide nanowires for chemiresistive gas sensors: Issues, challenges and prospects. 2013 , 439, 101-116	117
656	Analysis of the Urbach tails in absorption spectra of undoped ZnO thin films. 2013 , 113, 153508	165
655	Self-assembled CdS/Au/ZnO heterostructure induced by surface polar charges for efficient photocatalytic hydrogen evolution. 2013 , 1, 2773	270
654	Fabrication of gas sensor based on p-type ZnO nanoparticles and n-type ZnO nanowires. 2013 , 182, 190-196	98
653	One-Dimensional Inorganic Nanostructures for Field Emitters. 2013 , 483-501	
652	Advances and new directions in gas-sensing devices. 2013 , 61, 974-1000	232
651	Sliding and rolling frictional behavior of a single ZnO nanowire during manipulation with an AFM. 2013 , 5, 6081-7	33
650	Constructing ZnO nanorod array photoelectrodes for highly efficient quantum dot sensitized solar cells. 2013 , 1, 6770	67
649	ZnO nanorods on reduced graphene sheets with excellent field emission, gas sensor and photocatalytic properties. 2013 , 1, 8445	181
648	Single ZnO nanotetrapod-based sensors for monitoring localized UV irradiation. 2013 , 5, 5981-5	18
647	Vertically Aligned Hybrid Core/Shell Semiconductor Nanowires for Photonics Applications. 2013 , 23, 5981-5989	33

646	Kinetic manipulation of silicide phase formation in Si nanowire templates. 2013 , 13, 3703-8	29
645	Amphiphile nanoarchitectonics: from basic physical chemistry to advanced applications. 2013 , 15, 10580-611	268
644	Structural, optical and magnetic properties of Co-doped ZnO nanorods prepared by hydrothermal method. 2013 , 576, 59-65	55
643	Sol-gel synthesis, characterization, and neurotoxicity effect of zinc oxide nanoparticles using gum tragacanth. 2013 , 39, 9195-9199	93
642	Closed solutions for the electromechanical bending and vibration of thick piezoelectric nanobeams with surface effects. 2013 , 46, 405302	8
641	Selective preparation and enhanced microwave electromagnetic characteristics of polymorphous ZnO architectures made from a facile one-step ethanediamine-assisted hydrothermal approach. 2013 , 15, 1314	67
640	Polymer Sphere Array Assisted ZnO Electroless Deposition. 2013 , 11, 457-464	9
639	Pencil-like zinc oxide micro/nano-scale structures: Hydrothermal synthesis, optical and photocatalytic properties. 2013 , 48, 3723-3728	21
638	Hydrothermal growth of mop-brush-shaped ZnO rods on the surface of electrospun nylon-6 nanofibers. 2013 , 39, 3095-3102	15
637	Length-dependent charge generation from vertical arrays of high-aspect-ratio ZnO nanowires. 2013 , 19, 14665-74	61
636	Development and optical study of hexagonal multi-linked ZnO micro-rods grown using hexamine as capping agent. 2013 , 124, 1188-1191	21
635	Fabrication of lateral electrodes on semiconductor nanowires through structurally matched insulation for functional optoelectronics. 2013 , 24, 025204	7
634	ZnO nanorods: morphology control, optical properties, and nanodevice applications. 2013 , 56, 2243-2265	13
633	A Review of Synthesis Techniques for Gallium-Zinc Oxynitride Solar-Activated Photocatalyst for Water Splitting. 2013 , 2, Q118-Q126	28
632	Study of dark-conductivity and photoconductivity of ZnO nano structures synthesized by thermal decomposition of zinc oxalate. 2013 , 9, 555-559	17
631	Functionalized single ZnO-metal junction as a pH sensor. 2013 ,	3
630	A comprehensive review of semiconductor ultraviolet photodetectors: from thin film to one-dimensional nanostructures. 2013 , 13, 10482-518	511
629	Optical Characterization and Growth Mechanism of Combination of Zinc Oxide Nanowires and Nanorods at Various Substrate Temperatures. 2013 , 2013, 1-9	3

628	Integration of metal oxide nanowires in flexible gas sensing devices. 2013 , 13, 10659-73		28
627	Anisotropic Nanostructure ZnO Photoelectrodes for CdS/CdSe Quantum Dot Sensitized Solar Cells. 2013 , 873, 556-561		
626	Growth and characterization of ZnO multipods on functional surfaces with different sizes and shapes of Ag particles. <i>Chinese Physics B</i> , 2013 , 22, 088103	1.2	5
625	Multi-tip nano-prisms: Controlled growth and emission enhancement properties. 2013 , 104, 18004		4
624	Gold nanowires with high aspect ratio and morphological purity: Synthesis, characterization, and evaluation of parameters. 2013 , 28, 250-260		4
623	Influence of Deposition Voltage on Growth of ZnO Nanowires by Cathodic Electrodeposition. 2013 , 829, 732-736		1
622	Growth methodology for nanowires. 2013 ,		
621	Growth behavior and field emission property of ZnO nanowire arrays on Au and Ag films. 2013 , 3, 092132		2
620	3D reconstruction and feature extraction for analysis of nanostructures by SEM imaging. 2013 ,		1
619	Effect of Seed Layer Structure on Surface Morphology and Photoluminescence Property of ZnO Nanorods Grown on LiNbO ₃ Substrate. 2013 , 143, 115-120		
618	Laser-assisted growth of t-Te nanotubes and their controlled photo-induced unzipping to ultrathin core-Te/sheath-TeO ₂ nanowires. 2013 , 3, 1209		21
617	Equivalent circuit model of a nanogenerator based on a piezoelectric nanowire/polymer composite. 2013 , 7, 915-918		11
616	Photoresponse from single upright-standing ZnO nanorods explored by photoconductive AFM. 2013 , 4, 208-17		22
615	The growth of pine-leaf-like hierarchical SnO ₂ nanostructures. 2014 , 9, 913-921		3
614	Quantum cutting effect and photoluminescence emission at about 1,000 nm from Er ³⁺ /Yb ³⁺ co-doped ZnO nanoplates prepared by wet chemical precipitation method. <i>Applied Physics A: Materials Science and Processing</i> , 2014 , 117, 2289-2294	2.6	3
613	Fletching-shaped Bi ₄ Te ₃ /ZnTe heterostructure nanowires. 2014 , 25, 505605		3
612	Metal-Selenide Nanostructures: Growth and Properties. 2014 , 43-81		2
611	Fast synthesis, morphology transformation, structural and optical properties of ZnO nanorods grown by seed-free hydrothermal method. 2014 , 211, 2611-2615		10

610	Origin of the ring-shaped emission pattern observed from the field emission of ZnO nanowire: role of adsorbates and electron initial velocity. 2014 , 1, 045050	8
609	Nanostructured ZnO Materials: Synthesis, Properties and Applications. 2014 , 137-177	7
608	Emerging Applications of Liquid Crystals Based on Nanotechnology. 2014 , 7, 2044-2061	9
607	Piezoelectric Effect of Quaic-Nanotetrapods ZnO Nanostructure. 2014 , 633-634, 25-29	
606	Decoration of ZnO Nanorods with Coral Reefs like NiO Nanostructures by the Hydrothermal Growth Method and Their Luminescence Study. 2014 , 7, 430-440	13
605	The study of wireless thin film transistor with micro magnetic induction coupling antenna structure. 2014 ,	
604	Excitation of core modes through side coupling to multimode optical fiber by hydrothermal growth of ZnO nanorods for wide angle optical reception. 2014 , 31, 2232	7
603	ZnO 1D nanostructures designed by combining atomic layer deposition and electrospinning for UV sensor applications. 2014 , 2, 20650-20658	83
602	Investigation of ZnO nanostructures grown on Si and GaAs substrates by low-temperature CBD method. 2014 , 211, 625-629	
601	Preparation and Characterization of Tourmaline/ZnO Composite Thin Films by a Facile Wet-Chemical Route. 2014 , 809-810, 649-653	2
600	Tuning of structural, optical, and magnetic properties of ultrathin and thin ZnO nanowire arrays for nano device applications. 2014 , 9, 122	28
599	Metal-Organic Chemical Vapor Deposition Growth of ZnO Nanowires. 2014 , 265-302	0
598	Stable electron emission from ZnO nanoemitters grown with pseudo-catalyst. <i>Japanese Journal of Applied Physics</i> , 2014 , 53, 035002	1.4 1
597	Growth and properties of ZnO films on polymeric substrate by spray pyrolysis method. 2014 , 555, 87-92	11
596	Crystal structure transformation and dielectric properties of polymer composites incorporating zinc oxide nanorods. 2014 , 22, 19-25	12
595	A Low-Frequency Energy Harvester from Ultralong, Vertically Aligned BaTiO ₃ Nanowire Arrays. 2014 , 4, 1301660	61
594	ZnO/zeolite hybrid nanostructures: synthesis, structure, optical properties, and simulation. 2014 , 555, 21-27	9
593	Structural properties of defected ZnO nanoribbons under uniaxial strain: Molecular dynamics simulations. 2014 , 14, 57-67	7

592	Room temperature synthesis of CdS nanoflakes for photocatalytic properties. <i>Journal of Materials Science: Materials in Electronics</i> , 2014 , 25, 1887-1892	2.1	39
591	pH-triggered conduction of amine-functionalized single ZnO wire integrated on a customized nanogap electronic platform. 2014 , 9, 53		18
590	Thermoelectric Properties of Al-Doped ZnO Thin Films. 2014 , 43, 2145-2150		23
589	Temperature-dependent growth mechanism and microstructure of ZnO nanostructures grown from the thermal oxidation of zinc. 2014 , 390, 101-108		29
588	Buckling and free vibration of magneto-electroelastic nanoplate based on nonlocal theory. 2014 , 111, 522-529		112
587	Diameter regulated ZnO nanorod synthesis and its application in gas sensor optimization. 2014 , 586, 436-440		24
586	Cu-doped ZnO nanocrystalline powder catalyzed one-pot synthesis of fully substituted new indeno[1,2-b]pyridines at room temperature by a multi-component reaction. 2014 , 35, 560-564		12
585	Thermo-electro-mechanical vibration of coupled piezoelectric-nanoplate systems under non-uniform voltage distribution embedded in Pasternak elastic medium. 2014 , 14, 814-832		45
584	Electrospun Functional Nanofibers and Their Applications in Chemical Sensors and Li-Ion Batteries. 2014 , 793-838		2
583	The influence of Au film thickness and annealing conditions on the VLS-assisted growth of ZnO nanostructures. 2014 , 25, 215601		29
582	Growth and characterization of n-ZnO/p-GaN nanorods on silicon for the fabrication of heterojunction diodes. 2014 , 570, 330-335		
581	Defect-controlled growth of ZnO nanostructures using its different zinc precursors and their application for effective photodegradation. 2014 , 14, 621-629		26
580	Facile synthesis of ZnO nanopencil arrays for photoelectrochemical water splitting. 2014 , 7, 143-150		66
579	Piezoelectric and ferroelectric materials and structures for energy harvesting applications. 2014 , 7, 25-44		694
578	Polyvinyl pyrrolidone assisted low temperature synthesis of ZnO nanocones and its linear and nonlinear optical studies. 2014 , 49, 132-137		17
577	Green chemistry approach for the synthesis of ZnO nanopowders and their cytotoxic effects. 2014 , 40, 4827-4831		105
576	Tunable photoluminescence properties of well-aligned ZnO nanorod array by oxygen plasma post-treatment. <i>Applied Surface Science</i> , 2014 , 289, 252-256	6.7	30
575	Preparation, Infrared Emissivity, and Dielectric and Microwave Absorption Properties of Fe-Doped ZnO Powder. 2014 , 43, 3942-3948		4

574	Effect of some amines, dodecylamine (DDA) and hexadecyldimethylamine (DMHA), on the formation of ZnO nanorods synthesized by hydrothermal route. 2014 , 94, 2886-2899	4
573	Controllable fabrication of one-dimensional ZnO nanoarrays and their application in constructing silver trap structures. 2014 , 4, 33198-33205	6
572	Three-Dimensional Organization of Surface-Bound Silicone Nanofilaments Revealed by Focused Ion Beam Nanotomography. 2014 , 118, 24967-24975	14
571	High Catalytic Activity of Au Clusters Supported on ZnO Nanosheets. 2014 , 118, 21038-21041	16
570	3D nanostructure reconstruction based on the SEM imaging principle, and applications. 2014 , 25, 185705	12
569	Lithium-doped zinc oxide nanowires-polymer composite for high performance flexible piezoelectric nanogenerator. 2014 , 8, 10844-50	106
568	Synthesis of ligand-stabilized metal oxide nanocrystals and epitaxial core/shell nanocrystals via a lower-temperature esterification process. 2014 , 8, 64-75	67
567	Ag nanoparticles decorated CuO nanowire arrays for efficient plasmon enhanced photoelectrochemical water splitting. 2014 , 609, 59-64	41
566	Growth of vertically aligned one-dimensional ZnO nanowire arrays on sol-gel derived ZnO thin films. 2014 , 75, 1194-1200	13
565	Optoelectronic Properties of Single-Crystalline Zn ₂ GeO ₄ Nanowires. 2014 , 118, 8194-8199	24
564	Handwriting enabled harvested piezoelectric power using ZnO nanowires/polymer composite on paper substrate. 2014 , 9, 221-228	41
563	Rational design, high-yield synthesis, and low thermal conductivity of Te/Bi ₂ Te ₃ core/shell heterostructure nanotube composites. 2014 , 617, 247-252	9
562	Superhydrophobic ZnO networks with high water adhesion. 2014 , 9, 385	17
561	Reactivity of Crystalline ZnO Superstructures against Fungi and Bacterial Pathogens: Synthesized Using Nerium oleander Leaf Extract. 2014 , 14, 4068-4079	79
560	Growth of Bimodal Sn-Catalyzed CdS Nanowires by Using Tin Sulfide. 2014 , 118, 5988-5995	15
559	Origin of luminescence from ZnO/CdS core/shell nanowire arrays. 2014 , 6, 9783-90	25
558	Synthesis of reduced graphene oxide/Bi ₂ Mo ₃ O ₁₂ @ Bi ₂ O ₃ heterojunctions by organic electrolytes assisted UV-excited method. 2014 , 257, 309-316	22
557	Fabrication of Co-doped ZnO nanowires and their temperature-dependent ultraviolet emission properties. <i>Applied Physics A: Materials Science and Processing</i> , 2014 , 116, 2025-2029	2.6 1

556	Dynamic morphology instability in epitaxial ZnO/AZO (aluminum-doped ZnO) core-shell nanowires. <i>Journal of Materials Science</i> , 2014 , 49, 6020-6028	4-3	2
555	Biosensors based on zinc oxide. 2014 , 9, 99-115		4
554	CdS quantum dot-sensitized solar cells based on nano-branched TiO ₂ arrays. 2014 , 9, 107		18
553	Novel ZnO microflowers on nanorod arrays: local dissolution-driven growth and enhanced light harvesting in dye-sensitized solar cells. 2014 , 9, 183		10
552	Textured Al-doped ZnO ceramics with isotropic grains. 2014 , 34, 4247-4256		21
551	Piezoelectric effects and electromechanical theories at the nanoscale. 2014 , 6, 13314-27		102
550	Manipulation of ZnO nanowires using a tapered fiber probe. 2014 , 4, 21593		
549	Characterization of hexagonal ZnO nanostructures prepared by hexamethylenetetramine (HMTA) assisted wet chemical method. 2014 , 124, 219-222		18
548	Controlled growth of zinc oxide microrods by hydrothermal process on porous ceramic supports for catalytic application. 2014 , 586, 169-175		14
547	Photoelectrochemical properties of ZnO nanorods decorated with Cu and Cu ₂ O nanoparticles. 2014 , 72, 253-261		7
546	Controlling morphologies and growth mechanism of hexagonal prisms with planar and pyramid tips of ZnO microflowers by microwave radiation. 2014 , 40, 9069-9076		25
545	Synthesis of Al doped ZnO nanoparticles by aqueous coprecipitation. 2014 , 262, 203-208		40
544	Single-Bundle Carbon-Nanotube-Bridged Nanorod Devices with Control of Gap Length. 2014 , 118, 10463-10471		4
543	Piezoelectric effect of one-dimensional gear-shaped ZnO microwires. <i>Applied Surface Science</i> , 2014 , 311, 621-625	6-7	6
542	Unravelling the surface chemistry of metal oxide nanocrystals, the role of acids and bases. 2014 , 136, 9650-7		81
541	Controlled side coupling of light to cladding mode of ZnO nanorod coated optical fibers and its implications for chemical vapor sensing. 2014 , 202, 543-550		23
540	Visible-light-driven photocatalytic properties of ZnO/ZnFe ₂ O ₄ core/shell nanocable arrays. 2014 , 160-161, 408-414		126
539	Quantum dot-based immunoassay enhanced by high-density vertical ZnO nanowire array. 2014 , 55, 209-15		29

538	ZnO Nanostructures: Toxicity and Phototoxicity Characteristics in Biological Samples. 2014 , 167-194	1
537	Nonvolatile Resistance Random Access Memory Devices Based on ZnO Nanorod Arrays. 2015 , 3, 7-9	1
536	Laser-induced piezoelectricity in AgGaGe ₃ SixSe ₈ chalcogenide single crystals. 2015 , 70, 30501	12
535	Buoyant Photocatalyst Based on ZnO Immobilized on Polystyrene Beads for Pollutants Treatment. 2015 , 43, 1025-1030	13
534	Effects of loading misalignment and tapering angle on the measured mechanical properties of nanowires. 2015 , 26, 435704	6
533	Utilization of Anodized Aluminum Oxide Substrate for the Growth of ZnO Microcrystals on Polygonized Spirals. 2015 , 14, 1550008	
532	3D ZnO/Au/CdS Sandwich Structured Inverse Opal as Photoelectrochemical Anode with Improved Performance. 2015 , 2, 1500428	44
531	Morphological and structural characterization of single-crystal ZnO nanorod arrays on flexible and non-flexible substrates. 2015 , 6, 720-5	44
530	The Standard Molar Enthalpies of Formation of Nano-ZnO Particles with Different Morphologies. 2015 , 2015, 1-5	1
529	Role of evaporation time on the structural and optical properties of ZnO films deposited by thermal evaporator. 2015 , 72, 30302	1
528	Growth and green defect emission of ZnPbO nanorods by a catalyst-assisted thermal evaporation-oxidation method. 2015 , 415, 106-110	5
527	Direct Growth of Freestanding ZnO Tetrapod Networks for Multifunctional Applications in Photocatalysis, UV Photodetection, and Gas Sensing. 2015 , 7, 14303-16	368
526	A tactile sensor translating texture and sliding motion information into electrical pulses. 2015 , 7, 10801-6	13
525	ZnO Nanostructure-Based Intracellular Sensor. 2015 , 15, 11787-804	19
524	Zinc oxide formation in galvanized metallic wire by simple selective growth method. 2015 , 82, 327-335	1
523	Visco-surface-nonlocal piezoelectricity effects on nonlinear dynamic stability of graphene sheets integrated with ZnO sensors and actuators using refined zigzag theory. 2015 , 132, 506-526	45
522	Growth of Hierarchical CdS Nanostructures on Fluorine-Doped Tin Oxide Glass Substrate. 2015 , 119, 28199-28205	6
521	Strain-modulation and service behavior of Au/MgO/ZnO ultraviolet photodetector by piezo-phototronic effect. 2015 , 8, 3772-3779	25

520	Growth process, crystal size and alignment of ZnO nanorods synthesized under neutral and acid conditions. 2015 , 629, 84-91		36
519	Hydrothermal synthesis and growth mechanisms of different ZnO nanostructures and their gas-sensing properties. <i>Journal of Materials Science: Materials in Electronics</i> , 2015 , 26, 1347-1353	2.1	12
518	ZnO Nanowires: Growth, Properties and Advantages. 2015 , 129-149		2
517	A flexible anisotropic self-powered piezoelectric direction sensor based on double sided ZnO nanowires configuration. 2015 , 26, 095502		20
516	Room temperature photoluminescence properties of CuO nanowire arrays. 2015 , 42, 544-547		48
515	Piezoelectric effect of 3-D ZnO nanotetrapods. 2015 , 5, 11469-11474		10
514	Shear induced simultaneous consolidation and alignment of silicon nanowires into ingots using equal channel angular extrusion (ECAE). 2015 , 2, 015013		2
513	Characterization of K ₂ O/CaO-ZnO Catalyst for Transesterification of Soybean Oil to Biodiesel. 2015 , 23, 394-399		54
512	Growth of a-axis ZnO films on the defective substrate with different O/Zn ratios: A reactive force field based molecular dynamics study. 2015 , 628, 317-324		7
511	Zinc oxide nanowire gas sensors: fabrication, functionalisation and devices. 2015 , 31, 1681-1697		31
510	Fundamental theories of piezotronics and piezo-phototronics. 2015 , 14, 257-275		118
509	High-yield synthesis of gold nanoribbons by using binary surfactants. 2015 , 3, 1447-1451		12
508	Triboelectric energy harvester based on wearable textile platforms employing various surface morphologies. 2015 , 12, 410-418		130
507	Hierarchical ZnO nanostructures with blooming flowers driven by screw dislocations. 2015 , 5, 8226		13
506	Development of highly sensitive UV sensor using morphology tuned ZnO nanostructures. <i>Applied Physics A: Materials Science and Processing</i> , 2015 , 118, 595-603	2.6	9
505	Hydrothermal synthesis of ZnO whiskers from e-Zn(OH) ₂ in NaOH/Na ₂ SO ₄ solution. 2015 , 19, 113-117		8
504	Excellent acetone sensor of La-doped ZnO nanofibers with unique bead-like structures. 2015 , 213, 222-233		95
503	Nanoscale ultraviolet photodetectors based on onedimensional metal oxide nanostructures. 2015 , 8, 382-405		106

502	Synthesis, characterization and photocatalytic activity of ZnO nanoparticles prepared by biological method. 2015 , 143, 304-8	121
501	Structural, diffused reflectance and photoluminescence study of cerium doped ZnO nanoparticles synthesized through simple sol-gel method. 2015 , 126, 3310-3315	24
500	Effects of mechanical deformation on energy conversion efficiency of piezoelectric nanogenerators. 2015 , 26, 275402	5
499	Power generation from base excitation of a Kevlar composite beam with ZnO nanowires. 2015 ,	
498	EPR characterization of Co-doped ZnO microwires and distant spin-pair coupling. 2015 , 30, 075004	10
497	One-step pyrolytic synthesis of ZnO nanorods with enhanced photocatalytic activity and high photostability under visible light and UV light irradiation. 2015 , 648, 919-929	103
496	Unconventional co-existence of plasmon and thermoelectric activity in In:ZnO nanowires. 2015 , 5, 44865-44872	4
495	Effect of N ₂ and H ₂ plasma treatments on band edge emission of ZnO microrods. 2015 , 5, 10783	37
494	Determination of Young's Modulus of Ultrathin Nanomaterials. 2015 , 15, 5279-83	35
493	Gum Tragacanth-Mediated Synthesis of Nanocrystalline ZnO Powder for Use in Varistors. 2015 , 44, 3430-3435	5
492	Theory of Half-Space Light Absorption Enhancement for Leaky Mode Resonant Nanowires. 2015 , 15, 5513-8	13
491	Progress in triboelectric nanogenerators as a new energy technology and self-powered sensors. 2015 , 8, 2250-2282	1326
490	Phase dependent thermal and spectroscopic responses of Al ₂ O ₃ nanostructures with different morphogenesis. 2015 , 7, 13313-44	137
489	ZnO gap states investigated using magnetic circular dichroism. 2015 , 48, 255502	3
488	Double disks shaped ZnO microstructures synthesized by one-step CTAB assisted hydrothermal methods. 2015 , 41, 10461-10466	10
487	Flexible piezoelectric energy nanogenerator based on ZnO nanotubes hosted in a polycarbonate membrane. 2015 , 13, 474-481	66
486	Enhanced performance of ZnO piezoelectric nanogenerators by using Au-coated nanowire arrays as top electrode. 2015 , 212, 2001-2004	2
485	ZnO nanowire lines and bundles: Template-deformation-guided alignment for patterned field-electron emitters. 2015 , 15, 1296-1302	6

484	Honey-based synthesis of ZnO nanopowders and their cytotoxicity effects. 2015 , 26, 991-996		26
483	Piezoelectric nanogenerator with 3D-ZnO micro-thornyballs prepared by chemical vapour deposition. <i>Journal of Materials Science: Materials in Electronics</i> , 2015 , 26, 742-746	2.1	9
482	Effect of buffer layer on growth and properties of ZnO nanorod arrays. <i>Journal of Materials Science: Materials in Electronics</i> , 2015 , 26, 5232-5236	2.1	5
481	All-wurtzite ZnO/ZnSe hetero-nanohelix: formation, mechanics and luminescence. 2015 , 7, 7299-306		3
480	Nanostructured Thin Films of Thermoelectric Oxides. 2015 , 123-155		1
479	Evaluation of the piezoelectric properties and voltage generation of flexible zinc oxide thin films. 2015 , 26, 215704		45
478	Density Controlled Growth of ZnO Nanowall/Nanowire 3D Networks. 2015 , 119, 12023-12029		9
477	Nonlinear Vibration of Nonlocal Piezoelectric Nanoplates. 2015 , 15, 1540013		38
476	Piezoelectric Materials for Energy Harvesting. 2015 , 123-148		0
475	Ag nanowires as precursors to synthesize Ag/ZnO nanostructured brushes. 2015 , 5, 42568-42571		5
474	Role of polyethyleneimine (PEI) in synthesis of zinc oxide nanoparticles and their cytotoxicity effects. 2015 , 41, 10222-10226		6
473	Antiferromagnetic coupling in Co-doped ZnS. <i>Journal of Materials Science</i> , 2015 , 50, 7919-7929	4.3	17
472	Leveraging ZnO morphologies in piezoelectric composites for mechanical energy harvesting. 2015 , 18, 212-221		29
471	ZnO:Ga nanowires with low turn-on field for field-emission lighting. <i>Applied Surface Science</i> , 2015 , 356, 48-53	6.7	8
470	Realization of Interlinked ZnO Tetrapod Networks for UV Sensor and Room-Temperature Gas Sensor. 2015 , 7, 24177-84		42
469	Internal Electron Tunneling Enabled Ultrasensitive Position/Force Peapod Sensors. 2015 , 15, 7281-7		6
468	Enhancement of NH ₃ sensing performance in flower-like ZnO nanostructures and their growth mechanism. <i>Applied Surface Science</i> , 2015 , 357, 31-36	6.7	16
467	Phase and structure development of spontaneously ambient-grown ZnO·xH ₂ O and TiO ₂ ·xH ₂ O nanostructures towards oxide single crystals. 2015 , 5, 35061-35069		

466	Understanding the opposite electrical responses of an individual ZnO nanowire under different bending deformations. 2015 , 5, 34447-34450		8
465	Preferential Photooxidation of CO in Hydrogen across the Crystalline Face Boundary over Spheroidal ZnO Promoted by Cu Ions. 2015 , 119, 21585-21598		9
464	Development and progress in piezotronics. 2015 , 14, 276-295		70
463	Controlled ZnO hierarchical structure for improved gas sensing performance. 2015 , 209, 343-351		30
462	Environmental effects on nanogenerators. 2015 , 14, 49-61		126
461	Sol-gel derived nanocrystalline ZnO photoanode film for dye sensitized solar cells. <i>Materials Science in Semiconductor Processing</i> , 2015 , 31, 139-146	4-3	19
460	Surface energy-mediated construction of anisotropic semiconductor wires with selective crystallographic polarity. 2014 , 4, 5680		31
459	Transparent flexible stretchable piezoelectric and triboelectric nanogenerators for powering portable electronics. 2015 , 14, 139-160		166
458	Characteristics and optical properties of MgO nanowires synthesized by solvothermal method. <i>Materials Science in Semiconductor Processing</i> , 2015 , 29, 238-244	4-3	42
457	Free vibration of nonlocal piezoelectric nanoplates under various boundary conditions. <i>Physica E: Low-Dimensional Systems and Nanostructures</i> , 2015 , 66, 93-106	3	111
456	Fast piezoresistive sensor and UV photodetector based on Mn-doped ZnO nanorods. 2015 , 9, 87-91		24
455	Effect of the supported ZnO on clinoptilolite nano-particles in the photodecolorization of semi-real sample bromothymol blue aqueous solution. <i>Materials Science in Semiconductor Processing</i> , 2015 , 30, 275-284	4-3	62
454	Au nanoparticle sensitized ZnO nanopencil arrays for photoelectrochemical water splitting. 2015 , 7, 77-81		115
453	Oriented assembly of bacteriorhodopsin on ZnO nanostructured electrode for enhanced photocurrent generation. 2015 , 62, 489-93		9
452	Cu-doped ZnO nanocrystalline powder as a catalyst for green and convenient multi-component synthesis of 1,4-dihydropyridine. 2015 , 41, 5931-5940		11
451	Transparent and flexible ultraviolet photodetectors based on colloidal ZnO quantum dot/graphene nanocomposites formed on poly(ethylene terephthalate) substrates. 2015 , 69, 154-158		41
450	The influence of the textural properties of ZnO nanoparticles on adsorption and photocatalytic remediation of water from pharmaceuticals. 2015 , 241, 47-54		49
449	Science and technology roadmap for graphene, related two-dimensional crystals, and hybrid systems. 2015 , 7, 4598-810		2015

448	First-Principles Investigation of Phase Stability, Electronic Structure and Optical Properties of MgZnO Monolayer. 2016 , 9,		16
447	Energetic and electronic properties in a multilayered ZnO graphene-like nanostructure. 2016 , 19, 497-504		3
446	A Semi Analytical Method For Electro-Thermo-Mechanical Nonlinear Vibration Analysis of Nanobeam Resting On the Winkler-Pasternak Foundations With General Elastic Boundary Conditions. <i>Smart Materials and Structures</i> , 2016 , 25, 085005	3-4	19
445	Synthesis of ZnO Nanoparticles Based on Zn Complex Achieved from L-leucine. 2016 , 63, 290-297		7
444	Progress in Piezo-Phototronic-Effect-Enhanced Light-Emitting Diodes and Pressure Imaging. 2016 , 28, 1535-52		93
443	Shape Engineering of Oxide Nanoparticles for Heterogeneous Catalysis. 2016 , 11, 1470-88		35
442	Room temperature photoluminescence properties of ZnO nanorods grown by hydrothermal reaction. 2016 ,		8
441	Selective growth of tilted ZnO nanoneedles and nanowires by PLD on patterned sapphire substrates. 2016 , 6, 095013		2
440	Emission energy, exciton dynamics and lasing properties of buckled CdS nanoribbons. 2016 , 6, 26607		6
439	Energy scavenging based on a single-crystal PMN-PT nanobelt. 2016 , 6, 22513		20
438	Gas-phase supersaturation effects on morphology properties of ZnO nano and microstructures grown by PVT. 2016 , 687, 012027		2
437	Optical Characteristics of Solution Processed MoO ₂ /ZnO Quantum Dots Based Thin Film Transistor. 2016 ,		1
436	Hydrothermal synthesis of a 3D double-sided comb-like ZnO nanostructure and its growth mechanism analysis. 2016 , 52, 8231-4		18
435	Piezoelectric Nanomaterials for Energy Harvesting. <i>Nanoscience and Technology</i> , 2016 , 193-213	0.6	
434	Efficient charge-transport UV sensor based on interlinked ZnO tetrapod networks. 2016 , 306, 25-29		5
433	Versatile Fabrication of Self-Aligned Nanoscale Hall Devices Using Nanowire Masks. 2016 , 16, 3109-15		4
432	Epoxy Resin Composite Reinforced with Carbon Fiber and Inorganic Filler: Overview on Preparation and Properties. 2016 , 55, 1653-1672		31
431	Recent Developments in Different Types of Flame Retardants and Effect on Fire Retardancy of Epoxy Composite. 2016 , 55, 1512-1535		36

430	Fabrication of hybrid cauliflower-like nanoarchitectures by in situ grown ZnO nanoparticles on VS2 ultrathin nanosheets for high performance supercapacitors. 2016 , 501, 42-48	18
429	Ultrasensitive photoelectrochemical aptasensing of miR-155 using efficient and stable CH ₃ NH ₃ PbI ₃ quantum dots sensitized ZnO nanosheets as light harvester. 2016 , 85, 142-150	31
428	Development of multifunctional fiber reinforced polymer composites through ZnO nanowire arrays. 2016 ,	2
427	Distribution pattern and allocation of defects in hydrogenated ZnO thin films. 2016 , 18, 16033-8	12
426	Energy harvesting from vertically aligned PZT nanowire arrays. 2016 ,	1
425	Size- and temperature-dependent Young's modulus and size-dependent thermal expansion coefficient of thin films. 2016 , 18, 21508-17	16
424	In-situ synthesis and defect evolution of single-crystal piezoelectric nanoparticles. 2016 , 28, 195-205	7
423	Vertically aligned ZnO nanorods of high crystalline and optical quality grown by dc reactive sputtering. 2016 , 3, 095009	5
422	Triboelectrification. 2016 , 1-19	8
421	Bamboo-like 3C-SiC nanowires with periodical fluctuating diameter: Homogeneous synthesis, synergistic growth mechanism, and their luminescence properties. 2016 , 243, 247-252	25
420	Designing deoxidation inhibiting encapsulation of metal oxide nanostructures for fluidic and biological applications. <i>Applied Surface Science</i> , 2016 , 390, 924-928	6.7 3
419	A general melt-injection-decomposition route to oriented metal oxide nanowire arrays. <i>Applied Surface Science</i> , 2016 , 390, 760-764	6.7 9
418	Hierarchically structured bentonite loaded Bi ₂ O ₃ -ZnO and its multiple applications. 2016 , 5, 30-38	17
417	Fast growth of well-aligned ZnO nanowire arrays by a microwave heating method and their photocatalytic properties. 2016 , 27, 435402	12
416	Photon-spin coherent manipulation of piezotronic nanodevice. 2016 , 11, 876-880	5
415	A dual-band photodetector based on ZnO nanowires decorated with Au nanoparticles synthesized on a glass substrate. 2016 , 6, 74201-74208	21
414	Zero-dimensional to three-dimensional nanojoining: current status and potential applications. 2016 , 6, 75916-75936	29
413	The kinetic friction of ZnO nanowires on amorphous SiO ₂ and SiN substrates. <i>Applied Surface Science</i> , 2016 , 389, 797-801	6.7 9

412	Porous and single-crystalline ZnO nanobelts: fabrication with annealing precursor nanobelts, and gas-sensing and optoelectronic performance. 2016 , 27, 355702	22
411	Flexible Photodetectors Based on 1D Inorganic Nanostructures. 2016 , 3, 1500287	94
410	Unexpected Epitaxial Growth of a Few WS ₂ Layers on {11 00} Facets of ZnO Nanowires. 2016 , 120, 21451-21459	7
409	Structural transformation in monolayer materials: a 2D to 1D transformation. 2016 , 18, 19873-9	11
408	Low-temperature seeding and hydrothermal growth of ZnO nanorod on poly(3,4-ethylene dioxothiophene):poly(styrene sulfonic acid). 2016 , 183, 197-201	13
407	Tribotronics: A new field by coupling triboelectricity and semiconductor. 2016 , 11, 521-536	82
406	Buckling and post-buckling analyses of size-dependent piezoelectric nanoplates. 2016 , 6, 253-267	28
405	Schottky nanocontact of one-dimensional semiconductor nanostructures probed by using conductive atomic force microscopy. 2016 , 27, 425711	10
404	Progress in piezo-phototronic effect enhanced photodetectors. 2016 , 4, 11341-11354	35
403	In Situ Characterization of the Local Work Function along Individual Free Standing Nanowire by Electrostatic Deflection. 2016 , 6, 21270	6
402	Piezotronics and piezo-phototronics for adaptive electronics and optoelectronics. 2016 , 1,	308
401	ZnO quantum dots decorated on optimized carbon nanotube intramolecular junctions exhibit superior field emission properties. 2016 , 6, 60877-60887	10
400	Aspect ratio improvement of ZnO nanowires grown in liquid phase by using step-by-step sequential growth. 2016 , 18, 5502-5511	10
399	Solution derived p-ZnO/n-Si nanowire heterojunctions for photodetection. 2016 , 658, 158-161	16
398	Facile bottom-up growth of pyramidally textured ZnO:Al films by combined chemical bathing and DC sputtering deposition. <i>Journal of Materials Science: Materials in Electronics</i> , 2016 , 27, 10764-10769	2.1
397	Piezoelectric Response at Nanoscale. 2016 , 41-76	1
396	Thermo-electro-mechanical vibration analysis of size-dependent nanobeam resting on elastic medium under axial preload in presence of surface effect. <i>Applied Physics A: Materials Science and Processing</i> , 2016 , 122, 1	2.6 12
395	Photoelectric Property Modulation by Nanoconfinement in the Longitude Direction of Short Semiconducting Nanorods. 2016 , 8, 11001-7	9

394	A modified size-dependent core-shell model and its application in the wave propagation of square cellular networks. <i>Physica E: Low-Dimensional Systems and Nanostructures</i> , 2016 , 80, 53-61	3	2
393	Highly Porous ZnO Thin Films and 1D Nanostructures by Remote Plasma Processing of Zn-Phthalocyanine. 2016 , 13, 287-297		6
392	Low frequency accelerator sensor based on piezoelectric ZnO nanorods grown by low temperature scalable process. 2016 , 213, 2503-2508		10
391	Facile synthesis of V ₂ O ₃ nanobelts by the transformation of VO ₂ (B) with controllable phase transition property. 2016 , 165, 214-216		1
390	Hydrodynamic fabrication of structurally gradient ZnO nanorods. 2016 , 27, 085704		4
389	Ultraviolet photoresponse of ZnO nanostructured AlGaIn/GaN HEMTs. <i>Materials Science in Semiconductor Processing</i> , 2016 , 44, 71-77	4-3	17
388	Electrochemical characterisations of ZnO nanowires for dye-sensitised solar cells. 2016 , 95, 481-485		12
387	ZnO nanowire interfaces for high strength multifunctional composites with embedded energy harvesting. 2016 , 9, 634-643		65
386	Synthesis of TiO ₂ coated ZnO nanorod arrays and their stability in photocatalytic flow reactors. 2016 , 605, 232-242		17
385	A vanadium-doped ZnO nanosheets-polymer composite for flexible piezoelectric nanogenerators. 2016 , 8, 1314-21		42
384	Coaxial carbon fiber/ZnO nanorods as electrodes for the electrochemical determination of dopamine. 2016 , 8, 650-655		17
383	Optoelectronic Properties of Solution Grown ZnO n-p or p-n Core-Shell Nanowire Arrays. 2016 , 8, 4287-91		38
382	Synthesis of urchin-like Fe ₃ O ₄ @SiO ₂ @ZnO/CdS core-shell microspheres for the repeated photocatalytic degradation of rhodamine B under visible light. 2016 , 6, 4525-4534		59
381	Effect of a High Density of Stacking Faults on the Young's Modulus of GaAs Nanowires. 2016 , 16, 1911-6		48
380	Growth and Electrical Properties of Free-Standing Zinc Oxide Nanomembranes. 2016 , 16, 1654-1661		7
379	Fibrous-Root-Inspired Design and Lithium Storage Applications of a Co-Zn Binary Synergistic Nanoarray System. 2016 , 10, 2500-8		36
378	Controllable growth of highly organized ZnO nanowires using templates of electrospun nanofibers. <i>Journal of Materials Science: Materials in Electronics</i> , 2016 , 27, 7124-7131	2.1	2
377	High-Quality, Reproducible ZnO Nanowire Arrays Obtained by a Multiparameter Optimization of Chemical Bath Deposition Growth. 2016 , 16, 2140-2150		28

376	Surface effects on the bending, buckling and free vibration analysis of magneto-electro-elastic beams. 2016 , 227, 1557-1573	35
375	Growth of hybrid carbon nanostructures on iron-decorated ZnO nanorods. 2016 , 27, 145605	3
374	Three-dimensional flexible ceramics based on interconnected network of highly porous pure and metal alloyed ZnO tetrapods. 2016 , 42, 8664-8676	54
373	High-performance piezoelectric nanogenerators for self-powered nanosystems: quantitative standards and figures of merit. 2016 , 27, 112503	17
372	Synthesis of zinc oxide nanoparticles with different pH by aqueous solution growth technique. 2016 , 127, 174-177	15
371	Tunable ZnO spheres with high anti-biofilm and antibacterial activity via a simple green hydrothermal route. 2016 , 462, 64-74	38
370	Electro-magneto wave propagation analysis of viscoelastic sandwich nanoplates considering surface effects. 2017 , 231, 387-403	22
369	Toward DNA electrochemical sensing by free-standing ZnO nanosheets grown on 2D thin-layered MoS. 2017 , 89, 538-544	46
368	Electro-thermo-mechanical nonlinear free vibration of nanobeam resting on the winkler-pasternak foundations based on nonlocal elasticity using differential transform method. 2017 , 23, 2641-2648	7
367	Improving Morphological Quality and Uniformity of Hydrothermally Grown ZnO Nanowires by Surface Activation of Catalyst Layer. 2017 , 12, 51	11
366	Multiscale-structuring of polyvinylidene fluoride for energy harvesting: the impact of molecular-, micro- and macro-structure. 2017 , 5, 3091-3128	265
365	Uniform and Vertically Oriented ZnO Nanosheets Based on Thin-Layered MoS ₂ : Synthesis and High-Sensing Ability. 2017 , 5, 1332-1338	17
364	Synthesis, piezoelectric property and domain behaviour of the vertically aligned K _{1-x} NaxNbO ₃ nanowire with a morphotropic phase boundary. 2017 , 5, 747-753	14
363	High performance top-gated ferroelectric field effect transistors based on two-dimensional ZnO nanosheets. 2017 , 110, 043505	24
362	Modeling of Nanostructures. 2017 , 1459-1513	
361	Highly sensitive and rapid chemiresistive sensor towards trace nitro-explosive vapors based on oxygen vacancy-rich and defective crystallized In-doped ZnO. 2017 , 244, 983-991	47
360	Efficient Carrier Separation in Graphitic Zinc Oxide and Blue Phosphorus van der Waals Heterostructure. 2017 , 121, 3648-3653	55
359	UV irradiation assisted growth of ZnO nanowires on optical fiber surface. <i>Applied Surface Science</i> , 2017 , 406, 294-300	6.7 11

358	Non-linear optical deformation potentials in uniaxially strained ZnO microwires. 2017 , 110, 062103		2
357	Piezoelectricity of 2D nanomaterials: characterization, properties, and applications. 2017 , 32, 043006		40
356	Design of Nano Screw Pump for Water Transport and its Mechanisms. 2017 , 7, 41717		12
355	UV irradiation-assisted ethanol detection operated by the gas sensor based on ZnO nanowires/optical fiber hybrid structure. 2017 , 245, 821-827		48
354	Adsorbed Molecules and Surface Treatment Effect on Optical Properties of ZnO Nanowires Grown by MOCVD. 2017 , 46, 4690-4694		1
353	Low-Temperature PLD-Growth of Ultrathin ZnO Nanowires by Using Zn Al O and Zn Ga O Seed Layers. 2017 , 12, 134		7
352	Synthesis and investigation of photonic properties of surface modified ZnO nanoparticles with imine linked receptor as coupling agent- for application in LEDs. <i>Journal of Materials Science: Materials in Electronics</i> , 2017 , 28, 6388-6398	2.1	4
351	Core-defect reduction in ZnO nanorods by cobalt incorporation. 2017 , 28, 285705		7
350	Enhanced UV photosensing properties of ZnO nanowires prepared by electrodeposition and atomic layer deposition. 2017 , 21, 2877-2886		4
349	Hydrogen sensors based on 2D WO ₃ nanosheets prepared by anodization. 2017 , 251, 57-64		60
348	PMN-PT nanostructures for energy scavenging. 2017 , 32, 063001		3
347	Nanogenerator made of ZnO nanosheet networks. 2017 , 32, 054002		21
346	Ultralarge Bending Strain and Fracture-Resistance Investigation of Tungsten Carbide Nanowires. 2017 , 13, 1700389		11
345	Effect of impurity concentration on optical and magnetic properties in ZnS:Cu nanoparticles. <i>Physica E: Low-Dimensional Systems and Nanostructures</i> , 2017 , 93, 148-152	3	14
344	Scalable bio-friendly method for production of homogeneous metal oxide nanoparticles using green bovine skin gelatin. 2017 , 162, 186-194		20
343	Fast response relative humidity clad-modified multimode optical fiber sensor with hydrothermally dimension controlled ZnO nanorods. <i>Materials Science in Semiconductor Processing</i> , 2017 , 66, 200-206	4.3	23
342	Hydrogenated ZnO thin film with p-type surface conductivity from plasma treatment. 2017 , 50, 24LT02		9
341	Hydrogen sensors based on gold nanoclusters assembled onto ZnO nanostructures at low operating temperature. 2017 , 43, S511-S515		5

- 340 Green synthesis of zinc oxide nanoparticles using arabic gum and photocatalytic degradation of direct blue 129 dye under visible light. *Journal of Materials Science: Materials in Electronics*, **2017**, 28, 13596-13601 2.1 85
- 339 High resolution X-ray diffraction studies of epitaxial ZnO nanorods grown by reactive sputtering. **2017**, 121, 215306 4
- 338 Hot-injection synthesis of Ni-ZnO hybrid nanocrystals with tunable magnetic properties and enhanced photocatalytic activity. **2017**, 19, 1 5
- 337 Non-native transition metal monoxide nanostructures: unique physicochemical properties and phase transformations of CoO, MnO and ZnO. **2017**, 9, e364-e364 23
- 336 Selectivity of quantum dot sensitized ZnO nanotube arrays for improved photocatalytic activity. **2017**, 19, 11366-11372 25
- 335 Enhancement of Interface Characteristics of Neural Probe Based on Graphene, ZnO Nanowires, and Conducting Polymer PEDOT. **2017**, 9, 10577-10586 26
- 334 Sonochemical synthesis, characterization, and magnetic properties of Mn-doped ZnO nanostructures. *Rare Metals*, **2017**, 40, 1 5.5
- 333 Capacitive humidity sensing properties of CdS/ZnO sesame-seed-candy structure grown on silicon nanoporous pillar array. **2017**, 698, 94-98 25
- 332 Surface Engineering of Nanostructured ZnO Surfaces. **2017**, 4, 1600758 39
- 331 Hydrothermally grown ZnO nanoparticles for effective photocatalytic activity. *Applied Surface Science*, **2017**, 418, 138-146 6.7 80
- 330 Sensitivity optimization of ZnO clad-modified optical fiber humidity sensor by means of tuning the optical fiber waist diameter. **2017**, 90, 96-101 40
- 329 Synthesis and characteristics of p-type CdS nanobelts. **2017**, 4, 115013 3
- 328 Stress-Induced Shift of Band Gap in ZnO Nanowires from Finite-Element Modeling. **2017**, 8, 4
- 327 Performance evaluation of nanogenerators based on Ag doped ZnO nanorods. **2017**, 266, 338-344 11
- 326 Self-Powered Nanoscale Photodetectors. **2017**, 13, 1701848 130
- 325 Direction-specific interaction forces underlying zinc oxide crystal growth by oriented attachment. **2017**, 8, 835 64
- 324 Balancing Bacteria-Osteoblast Competition through Selective Physical Puncture and Biofunctionalization of ZnO/Polydopamine/Arginine-Glycine-Aspartic Acid-Cysteine Nanorods. **2017**, 11, 11250-11263 178
- 323 Catalyst-Free Vapor Phase Growth of Ultralong SnSe Single-Crystalline Nanowires. **2017**, 17, 6163-6168 12

322	Synthesis and Structure-Dependent Optical Properties of ZnO Nanocomb and ZnO Nanoflag. 2017 , 121, 26076-26085	14
321	Novel EShaped CoreShell Photodetector with High Ultraviolet Selectivity and Enhanced Responsivity. 2017 , 27, 1704477	21
320	Functionalization of MgZnO nanorod films and characterization by FTIR microscopic imaging. 2017 , 409, 6379-6386	3
319	First-principles calculations of electronic structure and optical properties of Be-doped ZnO monolayer. 2017 , 179, 84-94	13
318	Atmospheric pressure plasma in contact with liquid and its application for nanoparticles synthesis. 2017 , 79, 10801	8
317	Effects of surface defects on the mechanical properties of ZnO nanowires. 2017 , 7, 9547	22
316	Hybrid Organic-Inorganic Perovskite Photodetectors. 2017 , 13, 1702107	206
315	Lab-on-Skin: A Review of Flexible and Stretchable Electronics for Wearable Health Monitoring. 2017 , 11, 9614-9635	873
314	Impact of physicochemical properties of cerium oxide nanoparticles on their toxicity effects. 2017 , 43, 14572-14581	31
313	Synthesis and photoluminescence properties of ZnO nanohelices. 2017 , 213, 012009	2
312	Optimizing growth of ZnO nanowire networks for high-performance UV detection. 2017 , 43, 15978-15985	29
311	Structural Evolution and Formation Mechanism of the Soft Colloidal Arrays in the Core of PAAm Nanofibers by Electrospun Packing. 2017 , 33, 10291-10301	6
310	Self-templating faceted and spongy single-crystal ZnO nanorods: Resistive switching and enhanced piezoresponse. 2017 , 133, 54-61	13
309	ReviewElectrochemical Biosensors Based on ZnO Nanostructures. 2017 , 6, Q84-Q100	28
308	Morphology Transition Engineering of ZnO Nanorods to Nanoplatelets Grafted MoO-MoO by Polyoxometalates: Mechanism and Possible Applicability to other Oxides. 2017 , 7, 5946	28
307	Exact solutions to the electromechanical quantities inside a statically-bent circular ZnO nanowire by taking into account both the piezoelectric property and the semiconducting performance: Part I-Linearized analysis. 2017 , 40, 82-87	68
306	Electrical and optical characteristics of solution-processed MoOx and ZnO QDs heterojunction. 2017 , 7, 607-612	3
305	Thermo-electro-mechanical vibration analysis of piezoelectric nanoplates resting on viscoelastic foundation with various boundary conditions. 2017 , 131-132, 1001-1015	29

304	On-chip growth of semiconductor metal oxide nanowires for gas sensors: A review. 2017 , 2, 263-285		62
303	Elastocaloric effect on the piezoelectric potential of boron nitride nanotubes. 2017 , 50, 415308		7
302	Optically Active and Chiral Semiconductor Nanocrystals. 2017 , 85-98		2
301	Size-dependent Phase Transformation and Fracture of ZnO Nanowires. 2017 , 21, 86-93		2
300	Piezoresistive Response of Quasi-One-Dimensional ZnO Nanowires Using an in Situ Electromechanical Device. 2017 , 2, 2985-2993		60
299	Tunable Strain in Magnetoelectric ZnO Microrod Composite Interfaces. 2017 , 9, 25571-25577		12
298	Wurtzite ZnTe Nanotrees and Nanowires on Fluorine-Doped Tin Oxide Glass Substrates. 2017 , 17, 4365-4372		10
297	Effect of TWEEN 80 on the morphology and antibacterial properties of ZnO nanoparticles. <i>Journal of Materials Science: Materials in Electronics</i> , 2017 , 28, 3272-3277	2.1	5
296	Surface and optical properties of undoped and Cu doped ZnO nanostructures. 2017 , 130, 422-426		10
295	Degradation of terephthalic acid in a photocatalytic system able to work also at high pressure. 2017 , 312, 10-19		30
294	Zinc Oxide Thin Films for Memristive Devices: A Review. <i>Critical Reviews in Solid State and Materials Sciences</i> , 2017 , 42, 153-172	10.1	64
293	High output piezoelectric composite nanogenerators composed of FAPbBr ₃ -PVDF. 2017 ,		
292	Sandwich-structure-modulated photoluminescence enhancement of wide bandgap semiconductors capping with dielectric microsphere arrays. <i>Optics Express</i> , 2017 , 25, 6000-6014	3.3	13
291	Three-Dimensional ZnO Hierarchical Nanostructures: Solution Phase Synthesis and Applications. 2017 , 10,		44
290	Green Microwave-Assisted Combustion Synthesis of Zinc Oxide Nanoparticles with Citrullus colocynthis (L.) Schrad: Characterization and Biomedical Applications. 2017 , 22,		50
289	Room-Temperature Ammonia Sensor Based on ZnO Nanorods Deposited on ST-Cut Quartz Surface Acoustic Wave Devices. 2017 , 17,		11
288	ZnO Nanostructures for Tissue Engineering Applications. <i>Nanomaterials</i> , 2017 , 7,	5.4	89
287	Nonlinear vibration of piezoelectric nanoplates using nonlocal Mindlin plate theory. 2018 , 25, 1252-1264		40

286	Surface plasmon-driven photoelectrochemical water splitting of aligned ZnO nanorod arrays decorated with loading-controllable Au nanoparticles. 2018 , 180, 25-33		48
285	Growth of wurtzite CdTe nanowires on fluorine-doped tin oxide glass substrates and room-temperature bandgap parameter determination. 2018 , 29, 145702		3
284	Low-cost synthesis of pure ZnO nanowalls showing three-fold symmetry. 2018 , 29, 135707		10
283	Ultrahigh photosensitivity of the polar surfaces of single crystalline ZnO nanoplates. 2018 , 10, 6801-6805		7
282	A novel electrochemical sensor fabricated by embedding ZnO nano particles on MWCNT for morphine detection. 2018 , 5, 9061-9066		12
281	Fast-Response Single-Nanowire Photodetector Based on ZnO/WS Core/Shell Heterostructures. 2018 , 10, 13869-13876		45
280	Liquid-Evaporation-Assisted Self-Folding of One-Dimensional Nanomaterials. 2018 , 122, 3078-3090		5
279	Photochemistry and the role of light during the submerged photosynthesis of zinc oxide nanorods. 2018 , 8, 177		13
278	Defect-concentration dependence of electrical transport mechanisms in CuO nanowires.. 2018 , 8, 2188-2195		13
277	One-step facile preparation of ZnO nanorods as high-performance photoanodes for photoelectrochemical cathodic protection. 2018 , 276, 311-318		41
276	ZnO THIN FILMS: RECENT DEVELOPMENT, FUTURE PERSPECTIVES AND APPLICATIONS FOR DYE SENSITIZED SOLAR CELL. <i>Surface Review and Letters</i> , 2018 , 25, 1930001	1.1	7
275	Wave Propagation Analysis of Piezoelectric Nanoplates Based on the Nonlocal Theory. 2018 , 18, 1850060		18
274	Piezoelectric Current Generation in Wurtzite GaAs Nanowires. 2018 , 12, 1700358		10
273	Size-dependent three-phase cylinder model of magnetoelectroelastic nanocomposites with interface effect under antiplane shear. 2018 , 229, 1399-1414		9
272	Single Metal Ohmic and Rectifying Contacts to ZnO Nanowires: A Defect Based Approach. 2018 , 530, 1700335		10
271	ZnO tetrapod materials for functional applications. 2018 , 21, 631-651		352
270	Optimization of electrolyte to significantly improve photoelectrochemical water splitting performance of ZnO nanowire arrays. 2018 , 227, 129-135		25
269	Low-cost and facile synthesis of Ni(OH)/ZnO nanostructures for high-sensitivity glucose detection. 2018 , 29, 015502		5

268	ZnO-SWCNT Nanocomposite as NO ₂ gas sensor. 2018 , 5, 15439-15444		8
267	ZnO Nanorods with High Photocatalytic and Antibacterial Activity under Solar Light Irradiation. 2018 , 11,		16
266	On the size-dependent magneto/electromechanical buckling of nanobeams. 2018 , 133, 1		19
265	Optical properties of Ln ^{2+,3+} (Ln = Eu ²⁺ , Ce ³⁺ , Dy ³⁺ and Ce ³⁺ /Dy ³⁺) doped BaMg ₂ Al ₆ Si ₉ O ₃₀ nanophosphor. <i>Journal of Materials Science: Materials in Electronics</i> , 2018 , 29, 21014-21022	2.1	2
264	Bound magnetic polaron driven room-temperature ferromagnetism in Ni doped ZnS nanoparticles. 2018 , 216, 285-293		9
263	Optically Active Semiconductor Nanosprings for Tunable Chiral Nanophotonics. 2018 , 12, 6203-6209		10
262	First-principles investigation of size-dependent piezoelectric properties of bare ZnO and ZnO/MgO core-shell nanowires. 2018 , 120, 732-737		6
261	Humidity-dependent piezopotential properties of zinc oxide nanowires: Insights from atomic-scale modelling. 2018 , 50, 298-307		12
260	Sol-gel synthesis and nanostructured semiconductor analysis of undoped and Cd-doped ZnO thin films. 2018 , 169, 303-313		10
259	High-performance piezoelectric composite nanogenerator based on Ag/(K,Na)NbO ₃ heterostructure. 2018 , 50, 62-69		60
258	Investigating oxidation growth routes in the flame synthesis of tungsten-oxide nanowires from tungsten substrates. 2018 , 195, 311-321		4
257	White Light-Emitting Novel Nanophosphors for LED Applications. 2018 , 411-431		1
256	AlN piezoelectric thin films for energy harvesting and acoustic devices. 2018 , 51, 146-161		77
255	Engineered Nanomaterials for Industrial Application: An Overview. 2018 , 127-134		10
254	Engineered Nanomaterials for Renewable Energy. 2018 , 829-845		2
253	Enhancement of the efficiency of the third harmonic generation process in ZnO:F thin films probed by photoluminescence and Raman spectroscopy. <i>Materials Science in Semiconductor Processing</i> , 2018 , 87, 100-109	4.3	9
252	Multifunctional hierarchical 3-D ZnO superstructures directly grown over FTO glass substrates: enhanced photovoltaic and selective sensing applications. 2018 , 6, 15868-15887		17
251	X-ray photoelectron spectroscopy, Raman and photoluminescence studies on formation of defects in Cu:ZnO thin films and its role in nonlinear optical features. 2018 , 28, 095405		7

250	Thermal conductivity and stability of Al-doped ZnO nanostructured ceramics. 2018 , 38, 5015-5020	27
249	Nonlinear effect of carrier drift on the performance of an n-type ZnO nanowire nanogenerator by coupling piezoelectric effect and semiconduction. 2018 , 9, 1917-1925	28
248	Valorisation of xylose to lactic acid on morphology-controlled ZnO catalysts. 2018 , 8, 4945-4956	14
247	Adjustment and control on the fundamental characteristics of a piezoelectric PN junction by mechanical-loading. 2018 , 52, 416-421	27
246	Zinc Oxide Tetrapods Based Biohybrid Interface for Voltammetric Sensing of Helicobacter pylori. 2018 , 10, 30631-30639	28
245	Densely aligned ZnO nanoneedle arrays prepared via room temperature growth. 2018 , 126, 367-371	
244	Investigation of nanoscale voids in Sb-doped p-type ZnO nanowires. 2018 , 29, 335204	9
243	Capacitive humidity-sensing properties of ZnO nanorods/silicon nanoporous pillar array enhanced by LiCl incorporation. 2018 , 272, 543-549	16
242	Tunable, Hybrid 1D ZnO Nanostructures Obtained by Using Bio-renewable Ferulic Acid as Support and its Applications. 2018 , 3, 6232-6241	1
241	On the prediction of external shape of ZnO nanocrystals. <i>Physica E: Low-Dimensional Systems and Nanostructures</i> , 2019 , 106, 291-297	3 14
240	Wet chemical growth of semiconductor 1-D nanostructure arrays on conductive substrates. 2019 , 7, 12019-12047	
239	Electronic Skin to Feel "Pain": Detecting "Prick" and "Hot" Pain Sensations. 2019 , 6, 745-759	5
238	Flexible hybrid piezoelectric-thermoelectric generator for harnessing electrical energy from mechanical and thermal energy. 2019 , 198, 111783	21
237	Graphene-Based Mixed-Dimensional van der Waals Heterostructures for Advanced Optoelectronics. 2019 , 31, e1806411	67
236	Comprehensive investigation of evanescent wave optical fiber refractive index sensor coated with ZnO nanoparticles. 2019 , 52, 101976	19
235	Piezotronics and Piezo-phototronics of Third Generation Semiconductor Nanowires. 2019 , 119, 9303-9359	112
234	Highly Compressible and Robust Polyimide/Carbon Nanotube Composite Aerogel for High-Performance Wearable Pressure Sensor. 2019 , 11, 42594-42606	134
233	Pulsed Laser Deposition Assisted van der Waals Epitaxial Large Area Quasi-2D ZnO Single-Crystal Plates on Fluorophlogopite Mica. 2019 , 6, 1901156	9

232	Optimization of Transistor Characteristics and Charge Transport in Solution Processed ZnO Thin Films Grown from Zinc Neodecanoate. 2019 , 15, 702-711		14
231	Alternating Current-Driven Oxide Powder Electroluminescent Device Employing Vertically Aligned ZnO Nanowire Array. 2019 , 13, 1900443		1
230	The photo-electrokinetics of the O ₂ evolution reaction on ZnO nanorods. 2019 , 298, 587-598		8
229	Influence of Doping Concentration on the Outputs of a Bent ZnO Nanowire. 2019 , 66, 1793-1797		4
228	Double-Gated Nanohelix as a Novel Tunable Binary Superlattice. 2019 , 14, 257		1
227	Symmetric growth of ZnO nanorod arrays on both the top and bottom polar surfaces of ZnO nanobelts by chemical bath deposition. <i>Applied Physics A: Materials Science and Processing</i> , 2019 , 125, 1	2.6	
226	Synthesis, growth mechanism and effect of sputtering pressure on 3D ZnO nanostructures with trunk-branch nanorods. 2019 , 12, 1940003		1
225	Preparation of Co ₃ O ₄ @ZnO core-shell nanocomposites with intrinsic p-n junction as high-performance photoelectrodes for photoelectrochemical cathodic protection under visible light. <i>Applied Surface Science</i> , 2019 , 476, 815-821	6.7	30
224	Design and tailoring of one-dimensional ZnO nanomaterials for photocatalytic degradation of organic dyes: a review. 2019 , 45, 2197-2254		78
223	Improvement in the Piezoelectric Performance of a ZnO Nanogenerator by a ZnO/Spiro-MeOTAD ps-n Heterojunction. 2019 , 216, 1800717		6
222	On the piezopotential properties of two-dimensional materials. 2019 , 58, 568-578		22
221	Heterostructured NiO/ZnO Nanorod Arrays with Significantly Enhanced HS Sensing Performance. <i>Nanomaterials</i> , 2019 , 9,	5.4	18
220	ZnO-based dye-sensitized solar cells. 2019 , 145-204		1
219	Chemical Approaches for 1D Oxide Nanostructures. 2019 , 53-83		3
218	Free vibration of a piezoelectric nanobeam resting on nonlinear Winkler-Pasternak foundation by quadrature methods. 2019 , 5, e01856		12
217	Integration of ZnO nanoarrays on partially imidized polyimide substrates. 2019 , 254, 407-411		3
216	Nanostructured ZnO-based materials for biomedical and environmental applications. 2019 , 285-305		1
215	Nano ZnO (hexagonal wurtzite) of different shapes under various conditions: fabrication and characterization. 2019 , 6, 085057		9

214	Experimental Study of Different Vanadium Dopant Concentrations in ZnO Nanorods for a Low Frequency Piezoelectric Accelerometer. 2019 , 48, 5310-5322		9
213	Energy harvesting from fluid flow using piezoelectrics: A critical review. 2019 , 143, 1826-1838		66
212	Facile synthesis of flexible Pt/NiO 1D nanohybrids with high electrical properties using electrospinning. <i>Journal of Materials Science: Materials in Electronics</i> , 2019 , 30, 10589-10596	2.1	1
211	Enhanced Photocatalytic Activity and Low Temperature Magnetic/Transport Study of Cu-Doped ZnS-Based Diluted Magnetic Semiconductor Nanoparticles. 2019 , 48, 4544-4551		1
210	Electroluminescence from n-ZnO microdisks/p-GaN heterostructure. 2019 , 51, 1		5
209	An efficient iteration approach for nonlinear boundary value problems in 2D piezoelectric semiconductors. <i>Applied Mathematical Modelling</i> , 2019 , 74, 170-183	4.5	4
208	eNEUTRAL IoT: Energy-Neutral Event Monitoring for Internet of Nano Things. 2019 , 6, 2379-2389		11
207	Improved performance of ferroelectric nanocomposite flexible film based triboelectric nanogenerator by controlling surface morphology, polarizability, and hydrophobicity. 2019 , 178, 765-771		44
206	Controlling the growth of single crystal ZnO nanowires by tuning the atomic layer deposition parameters of the ZnO seed layer. 2019 , 30, 305602		4
205	Surface morphology, electrochemical and electrical performances of ZnO thin films sensitized with Ag nanoparticles by UV irradiation. <i>Journal of Materials Science: Materials in Electronics</i> , 2019 , 30, 9798-9805	2.1	5
204	Zinc oxide ultraviolet photodetectors: rapid progress from conventional to self-powered photodetectors. 2019 , 1, 2059-2085		121
203	Highly sensitive ultraviolet sensor based on ZnO nanorod film deposited on ST-cut quartz surface acoustic wave devices. 2019 , 363, 419-425		14
202	Annealing effects on elemental composition and morphological properties of Pd thin films grown on crystalline silicon substrate. 2019 , 444, 91-95		2
201	Piezoelectric Nanogenerators Based on Self-Poled Two-Dimensional Li-Doped ZnO Microdisks. 2019 , 48, 2886-2894		4
200	Ultrasensitive room-temperature chemical sensors by Ag-decorated ultraporous ZnO nanoparticle networks. 2019 ,		
199	1D Semiconducting Nanostructures for Flexible and Large-Area Electronics: Growth Mechanisms and Suitability. 2019 ,		9
198	Growth of Zinc Oxide Nanorods with the Thickness of Less than or Equal to 1 μ m through Zinc Acetate or Zinc Nitrate for Perovskite Solar Cell Applications. 2019 , 2019, 1-9		2
197	ZnO Nanowires Growth from Thin Zinc Films for Field Emission Purposes. 2019 ,		

196	Novel ZnO nanostructures on Philippine natural zeolite (PNZ) framework designed via thermal decomposition process of solution-based ZnCl ₂ precursor. 2019 , 6, 015005		7
195	Defects controllable ZnO nanowire arrays by a hydrothermal growth method for dye-sensitized solar cells. <i>Physica E: Low-Dimensional Systems and Nanostructures</i> , 2019 , 105, 156-161	3	6
194	The stability and electronic properties of Si-doped ZnO nanosheet: a DFT study. 2019 , 6, 045044		12
193	Facile and cost-efficient development of PMMA-based nanocomposites with custom-made hydrothermally-synthesized ZnO nanofillers. 2019 , 17, 7-20		9
192	Piezophotonic effect based on mechanoluminescent materials for advanced flexible optoelectronic applications. 2019 , 55, 389-400		87
191	Refluxing synthesis of Mn-doped ZnO nanoparticles and their applications in dielectric ceramics. 2019 , 14, 182-185		1
190	Micro-scale to nano-scale generators for energy harvesting: Self powered piezoelectric, triboelectric and hybrid devices. 2019 , 792, 1-33		80
189	Polar surface dominated octagonal Sn doped ZnO nanowires and their room-temperature photoluminance properties. <i>Applied Surface Science</i> , 2019 , 476, 265-270	6.7	8
188	Sensorless Node Architecture for Events detection in Self-Powered Nanosensor Networks. <i>Nano Communication Networks</i> , 2019 , 19, 1-9	2.9	2
187	Hydrothermal growing of cluster-like ZnO nanoparticles without crystal seeding on PET films via dopamine anchor. <i>Applied Surface Science</i> , 2019 , 467-468, 534-542	6.7	23
186	A new approach for synthesis of ZnO nanorod flowerets and subsequent pure free-standing ZnO nanorods. 2019 , 30, 30-41		19
185	Performance enhancements in poly(vinylidene fluoride)-based piezoelectric nanogenerators for efficient energy harvesting. 2019 , 56, 662-692		95
184	Influence of metal/semiconductor interface on attainable piezoelectric and energy harvesting properties of ZnO. 2019 , 162, 277-283		18
183	Size-dependent effect on thermo-electro-mechanical responses of heated nano-sized piezoelectric plate. 2019 , 29, 477-495		19
182	Synthesis of composite of ZnO spheres with polyaniline and their microwave absorption properties. 2019 , 23, 385-391		15
181	A review on piezo-/ferro-electric properties of morphologically diverse ZnO nanostructures. 2020 , 816, 152491		36
180	Semiconductor nanowires: to grow or not to grow?. 2020 , 9, 100058		37
179	Germinant ZnO nanorods as a charge-selective layer in organic solar cells. 2020 , 55, 89-94		5

178	Non-focusing dense plasma focus device based alternative synthesis technology for ZnO thin films. 2020 , 46, 4690-4699	3
177	Doped ZnO nanostructures with selected elements - Structural, morphology and optical properties: A review. 2020 , 46, 5507-5520	37
176	Colloidal metal oxides in electronics and optoelectronics. 2020 , 203-246	3
175	Simplified patterning process for the selective 1D ZnO nanorods growth. 2020 , 38, 012204	3
174	Enhanced photoresponse of epitaxially grown ZnO by MoO surface functionalization. 2020 , 22, 2399-2404	5
173	Application of ZnO nanostructures in ceramic and polymeric membranes for water and wastewater technologies: A review. 2020 , 391, 123475	71
172	On the piezotronic behaviours of wurtzite core-shell nanowires. 2020 , 31, 095407	6
171	Effect of interaction among the three time scales on the propagation characteristics of coupled waves in a piezoelectric semiconductor rod. 2020 , 68, 104345	13
170	Rationally designed piezoelectric charge polarity at interfaces for largely improving photodiode performance by piezo-phototronic effects. 2020 , 8, 16057-16066	1
169	Conjoined photo-thermoelectric effect in ZnO-graphene nanocomposite foam for self-powered simultaneous temperature and light sensing. 2020 , 10, 11864	13
168	Ultrasound-Induced Wireless Energy Harvesting: From Materials Strategies to Functional Applications. 2020 , 77, 105131-105131	29
167	Quantum piezotronic devices based on ZnO/CdO quantum well topological insulator. 2020 , 77, 105154	6
166	Process, fundamental and application of one-step molten-salt synthesized BaTi ₂ O ₅ nanorods. 2020 , 826, 154064	2
165	Hydrothermal control, characterization, growth mechanism, and photoluminescence properties of highly crystalline 1D Eu(OH) nanostructures. 2020 , 10, 33499-33508	3
164	A Multifunctional Triboelectric Nanogenerator Based on Conveyor Belt Structure for High-Precision Vortex Detection. 2020 , 5, 2000377	2
163	Study of structural, optical, and paramagnetic properties of Zn _{1-x} CoxS nanoparticles prepared via co-precipitation. <i>Journal of Materials Science: Materials in Electronics</i> , 2020 , 31, 17297-17306	2.1 7
162	Transient Bending Vibration of a Piezoelectric Semiconductor Nanofiber under a Harmonic Shear Force. 2020 , 1637, 012006	1
161	Correlation between Microstructure and Chemical Composition of Zinc Oxide Gas Sensor Layers and Their Gas-Sensitive Properties in Chlorine Atmosphere. 2020 , 20,	5

160	A full-coupling model of PN junctions based on the global-domain carrier motions with inclusion of the two metal/semiconductor contacts at endpoints. 2020 , 41, 845-858	4
159	Urea detection by ZnO-MWCNT nanocomposite sensor. 2020 , 29, 749-752	2
158	Self-Powered Sensors and Systems Based on Nanogenerators. 2020 , 20,	95
157	Cardiac energy harvesting and sensing based on piezoelectric and triboelectric designs. 2020 , 76, 105076	36
156	Enhancing crystalline/optical quality, and photoluminescence properties of the Na and Sn substituted ZnS thin films for optoelectronic and solar cell applications; a comparative study. 2020 , 107, 110073	38
155	Ultraviolet sensor with fast response characteristics based on an AgNW/ZnO bi-layer. 2020 , 311, 112044	5
154	Controlled synthesis of periodic arrays of ZnO nanostructures combining e-beam lithography and solution-based processes leveraged by micro X-ray fluorescence spectroscopy. 2020 , 8, 100063	
153	Synthesis of Metal Oxide Semiconductor Nanostructures for Gas Sensors. 2020 ,	2
152	Wet Synthesis of Elongated Hexagonal ZnO Microstructures for Applications as Photo-Piezoelectric Catalysts. 2020 , 13,	9
151	Flexible Piezoelectric Nanogenerators Using Metal-doped ZnO-PVDF Films. 2020 , 305, 111912-111912	50
150	Influence of solvent molecular geometry on the growth of nanostructures. 2020 , 570, 322-331	12
149	Highly dispersed Metal-Organic-Framework-Derived Pt nanoparticles on three-dimensional macroporous ZnO for trace-level H ₂ S sensing. 2020 , 309, 127802	29
148	Growth and characterization of PbI ₂ -decorated ZnO nanowires for photodetection applications. 2020 , 825, 154095	8
147	Designed synthesis of ZnO/PEDOT core/shell hybrid nanotube arrays with enhanced electrochromic properties. 2020 , 52, 389-395	2
146	A low-temperature limit for growth of ZnO nanowires by using of laser ablation processes. <i>Applied Physics A: Materials Science and Processing</i> , 2020 , 126, 1	2.6 3
145	Zinc oxide nanosheet as a promising route for carrier 5-fluorouracil anticancer drug in the presence metal impurities: Insights from DFT calculations. 2021 , 1194, 113079	8
144	Eco-friendly Strategies for the Material and Fabrication of Wearable Sensors. 2021 , 8, 1323-1346	9
143	On the local/nonlocal piezoelectric nanobeams: Vibration, buckling, and energy harvesting. 2021 , 151, 107432	23

142	Light-activated gas sensing: a perspective of integration with micro-LEDs and plasmonic nanoparticles. 2021 , 2, 827-844	18
141	2D Allotrope of Carbon for Self-Powered, Flexible, and Transparent Optoelectronics. 2021 , 9, 2001551	4
140	Small-scale effects on the piezopotential properties of tapered gallium nitride nanowires: The synergy between surface and flexoelectric effects. 2021 , 79, 105489	8
139	On the size-dependent nonlinear dynamics of viscoelastic/flexoelectric nanobeams. 2021 , 27, 2018-2033	7
138	Size dependent free vibration analysis of functionally graded piezoelectric micro/nano shell based on modified couple stress theory with considering thickness stretching effect. 2021 , 17, 119-134	18
137	Surface and interface effects: properties of nanostructured ZnO. 2021 , 253-287	
136	Electrochemical synthesis of hydroxyl group-functionalized PProDOT/ZnO for an ultraviolet photodetector.. 2021 , 11, 15825-15834	2
135	Recent developments in the nanomaterial-catalyzed green synthesis of structurally diverse 1,4-dihydropyridines.. 2021 , 11, 1376-1393	3
134	Solution-Processed High-Performance ZnO Nano-FETs Fabricated with Direct-Write Electron-Beam-Lithography-Based Top-Down Route. 2021 , 7, 2000978	2
133	Self-assembly nuclei with a preferred orientation at the extended hydrophobic surface toward textured growth of ZnO nanorods in aqueous chemical bath deposition. 2021 , 32, 175603	1
132	Efficient Triboelectric Nanogenerator (TENG) Output Management for Improving Charge Density and Reducing Charge Loss. 2021 , 3, 532-549	4
131	Substrate-independent growth and characterization of single-crystalline SnSe nanoplates. 2021 , 172, 110864	3
130	Vibration Analysis of Rotating Functionally Graded Piezoelectric Nanobeams Based on the Nonlocal Elasticity Theory. 2021 , 9, 1155	7
129	Advances in piezotronic transistors and piezotronics. 2021 , 37, 101108	19
128	Influence of Low Cd-Doping Concentration (0.5 and 3 wt.%) and Different Substrate Types (Glass and Silicon) on the Properties of Dip-Coated Nanostructured ZnO Semiconductors Thin Films. 2021 , 31, 4001-4017	1
127	Elastocaloric effect in zinc oxide nanowire. 2021 , 14, 2150021	0
126	Nanogenerators and Self-Powered Microdevices Applied to Wireless Electrical Stimulation at Cell Level. 2021 ,	0
125	Effect of different pH values on growth solutions for the ZnO nanostructures. 2021 , 71, 175-189	5

124	Recent Advances on SEM-Based Multiphysical Characterization of Nanomaterials. 2021 , 2021, 4426254	0
123	Simulated synthesis of silica nanowires by lyotropic liquid crystal template method. 1-11	
122	Typical transient effects in a piezoelectric semiconductor nanofiber under a suddenly applied axial time-dependent force. 2021 , 42, 1095-1108	1
121	Excitonic properties of layer-by-layer CVD grown ZnO hexagonal microdisks. 2021 , 32,	2
120	Conduction mechanisms and dielectric constant features of Fe doped ZnO nanocrystals. 2021 , 47, 19106-19114	
119	MFC-MZI Type Ultraviolet Sensor Based on ZnO and Composite Graphene. 2021 , 39, 4542-4547	3
118	Piezoelectric Materials for Energy Harvesting and Sensing Applications: Roadmap for Future Smart Materials. 2021 , 8, e2100864	57
117	Hybrid ZnO/MoS ₂ Core/Sheath Heterostructures for Photoelectrochemical Water Splitting. 2021 , 2, 148-161	1
116	Piezoelectric Nanomaterials Activated by Ultrasound: The Pathway from Discovery to Future Clinical Adoption. 2021 ,	21
115	Temperature dependant high output voltage generation via mechanical transducer by using surface modified (O ₂ , CO ₂ , NO ₂) ZnO nanowires. 2021 , 248, 111614	2
114	Technology evolution from micro-scale energy harvesters to nanogenerators. 2021 , 31, 093002	25
113	ZnO/graphene heterostructure nanohybrids for optoelectronics and sensors. 2021 , 130, 070905	2
112	Plasmonic Sensing from Vertical Au-Coated ZnO Nanorod Arrays Templated by Block Copolymers. 2021 , 4, 8556-8563	0
111	Progress in ZnO Nanosensors. 2021 , 21,	9
110	Defect engineering of ZnO: Review on oxygen and zinc vacancies. 2021 , 41, 4977-4996	30
109	Recent Progress on ZnO Nanowires Cold Cathode and Its Applications. <i>Nanomaterials</i> , 2021 , 11,	5-4 0
108	Recent progress in self-supported nanoarrays with diverse substrates for water splitting and beyond. 2021 , 15, 100120	4
107	Tunable local and global piezopotential properties of graded InGaN nanowires. 2021 , 86, 106125	3

106	Ab initio investigation of non-metal-doped ZnS monolayer. <i>Applied Physics A: Materials Science and Processing</i> , 2021 , 127, 1	2.6	0
105	Green Synthesis, Characterization and Antibacterial Activity of SiO ₂ /ZnO Nanocomposite by <i>Dictyota bartayresiana</i> Extract and Its Cytotoxic Effect on HT29 Cell Line. 1		0
104	Review on GaAsSb nanowire potentials for future 1D heterostructures: Properties and applications. <i>Materials Today Communications</i> , 2021 , 28, 102542	2.5	2
103	Formation of a ZnO nanorods-patterned coating with strong bactericidal capability and quantitative evaluation of the contribution of nanorods-derived puncture and ROS-derived killing.. 2022 , 11, 181-191		4
102	Characterization of micro-ZnO/PDMS composite structured via dielectrophoresis □Toward medical application. 2021 , 208, 109912		9
101	Plasmonic DSSC performance of spray deposited Ag-ZnO and Au-ZnO films. 2021 , 73, 581-588		0
100	Development of Piezoelectric Nanogenerator Based on Micro/Nanofabrication Techniques and Its Application on Medical Devices. 2022 , 225-244		0
99	Influence of composition on morphology of semiconducting oxides microwires. 2021 , 158, 110248		1
98	Nanogenerator-based devices for biomedical applications. 2021 , 89, 106461		14
97	Highly responsive and low-cost ultraviolet sensor based on ZnS/p-Si heterojunction grown by chemical bath deposition. 2021 , 331, 112988		6
96	Ultralight, flexible and conductive silver nanowire/nanofibrillated cellulose aerogel for multifunctional strain sensor. 2021 , 424, 130565		6
95	Fully-Printed Piezoelectric Devices for Flexible Electronics Applications. 2021 , 6, 2001020		11
94	Piezoelectric Mechanical Energy Harvesters and Related Materials. <i>Springer Series in Materials Science</i> , 2016 , 113-138	0.9	1
93	Modeling of Piezoelectric Nanodevices. 2012 , 93-133		2
92	Introduction of Piezotronics and Piezo-Phototronics. <i>Microtechnology and MEMS</i> , 2012 , 1-17	0.6	3
91	Waste Mechanical Energy Harvesting (II): Nanopiezoelectric Effect. 2014 , 135-262		4
90	Laser-Assisted Growth and Processing of Functional Chalcogenide Nanostructures. 2015 , 17-27		1
89	Size and Crystal Orientation-Dependent Thermal Behaviors of ZnO Nanobelts. 2020 , 124, 27222-27229		1

88	Non-linear nanoscale piezoresponse of single ZnO nanowires affected by piezotronic effect. 2021 , 32, 025202		3
87	Fabrication, Structural Characterization and Optical Properties of the Flower-Like ZnO Nanowires. <i>Acta Physica Polonica A</i> , 2010 , 117, 512-517	0.6	5
86	Type-II ZnO/ZnS core-shell nanowires: Earth-abundant photoanode for solar-driven photoelectrochemical water splitting. <i>Optics Express</i> , 2019 , 27, A184-A196	3.3	10
85	Excellent light-capture capability of trilobal SiNW for ultra-high JSC in single-nanowire solar cells. <i>Photonics Research</i> , 2020 , 8, 995	6	5
84	Study of tetrapodal ZnO-PDMS composites: a comparison of fillers shapes in stiffness and hydrophobicity improvements. <i>PLoS ONE</i> , 2014 , 9, e106991	3.7	45
83	Effects of Substrate on the Structure, Morphology and Optical Properties of Vertically Aligned ZnO Nanorod Arrays Grown by Low-temperature CBD Method. <i>Wuji Cailiao Xuebao/Journal of Inorganic Materials</i> , 2010 , 25, 1115-1120	1	7
82	Electronic Structure and Optical Properties of Vertically Aligned ZnO Nanorod Arrays Grown by Low-temperature Hydrothermal Method. <i>Wuji Cailiao Xuebao/Journal of Inorganic Materials</i> , 2011 , 26, 332-336	1	2
81	Bright Red Luminescence and Structural Properties of Eu ³⁺ Ion Doped ZnO by Solution Combustion Technique. <i>World Journal of Condensed Matter Physics</i> , 2014 , 04, 227-234	0.5	15
80	Current Biased Resistive Switching in ZnO Whiskers. <i>Japanese Journal of Applied Physics</i> , 2011 , 50, 04DJ014	0.4	4
79	Physics and applications of semiconductor nanowire lasers. <i>Frontiers of Nanoscience</i> , 2021 , 20, 389-438	0.7	
78	Recent progress in the electrochemical deposition of ZnO nanowires: synthesis approaches and applications. <i>Critical Reviews in Solid State and Materials Sciences</i> , 1-34	10.1	2
77	Morphology Evolution Mechanism of ZnO Quasi-One-Dimensional Nanostructures. <i>Wuji Cailiao Xuebao/Journal of Inorganic Materials</i> , 2009 , 24, 1141-1146	1	1
76	ZnO Nanowires and Si Nanowires. 231-258		
75	Semiconductor Nanowire Heterostructures: Controlled Growth and Optoelectronic Applications. <i>Nanoscience and Technology</i> , 2012 , 137-166	0.6	
74	Piezotronic Logic Circuits and Operations. <i>Microtechnology and MEMS</i> , 2012 , 97-109	0.6	
73	Structural and Electrical Conductivity of ZnO Nano Bi-pyramids-like Structure. <i>Lecture Notes in Mechanical Engineering</i> , 2012 , 665-670	0.4	
72	Nanowires and Nanotubes. 961-993		1
71	II-VI Semiconductor Nanostructures. 2012 , 167-235		

70	One-Dimensional Inorganic Semiconductor Nanostructures. 2012 , 37-70		
69	Progress of the Study of Self-Assembly 1D Nano-Functional Materials. <i>Advances in Condensed Matter Physics</i> , 2013 , 02, 51-67	0.1	
68	Zinc Oxide and Polysaccharides: Promising Candidates for Functional Nanomaterials. <i>Springer Series in Materials Science</i> , 2014 , 109-136	0.9	
67	Solvothermal Routes. <i>Advances in Materials Science and Engineering</i> , 2014 , 9-52		
66	Modeling of Nanostructures. 2015 , 1-55		1
65	History and latest development of ferroelectric-semiconductor coupled photovoltaic devices. <i>Wuli Xuebao/Acta Physica Sinica</i> , 2015 , 64, 038807	0.6	3
64	Mechanical Behavior of Nanowires with High-Order Surface Stress Effects. 2018 , 157-177		
63	Synthesis of zinc oxide nanorod through aqueous chemical method for study of its characterization and properties for sensing mechanism of toxic gases. 2020 ,		
62	CHAPTER 10:Functionalization and Useful Properties and Potential Applications of Nanowires. <i>RSC Nanoscience and Nanotechnology</i> , 2021 , 541-584		
61	Van der Waals heterostructure of graphene Defected&Doped X(X = Au, N) composite ZnO monolayer: A First Principle study. <i>Materials Science in Semiconductor Processing</i> , 2022 , 138, 106247	4.3	1
60	Antimicrobial and antifouling surfaces through polydopamine bio-inspired coating. <i>Rare Metals</i> , 1	5.5	0
59	Piezoelectric application of metal oxide nanofibers. 2022 , 215-246		
58	A mathematical modelling of multiphysics-based propagation characteristics of surface wave in piezoelectric - hydrogel layer on an elastic substrate. <i>Applied Mathematical Modelling</i> , 2022 , 103, 493-515	4.5	2
57	Single-Step Hydrothermal Synthesis of Zinc Oxide Micro/Nanostructures. <i>Russian Journal of Inorganic Chemistry</i> , 2021 , 66, 1583-1591	1.5	1
56	Benign by design: porous spherical ZnO-alginate family via a dual-template synthesis. <i>Applied Surface Science</i> , 2022 , 580, 152231	6.7	0
55	Fabrication of self-healing hybrid nanogenerators based on polyurethane and ZnO for harvesting wind energy. <i>Journal of Materials Science: Materials in Electronics</i> , 2022 , 33, 3982	2.1	1
54	Multi-component ZnO alloys: Bandgap engineering, hetero-structures, and optoelectronic devices. <i>Materials Science and Engineering Reports</i> , 2022 , 147, 100661	30.9	7
53	Introduction of ZnO nanomaterial integration nanospikes to nanocombs dispersed into HBLCs phase transition and novel switching. 2022 , 3-22		

52	Hydrothermal Synthesis and Structures of Unknown Intermediate Phase Zn(HCO)OH Nanoflakes and Final ZnO Nanorods.. <i>Inorganic Chemistry</i> , 2022 ,	5.1	0
51	ERPPM IoNT: Event Recognition using Pulse Position Modulation in Internet of Nano Things. <i>Nano Communication Networks</i> , 2022 , 31, 100393	2.9	1
50	MEMS-Based Platforms for Multi-Physical Characterization of Nanomaterials: A Review. <i>IEEE Sensors Journal</i> , 2022 , 22, 1827-1841	4	1
49	Comparative investigation on the Di-/ferro-electric and optical properties of Ce/Nd dual doped ZnO nanostructures prepared in different reaction mechanisms. <i>Physica E: Low-Dimensional Systems and Nanostructures</i> , 2022 , 139, 115110	3	0
48	Size dependent effects of two phase viscoelastic medium on damping vibrations of smart nanobeams: An efficient implementation of GDQM. <i>Smart Materials and Structures</i> ,	3.4	1
47	Piezoelectric nanogenerators for personalized healthcare.. <i>Chemical Society Reviews</i> , 2022 ,	58.5	23
46	Fabrication and Characterisation of ZnO@TiO ₂ Core/Shell Nanowires Using a Versatile Kinetics-Controlled Coating Growth Method. <i>SSRN Electronic Journal</i> ,	1	
45	NEW INSIGHT INTO THE EFFECT OF NOZZLE DIAMETER ON THE PROPERTIES OF SPRAYED ZnO THIN FILMS. <i>Surface Review and Letters</i> , 2022 , 29,	1.1	0
44	Effect of Iodine-doping toward ZnO critical optical constants and their applications to latent fingerprints detection. <i>Materials Today Communications</i> , 2022 , 103450	2.5	1
43	Synthesis of ZnO/CNT Nanocomposites for Ultraviolet Sensors. <i>Frontiers in Materials</i> , 9,	4	0
42	Research on PDMS TENG of laser etch 3D structure. <i>Journal of Materials Science</i> , 2022 , 57, 6723-6733	4.3	1
41	Enhanced photoresponse of nanostructured ZnO-based flexible photodetectors. 2021 ,		
40	3D ordered macroporous Pt/ZnS@ZnO core-shell heterostructure for highly effective photocatalytic hydrogen evolution. <i>International Journal of Hydrogen Energy</i> , 2022 ,	6.7	4
39	A high-responsivity CsPbBr nanowire photodetector induced by CdS@CdZnS gradient-alloyed quantum dots.. <i>Nanoscale Horizons</i> , 2022 ,	10.8	0
38	Flexible ultraviolet photodetector based on flower-like ZnO/PEDOT:PSS nanocomposites. <i>Applied Physics A: Materials Science and Processing</i> , 2022 , 128,	2.6	0
37	Structural evolution of low-dimensional metal oxide semiconductors under external stress. <i>Journal of Semiconductors</i> , 2022 , 43, 041105	2.3	1
36	Shear horizontal wave in a piezoelectric semiconductor substrate covered with a metal layer with consideration of Schottky junction effects. <i>Applied Mathematical Modelling</i> , 2022 ,	4.5	1
35	Effects of As, P and Sb on the output voltage generation of ZnO nanowires based nanogenerator: Mitigation of screening effect by using surface modified ZnO nanowires. <i>Vacuum</i> , 2022 , 202, 111130	3.7	1

34	Fabrication and characterisation of ZnO@TiO ₂ core/shell nanowires using a versatile kinetics-controlled coating growth method. <i>Applied Surface Science</i> , 2022 , 594, 153463	6.7	0
33	Crystal-facet and microstructure engineering in ZnO for photocatalytic NO oxidation. <i>Journal of Hazardous Materials</i> , 2022 , 435, 129073	12.8	0
32	Comparison of optical properties of CdS thin films synthesized by spray pyrolysis and thermal evaporation method. <i>Journal of Optics (India)</i> ,	1.3	0
31	Unveiling Evolutionary Path of Nanogenerator Technology: A Novel Method Based on Sentence-BERT. <i>Nanomaterials</i> , 2022 , 12, 2018	5.4	0
30	Bio-piezoelectricity: fundamentals and applications in tissue engineering and regenerative medicine. <i>Biophysical Reviews</i> , 2022 , 14, 717-733	3.7	1
29	Characterization, Luminescence and Optical Resonant Modes of Eu-Li Co-Doped ZnO Nano- and Microstructures. <i>Applied Sciences (Switzerland)</i> , 2022 , 12, 6948	2.6	
28	Comprehensive Insights into Synthesis, Structural Features, and Thermoelectric Properties of High-Performance Inorganic Chalcogenide Nanomaterials for Conversion of Waste Heat to Electricity. <i>ACS Applied Energy Materials</i> ,	6.1	3
27	Boosting the performance of crossed ZnO microwire UV photodetector by mechanical contact homo-interface barrier. <i>Chinese Physics B</i> ,	1.2	
26	Assessing the efficiency of photocatalytic removal of alizarin red using copper doped zinc oxide nanostructures by combining SERS optical detection. <i>Journal of Photochemistry and Photobiology A: Chemistry</i> , 2022 , 432, 114123	4.7	0
25	Solution composition and temperature impact on physicochemical properties of synthesized zinc oxide. 2022 , 12, 2523-2532		
24	Ferroelectric La _x Fe _{0.1-x} Codoped ZnO Nanorod Triboelectric Nanogenerators for Electrochemical Rhodamine B Degradation.		0
23	Cold crystallization and morphology control of ZnO nanostructures for chemical sensors.		
22	Intermolecular interactions of ZnO nanodispersion with aqueous polyethylene glycol via physicochemical and optical study. 2022 , 45,		0
21	Effects of Group-I Elements on Output Voltage Generation of ZnO Nanowires Based Nanogenerator; Degradation of Screening Effects by Oxidation of Nanowires. 2022 , 13, 1450		0
20	Piezo-Catalytic Techniques in Environmental Remediation.		0
19	Combined Triboelectric and Piezoelectric Effect in ZnO/PVDF Hybrid-Based Fiber-Structured Nanogenerator with PDMS:Carbon Black Electrodes. 2022 , 14, 4414		0
18	Mg doping effects on the microstructure and piezoelectric characteristics of ZnO:Li films deposited at room temperature using an RF sputtering deposition method. 2022 ,		1
17	Highly sensitive ultra-thin optical CO ₂ gas sensors using nanowall honeycomb structure and plasmonic nanoparticles. 10,		1

16	Piezo-Catalytic Techniques in Environmental Remediation.	0
15	Strain related new sciences and devices in low-dimensional binary oxides. 2022 , 104, 107917	1
14	Effects of Fe doping on the magnetic and absorption spectrum of graphene-like ZnO monolayer from first-principles calculations. 2023 , 565, 111742	0
13	Design of a piezo-photocatalytic system using both fluid and visible light as driving energy.	0
12	Zinc oxide tetrapod sponges for environmental pollutant monitoring and degradation. 2023 , 22, 811-824	0
11	Influence of Calcium Element on Microstructure and Electrical Properties of ZnO Varistor with Lesser Dopants. 2200238	0
10	Flexible piezoelectric generator based on PLLA/ZnO oriented fibers for wearable self-powered sensing. 2023 , 169, 107518	0
9	Tunable local piezopotential properties of zinc oxide nanowires grown by remote epitaxy. 2023 , 157, 107345	0
8	Biocidal activity of ZnO NPs against pathogens and antioxidant activity - a greener approach by Citrus hystrix leaf extract as bio-reductant. 2023 , 192, 108818	0
7	Influence of manganese addition in ZnO-based piezoelectric nanogenerator for mechanical energy harvesting. 2023 , 34,	0
6	High-Performance Near-Infrared Photodetector Based on PbS Colloidal Quantum Dots/ZnO-Nanowires Hybrid Nanostructures. 2023 , 23, 2254	0
5	Tiny (ZnO) clusters supported on graphene for solar energy trapping: A density functional theory study. 2023 , 144, 104769	0
4	Antibacterial activity studies of ZnO nanostructures with different morphologies against E. coli and S. aureus. 2023 , 129,	0
3	Controlled Growth of Semiconducting ZnO Nanorods for Piezoelectric Energy Harvesting-Based Nanogenerators. 2023 , 13, 1025	0
2	Effects of Schottky junction on surface waves in a piezoelectric semiconducting film over a metal substrate. 108128652311623	0
1	Perspective on Development of Piezoelectric Micro-Power Generators. 2023 , 3, 73-100	0