

Bohr-Ran Huang

List of Publications by Year in descending order

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90
papers

1,504
citations

304743

22
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395702

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90
docs citations

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times ranked

2030
citing authors

#	ARTICLE	IF	CITATIONS
1	ZnO-NWs/Cu-based metallic glass nanotube array (ZNWs/Cu-MeNTA) for field emission properties. Journal of Alloys and Compounds, 2022, 890, 161846.	5.5	4
2	Surface modified highly porous egg-shell membrane derived granular activated carbon coated on paper substrate and its humidity sensing properties. Materials Chemistry and Physics, 2022, 277, 125486.	4.0	6
3	Surface and interface properties of monolayer graphene on hydrophobic and hydrophilic ultrananocrystalline diamond structures for hydrogen sensing applications. International Journal of Hydrogen Energy, 2022, 47, 4959-4969.	7.1	2
4	Structure dependence of gas sensing responsivity on graphene nanoribbons covered TiO ₂ nanotubes, nano-bugles array. Journal of Materials Science: Materials in Electronics, 2022, 33, 6082.	2.2	1
5	Reducing noise current in exfoliated WS ₂ nanosheets using an ultra-nanocrystalline diamond substrate and their enhanced NIR photodetection properties. Journal of Materials Chemistry C, 2022, 10, 6061-6069.	5.5	1
6	Effect of MoS ₂ solution on reducing the wall thickness of ZnO nanotubes to enhance their hydrogen gas sensing properties. Journal of Alloys and Compounds, 2021, 854, 157102.	5.5	14
7	Boron-doped graphene from boron-doped copper substrate for self-powered photodetector. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2021, 263, 114814.	3.5	1
8	ZnO-NWs/metallic glass nanotube hybrid arrays: Fabrication and material characterization. Surface and Coatings Technology, 2021, 408, 126785.	4.8	12
9	Crystalline Nanodiamond-Induced Formation of Carbon Nanotubes for Stable Hydrogen Sensing. ACS Applied Nano Materials, 2021, 4, 2840-2848.	5.0	9
10	Cesium tungsten bronze nanostructures and their highly enhanced hydrogen gas sensing properties at room temperature. International Journal of Hydrogen Energy, 2021, 46, 25752-25762.	7.1	18
11	Modified interfaces of twisted root-like 2D configured ZnO hierarchical nanostructures through surface lattice coating of NiO/graphene and their enhanced UV photodetection properties. Journal of Alloys and Compounds, 2021, 868, 159240.	5.5	10
12	Role of Nanodiamond Grains in the Exfoliation of WS ₂ Nanosheets and Their Enhanced Hydrogen-Sensing Properties. ACS Applied Materials & Interfaces, 2021, 13, 48260-48269.	8.0	5
13	Reversibly photoswitchable gratings prepared from azobenzene-modified tethered poly(methacrylic) Tj ETQq1 1 0.784314 rgBT /Over	7.8	17
14	Enhancement of UV Photodetection Properties of Hierarchical Core-Shell Heterostructures of a Natural Sericin Biopolymer with the Addition of ZnO Fabricated on Ultra-Nanocrystalline Diamond Layers. ACS Applied Materials & Interfaces, 2020, 12, 3254-3264.	8.0	5
15	Structural Engineering of Dispersed Graphene Flakes into ZnO Nanotubes on Discontinues Ultra-Nanocrystalline Diamond Substrates for High-Performance Photodetector with Excellent UV Light to Dark Current Ratios. Advanced Materials Interfaces, 2020, 7, 1901694.	3.7	7
16	Exfoliated MoSe ₂ Nanosheets Doped on the Surface of ZnO Nanorods for Hydrogen Sensing Applications. ACS Applied Nano Materials, 2020, 3, 12139-12147.	5.0	24
17	Superficial Edge Effect of N-Doped Nanodiamond on the Highly Stable Nonenzymatic Glucose Detection Properties of Dispersed Graphene Flakes/Ni Nanostructures. ACS Applied Bio Materials, 2020, 3, 5966-5973.	4.6	5
18	Self-growth of graphene nanosheets on a crystalline nanodiamond substrate using Ni _x Zn _x O catalyst and their efficient photodetection properties. Applied Materials Today, 2020, 20, 100679.	4.3	1

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19	Effect of PMMA on the surface of exfoliated MoS ₂ nanosheets and their highly enhanced ammonia gas sensing properties at room temperature. <i>Journal of Alloys and Compounds</i> , 2020, 832, 155005.	5.5	24
20	High-Performance Sensor Based on Thin-Film Metallic Glass/Ultra-nanocrystalline Diamond/ZnO Nanorod Heterostructures for Detection of Hydrogen Gas at Room Temperature. <i>Chemistry - A European Journal</i> , 2019, 25, 10385-10393.	3.3	22
21	Interface engineering of ultrananocrystalline diamond/MoS ₂ -ZnO heterostructures and its highly enhanced hydrogen gas sensing properties. <i>Sensors and Actuators B: Chemical</i> , 2019, 292, 70-79.	7.8	48
22	Improving the optical and crystal properties of ZnO nanotubes via a metallic glass quantum dot underlayer. <i>Journal of Materials Chemistry C</i> , 2019, 7, 5163-5171.	5.5	1
23	Silicon- and oxygen-codoped graphene from polycarbosilane and its application in graphene/n-type silicon photodetectors. <i>Applied Surface Science</i> , 2019, 464, 125-130.	6.1	14
24	Highly enhanced hydrogen sensing properties of sericin-induced exfoliated MoS ₂ nanosheets at room temperature. <i>Sensors and Actuators B: Chemical</i> , 2019, 279, 138-147.	7.8	46
25	Concurrent enhancement in the H ₂ and UV sensing properties of ZnO nanostructures through discontinuous lattice coating of La ³⁺ partial p-n junction formation. <i>Journal of Materials Chemistry C</i> , 2018, 6, 2387-2395.	5.5	17
26	The Significant Role of Hydrophilic and Hydrophobic Interfaces in Graphene-Based 1D Heterostructures for Highly Enhanced Electron Emission. <i>Advanced Materials Interfaces</i> , 2018, 5, 1701148.	3.7	2
27	Interfacial Effect of Oxygen-Doped Nanodiamond on CuO and Micropyramidal Silicon Heterostructures for Efficient Nonenzymatic Glucose Sensor. <i>ACS Applied Bio Materials</i> , 2018, 1, 1579-1586.	4.6	24
28	Role of conductive nitrogen incorporated diamond nanowires for enhancing the UV detection and field emission properties of ZnO nanotubes. <i>Materials and Design</i> , 2018, 154, 130-139.	7.0	14
29	Bio-Industrial Waste Silk Fibroin Protein and Carbon Nanotube-Induced Carbonized Growth of One-Dimensional ZnO-based Bio-nanosheets and their Enhanced Optoelectronic Properties. <i>Chemistry - A European Journal</i> , 2018, 24, 12574-12583.	3.3	8
30	Antigen detection with thermosensitive hydrophilicity of poly(N-isopropylacrylamide)-grafted poly(vinyl chloride) fibrous mats. <i>Journal of Materials Chemistry B</i> , 2018, 6, 3486-3496.	5.8	9
31	Hierarchical morphology and hydrogen sensing properties of N ₂ -based nanodiamond materials produced through CH ₄ /H ₂ /Ar plasma treatment. <i>Applied Surface Science</i> , 2018, 457, 367-375.	6.1	13
32	High-Performance Electron Field Emitters and Microplasma Cathodes Based on Conductive Hybrid Granular Structured Diamond Materials. <i>ACS Applied Materials & Interfaces</i> , 2017, 9, 4916-4925.	8.0	12
33	Multifunctional sustainable materials: the role of carbon existing protein in the enhanced gas and UV sensing performances of ZnO-based biofilms. <i>Journal of Materials Chemistry C</i> , 2017, 5, 5239-5247.	5.5	29
34	Core-Shell P-N Junction Si Nanowires as Rapid Response and High-Sensitivity pH Sensor. <i>IEEE Sensors Journal</i> , 2017, 17, 3967-3974.	4.7	7
35	Simple Synthesis of Eco-Friendly Multifunctional Silk-Sericin Capped Zinc Oxide Nanorods and Their Potential for Fabrication of Hydrogen Sensors and UV Photodetectors. <i>ACS Sustainable Chemistry and Engineering</i> , 2017, 5, 4002-4010.	6.7	18
36	Self-Assembled Hierarchical Interfaces of ZnO Nanotubes/Graphene Heterostructures for Efficient Room Temperature Hydrogen Sensors. <i>ACS Applied Materials & Interfaces</i> , 2017, 9, 12064-12072.	8.0	53

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37	Pillar arrays of tethered polyvinyltetrazole on silicon as a visualization platform for sensing of lead ions. <i>Sensors and Actuators B: Chemical</i> , 2017, 243, 234-243.	7.8	25
38	Natural Biowaste-Cocoon-Derived Granular Activated Carbon-Coated ZnO Nanorods: A Simple Route To Synthesizing a Core-Shell Structure and Its Highly Enhanced UV and Hydrogen Sensing Properties. <i>ACS Applied Materials & Interfaces</i> , 2017, 9, 39771-39780.	8.0	33
39	Few-Layer Thin-Film Metallic Glass-Enhanced Optical Properties of ZnO Nanostructures. <i>ACS Applied Materials & Interfaces</i> , 2017, 9, 39475-39483.	8.0	18
40	Functionalization of CVD Grown Graphene with Downstream Oxygen Plasma Treatment for Glucose Sensors. <i>Journal of the Electrochemical Society</i> , 2017, 164, B336-B341.	2.9	25
41	Interfacial effects in ZnO nanotubes/needle-structured graphitic diamond nanohybrid for detecting dissolved acetone at room temperature. <i>Applied Surface Science</i> , 2017, 426, 630-638.	6.1	3
42	Phosphor-Free InGaN White Light Emitting Diodes Using Flip-Chip Technology. <i>Materials</i> , 2017, 10, 432.	2.9	9
43	Investigation of Rapid Low-Power Microwave-Induction Heating Scheme on the Cross-Linking Process of the Poly(4-vinylphenol) for the Gate Insulator of Pentacene-Based Thin-Film Transistors. <i>Materials</i> , 2017, 10, 742.	2.9	1
44	Effects of the F4TCNQ-Doped Pentacene Interlayers on Performance Improvement of Top-Contact Pentacene-Based Organic Thin-Film Transistors. <i>Materials</i> , 2016, 9, 46.	2.9	12
45	Real-Time Packing Behavior of Core-Shell Silica@Poly(N-isopropylacrylamide) Microspheres as Photonic Crystals for Visualizing in Thermal Sensing. <i>Polymers</i> , 2016, 8, 428.	4.5	10
46	Nitrogen Incorporated Ultrananocrystalline Diamond Microstructures From Bias-Enhanced Microwave N_2/CH_4 Plasma Chemical Vapor Deposition. <i>Plasma Processes and Polymers</i> , 2016, 13, 419-428.	3.0	15
47	Poly(4-vinylphenol) gate insulator with cross-linking using a rapid low-power microwave induction heating scheme for organic thin-film-transistors. <i>APL Materials</i> , 2016, 4, 036105.	5.1	14
48	Engineered design and fabrication of long lifetime multifunctional devices based on electrically conductive diamond ultrananowire multifinger integrated cathodes. <i>Journal of Materials Chemistry C</i> , 2016, 4, 9727-9737.	5.5	5
49	Highly sensitive pH dependent acetone sensor based on ultrananocrystalline diamond materials at room temperature. <i>RSC Advances</i> , 2016, 6, 102821-102830.	3.6	3
50	Improvement in reliability of amorphous indium-gallium-zinc oxide thin-film transistors with Teflon/SiO ₂ bilayer passivation under gate bias stress. <i>Japanese Journal of Applied Physics</i> , 2016, 55, 02BC17.	1.5	8
51	Structure and field emission of graphene layers on top of silicon nanowire arrays. <i>Applied Surface Science</i> , 2016, 362, 250-256.	6.1	14
52	Enhancement of plasma illumination characteristics via typical engineering of diamond-graphite nanocomposite films. <i>CrystEngComm</i> , 2016, 18, 1800-1808.	2.6	1
53	Novel LTPS-TFT Pixel Circuit with OLED Luminance Compensation for 3D AMOLED Displays. <i>Journal of Display Technology</i> , 2016, 12, 425-428.	1.2	40
54	Fast Photoresponse and Long Lifetime UV Photodetectors and Field Emitters Based on ZnO/Ultrananocrystalline Diamond Films. <i>Chemistry - A European Journal</i> , 2015, 21, 16017-16026.	3.3	23

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55	Heterostructured Diamond-Gold Nanohybrids: A New Long-Life Electronic Display Cathode. ACS Applied Materials & Interfaces, 2015, 7, 27078-27086.	8.0	15
56	Highly Conductive Diamond-Graphite Nanohybrid Films with Enhanced Electron Field Emission and Microplasma Illumination Properties. ACS Applied Materials & Interfaces, 2015, 7, 14035-14042.	8.0	13
57	Bifunctional superparamagnetic-luminescent core-shell satellite structured microspheres: preparation, characterization, and magnetodisplay application. Journal of Materials Chemistry C, 2015, 3, 4603-4615.	5.5	22
58	WO ₃ /TiO ₂ core-shell nanostructure for high performance energy-saving smart windows. Solar Energy Materials and Solar Cells, 2015, 133, 32-38.	6.2	35
59	Color-tunable mixed photoluminescence emission from Alq ₃ organic layer in metal-Alq ₃ -metal surface plasmon structure. Nanoscale Research Letters, 2014, 9, 569.	5.7	7
60	Improvement in Brightness Uniformity by Compensating for the Threshold Voltages of Both the Driving Thin-Film Transistor and the Organic Light-Emitting Diode for Active-Matrix Organic Light-Emitting Diode Displays. International Journal of Photoenergy, 2014, 2014, 1-8.	2.5	2
61	Effect of gas enhanced metal-semiconductor-metal UV photodetectors based on thermal annealing tungsten oxide thin film prepared by sol-gel method. Journal of Materials Science: Materials in Electronics, 2014, 25, 408-413.	2.2	7
62	Poole-Frenkel effect on electrical characterization of Al-doped ZnO films deposited on p-type GaN. Journal of Applied Physics, 2014, 115, 113705.	2.5	12
63	Hybrid structure of graphene sheets/ZnO nanorods for enhancing electron field emission properties. Applied Surface Science, 2014, 289, 384-387.	6.1	25
64	Bias-Enhanced Nucleation and Growth Processes for Ultrananocrystalline Diamond Films in Ar/CH ₄ Plasma and Their Enhanced Plasma Illumination Properties. ACS Applied Materials & Interfaces, 2014, 6, 10566-10575.	8.0	26
65	Hydrogen-sensing response of grass-like carbon nanotube/nickel nanostructure by microwave treatment. Carbon, 2014, 76, 410-416.	10.3	8
66	Aggregated TiO ₂ nanotubes with high field emission properties. Applied Surface Science, 2014, 311, 339-343.	6.1	12
67	ZnO Branched Nanowires and the p-CuO/n-ZnO Heterojunction Nanostructured Photodetector. IEEE Nanotechnology Magazine, 2013, 12, 263-269.	2.0	62
68	Temperature effect on hydrogen response for cracked carbon nanotube/nickel (CNT/Ni) composite film with horizontally aligned carbon nanotubes. Sensors and Actuators B: Chemical, 2013, 185, 548-552.	7.8	14
69	ZnO/Silicon Nanowire Hybrids Extended-Gate Field-Effect Transistors as pH Sensors. Journal of the Electrochemical Society, 2013, 160, B78-B82.	2.9	25
70	Low temperature synthesis of ZnO nanotubes based hydrogen sensors. , 2013, , .		1
71	Key technique for texturing a uniform pyramid structure with a layer of silicon nitride on monocrystalline silicon wafer. Applied Surface Science, 2013, 266, 245-249.	6.1	20
72	A facile synthesis of ZnO nanotubes and their hydrogen sensing properties. Applied Surface Science, 2013, 280, 945-949.	6.1	45

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73	Bilayer Structure of ZnO Nanorod/Nanodiamond Film Based Ultraviolet Photodetectors. Journal of the Electrochemical Society, 2013, 160, H509-H512.	2.9	18
74	Field emission properties of zinc oxide/zinc tungstate (ZnO/ZnWO ₄) composite nanorods. Surface and Coatings Technology, 2013, 231, 289-292.	4.8	16
75	Rice-straw-like structure of silicon nanowire arrays for a hydrogen gas sensor. Nanotechnology, 2013, 24, 475502.	2.6	24
76	Core-Shell Structure of a Silicon Nanorod/Carbon Nanotube Field Emission Cathode. Journal of Nanomaterials, 2012, 2012, 1-6.	2.7	4
77	Low-Frequency Noise Characteristics of GaN Schottky Barrier Photodetectors Prepared With Nickel Annealing. IEEE Sensors Journal, 2012, 12, 2824-2829.	4.7	10
78	Core-shell structure of zinc oxide/indium oxide nanorod based hydrogen sensors. Sensors and Actuators B: Chemical, 2012, 174, 389-393.	7.8	58
79	CuO Nanowire-Based Humidity Sensor. IEEE Sensors Journal, 2012, 12, 1884-1888.	4.7	44
80	Long-term stability of a horizontally-aligned carbon nanotube field emission cathode coated with a metallic glass thin film. Carbon, 2012, 50, 1619-1624.	10.3	16
81	Palladium nanoparticles modified carbon nanotube/nickel composite rods (Pd/CNT/Ni) for hydrogen sensing. Sensors and Actuators B: Chemical, 2012, 162, 108-113.	7.8	49
82	Gas Ionization Sensors with Carbon Nanotube/Nickel Field Emitters. Journal of Nanoscience and Nanotechnology, 2011, 11, 10849-10853.	0.9	0
83	A novel technique to fabricate horizontally aligned CNT nanostructure film for hydrogen gas sensing. International Journal of Hydrogen Energy, 2011, 36, 15919-15926.	7.1	10
84	Improvement of n-ZnO/p-Si photodiodes by embedding of silver nanoparticles. Journal of Nanoparticle Research, 2011, 13, 4757-4763.	1.9	12
85	The Effect of Tetrafluoromethane Plasma Post-Treatment on the Electrical Property of Tungsten Oxide Nanowires. Journal of Nanoscience and Nanotechnology, 2011, 11, 7693-7699.	0.9	3
86	Leaf-like carbon nanotube/nickel composite membrane extended-gate field-effect transistors as H ₂ sensor. Applied Physics Letters, 2011, 99, .	3.3	20
87	Effect of rapid thermal annealing treatment on the field-emission characteristics of nanocrystalline diamonds grown on various metal/silicon substrates. Journal of Materials Science: Materials in Electronics, 2010, 21, 385-392.	2.2	1
88	Effect of XeF laser treatment on structure of nanocrystalline diamond films. Diamond and Related Materials, 2010, 19, 445-448.	3.9	7
89	Field Emission and Electric Discharge of Nanocrystalline Diamond Films. Journal of Electronic Materials, 2009, 38, 750-755.	2.2	4
90	Highly Sensitive ZnO Nanowire Acetone Vapor Sensor With Au Adsorption. IEEE Nanotechnology Magazine, 2008, 7, 754-759.	2.0	95