Yoon-Bong Hahn

List of Publications by Year
in descending order

189	9,684	28190	46693
papers	citations	55 h-index	89 g-index

192	192	192	10949
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Zinc oxide nanonail based chemical sensor for hydrazine detection. Chemical Communications, 2008, , 166-168.	2.2	442
2	Graphene and its derivatives for solar cells application. Nano Energy, 2018, 47, 51-65.	8.2	284
3	Growth of aligned ZnO nanorods and nanopencils on ZnO/Si in aqueous solution: growth mechanism and structural and optical properties. Nanotechnology, 2007, 18, 115603.	1.3	238
4	Highly Efficient Non-Enzymatic Glucose Sensor Based on CuO Modified Vertically-Grown ZnO Nanorods on Electrode. Scientific Reports, 2017, 7, 5715.	1.6	234
5	Chemical and biological sensors based on metal oxide nanostructures. Chemical Communications, 2012, 48, 10369.	2.2	226
6	Ultra-sensitive cholesterol biosensor based on low-temperature grown ZnO nanoparticles. Electrochemistry Communications, 2009, 11, 118-121.	2.3	208
7	Catalyst-free large-quantity synthesis of ZnO nanorods by a vaporâ€“solid growth mechanism: Structural and optical properties. Journal of Crystal Growth, 2005, 282, 131-136.	0.7	183
8	Low-Temperature Synthesis of Flower-Shaped CuO Nanostructures by Solution Process:â€‰ Formation Mechanism and Structural Properties. Journal of Physical Chemistry C, 2008, 112, 5729-5735.	1.5	183
9	Wide Linear-Range Detecting Nonenzymatic Glucose Biosensor Based on CuO Nanoparticles Inkjet-Printed on Electrodes. Analytical Chemistry, 2013, 85, 10448-10454.	3.2	180
10	Highly-sensitive cholesterol biosensor based on well-crystallized flower-shaped ZnO nanostructures. Talanta, 2009, 78, 284-289.	2.9	179
11	Enzymatic glucose biosensor based on flower-shaped copper oxide nanostructures composed of thin nanosheets. Electrochemistry Communications, 2009, 11, 278-281.	2.3	162
12	Flower-shaped CuO nanostructures: Structural, photocatalytic and XANES studies. Catalysis Communications, 2008, 10, 11-16.	1.6	149
13	Deposition of nanomaterials: A crucial step in biosensor fabrication. Materials Today Communications, 2018, 17, 289-321.	0.9	140
14	Ultra thin NiO nanosheets for high performance hydrogen gas sensor device. Applied Surface Science, 2020, 506, 144971.	3.1	133
15	Fabrication of ZnO Nanowires Using Nanoscale Spacer Lithography for Gas Sensors. Small, 2008, 4, 1105-1109.	5.2	129
16	Improved selectivity and low concentration hydrogen gas sensor application of Pd sensitized heterojunction n-ZnO/p-NiO nanostructures. Journal of Alloys and Compounds, 2019, 797, 456-464.	2.8	127
17	Zinc oxide nanostructures and their applications. Korean Journal of Chemical Engineering, 2011, 28, 1797-1813.	1.2	125
18	Catalyst-free synthesis of ZnO nanowires on Si by oxidation of Zn powders. Journal of Crystal Growth, 2005, 277, 471-478.	0.7	122

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19	Ultra-sensitive hydrazine chemical sensor based on high-aspect-ratio ZnO nanowires. Talanta, 2009, 77, 1376-1380.	2.9	121
20	Fabrication of highly sensitive uric acid biosensor based on directly grown ZnO nanosheets on electrode surface. Sensors and Actuators B: Chemical, 2015, 206, 146-151.	4.0	112
21	Recent advances in nanowires-based field-effect transistors for biological sensor applications. Biosensors and Bioelectronics, 2018, 100, 312-325.	5.3	110
22	High-performance cholesterol sensor based on the solution-gated field effect transistor fabricated with ZnO nanorods. Biosensors and Bioelectronics, 2013, 45, 281-286.	5.3	105
23	Controlled selective growth of ZnO nanorod arrays and their field emission properties. Nanotechnology, 2007, 18, 485307.	1.3	104
24	A comprehensive in vitro and in vivo study of ZnO nanoparticles toxicity. Journal of Materials Chemistry B, 2013, 1, 2985.	2.9	103
25	Highly sensitive hydrazine chemical sensor based on ZnO nanorods field-effect transistor. Chemical Communications, 2014, 50, 1890.	2.2	102
26	Nonenzymatic flexible field-effect transistor based glucose sensor fabricated using NiO quantum dots modified ZnO nanorods. Journal of Colloid and Interface Science, 2018, 512, 21-28.	5.0	99
27	Glucose-assisted synthesis of Cu2O shuriken-like nanostructures and their application as nonenzymatic glucose biosensors. Sensors and Actuators B: Chemical, 2014, 203, 471-476.	4.0	98
28	Photocatalytic degradation of methyl orange dye by ZnO nanoneedle under UV irradiation. Materials Letters, 2014, 136, 171-174.	1.3	95
29	Fabrication of a non-enzymatic glucose sensor field-effect transistor based on vertically-oriented ZnO nanorods modified with Fe 2 O 3. Electrochemistry Communications, 2017, 77, 107-111.	2.3	94
30	ZnO nanorods array based field-effect transistor biosensor for phosphate detection. Journal of Colloid and Interface Science, 2017, 498, 292-297.	5.0	93
31	ZnO Nanonails: Synthesis and Their Application as Glucose Biosensor. Journal of Nanoscience and Nanotechnology, 2008, 8, 3216-3221.	0.9	89
32	A comprehensive biosensor integrated with a ZnO nanorod FET array for selective detection of glucose, cholesterol and urea. Chemical Communications, 2015, 51, 11968-11971.	2.2	89
33	Nano-bitter gourd like structured CuO for enhanced hydrogen gas sensor application. International Journal of Hydrogen Energy, 2018, 43, 22705-22714.	3.8	85
34	Optical and electrical properties of ZnO nanowires grown on aluminium foil by non-catalytic thermal evaporation. Nanotechnology, 2007, 18, 175606.	1.3	82
35	Growth, properties and dye-sensitized solar cellsâ€“applications of ZnO nanorods grown by low-temperature solution process. Superlattices and Microstructures, 2009, 45, 529-534.	1.4	82
36	Effect of ZnO nanoparticles aggregation on the toxicity in RAW 264.7 murine macrophage. Journal of Hazardous Materials, 2014, 270, 110-117.	6.5	79

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37	MgO polyhedral nanocages and nanocrystals based glucose biosensor. Electrochemistry Communications, 2009, 11, 1353-1357.	2.3	77
38	Growth of Highly c-Axis-Oriented ZnO Nanorods on ZnO/Glass Substrate: Growth Mechanism, Structural, and Optical Properties. Journal of Physical Chemistry C, 2009, 113, 14715-14720.	1.5	77
39	High performance cholesterol sensor based on ZnO nanotubes grown on Si/Ag electrodes. Electrochemistry Communications, 2014, 38, 4-7.	2.3	77
40	Star-shaped ZnO nanostructures on silicon by cyclic feeding chemical vapor deposition. Journal of Crystal Growth, 2005, 277, 479-484.	0.7	76
41	Highly stable urea sensor based on ZnO nanorods directly grown on Ag/glass electrodes. Sensors and Actuators B: Chemical, 2014, 194, 290-295.	4.0	76
42	Air-stable, hole-conductor-free high photocurrent perovskite solar cells with CH3NH3PbI3â€“NiO nanoparticles composite. Nano Energy, 2016, 27, 535-544.	8.2	73
43	Structural properties and growth mechanism of flower-like ZnO structures obtained by simple solution method. Materials Research Bulletin, 2008, 43, 3483-3489.	2.7	71
44	Highly selective wide linear-range detecting glucose biosensors based on aspect-ratio controlled ZnO nanorods directly grown on electrodes. Sensors and Actuators B: Chemical, 2012, 174, 195-201.	4.0	69
45	Cation-size mismatch and interface stabilization for efficient NiOx-based inverted perovskite solar cells with 21.9% efficiency. Nano Energy, 2021, 88, 106285.	8.2	66
46	Fully-ambient-processed mesoscopic semitransparent perovskite solar cells by islands-structure-MAPbI3-xClx-NiO composite and Al2O3/NiO interface engineering. Nano Energy, 2018, 49, 59-66.	8.2	65
47	Solution Process Synthesis of High Aspect Ratio ZnO Nanorods on Electrode Surface for Sensitive Electrochemical Detection of Uric Acid. Scientific Reports, 2017, 7, 46475.	1.6	64
48	Enhanced anticancer potency using an acid-responsive ZnO-incorporated liposomal drug-delivery system. Nanoscale, 2015, 7, 4088-4096.	2.8	63
49	Inkjet Printed Fractal-Connected Electrodes with Silver Nanoparticle Ink. ACS Applied Materials & Interfaces, 2012, 4, 3300-3307.	4.0	62
50	Direct growth of GaN layer on carbon nanotube-graphene hybrid structure and its application for light emitting diodes. Scientific Reports, 2015, 5, 7747.	1.6	62
51	A Highly Sensitive Nonenzymatic Sensor Based on Fe₂O₃ Nanoparticle Coated ZnO Nanorods for Electrochemical Detection of Nitrite. Advanced Materials Interfaces, 2017, 4, 1700691.	1.9	61
52	Stability Enhancement in Perovskite Solar Cells with Perovskite/Silverâ€“Graphene Composites in the Active Layer. ACS Energy Letters, 2019, 4, 235-241.	8.8	61
53	Rapid synthesis and dye-sensitized solar cell applications of hexagonal-shaped ZnO nanorods. Electrochimica Acta, 2009, 54, 5358-5362.	2.6	60
54	Ammonium ion detection in solution using vertically grown ZnO nanorod based field-effect transistor. RSC Advances, 2016, 6, 54836-54840.	1.7	60

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55	Ambient-air-solution-processed efficient and highly stable perovskite solar cells based on CH3NH3PbI3â"xClx-NiO composite with Al2O3/NiO interfacial engineering. Nano Energy, 2017, 40, 408-417.	8.2	60
56	Ultrathin ternary metal oxide Bi2MoO6 nanosheets for high performance asymmetric supercapacitor and gas sensor applications. Applied Surface Science, 2021, 551, 149422.	3.1	60
57	A new purification method of single-wall carbon nanotubes using H2S and O2 mixture gas. Chemical Physics Letters, 2001, 344, 18-22.	1.2	59
58	Fabrication of sensitive non-enzymatic nitrite sensor using silver-reduced graphene oxide nanocomposite. Journal of Colloid and Interface Science, 2018, 516, 67-75.	5.0	59
59	Low-temperature sintering of highly conductive silver ink for flexible electronics. Journal of Materials Chemistry C, 2016, 4, 8522-8527.	2.7	58
60	Reviewâ€"Recent Advances in Nanostructured Graphitic Carbon Nitride as a Sensing Material for Heavy Metal Ions. Journal of the Electrochemical Society, 2020, 167, 037519.	1.3	57
61	Rapid methyl orange degradation using porous ZnO spheres photocatalyst. Journal of Photochemistry and Photobiology B: Biology, 2016, 161, 312-317.	1.7	56
62	High response and low concentration hydrogen gas sensing properties using hollow ZnO particles transformed from polystyrene@ZnO core-shell structures. International Journal of Hydrogen Energy, 2019, 44, 15677-15688.	3.8	56
63	Time-Dependent Control of Hole-Opening Degree of Porous ZnO Hollow Microspheres. Inorganic Chemistry, 2012, 51, 1104-1110.	1.9	55
64	Tailored lysozymeâ€"ZnO nanoparticle conjugates as nanoantibiotics. Chemical Communications, 2014, 50, 9298-9301.	2.2	55
65	Highly stable hydrazine chemical sensor based on vertically-aligned ZnO nanorods grown on electrode. Journal of Colloid and Interface Science, 2017, 494, 153-158.	5.0	55
66	Ultraviolet-Emitting ZnO Nanostructures on Steel Alloy Substrates: Growth and Properties. Crystal Growth and Design, 2008, 8, 2741-2747.	1.4	54
67	Electrical and gas sensing properties of ZnO nanorod arrays directly grown on a four-probe electrode system. Electrochemistry Communications, 2010, 12, 475-478.	2.3	54
68	Wide linear-range detecting high sensitivity cholesterol biosensors based on aspect-ratio controlled ZnO nanorods grown on silver electrodes. Sensors and Actuators B: Chemical, 2012, 169, 382-386.	4.0	54
69	SrTiO₃/Al₂O₃â€Graphene Electron Transport Layer for Highly Stable and Efficient Compositesâ€Based Perovskite Solar Cells with 20.6% Efficiency. Advanced Energy Materials, 2020, 10, 1903369.	10.2	53
70	ZnO Nanorods Based Hydrazine Sensors. Journal of Nanoscience and Nanotechnology, 2009, 9, 4686-4691.	0.9	52
71	A robust enzymeless glucose sensor based on CuO nanoseed modified electrodes. Dalton Transactions, 2015, 44, 12488-12492.	1.6	50
72	Suppression of Sn2+/Sn4+ oxidation in tin-based perovskite solar cells with graphene-tin quantum dots composites in active layer. Nano Energy, 2021, 90, 106495.	8.2	48

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73	Highly stable and Efficient Perovskite Solar Cells Based on FAMAâ€Perovskiteâ€Cu:NiO Composites with 20.7% Efficiency and 80.5% Fill Factor. Advanced Energy Materials, 2020, 10, 2000967.	10.2	47
74	Ultraviolet-emitting javelin-like ZnO nanorods by thermal evaporation: Growth mechanism, structural and optical properties. Chemical Physics Letters, 2007, 440, 110-115.	1.2	46
75	Parametric study of cost-effective synthesis of crystalline copper nanoparticles and their crystallographic characterization. Materials Chemistry and Physics, 2011, 125, 334-341.	2.0	46
76	Mesoporous ZnO nanoclusters as an ultra-active photocatalyst. Ceramics International, 2016, 42, 9519-9526.	2.3	46
77	Synthesis of ZnO nanowires on Si substrate by thermal evaporation method without catalyst: Structural and optical properties. Korean Journal of Chemical Engineering, 2006, 23, 499-504.	1.2	45
78	Development of Highly Sensitive and Selective Cholesterol Biosensor Based on Cholesterol Oxidase Co-Immobilized with Î±-Fe2O3 Micro-Pine Shaped Hierarchical Structures. Electrochimica Acta, 2014, 135, 396-403.	2.6	44
79	Outstanding Antibiofilm Features of Quanta-CuO Film on Glass Surface. ACS Applied Materials & Interfaces, 2016, 8, 15128-15137.	4.0	43
80	Nozzle-jet printed flexible field-effect transistor biosensor for high performance glucose detection. Journal of Colloid and Interface Science, 2017, 506, 188-196.	5.0	42
81	Highly conductive and dispersible graphene and its application in P3HT-based solar cells. Chemical Communications, 2014, 50, 8705.	2.2	41
82	Highly stable perovskite solar cells based on perovskite/NiO-graphene composites and NiO interface with 25.9ÂmA/cm2 photocurrent density and 20.8% efficiency. Nano Energy, 2021, 79, 105452.	8.2	41
83	Non-catalytic growth of high aspect-ratio ZnO nanowires by thermal evaporation. Solid State Communications, 2006, 139, 447-451.	0.9	40
84	Selection of non-alloyed ohmic contacts for ZnO nanostructure based devices. Nanotechnology, 2007, 18, 445710.	1.3	40
85	Growth Mechanism and Optical Properties of Aligned Hexagonal ZnO Nanoprisms Synthesized by Noncatalytic Thermal Evaporation. Inorganic Chemistry, 2008, 47, 4088-4094.	1.9	40
86	Copper oxide quantum dot ink for inkjet-driven digitally controlled high mobility field effect transistors. Journal of Materials Chemistry C, 2013, 1, 2112.	2.7	40
87	High performance field-effect transistors fabricated with laterally grown ZnO nanorods in solution. Nanotechnology, 2011, 22, 185310.	1.3	39
88	Preparation of a Highly Conductive Seed Layer for Calcium Sensor Fabrication with Enhanced Sensing Performance. ACS Sensors, 2018, 3, 772-778.	4.0	39
89	TiO2 Nanoparticles/Nanotubes for Efficient Light Harvesting in Perovskite Solar Cells. Nanomaterials, 2019, 9, 326.	1.9	39
90	Enhancement of power conversion efficiency with TiO2 nanoparticles/nanotubes-silver nanoparticles composites in dye-sensitized solar cells. Applied Surface Science, 2018, 429, 23-28.	3.1	38

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91	Fabrication and enhanced carbon monoxide gas sensing performance of p-CuO/n-TiO2 heterojunction device. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2021, 612, 125962.	2.3	38
92	Low-temperature growth and properties of flower-shaped - Ni(OH)2 and NiO structures composed of thin nanosheets networks. Superlattices and Microstructures, 2008, 44, 216-222.	1.4	37
93	Efficient bulk heterojunction hybrid solar cells with graphene-silver nanoparticles composite synthesized by microwave-assisted reduction. Nano Energy, 2016, 28, 179-187.	8.2	37
94	Hybrid interfacial ETL engineering using PCBM-SnS2 for High-Performance p-i-n structured planar perovskite solar cells. Chemical Engineering Journal, 2020, 397, 125504.	6.6	37
95	Two-step growth of ZnO films on silicon by atomic layer deposition. Korean Journal of Chemical Engineering, 2005, 22, 334-338.	1.2	36
96	Temperature-dependant non-catalytic growth of ultraviolet-emitting ZnO nanostructures on silicon substrate by thermal evaporation process. Journal of Alloys and Compounds, 2008, 463, 516-521.	2.8	36
97	Growth of high aspect ratio ZnO nanorods by solution process: Effect of polyethyleneimine. Journal of Solid State Chemistry, 2012, 189, 25-31.	1.4	36
98	Fully nozzle-jet printed non-enzymatic electrode for biosensing application. Journal of Colloid and Interface Science, 2018, 512, 480-488.	5.0	36
99	Fully-ambient-air and antisolvent-free-processed stable perovskite solar cells with perovskite-based composites and interface engineering. Nano Energy, 2019, 64, 103964.	8.2	35
100	Fabrication of a solution-gated transistor based on valinomycin modified iron oxide nanoparticles decorated zinc oxide nanorods for potassium detection. Journal of Colloid and Interface Science, 2018, 518, 277-283.	5.0	34
101	A unified global self-consistent model of a capacitively and inductively coupled plasma etching system. Korean Journal of Chemical Engineering, 2000, 17, 304-309.	1.2	33
102	Hexagonally patterned selective growth of well-aligned ZnO nanorod arrays. Journal of Alloys and Compounds, 2009, 484, 17-20.	2.8	33
103	Silver-ethanolamine-formate complex based transparent and stable ink: Electrical assessment with microwave plasma vs thermal sintering. Chemical Engineering Journal, 2016, 306, 796-805.	6.6	31
104	Seedless Pattern Growth of Quasi-Aligned ZnO Nanorod Arrays on Cover Glass Substrates in Solution. Nanoscale Research Letters, 2010, 5, 669-674.	3.1	30
105	Gas sensing properties of single crystalline ZnO nanowires grown byÂthermal evaporation technique. Current Applied Physics, 2013, 13, 1769-1773.	1.1	30
106	Green chemistry of glucose-capped ferromagnetic hcp-nickel nanoparticles and their reduced toxicity. RSC Advances, 2013, 3, 9698.	1.7	30
107	Nozzle-Jet-Printed Silver/Graphene Composite-Based Field-Effect Transistor Sensor for Phosphate Ion Detection. ACS Omega, 2019, 4, 8373-8380.	1.6	29
108	Cost-effective silver ink for printable and flexible electronics with robust mechanical performance. Chemical Engineering Journal, 2019, 373, 355-364.	6.6	29

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109	The synthesis of ZnO nanowires and their subsequent use in high-current field-effect transistors formed by dielectrophoresis alignment. Physica E: Low-Dimensional Systems and Nanostructures, 2008, 40, 866-872.	1.3	28
110	Development of highly-stable binder-free chemical sensor electrodes for p-nitroaniline detection. Journal of Colloid and Interface Science, 2017, 494, 300-306.	5.0	28
111	Synthesis of manganese oxide nanorods and its application for potassium ion sensing in water. Journal of Colloid and Interface Science, 2018, 516, 364-370.	5.0	28
112	A critical review of materials innovation and interface stabilization for efficient and stable perovskite photovoltaics. Nano Energy, 2021, 87, 106141.	8.2	28
113	Thermoelectric properties of SrTiO3 nano-particles dispersed indium selenide bulk composites. Applied Physics Letters, 2013, 102, .	1.5	27
114	Optimization of the distance between source and substrate for device-grade SnS films grown by the thermal evaporation technique. Journal of Physics Condensed Matter, 2007, 19, 306003.	0.7	25
115	Robust and Multifunctional Nanosheath for Chemical and Biological Nanodevices. Nano Letters, 2012, 12, 1891-1897.	4.5	24
116	Synthesis of ZnO Nanoparticles and Their Ink-Jetting Behavior. Journal of Nanoscience and Nanotechnology, 2012, 12, 2380-2386.	0.9	23
117	Spruce branched Î±-Fe2O3 nanostructures as potential scaffolds for a highly sensitive and selective glucose biosensor. New Journal of Chemistry, 2014, 38, 5873-5879.	1.4	23
118	Effect of rapid thermal annealing on the structural and electrical properties of TiO2 thin films prepared by plasma enhanced CVD. Korean Journal of Chemical Engineering, 1998, 15, 217-222.	1.2	22
119	High performance chemical sensor with field-effect transistors array for selective detection of multiple ions. Chemical Engineering Journal, 2021, 417, 128064.	6.6	22
120	Growth and optical properties of large-quantity single-crystalline ZnO rods by thermal evaporation. Journal Physics D: Applied Physics, 2007, 40, 3478-3484.	1.3	21
121	Large-quantity synthesis of ZnO hollow objects by thermal evaporation: Growth mechanism, structural and optical properties. Applied Surface Science, 2008, 254, 3339-3346.	3.1	21
122	Influence of aqueous hexamethylenetetramine on the morphology of self-assembled SnO2 nanocrystals. Materials Research Bulletin, 2011, 46, 609-614.	2.7	21
123	Structural evolution of SnO2 nanostructure from coreâ€“shell faceted pyramids to nanorods and its gas-sensing properties. Journal of Crystal Growth, 2011, 314, 171-179.	0.7	20
124	Front-illuminated dye-sensitized solar cells with Ag nanoparticle-functionalized freestanding TiO 2 nanotube arrays. Chemical Physics Letters, 2014, 614, 78-81.	1.2	20
125	Recent advances in graphene monolayers growth and their biological applications: A review. Advances in Colloid and Interface Science, 2020, 283, 102225.	7.0	20
126	Growth and formation mechanism of sea urchin-like ZnO nanostructures on Si. Korean Journal of Chemical Engineering, 2005, 22, 489-493.	1.2	19

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127	Direct fabrication of ZnO nanorods array on-chip system in solution and their electrical properties. Electrochemistry Communications, 2012, 18, 88-91.	2.3	19
128	Etch-free selective area growth of well-aligned ZnO nanorod arrays by economical polymer mask for large-area solar cell applications. Solar Energy Materials and Solar Cells, 2012, 98, 476-481.	3.0	19
129	Fabrication of a robust and highly sensitive nitrate biosensor based on directly grown zinc oxide nanorods on a silver electrode. New Journal of Chemistry, 2017, 41, 10992-10997.	1.4	19
130	Synthesis and characterization of triphenylamine-3-hexylthiophene oligomer hybrids: A triphenylamine core carrying three terthiophene branches and triphenylamine end-capped quaterthiophene. Synthetic Metals, 2008, 158, 150-156.	2.1	18
131	Metal-ion doped p-type TiO2 thin films and their applications for heterojunction devices. Journal of Alloys and Compounds, 2013, 553, 188-193.	2.8	18
132	Heat transfer behavior of high-power light-emitting diode packages. Korean Journal of Chemical Engineering, 2007, 24, 197-203.	1.2	17
133	Single ZnO Nanobelt Based Field Effect Transistors (FETs). Journal of Nanoscience and Nanotechnology, 2009, 9, 5745-5751.	0.9	17
134	Hierarchically assembled ZnO nanosheets microspheres for enhanced glucose sensing performances. Ceramics International, 2016, 42, 13464-13469.	2.3	17
135	Synthesis of ZnO nanowires on steel alloy substrate by thermal evaporation: Growth mechanism and structural and optical properties. Korean Journal of Chemical Engineering, 2006, 23, 860-865.	1.2	16
136	Impact of chemical treatment on the surface, structure, optical and electrical properties of SnS thin films. Applied Surface Science, 2013, 268, 317-322.	3.1	16
137	Multi-synergetic ZnO platform for high performance cancer therapy. Chemical Communications, 2015, 51, 2585-2588.	2.2	16
138	Formation of hierarchical ZnO nanostructures â€œnanocombsâ€• Growth mechanism, structural and optical properties. Current Applied Physics, 2008, 8, 793-797.	1.1	15
139	Low temperature preparation of CuO nanospheres and urchin-shaped structures via hydrothermal route. Journal of Alloys and Compounds, 2014, 609, 211-214.	2.8	14
140	Roles of Longâ€Chain Alkylamine Ligands in Tripleâ€Halide Perovskites for Efficient NiO_xâ€Based Inverted Perovskite Solar Cells. Solar Rrl, 2022, 6, .	3.1	14
141	Evolution of ZnO nanostructures by non-catalytic growth process on steel alloy substrate: Structural and optical properties. Current Applied Physics, 2008, 8, 798-802.	1.1	13
142	Vertical alignment of liquid crystals with zinc oxide nanorods. Nanotechnology, 2013, 24, 345702.	1.3	13
143	Cholesterol biosensing based on highly immobilized ChOx on ZnO hollow nanospheres. RSC Advances, 2014, 4, 46049-46053.	1.7	13
144	Preparation and characterization of TiO2 thin films by PECVD on Si substrate. Korean Journal of Chemical Engineering, 1996, 13, 473-477.	1.2	11

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145	Improved Energy Conversion Efficiency of Dye-sensitized Solar Cells Fabricated using Open-ended TiO₂Nanotube Arrays with Scattering Layer. Bulletin of the Korean Chemical Society, 2014, 35, 1165-1168.	1.0	11
146	Growth of ZnO nanoneedles on silicon substrate by cyclic feeding chemical vapor deposition: Structural and optical properties. Korean Journal of Chemical Engineering, 2007, 24, 1084-1088.	1.2	10
147	Solution processed Ni-doped TiO2 p-type channel in field effect transistor assembly with <10â€‚nm thin Ba0.5Sr0.5TiO3 dielectric layer. Applied Physics Letters, 2011, 98, 202102.	1.5	10
148	Heat transfer between wafer and electrode in a high density plasma etcher. Korean Journal of Chemical Engineering, 2002, 19, 347-350.	1.2	9
149	Inductively coupled plasma etching of Ta, Co, Fe, NiFe, NiFeCo, and MnNi with Cl2/Ar discharges. Korean Journal of Chemical Engineering, 2004, 21, 1235-1239.	1.2	9
150	Low-Temperature Growth and Properties of CuO Structures Prepared by Aqueous Solution Process. Journal of Nanoscience and Nanotechnology, 2008, 8, 5511-5515.	0.9	9
151	Interfacial and electrical properties of solution processed p-TiO2 in heterojunction devices. Electrochemistry Communications, 2011, 13, 350-354.	2.3	9
152	Excellent enhancement in the device performance of nitrogen plasma treated ZnO nanorods based diodes. Nano Convergence, 2014, 1, .	6.3	9
153	Predominantly enhanced catalytic activities of surface protected ZnO nanorods integrated stainless-steel mesh structures: A synergistic impact on oxygen evolution reaction process. Chemical Engineering Journal, 2022, 429, 132360.	6.6	9
154	Parametric Study of Nozzle-Jet Printing for Directly Drawn ZnO Field-Effect Transistors. Science of Advanced Materials, 2016, 8, 148-155.	0.1	9
155	Preparation of PbTiO3 thin films by plasma enhanced MOCVD and the effect of rapid thermal annealing. Journal of Electronic Materials, 1997, 26, 1394-1400.	1.0	7
156	High yield purification of carbon nanotubes with H2S-O2 mixture. Korean Journal of Chemical Engineering, 2002, 19, 519-523.	1.2	7
157	Role of the Vapor Composition in the Evolution from 1D to 2D ZnO Nanostructures. Journal of Physical Chemistry C, 2008, 112, 17926-17930.	1.5	7
158	Nanocrystalline Thin Films of Cu, CuO and Cu₂O Synthesized by Electroless Deposition. Science of Advanced Materials, 2012, 4, 23-28.	0.1	7
159	Solution-Processed Solid-State Solar Cells of ZnO/CuO Core/Shell Nanrods. Science of Advanced Materials, 2012, 4, 978-984.	0.1	7
160	Structural and optical properties of InGaN/GaN triangular-shape quantum wells with different threading dislocation densities. Korean Journal of Chemical Engineering, 2004, 21, 292-295.	1.2	6
161	Lateral growth of ZnO nanorod arrays in polyhedral structures for high on-current field-effect transistors. Chemical Communications, 2014, 50, 10502.	2.2	6
162	ZnO hybrid photovoltaics with variable side-chain lengths of thienothiophene polymer. Thin Solid Films, 2015, 576, 38-41.	0.8	6

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163	Effect of Annealing Atmosphere on the Optical and Electrical Properties of Al-Doped ZnO Films and ZnO Nanorods Grown by Solution Process. Science of Advanced Materials, 2016, 8, 1523-1529.	0.1	6
164	Dry etching of SrBi2Ta2O9: Comparison of inductively coupled plasma chemistries. Korean Journal of Chemical Engineering, 2002, 19, 486-490.	1.2	5
165	Stoichiometry-controlled growth of BaxSr1â^'xTiO3 thin films and their electrical behavior in heterojunction assemblies. RSC Advances, 2012, 2, 10255.	1.7	5
166	Low-Temperature Growth of Aligned ZnO Nanorods: Effect of Annealing Gases on the Structural and Optical Properties. Journal of Nanoscience and Nanotechnology, 2014, 14, 4564-4569.	0.9	5
167	Effects of growth variables on structural and optical properties of InGaN/GaN triangular-shaped quantum wells. Korean Journal of Chemical Engineering, 2005, 22, 298-302.	1.2	4
168	Single ZnO Nanowire Based High-Performance Field Effect Transistors (FETs). Journal of Nanoscience and Nanotechnology, 2009, 9, 5839-5844.	0.9	4
169	Heterojunction bipolar assembly with Cr Ti1â^'O2 thin films and vertically aligned ZnO nanorods. Materials Chemistry and Physics, 2010, 124, 704-708.	2.0	4
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