Sheng-Joue Young

List of Publications by Year
in descending order

133	2,847	172386	233338
papers	citations	29 h-index	45 g-index

138	138	138	2636
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Reviewâ€"Recent Advances in Carbon Nanomaterials as Electrochemical Biosensors. Journal of the Electrochemical Society, 2020, 167, 037555.	1.3	272
2	Reviewâ€"Influence of Processing Parameters to Control Morphology and Optical Properties of Sol-Gel Synthesized ZnO Nanoparticles. ECS Journal of Solid State Science and Technology, 2021, 10, 023002.	0.9	141
3	Reviewâ€"Growth of Al-, Ga-, and In-Doped ZnO Nanostructures via a Low-Temperature Process and Their Application to Field Emission Devices and Ultraviolet Photosensors. Journal of the Electrochemical Society, 2017, 164, B3013-B3028.	1.3	90
4	Flexible Ultraviolet Photodetectors Based on One-Dimensional Gallium-Doped Zinc Oxide Nanostructures. ACS Applied Electronic Materials, 2020, 2, 3522-3529.	2.0	82
5	Buckling characterization of vertical ZnO nanowires using nanoindentation. Applied Physics Letters, 2007, 90, 033109.	1.5	80
6	Multi-Walled Carbon Nanotubes Decorated with Silver Nanoparticles for Acetone Gas Sensing at Room Temperature. Journal of the Electrochemical Society, 2020, 167, 167519.	1.3	75
7	ZnO Branched Nanowires and the p-CuO/n-ZnO Heterojunction Nanostructured Photodetector. IEEE Nanotechnology Magazine, 2013, 12, 263-269.	1.1	62
8	ZnO ultraviolet photodiodes with Pd contact electrodes. Acta Materialia, 2007, 55, 329-333.	3.8	55
9	High Response of Ultraviolet Photodetector Based on Al-Doped ZnO Nanosheet Structures. IEEE Journal of Selected Topics in Quantum Electronics, 2017, 23, 1-5.	1.9	49
10	CuO Nanowire-Based Humidity Sensor. IEEE Sensors Journal, 2012, 12, 1884-1888.	2.4	44
11	CO₂Gas Sensors Based on Carbon Nanotube Thin Films Using a Simple Transfer Method on Flexible Substrate. IEEE Sensors Journal, 2015, 15, 7017-7020.	2.4	41
12	Low-frequency noise properties of MgZnO nanorod ultraviolet photodetectors with and without UV illumination. Sensors and Actuators A: Physical, 2018, 269, 363-368.	2.0	40
13	Fabrication of Ultraviolet Photodetectors Based on Fe-Doped ZnO Nanorod Structures. Sensors, 2020, 20, 3861.	2.1	40
14	Fabrication and Characterization of Ni-Doped ZnO Nanorod Arrays for UV Photodetector Application. Journal of the Electrochemical Society, 2020, 167, 067506.	1.3	40
15	Field-Emission and Photoelectrical Characteristics of Gaâ€"ZnO Nanorods Photodetector. IEEE Transactions on Electron Devices, 2013, 60, 1905-1910.	1.6	39
16	Characteristics of Gas Sensors Based on Co-Doped ZnO Nanorod Arrays. Journal of the Electrochemical Society, 2020, 167, 117503.	1.3	38
17	Carbon Nanotubes With Adsorbed Au for Sensing Gas. IEEE Sensors Journal, 2013, 13, 2423-2427.	2.4	36
18	Bending effects of ZnO nanorod metalâ€"semiconductorâ€"metal photodetectors on flexible polyimide substrate. Nanoscale Research Letters, 2012, 7, 214.	3.1	34

#	Article	IF	Citations
19	Adsorption sensitivity of Ag-decorated carbon nanotubes toward gas-phase compounds. Sensors and Actuators B: Chemical, 2013, 188, 1230-1234.	4.0	34
20	Visible-Blind Photodetectors With Mg-Doped ZnO Nanorods. IEEE Photonics Technology Letters, 2014, 26, 645-648.	1.3	34
21	Ethanol gas sensors based on multi-wall carbon nanotubes on oxidized Si substrate. Microsystem Technologies, 2018, 24, 55-58.	1.2	34
22	Improving the Performance of pH Sensors With One-Dimensional ZnO Nanostructures. IEEE Sensors Journal, 2019, 19, 10972-10976.	2.4	33
23	Improving Field Electron Emission Properties of ZnO Nanosheets with Ag Nanoparticles Adsorbed by Photochemical Method. ACS Omega, 2018, 3, 8135-8140.	1.6	32
24	Hydrothermal Synthesis and Improved CHâ‚ƒOH-Sensing Performance of ZnO Nanorods With Adsorbed Au NPs. IEEE Transactions on Electron Devices, 2021, 68, 1886-1891.	1.6	32
25	ZnO-Based Ultraviolet Photodetectors With Novel Nanosheet Structures. IEEE Nanotechnology Magazine, 2014, 13, 238-244.	1.1	31
26	Ethanol Gas Sensors Composed of Carbon Nanotubes with Au Nanoparticles Adsorbed onto a Flexible PI Substrate. ECS Journal of Solid State Science and Technology, 2017, 6, M130-M132.	0.9	31
27	Ga-Doped ZnO Nanosheet Structure-Based Ultraviolet Photodetector by Low-Temperature Aqueous Solution Method. IEEE Transactions on Electron Devices, 2015, 62, 2924-2927.	1.6	30
28	Ammonia gas sensors with Au-decorated carbon nanotubes. Microsystem Technologies, 2018, 24, 4207-4210.	1.2	30
29	Platinum Nanoparticle-Decorated ZnO Nanorods Improved the Performance of Methanol Gas Sensor. Journal of the Electrochemical Society, 2020, 167, 147508.	1.3	30
30	Improvement of the UV-Sensing Performance of Ga-Doped ZnO Nanostructures via a Wet Chemical Solution at Room Temperature. ECS Journal of Solid State Science and Technology, 2021, 10, 127001.	0.9	30
31	Ultraviolet photodetectors with Ga-doped ZnO nanosheets structure. Microelectronic Engineering, 2015, 148, 14-16.	1.1	29
32	Carbon Nanotube Thin Films Functionalized via Loading of Au Nanoclusters for Flexible Gas Sensors Devices. IEEE Transactions on Electron Devices, 2016, 63, 476-480.	1.6	29
33	Wireless Zinc Oxide Based pH Sensor System. Journal of the Electrochemical Society, 2019, 166, B3047-B3050.	1.3	29
34	Characteristic Improvements of ZnO-Based Metalâ€“Semiconductorâ€“Metal Photodetector on Flexible Substrate with ZnO Cap Layer. Japanese Journal of Applied Physics, 2010, 49, 052201.	0.8	27
35	Fabrication and Characterization of UV Photodetectors with Cu-Doped ZnO Nanorod Arrays. Journal of the Electrochemical Society, 2020, 167, 027522.	1.3	27
36	Improved UV-Sensing of Au-Decorated ZnO Nanostructure MSM Photodetectors. IEEE Sensors Journal, 2022, 22, 5644-5650.	2.4	27

#	Article	IF	Citations
37	Semitransparent Field-Effect Transistors Based on ZnO Nanowire Networks. IEEE Electron Device Letters, 2011, 32, 533-535.	2.2	26
38	Low-Frequency Noise Characteristics of ZnO Nanorods Schottky Barrier Photodetectors. IEEE Sensors Journal, 2013, 13, 2115-2119.	2.4	26
39	UV Enhanced Field Emission Performance of Mg-Doped ZnO Nanorods. IEEE Transactions on Electron Devices, 2014, 61, 1541-1545.	1.6	26
40	Sensing Performance of Carbon Dioxide Gas Sensors with Carbon Nanotubes on Plastic Substrate. ECS Journal of Solid State Science and Technology, 2017, 6, M72-M74.	0.9	26
41	Transparent ZnO Nanowire-Network Ultraviolet Photosensor. IEEE Transactions on Electron Devices, 2011, 58, 2036-2040.	1.6	24
42	Low-Frequency Noise Characteristics of In-Doped ZnO Ultraviolet Photodetectors. IEEE Photonics Technology Letters, 2013, 25, 2043-2046.	1.3	24
43	UV Enhanced Emission Performance of Low Temperature Grown Ga-Doped ZnO Nanorods. IEEE Photonics Technology Letters, 2014, 26, 66-69.	1.3	24
44	Noise Properties of Mg-Doped ZnO Nanorods Visible-Blind Photosensors. IEEE Journal of Selected Topics in Quantum Electronics, 2015, 21, 223-227.	1.9	24
45	Enhancing pH Sensors Performance of ZnO Nanorods With Au Nanoparticles Adsorption. IEEE Sensors Journal, 2021, 21, 13068-13073.	2.4	23
46	Ultraviolet Photodetectors With 2-D Indium-Doped ZnO Nanostructures. IEEE Transactions on Electron Devices, 2016, , 1-5.	1.6	22
47	Synthesis of Ni-Doped ZnO Nanorod Arrays by Chemical Bath Deposition and Their Application to Nanogenerators. Energies, 2020, 13, 2731.	1.6	22
48	Investigation of a Highly Sensitive Au Nanoparticle-Modified ZnO Nanorod Humidity Sensor. IEEE Transactions on Electron Devices, 2021, 68, 775-779.	1.6	21
49	ZnO Nanorods Adsorbed with Photochemical Ag Nanoparticles for IOT and Field Electron Emission Application. Journal of the Electrochemical Society, 2018, 165, B3043-B3045.	1.3	20
50	Improving ZnO Nanorod Humidity Sensors with Pt Nanoparticle Adsorption. ECS Journal of Solid State Science and Technology, 2021, 10, 037003.	0.9	20
51	Effects of crystallization on the optical properties of ZnO nano-pillar thin films by sol-gel method. Current Applied Physics, 2011, 11, 1243-1248.	1.1	19
52	Self-Powered ZnO Nanorod Ultraviolet Photodetector Integrated with Dye-Sensitised Solar Cell. Journal of the Electrochemical Society, 2019, 166, B1034-B1037.	1.3	19
53	Improved Field Emission Properties of Ag-Decorated Multi-Walled Carbon Nanotubes. IEEE Photonics Technology Letters, 2013, 25, 1017-1019.	1.3	18
54	Field emission properties of ZnO nanosheets grown on a Si substrate. Microelectronic Engineering, 2015, 148, 40-43.	1.1	18

#	Article	IF	Citations
55	Acetone gas sensors composed of carbon nanotubes with adsorbed Au nanoparticles on plastic substrate. Microsystem Technologies, 2018, 24, 3973-3976.	1.2	18
56	Effect of Oxygen Plasma Treatment on Characteristics of TiO$_{2}$ Photodetectors. IEEE Sensors Journal, 2011, 11, 3031-3035.	2.4	17
57	Photoelectrical and Noise Characteristics of ZnO Nanowire Networks Photosensor. IEEE Sensors Journal, 2011, 11, 1173-1177.	2.4	16
58	Noise Properties of Fe-ZnO Nanorod Ultraviolet Photodetectors. IEEE Photonics Technology Letters, 2013, 25, 2089-2092.	1.3	16
59	Synthesis and optoelectronic properties of Ga-doped ZnO nanorods by hydrothermal method. Microsystem Technologies, 2018, 24, 103-107.	1.2	16
60	A Green Strategy for Developing a Self-Healing Gelatin Resistive Memory Device. ACS Applied Polymer Materials, 2020, 2, 5318-5326.	2.0	16
61	Photoconductive Gain of Vertical ZnO Nanorods on Flexible Polyimide Substrate by Low-Temperature Process. IEEE Sensors Journal, 2011, 11, 3457-3461.	2.4	15
62	Ultraviolet photodetectors based on MgZnO thin films. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2011, 29, 03A118.	0.9	15
63	Enhanced Field Emission Properties of Ga-Doped ZnO Nanosheets by using an Aqueous Solution at Room Temperature. IEEE Transactions on Electron Devices, 2014, 61, 4192-4196.	1.6	15
64	Synthesis of Ga-Doped ZnO Nanorods by Hydrothermal Method and Their Application to Ultraviolet Photodetector. Inventions, 2016, 1, 3.	1.3	15
65	Optoelectronic Characteristics of UV Photodetector Based on ZnO Nanopillar Thin Films Prepared by Sol-Gel Method. Materials Transactions, 2009, 50, 922-925.	0.4	14
66	Photoconductive Gain and Noise Properties of ZnO Nanorods Schottky Barrier Photodiodes. IEEE Journal of Selected Topics in Quantum Electronics, 2014, 20, 96-99.	1.9	14
67	Electron Field Emission Enhancement Based on Pt-Adsorbed ZnO Nanorods With UV Irradiation. IEEE Nanotechnology Magazine, 2018, 17, 1063-1068.	1.1	14
68	MgZnO Nanorod Homojunction Photodetectors for Solar-Blind Detection. Electrochemical and Solid-State Letters, 2011, 14, J55.	2.2	13
69	High-Efficient Ultraviolet Photodetectors Based on TiO₂/Ag/TiO₂ Multilayer Films. IEEE Sensors Journal, 2015, 15, 762-765.	2.4	13
70	Field emission properties of Al-doped ZnO nanosheet based on field emitter device with UV exposure. RSC Advances, 2017, 7, 14219-14223.	1.7	13
71	ZnO Nanorod Humidity Sensor and Dye-Sensitized Solar Cells as a Self-Powered Device. IEEE Transactions on Electron Devices, 2019, 66, 3978-3981.	1.6	13
72	UV Illumination and Au Nanoparticles Enhanced ZnO Nanorods Field Electron Emission Device. IEEE Transactions on Electron Devices, 2020, 67, 304-308.	1.6	13

#	Article	IF	Citations
73	UV-Enhanced Field-Emission Performances of Pd-Adsorbed ZnO Nanorods through Photochemical Synthesis. ECS Journal of Solid State Science and Technology, 2021, 10, 017001.	0.9	13
74	Improved pH-Sensing Characteristics by Pt Nanoparticle-Decorated ZnO Nanostructures. ECS Journal of Solid State Science and Technology, 2021, 10, 067001.	0.9	13
75	ZnO metalâ€“semiconductorâ€“metal ultraviolet photodetectors with Iridium contact electrodes. IET Optoelectronics, 2007, 1, 135.	1.8	12
76	Improvement of (11-22) GaN on m-Plane Sapphire With CrN Interlayer by Using Molecular Beam Epitaxy. Journal of the Electrochemical Society, 2011, 158, H983.	1.3	12
77	UV Enhanced Indium-Doped ZnO Nanorod Field Emitter. IEEE Transactions on Electron Devices, 2013, 60, 3901-3906.	1.6	12
78	UV Enhanced Field Emission Properties of Ga-Doped ZnO Nanosheets. IEEE Transactions on Electron Devices, 2015, 62, 2033-2037.	1.6	12
79	High temperature characteristics of ZnO-based MOS-FETs with a photochemical vapor deposition SiO2 gate dielectric. Journal of Physics and Chemistry of Solids, 2011, 72, 147-149.	1.9	11
80	Growth of gallium nitride on silicon by molecular beam epitaxy incorporating a chromium nitride interlayer. Journal of Alloys and Compounds, 2012, 511, 1-4.	2.8	11
81	Enhanced Field Emission Properties of Two-Dimensional ZnO Nanosheets Under UV illumination. IEEE Journal of Selected Topics in Quantum Electronics, 2015, 21, 427-430.	1.9	11
82	UV Enhanced Field Emission Properties of ZnO Nanosheets With Different NaOH Concentration. IEEE Nanotechnology Magazine, 2015, 14, 776-781.	1.1	11
83	Metal and Carbon Filaments in Biomemory Devices through Controlling the Al/Apple Pectin Interface. ACS Applied Electronic Materials, 2020, 2, 2798-2805.	2.0	11
84	Low-Frequency Noise Characteristics of GaN Schottky Barrier Photodetectors Prepared With Nickel Annealing. IEEE Sensors Journal, 2012, 12, 2824-2829.	2.4	10
85	Enhanced Field Emitter Base on Indium-Doped ZnO Nanostructures by Aqueous Solution. ECS Journal of Solid State Science and Technology, 2016, 5, R203-R205.	0.9	10
86	Characteristics of Field Emitters on the Basis of Pd-Adsorbed ZnO Nanostructures by Photochemical Method. ACS Applied Nano Materials, 2021, 4, 2515-2521.	2.4	10
87	Characteristics of Field-Emission Emitters Based On Graphene Decorated ZnO Nanostructures. IEEE Journal of the Electron Devices Society, 2021, 9, 1076-1083.	1.2	10
88	GaN Schottky Barrier Photodetectors. IEEE Sensors Journal, 2010, 10, 1609-1614.	2.4	9
89	Photoconductive Gain and Low-Frequency Noise Characteristics of ZnO Nanorods. Electrochemical and Solid-State Letters, 2011, 14, J13.	2.2	9
90	Nanoindentation of vertical ZnO nanowires. Physica E: Low-Dimensional Systems and Nanostructures, 2007, 39, 240-243.	1.3	8

#	Article	IF	Citations
91	Novel Ga-ZnO Nanosheet Structures Applied in Ultraviolet Photodetectors. IEEE Photonics Technology Letters, 2014, 26, 1317-1320.	1.3	8
92	GaN Metalâ€“Semiconductorâ€“Metal Photodetectors Prepared on Nanorod Template. IEEE Photonics Technology Letters, 2010, 22, 625-627.	1.3	7
93	Photosensitivity of Field-Effect Transistors Based on ZnO Nanowire Networks. IEEE Electron Device Letters, 2011, 32, 339-341.	2.2	7
94	Noise Properties of Low-Temperature-Grown Co-Doped ZnO Nanorods as Ultraviolet Photodetectors. IEEE Journal of Selected Topics in Quantum Electronics, 2014, 20, 89-95.	1.9	7
95	Fabrication and Characterization of a-IGZO Thin-Film Transistors With and Without Passivation Layers. ECS Journal of Solid State Science and Technology, 2021, 10, 027002.	0.9	7
96	MOVPE-Grown Ultrasmall Self-Organized InGaN Nanotips. IEEE Nanotechnology Magazine, 2008, 7, 1-4.	1.1	6
97	High On/Off Ratio Field-Effect Transistor Based on Semiconducting Single-Walled Carbon Nanotubes by Selective Separation. ECS Journal of Solid State Science and Technology, 2017, 6, M1-M4.	0.9	6
98	UV-Enhanced 2-D Nanostructured ZnO Field Emitter With Adsorbed Pt Nanoparticles. IEEE Electron Device Letters, 2018, 39, 1932-1935.	2.2	6
99	Carbon nanotubes with adsorbed Au nanoparticles for sensing propanone gas. Microsystem Technologies, 2022, 28, 209-212.	1.2	6
100	Aluminum-doped zinc oxide nanorods and methyl alcohol gas sensor application. Microsystem Technologies, 2022, 28, 377-382.	1.2	6
101	Pd Nanoparticle Adsorption ZnO Nanorods for Enhancing Photodetector UV-Sensing Performance. IEEE Journal of the Electron Devices Society, 2021, 9, 265-270.	1.2	6
102	Preparation and Characteristics of Flexible Nanorod-Based Photodetectors. Journal of Nanoelectronics and Optoelectronics, 2010, 5, 300-303.	0.1	6
103	Thin film transistors based on TiO2 fabricated by using radio-frequency magnetron sputtering. Journal of Physics and Chemistry of Solids, 2010, 71, 1760-1762.	1.9	5
104	Characteristics of III-nitride photodiodes with self-assembled quantum dots. Materials Letters, 2007, 61, 1619-1621.	1.3	4
105	Effects of Ag nanoshape and AgGa phase in Agâ€“Si nanostructure using 2-step etching process. Journal of Alloys and Compounds, 2011, 509, 758-763.	2.8	4
106	Optical and Structural Properties of Ga-Doped ZnO Nanorods. Journal of Nanoscience and Nanotechnology, 2013, 13, 8320-8324.	0.9	4
107	Enhanced Carbon Nanotube Field Emitter With Adsorbed Au Nanoparticles. IEEE Transactions on Electron Devices, 2015, 62, 4301-4304.	1.6	4
108	UV Enhanced Field Emission Properties of ZnO Nanosheets Grown on a Si Substrate. IEEE Photonics Technology Letters, 2016, 28, 63-66.	1.3	4

#	Article	IF	Citations
109	Characteristics of Metalâ€“Semiconductorâ€“Metal Ultraviolet Photodetectors Based on Pure ZnO/Amorphous IGZO Thin-Film Structures. Journal of Nanomaterials, 2021, 2021, 1-6.	1.5	4
110	Advanced Nanomaterials for Applications in Photonic and Sensor Devices. Journal of Nanomaterials, 2022, 2022, 1-2.	1.5	4
111	FABRICATION AND CHARACTERISTICS OF SILICON MICRO-TIP ARRAYS. International Journal of Modern Physics B, 2010, 24, 5601-5611.	1.0	3
112	Ir/n-ZnO Schottky Barrier Ultraviolet Photodiodes. IEEE Sensors Journal, 2011, 11, 1129-1133.	2.4	3
113	Fabrication and Characterization of Aluminum-Doped ZnO Nanosheets for Field Emitter Application. ECS Journal of Solid State Science and Technology, 2017, 6, P243-P246.	0.9	3
114	Fabrication of Silicon Dioxide by Photo-Chemical Vapor Deposition to Decrease Detector Current of ZnO Ultraviolet Photodetectors. ACS Omega, 2020, 5, 27566-27571.	1.6	3
115	ZnSe/ZnSeTe Superlattice Nanotips. Nanoscale Research Letters, 2010, 5, 930-934.	3.1	2
116	Magnetization Processes of (La 0.7 Pb 0.3 MnO 3) 1â^'x (SiO 2) x Composites. Journal of Superconductivity and Novel Magnetism, 2010, 23, 953-956.	0.8	2
117	ZnCdSe nanowires grown by molecular beam epitaxy. Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics, 2010, 28, 613-616.	0.6	2
118	Growth of InN nanorods prepared by plasma-assisted molecular beam epitaxy with varying Cr thicknesses. Journal of Crystal Growth, 2012, 347, 113-118.	0.7	2
119	Applications of Advanced Nanomaterials to Microelectronic and Photonic Devices. Journal of Nanomaterials, 2015, 2015, 1-1.	1.5	2
120	Characteristics of photodetectors with TiO<inf>2</inf> nanorod arrays. , 2011, , .		1
121	Growth and Characterization of ZnSe/CdSe Multiquantum Disks. IEEE Journal of Selected Topics in Quantum Electronics, 2011, 17, 779-784.	1.9	1
122	InN nanorods prepared with CrN nanoislands by plasma-assisted molecular beam epitaxy. Nanoscale Research Letters, 2011, 6, 442.	3.1	1
123	Nanomaterials for Sensor Device Applications. Journal of Nanomaterials, 2014, 2014, 1-1.	1.5	1
124	Combined ZnO nanorod hygrometers and DSSCs for IOTs application. , 2021, , .		1
125	Two-Step Etching Mechanism of Ag-Si Nanostructure with Various Ag Nanoshape Depositions. Materials Transactions, 2009, 50, 1992-1997.	0.4	0
126	ZnSe/ZnCdSeTe Superlattice Nanotips. IEEE Nanotechnology Magazine, 2011, 10, 682-687.	1.1	0

#	Article	IF	Citations
127	Effect of Nickel Annealing on GaN-Based Photodetectors. Electrochemical and Solid-State Letters, 2012, 15, H111.	2.2	0
128	The study of ultraviolet photosensors with IZO nanosheets. , 2016, , .		0
129	Improving FET Properties of Semiconducting Single-Walled Carbon Nanotubes by Selective Extraction. IEEE Transactions on Electron Devices, 2016, 63, 1749-1753.	1.6	0
130	Enhanced ZnO Nanorods Field Emitter with Adsorbed Silver Nanoparticles. ECS Meeting Abstracts, 2016, , .	0.0	0
131	Ga Doped ZnO Nanorods Ultraviolet Photodetectors on Flexible Substrate. ECS Meeting Abstracts, 2018, , .	0.0	0
132	Ag-Decorated Multi-Wall Carbon Nanotubes for Acetone Gas Sensing. ECS Meeting Abstracts, 2018, , .	0.0	0
133	Pt nanoparticles deposited on ZnO Nanorods based on Field emitter. , 2022, , .		0