Alan Man Ching Ng

List of Publications by Citations

107 papers	5,297 citations	33 h-index	71 g-index
132 ext. papers	6,025 ext. citations	6 avg, IF	5.67 L-index

#	Paper	IF	Citations
107	ZnO nanostructures for optoelectronics: Material properties and device applications. *Progress in Quantum Electronics*, **2010**, 34, 191-259	9.1	788
106	ZnO nanostructures: growth, properties and applications. *Journal of Materials Chemistry*, **2012**, 22, 6526		460
105	Mechanisms of antibacterial activity of MgO: non-ROS mediated toxicity of MgO nanoparticles towards Escherichia coli. *Small*, **2014**, 10, 1171-83	11	284
104	Toxicity of metal oxide nanoparticles: mechanisms, characterization, and avoiding experimental artefacts. *Small*, **2015**, 11, 26-44	11	250
103	Strategies for improving the efficiency of semiconductor metal oxide photocatalysis. *Materials Horizons*, **2014**, 1, 400	14.4	240
102	Tuning the absorption, charge transport properties, and solar cell efficiency with the number of thienyl rings in platinum-containing poly(aryleneethynylene)s. *Journal of the American Chemical Society*, **2007**, 129, 14372-80	16.4	231
101	Is Excess PbI2 Beneficial for Perovskite Solar Cell Performance?. *Advanced Energy Materials*, **2016**, 6, 1502206	21.8	226
100	Effect of Native Defects on Photocatalytic Properties of ZnO. *Journal of Physical Chemistry C*, **2011**, 115, 11095-11101	3.8	209
99	Alkali Chlorides for the Suppression of the Interfacial Recombination in Inverted Planar Perovskite Solar Cells. *Advanced Energy Materials*, **2019**, 9, 1803872	21.8	148
98	Native Defects in ZnO: Effect on Dye Adsorption and Photocatalytic Degradation. *Journal of Physical Chemistry C*, **2013**, 117, 12218-12228	3.8	113
97	Encapsulation of Perovskite Solar Cells for High Humidity Conditions. *ChemSusChem*, **2016**, 9, 2597-2603	8.3	113
96	NiO/ZnO light emitting diodes by solution-based growth. *Applied Physics Letters*, **2008**, 92, 113505	3.4	111
95	Antibacterial activity of ZnO nanoparticles with a modified surface under ambient illumination. *Nanotechnology*, **2012**, 23, 475703	3.4	101
94	Undoped p-Type ZnO Nanorods Synthesized by a Hydrothermal Method. *Advanced Functional Materials*, **2008**, 18, 1020-1030	15.6	97
93	Novel Molecular Doping Mechanism for n-Doping of SnO via Triphenylphosphine Oxide and Its Effect on Perovskite Solar Cells. *Advanced Materials*, **2019**, 31, e1805944	24	96
92	Toxicity of ZnO and TiO to Escherichia coli cells. *Scientific Reports*, **2016**, 6, 35243	4.9	91
91	Visible-light photocatalysts: Prospects and challenges. *APL Materials*, **2020**, 8, 030903	5.7	82

90	Photocatalytic activity of metal oxides□The role of holes and OH radicals. *Applied Catalysis B: Environmental*, **2011**, 107, 150-157	21.8	81
89	ZnO and TiO2 1D nanostructures for photocatalytic applications. *Journal of Alloys and Compounds*, **2011**, 509, 1328-1332	5.7	76
88	Effect of ZnO nanoparticle properties on dye-sensitized solar cell performance. *ACS Applied Materials & Interfaces*, **2012**, 4, 1254-61	9.5	73
87	Green emission in ZnO nanostructures□Examination of the roles of oxygen and zinc vacancies. *Applied Surface Science*, **2013**, 271, 202-209	6.7	64
86	GaN/ZnO nanorod light emitting diodes with different emission spectra. *Nanotechnology*, **2009**, 20, 445201	3.4	64
85	Hydrogen peroxide treatment induced rectifying behavior of Au□-ZnO contact. *Applied Physics Letters*, **2007**, 90, 122101	3.4	62
84	Stability issues of the next generation solar cells. *Physica Status Solidi - Rapid Research Letters*, **2016**, 10, 281-299	2.5	54
83	Long cycle life of CoMn2O4 lithium ion battery anodes with high crystallinity. *Journal of Materials Chemistry A*, **2015**, 3, 14759-14767	13	52
82	Organometallic Polymer Light-Emitting Diodes Derived from a Platinum(II) Polyyne Containing the Bithiazole Ring. *Macromolecular Chemistry and Physics*, **2008**, 209, 1319-1332	2.6	46
81	Ion-Desorption Efficiency and Internal-Energy Transfer in Surface-Assisted Laser Desorption/Ionization: More Implication(s) for the Thermal-Driven and Phase-Transition-Driven Desorption Process. *Journal of Physical Chemistry C*, **2015**, 119, 23708-23720	3.8	44
80	Au/n-ZnO rectifying contact fabricated with hydrogen peroxide pretreatment. *Journal of Applied Physics*, **2008**, 103, 093706	2.5	43
79	Synthesis of conjugated polymers with pendant ruthenium terpyridine trithiocyanato complexes and their applications in heterojunction photovoltaic cells. *Journal of Polymer Science Part A*, **2008**, 46, 1305-1317	2.5	41
78	Synthesis and properties of copper phthalocyanine nanowires. *Thin Solid Films*, **2007**, 515, 5270-5274	2.2	38
77	Toxicity of CeO2 nanoparticles - the effect of nanoparticle properties. *Journal of Photochemistry and Photobiology B: Biology*, **2015**, 145, 48-59	6.7	37
76	Splitting Water on Metal Oxide Surfaces. *Journal of Physical Chemistry C*, **2011**, 115, 19710-19715	3.8	37
75	Antibacterial and photocatalytic activity of TiO2 and ZnO nanomaterials in phosphate buffer and saline solution. *Applied Microbiology and Biotechnology*, **2013**, 97, 5565-73	5.7	35
74	Solution-based growth of ZnO nanorods for light-emitting devices: hydrothermal vs. electrodeposition. *Applied Physics B: Lasers and Optics*, **2010**, 100, 851-858	1.9	33
73	Multifunctional Poly(N-vinylcarbazole)-Based Block Copolymers and their Nanofabrication and Photosensitizing Properties. *Macromolecular Rapid Communications*, **2009**, 30, 622-6	4.8	32

72	ZnO nanorod/GaN light-emitting diodes: The origin of yellow and violet emission bands under reverse and forward bias. *Journal of Applied Physics*, **2011**, 110, 094513	2.5	30
71	The Influence of the ZnO Seed Layer on the ZnO Nanorod/GaN LEDs. *Journal of the Electrochemical Society*, **2010**, 157, H308	3.9	29
70	Indium tin oxide nanowires growth by dc sputtering. *Applied Physics A: Materials Science and Processing*, **2011**, 104, 1075-1080	2.6	28
69	Enhanced conversion efficiency of polymeric photovoltaic cell by nanostructured antireflection coating. *Organic Electronics*, **2011**, 12, 557-561	3.5	27
68	Mixed Spacer Cation Stabilization of Blue-Emitting n = 2 Ruddlesden□Popper Organic□Inorganic Halide Perovskite Films. *Advanced Optical Materials*, **2020**, 8, 1901679	8.1	27
67	Metal oxide nanoparticles with low toxicity. *Journal of Photochemistry and Photobiology B: Biology*, **2015**, 151, 17-24	6.7	25
66	Hydrothermally synthesized CuxO as a catalyst for CO oxidation. *Journal of Materials Chemistry A*, **2015**, 3, 3627-3632	13	24
65	TiO2□arbon nanotube composites for visible photocatalysts □nfluence of TiO2 crystal structure. *Current Applied Physics*, **2013**, 13, 1280-1287	2.6	22
64	Indium tin oxide nanorod electrodes for polymer photovoltaics. *ACS Applied Materials & Interfaces*, **2011**, 3, 522-7	9.5	22
63	Near infrared emission in rubrene:fullerene heterojunction devices. *Chemical Physics Letters*, **2009**, 474, 141-145	2.5	22
62	Spectroscopic ellipsometry characterization of polymer□ullerene blend films. *Thin Solid Films*, **2008** , 517, 1047-1052	2.2	21
61	Organic Nanoclusters on Inorganic Nanostructures for Tailoring the Emission Properties of Organic Materials. *Advanced Functional Materials*, **2008**, 18, 566-574	15.6	21
60	Effect of Plasma Treatment on Native Defects and Photocatalytic Activities of Zinc Oxide Tetrapods. *Journal of Physical Chemistry C*, **2014**, 118, 22760-22767	3.8	20
59	In situ synthesis of CuxO/SnOx@CNT and CuxO/SnOx@SnO□CNT nanocomposite anodes for lithium ion batteries by a simple chemical treatment process. *ACS Applied Materials & Interfaces*, **2014**, 6, 13478-86	9.5	20
58	Antibacterial activity of ZnO nanoparticles under ambient illumination □The effect of nanoparticle properties. *Thin Solid Films*, **2013**, 542, 368-372	2.2	19
57	Ruthenium complex containing block copolymer for the enhancement of carbon nanotube photoconductivity. *ACS Applied Materials & Interfaces*, **2012**, 4, 74-80	9.5	16
56	Effect of starting properties and annealing on photocatalytic activity of ZnO nanoparticles. *Applied Surface Science*, **2013**, 283, 914-923	6.7	15
55	Perovskite Solar Cells: Alkali Chlorides for the Suppression of the Interfacial Recombination in Inverted Planar Perovskite Solar Cells (Adv. Energy Mater. 19/2019). *Advanced Energy Materials*, **2019**, 9, 1970068	21.8	14

54	Encapsulation of Perovskite Solar Cells for High Humidity Conditions. *ChemSusChem*, **2016**, 9, 2518-2518	8.3	14
53	2-Step self-assembly method to fabricate broadband omnidirectional antireflection coating in large scale. *Solar Energy Materials and Solar Cells*, **2011**, 95, 699-703	6.4	14
52	Generation of highly reactive oxygen species on metal-supported MgO(100) thin films. *Physical Chemistry Chemical Physics*, **2016**, 18, 25373-25379	3.6	13
51	Antibacterial and photocatalytic activities of TiO2 nanotubes. *Journal of Experimental Nanoscience*, **2013**, 8, 859-867	1.9	13
50	Effect of doping precursors on the optical properties of Ce-doped ZnO nanorods. *Thin Solid Films*, **2011**, 520, 1125-1130	2.2	13
49	Biocompatible and Biodegradable Magnesium Oxide Nanoparticles with In Vitro Photostable Near-Infrared Emission: Short-Term Fluorescent Markers. *Nanomaterials*, **2019**, 9,	5.4	12
48	Hydrothermal treatment of ZnO nanostructures. *Thin Solid Films*, **2012**, 520, 2656-2662	2.2	12
47	Graphene-oxide-wrapped ZnMnO as a high performance lithium-ion battery anode. *Nanotechnology* , **2017**, 28, 455401	3.4	11
46	An alumina stabilized graphene oxide wrapped SnO2 hollow sphere LIB anode with improved lithium storage. *RSC Advances*, **2015**, 5, 100783-100789	3.7	11
45	Effect of annealing on the performance of CrO3/ZnO light emitting diodes. *Applied Physics Letters*, **2009**, 94, 203502	3.4	11
44	Metal-Free and Metallated Polymers: Properties and Photovoltaic Performance. *Macromolecular Chemistry and Physics*, **2012**, 213, 1300-1310	2.6	10
43	Multicomponent antimicrobial transparent polymer coatings. *Journal of Applied Polymer Science*, **2011**, 122, 1572-1578	2.9	10
42	Structure-Dependent Photoluminescence in Low-Dimensional Ethylammonium, Propylammonium, and Butylammonium Lead Iodide Perovskites. *ACS Applied Materials & Interfaces*, **2020**, 12, 5008-5016	9.5	10
41	Annealing-Induced Antibacterial Activity in TiO2 under Ambient Light. *Journal of Physical Chemistry C*, **2017**, 121, 24060-24068	3.8	9
40	Indium tin oxide nanorods by dc sputtering. *Current Applied Physics*, **2011**, 11, 594-597	2.6	9
39	Indium oxide, tin oxide and indium tin oxide nanostructure growth by vapor deposition. *Current Applied Physics*, **2012**, 12, 697-706	2.6	8
38	3,4,9,10-Perylenetetracarboxylicdiimide as an interlayer for ultraviolet organic light emitting diodes. *Optics Communications*, **2008**, 281, 2498-2503	2	8
37	Study of Laser-Debonded GaN LEDs. *IEEE Transactions on Electron Devices*, **2006**, 53, 2266-2272	2.9	8

36	Indium oxide cubes prepared by hydrothermal synthesis as catalysts for CO oxidation. *Materials Chemistry and Physics*, **2015**, 153, 243-247	4.4	7
35	Metal oxide charge transport layers in perovskite solar cells: optimising low temperature processing and improving the interfaces towards low temperature processed, efficient and stable devices. *JPhys Energy*, **2021**, 3, 012004	4.9	7
34	Temperature and salinity jointly drive the toxicity of zinc oxide nanoparticles: a challenge to environmental risk assessment under global climate change. *Environmental Science: Nano*, **2020**, 7, 2995-3006	7.1	7
33	Effect of Tm doping on the properties of electrodeposited ZnO nanorods. *Materials Chemistry and Physics*, **2011**, 125, 813-817	4.4	6
32	Encapsulation and Stability Testing of Perovskite Solar Cells for Real Life Applications. *ACS Materials Au*,		6
31	GaN/MgO/ZnO heterojunction light-emitting diodes. *Thin Solid Films*, **2013**, 527, 303-307	2.2	5
30	In situ synthesis of TiO2(B) nanotube/nanoparticle composite anode materials for lithium ion batteries. *Nanotechnology*, **2015**, 26, 425403	3.4	5
29	Nitrogen doped-ZnO/n-GaN heterojunctions. *Journal of Applied Physics*, **2011**, 109, 084330	2.5	5
28	A three-dimensional network of graphene/silicon/graphene sandwich sheets as anode for Li-ion battery. *Thin Solid Films*, **2020**, 693, 137702	2.2	5
27	Hydrophobic Surface Coating Can Reduce Toxicity of Zinc Oxide Nanoparticles to the Marine Copepod. *Environmental Science & Technology*, **2021**, 55, 6917-6925	10.3	5
26	Iron oxide/graphene composites as negative-electrode materials for lithium ion batteries : optimum particle size for stable performance. *RSC Advances*, **2015**, 5, 91466-91471	3.7	4
25	Correlation of quantum efficiency and photoluminescence lifetime of ZnO tetrapods grown at different temperatures. *Journal of Applied Physics*, **2012**, 112, 023515	2.5	4
24	Infrared photoluminescence from and copper phthalocyanine nanostructures. *Optical Materials*, **2010**, 32, 924-927	3.3	4
23	Transmission electron microscopy artifacts in characterization of the nanomaterial-cell interactions. *Applied Microbiology and Biotechnology*, **2017**, 101, 5469-5479	5.7	3
22	Spontaneous Formation of Nanocrystals in Amorphous Matrix: Alternative Pathway to Bright Emission in Quasi-2D Perovskites. *Advanced Optical Materials*, **2019**, 7, 1900269	8.1	3
21	The influence of TiO$_{2}$ nanostructure properties on the performance of TiO$_{2}$-based anodes in lithium ion battery applications. *Turkish Journal of Physics*, **2014**, 38, 442-449	1.6	3
20	Preparation of 8-hydroxyquinoline wires by decomposition of tris(8-hydroxyquinoline) aluminium. *Journal of Experimental Nanoscience*, **2012**, 7, 578-585	1.9	3
19	Hydrothermal vs. electrodeposited CuxO for photocatalytic applications under simulated solar illumination. *Materials Chemistry and Physics*, **2012**, 135, 694-698	4.4	3

18	Recovery of clean ordered (1 1 1) surface of etched silicon. *Applied Surface Science*, **2013**, 282, 156-160	6.7	3
17	Growth of Triangular ZnO Nanorods by Electrodeposition. *Journal of the Electrochemical Society*, **2010**, 157, K269	3.9	3
16	Optical properties of ZnO-based core-shell nanostructures. *Thin Solid Films*, **2011**, 519, 2296-2301	2.2	3
15	Cavity design and optimization for organic microcavity OLEDs **2005**,		3
14	Effect of zinc precursor on the morphology and optical properties of ZnO nanostructures prepared by electrodeposition **2011**,		2
13	Optimization of microcavity OLED by varying the thickness of multi-layered mirror. *Optical and Quantum Electronics*, **2007**, 38, 1091-1099	2.4	2
12	Angular dependence of the emission from low Q-factor organic microcavity light emitting diodes. *Displays*, **2008**, 29, 358-364	3.4	2
11	Mesoporous silica nanosphere-based oxygen scavengers. *Microporous and Mesoporous Materials*, **2021**, 327, 111426	5.3	2
10	Optical Properties of Oxide Nanomaterials **2013**, 387-430		1
9	Zinc oxide precursor treatment for improving dye-sensitized solar cell efficiency. *Physica Status Solidi (B): Basic Research*, **2015**, 252, 532-537	1.3	1
8	Influence of native defects on photocatalytic activity of ZnO **2013**,		1
7	ZnO nanorods for light-emitting diode applications **2011**,		1
6	Organic quantum well light emitting diodes **2005**,		1
5	Enhanced Light Emission Performance of Mixed Cation Perovskite Films□he Effect of Solution Stoichiometry on Crystallization. *Advanced Optical Materials*,2100393	8.1	1
4	Ruddlesden□Popper Perovskites: Spontaneous Formation of Nanocrystals in Amorphous Matrix: Alternative Pathway to Bright Emission in Quasi-2D Perovskites (Advanced Optical Materials 19/2019). *Advanced Optical Materials*, **2019**, 7, 1970074	8.1	
3	Optimization of transparent electrode processing conditions for bulk heterojunction solar cells. *Journal of Photonics for Energy*, **2012**, 2, 021005	1.2	
2	Electroluminescence of p-GaN/MgO/n-ZnO Heterojunction Light-emitting Diodes. *Materials Research Society Symposia Proceedings*, **2012**, 1439, 109-114		
1	3,4,9,10-Perylenetetracarboxylicdiimide/ZnO hybrid nanomaterials. *Optical Materials*, **2010**, 32, 1578-1582	2.3	