Enda McGlynn

List of Publications by Citations

127 papers	1,808 citations	23 h-index	34 g-index
139 ext. papers	1,968 ext. citations	3 avg, IF	4.31 L-index

#	Paper	IF	Citations
127	Surface excitonic emission and quenching effects in ZnO nanowire/nanowall systems: Limiting effects on device potential. *Physical Review B*, **2005**, 71,	3.3	174
126	Structural, optical and magnetic properties of Cr doped ZnO microrods prepared by spray pyrolysis method. *Applied Surface Science*, **2011**, 257, 9293-9298	6.7	79
125	Structural, optical and magnetic properties of Ni-doped ZnO micro-rods grown by the spray pyrolysis method. *Chemical Physics Letters*, **2012**, 525-526, 72-76	2.5	58
124	Multiphoton excitation of surface plasmon-polaritons and scaling of nanoripple formation in large bandgap materials. *Optical Materials Express*, **2013**, 3, 1705	2.6	52
123	Identification of donor-related impurities in ZnO using photoluminescence and radiotracer techniques. *Physical Review B*, **2006**, 73,	3.3	52
122	Control of ZnO nanorod array density by Zn supersaturation variation and effects on field emission. *Nanotechnology*, **2007**, 18, 215704	3.4	47
121	Correlation of Raman and X-ray diffraction measurements of annealed pulsed laser deposited ZnO thin films. *Thin Solid Films*, **2003**, 436, 273-276	2.2	44
120	Studying the growth conditions, the alignment and structure of ZnO nanorods. *Surface and Coatings Technology*, **2005**, 200, 1093-1096	4.4	40
119	RHEED studies of nucleation of Ge islands on Si(001) and optical properties of ultra-small Ge quantum dots. *Thin Solid Films*, **2000**, 369, 79-83	2.2	35
118	(20□3) ZnO thin films grown by pulsed laser deposition on CeO2-buffered r-sapphire substrate. *Journal of Applied Physics*, **2007**, 101, 013509	2.5	34
117	A Study of Drop-Coated and Chemical Bath-Deposited Buffer Layers for Vapor Phase Deposition of Large Area, Aligned, Zinc Oxide Nanorod Arrays. *Crystal Growth and Design*, **2010**, 10, 2400-2408	3.5	33
116	Properties of Li-, P- and N-doped ZnO thin films prepared by pulsed laser deposition. *Superlattices and Microstructures*, **2005**, 38, 397-405	2.8	33
115	Structural, optical and magnetic properties of Zn1 □xMnxO micro-rod arrays synthesized by spray pyrolysis method. *Thin Solid Films*, **2012**, 520, 5172-5178	2.2	30
114	Carbothermal reduction vapor phase transport growth of ZnO nanostructures: Effects of various carbon sources. *Journal of Applied Physics*, **2009**, 105, 094306	2.5	29
113	Study of Morphological and Related Properties of Aligned Zinc Oxide Nanorods Grown by Vapor Phase Transport on Chemical Bath Deposited Buffer Layers. *Crystal Growth and Design*, **2011**, 11, 5378-5386	3.5	28
112	ZnO films grown by pulsed-laser deposition on soda lime glass substrates for the ultraviolet inactivation of biofilms. *Science and Technology of Advanced Materials*, **2009**, 10, 045003	7.1	28
111	Growth of ZnO nanostructures on Au-coated Si: Influence of growth temperature on growth mechanism and morphology. *Journal of Applied Physics*, **2008**, 104, 084309	2.5	28

110	Defect-induced room temperature ferromagnetism in B-doped ZnO. *Ceramics International*, **2013**, 39, 4609-4617	5.1	27
109	Microscopic origins of the surface exciton photoluminescence peak in ZnO nanostructures. *Physical Review B*, **2011**, 83,	3.3	27
108	Alignment, Morphology and Defect Control of Vertically Aligned ZnO Nanorod Array: Competition between "Surfactant" and "Stabilizer" Roles of the Amine Species and Its Photocatalytic Properties. *Crystal Growth and Design*, **2014**, 14, 2873-2879	3.5	26
107	A novel, substrate independent three-step process for the growth of uniform ZnO nanorod arrays. *Thin Solid Films*, **2010**, 518, 4489-4492	2.2	26
106	HO-assisted photoelectrocatalytic degradation of Mitoxantrone using CuO nanostructured films: Identification of by-products and toxicity. *Science of the Total Environment*, **2019**, 651, 2845-2856	10.2	24
105	Effects of Cu diffusion-doping on structural, optical, and magnetic properties of ZnO nanorod arrays grown by vapor phase transport method. *Journal of Applied Physics*, **2012**, 111, 013903	2.5	23
104	A catalyst-free and facile route to periodically ordered and c-axis aligned ZnO nanorod arrays on diverse substrates. *Nanoscale*, **2011**, 3, 1675-82	7.7	23
103	Pulsed laser deposition of ZnO and Mn-doped ZnO thin films. *Applied Surface Science*, **2003**, 208-209, 589-593	6.7	23
102	Synthesis and characterization of Mn-doped ZnO nanorods grown in an ordered periodic honeycomb pattern using nanosphere lithography. *Ceramics International*, **2014**, 40, 7753-7759	5.1	21
101	Unambiguous identification of the role of a single Cu atom in the ZnO structured green band. *Journal of Physics Condensed Matter*, **2012**, 24, 215802	1.8	20
100	Multiphoton-absorption induced ultraviolet luminescence of ZnO nanorods using low-energy femtosecond pulses. *Journal of Applied Physics*, **2010**, 108, 043107	2.5	20
99	Characterization of nitrogen-doped ZnO thin films grown by plasma-assisted pulsed laser deposition on sapphire substrates. *Superlattices and Microstructures*, **2007**, 42, 21-25	2.8	19
98	Effect of polycrystallinity on the optical properties of highly oriented ZnO grown by pulsed laser deposition. *Thin Solid Films*, **2004**, 458, 330-335	2.2	19
97	Effects of excitonic diffusion on stimulated emission in nanocrystalline ZnO. *Applied Physics Letters*, **2006**, 88, 071919	3.4	18
96	Relativistic laser nano-plasmonics for effective fast particle production. *Plasma Physics and Controlled Fusion*, **2016**, 58, 014038	2	17
95	Synthesis and photoluminescence of ZnO nanowires/nanorods. *Journal of Materials Science: Materials in Electronics*, **2005**, 16, 397-401	2.1	17
94	Fabrication of p-type doped ZnO thin films using pulsed laser deposition. *Journal of Materials Science: Materials in Electronics*, **2005**, 16, 421-427	2.1	16
93	Defect luminescence of GaN grown by pulsed laser deposition. *Journal of Crystal Growth*, **2001**, 222, 497-502	1.6	16

92	Study of photoluminescence at 3.310 and 3.368 eV in GaN/sapphire(0001) and GaN/GaAs(001) grown by liquid-target pulsed-laser deposition. *Applied Physics Letters*, **2002**, 80, 3301-3303	3.4	16
91	The luminescent properties of CuAlO2. *Journal of Materials Chemistry C*, **2014**, 2, 7859-7868	7.1	15
90	Highly transparent and reproducible nanocrystalline ZnO and AZO thin films grown by room temperature pulsed-laser deposition on flexible Zeonor plastic substrates. *Materials Research Express*, **2015**, 2, 096401	1.7	15
89	ZnO nanorods for efficient third harmonic UV generation. *Optical Materials Express*, **2014**, 4, 701	2.6	15
88	Field emission in ordered arrays of ZnO nanowires prepared by nanosphere lithography and extended Fowler-Nordheim analyses. *Journal of Applied Physics*, **2011**, 110, 124324	2.5	15
87	Excitonic properties of the polar faces of bulk ZnO after wet etching. *Physica B: Condensed Matter*, **2003**, 340-342, 210-215	2.8	14
86	The dominant role of adsorbed fluid layers on the polar surfaces of ZnO in ambient atmospheric conditions.. *Nanotechnology*, **2004**, 15,	3.4	14
85	ZnO nanostructured thin films grown by pulsed laser deposition in mixed O2 / Ar background gas. *Superlattices and Microstructures*, **2007**, 42, 468-472	2.8	13
84	ZnO thin films grown on platinum (111) buffer layers by pulsed laser deposition. *Thin Solid Films*, **2006**, 500, 78-83	2.2	13
83	Ultraviolet stimulated emission from bulk and polycrystalline ZnO thin films with varying grain sizes. *Physica B: Condensed Matter*, **2003**, 340-342, 245-249	2.8	13
82	Pulsed laser deposition of manganese doped GaN thin films. *Solid-State Electronics*, **2003**, 47, 533-537	1.7	13
81	Theoretical Analysis of Nucleation and Growth of ZnO Nanostructures in Vapor Phase Transport Growth. *Crystal Growth and Design*, **2011**, 11, 4581-4587	3.5	12
80	Photoluminescence analysis of semiconductors using radioactive isotopes **2000**, 129, 443-460		12
79	Low temperature growth technique for nanocrystalline cuprous oxide thin films using microwave plasma oxidation of copper. *Materials Letters*, **2012**, 71, 160-163	3.3	11
78	Crystalline ZnO/Amorphous ZnO Core/Shell Nanorods: Self-Organized Growth, Structure, and Novel Luminescence. *Journal of Physical Chemistry C*, **2015**, 119, 4848-4855	3.8	11
77	Length versus Radius Relationship for ZnO Nanowires Grown via Vapor Phase Transport. *Crystal Growth and Design*, **2012**, 12, 5972-5979	3.5	11
76	Dellafossite CuAlO2 film growth and conversion to CuAl2O3 metal ceramic composite via control of annealing atmospheres. *CrystEngComm*, **2013**, 15, 6144	3.3	11
75	Chemical identification of luminescence due to Sn and Sb in ZnO. *Applied Physics Letters*, **2013**, 102, 192110	3.4	11

74	Carbothermal reduction growth of ZnO nanostructures on sapphire□omparisons between graphite and activated charcoal powders. *Microelectronics Journal*, **2009**, 40, 259-261	1.8	11
73	Optical characterisation of thin film benzocyclobutene (BCB) based polymers. *Microelectronic Engineering*, **1997**, 33, 363-368	2.5	11
72	Electrical characterisation of phosphorus-doped ZnO thin films grown by pulsed laser deposition. *Superlattices and Microstructures*, **2007**, 42, 74-78	2.8	11
71	The First EU ScienceOlympiad (EUSO): a modelfor science education. *Journal of Biological Education* , **2005**, 39, 58-62	0.9	11
70	High quality interconnected core/shell ZnO nanorod architectures grown by pulsed laser deposition on ZnO-seeded Si substrates. *Superlattices and Microstructures*, **2017**, 101, 8-14	2.8	10
69	Growth of isotopically enriched ZnO nanorods of excellent optical quality. *Journal of Crystal Growth* , **2015**, 429, 6-12	1.6	10
68	Control and enhancement of the oxygen storage capacity of ceria films by variation of the deposition gas atmosphere during pulsed DC magnetron sputtering. *Journal of Power Sources*, **2015** , 279, 94-99	8.9	10
67	Control of ZnO nanowire arrays by nanosphere lithography (NSL) on laser-produced ZnO substrates. *Applied Surface Science*, **2011**, 257, 5159-5162	6.7	10
66	Effects of the crystallite mosaic spread on integrated peak intensities in 2□measurements of highly crystallographically textured ZnO thin films. *Journal Physics D: Applied Physics*, **2011**, 44, 375401	3	10
65	Comparison of structural, optical and electrical properties of undoped ZnO thin films grown on r- and c- Al2O3 substrates using pulsed laser deposition. *Superlattices and Microstructures*, **2005**, 38, 256-264	2.8	10
64	Influence of C4F8/Ar/O2 plasma etching on SiO2 surface chemistry. *Journal of Materials Science: Materials in Electronics*, **2005**, 16, 541-547	2.1	10
63	Influence of ZnO nanowire array morphology on field emission characteristics. *Nanotechnology*, **2014**, 25, 135604	3.4	9
62	Growth of crystalline ZnO nanostructures using pulsed laser deposition. *Superlattices and Microstructures*, **2006**, 39, 153-161	2.8	9
61	Optical absorption of a Li-related impurity in ZnO. *Physica B: Condensed Matter*, **2003**, 340-342, 225-229	2.8	9
60	Photoluminescence study of cadmium-related defects in oxygen-rich silicon. *Physical Review B*, **1996**, 54, 14494-14503	3.3	9
59	Defect-mediated ferromagnetism in ZnO:Mn nanorods. *Applied Physics A: Materials Science and Processing*, **2014**, 115, 313-321	2.6	8
58	Thermodynamic aspects of the gas atmosphere and growth mechanism in carbothermal vapour phase transport synthesis of ZnO nanostructures. *Thin Solid Films*, **2010**, 518, 4578-4581	2.2	8
57	Study of exciton□olariton modes in nanocrystalline thin films of ZnO using reflectance spectroscopy. *Nanotechnology*, **2005**, 16, 2625-2632	3.4	8

56	Control of crystal structure, morphology and optical properties of ceria films by post deposition annealing treatments. *Thin Solid Films*, **2016**, 603, 363-370	2.2	8
55	Hard x-ray photoelectron spectroscopy study of copper formation by metal salt inclusion in a polymer film. *Journal Physics D: Applied Physics*, **2019**, 52, 435301	3	7
54	Optical properties of undoped and oxygen doped CuCl films on silicon substrates. *Journal of Materials Science: Materials in Electronics*, **2009**, 20, 76-80	2.1	7
53	Radioactive Isotope Identifications of Au and Pt Photoluminescence Centres in Silicon. *Physica Status Solidi (B): Basic Research*, **1998**, 210, 853-858	1.3	7
52	Morphological control of ZnO nanostructures on silicon substrates. *Superlattices and Microstructures*, **2007**, 42, 337-342	2.8	7
51	Investigation of optical metastability in GaN using photoluminescence spectroscopy. *Physica B: Condensed Matter*, **2003**, 340-342, 452-456	2.8	7
50	Evaluation of the optical properties of epitaxial lateral overgrown gallium nitride on sapphire and the role of optically active metastable defects using cathodoluminescence and photoluminescence spectroscopy. *Thin Solid Films*, **2005**, 473, 308-314	2.2	7
49	Evidence for As lattice location and Ge bound exciton luminescence in ZnO implanted with As73 and Ge73. *Physical Review B*, **2011**, 83,	3.3	6
48	Splitting of point defect energy levels in wurtzite crystals under uniaxial stresses applied along arbitrary directions. *Physical Review B*, **2007**, 76,	3.3	6
47	Infrared light emission from GaAs MESFETs operating at avalanche breakdown conditions. *Semiconductor Science and Technology*, **2004**, 19, S94-S95	1.8	6
46	Exciton polariton behaviour in bulk and polycrystalline ZnO. *Physica B: Condensed Matter*, **2003**, 340-342, 230-234	2.8	6
45	Uniaxial stress and Zeeman spectroscopy of the 3.324-eV Ge-related photoluminescence in ZnO. *Physical Review B*, **2013**, 87,	3.3	5
44	Growth and field emission properties of ZnO nanostructures deposited by a novel pulsed laser ablation source on silicon substrates. *Ultramicroscopy*, **2009**, 109, 399-402	3.1	5
43	Study of exciton-polariton modes in nanocrystalline thin films of CuCl using reflectance spectroscopy. *Journal of Applied Physics*, **2012**, 112, 033505	2.5	5
42	Growth and characterisation of epitaxially ordered zinc aluminate domains on c-sapphire. *Thin Solid Films*, **2008**, 516, 1725-1735	2.2	5
41	Comparative study of the expansion dynamics of Ga+ ions in the laser ablation of Ga and GaN using time-resolved extreme UV absorption spectroscopy. *Applied Surface Science*, **2000**, 168, 150-153	6.7	5
40	The evolution of point defects in semiconductors studied using the decay of implanted radioactive isotopes. *Nuclear Instruments & Methods in Physics Research B*, **2001**, 178, 256-259	1.2	5
39	Precise Definition of a "Monolayer Point" in Polymer Brush Films for Fabricating Highly Coherent TiO Thin Films by Vapor-Phase Infiltration. *Langmuir*, **2020**, 36, 12394-12402	4	5

38	Pronounced effects of oxygen growth pressure on structure and properties of ZnO and AZO films laser deposited on Zeonor polymer. *Thin Solid Films*, **2017**, 621, 171-177	2.2	4
37	Surface characterization of poly-2-vinylpyridine□ polymer for area selective deposition techniques. *Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films*, **2019**, 37, 050601	2.9	4
36	Spatial inhomogeneity of donor bound exciton emission from ZnO nanostructures grown on Si. *Nanotechnology*, **2009**, 20, 255703	3.4	4
35	UV emission on a Si substrate: Optical and structural properties of □CuCl on Si grown using liquid phase epitaxy techniques. *Physica Status Solidi (A) Applications and Materials Science*, **2009**, 206, 923-926	1.6	4
34	Nitrogen doping of ZnO thin films grown by plasma-assisted pulsed-laser deposition. *Journal of Physics: Conference Series*, **2007**, 59, 505-509	0.3	4
33	A new science competition for secondary school students: the First European Union Science Olympiad. *European Journal of Physics*, **2004**, 25, 23-29	0.8	4
32	Uniaxial stress study of the 1026□meV center in Si:Pt. *Physical Review B*, **2001**, 63,	3.3	4
31	Photoelectrocatalytic Degradation of Methylene Blue Using ZnO Nanorods Fabricated on Silicon Substrates. *Journal of Nanoscience and Nanotechnology*, **2020**, 20, 1177-1188	1.3	4
30	Analysing trimethylaluminum infiltration into polymer brushes using a scalable area selective vapor phase process. *Materials Advances*, **2021**, 2, 769-781	3.3	4
29	Field enhancement of multiphoton induced luminescence processes in ZnO nanorods. *Journal Physics D: Applied Physics*, **2018**, 51, 105306	3	3
28	Origin of the 3.331 eV emission in ZnO nanorods: Comparison of vapour phase transport and pulsed laser deposition grown nanorods. *Journal of Luminescence*, **2016**, 175, 117-121	3.8	3
27	Enhanced Optical Properties of ZnO and CeO-coated ZnO Nanostructures Achieved Via Spherical Nanoshells Growth On A Polystyrene Template. *Scientific Reports*, **2017**, 7, 3737	4.9	3
26	ZnO nanorods for efficient third harmonic UV generation: erratum. *Optical Materials Express*, **2014**, 4, 1243	2.6	3
25	Self-organized ZnAl2O4 nanostructures grown on -sapphire. *Superlattices and Microstructures*, **2007** , 42, 327-332	2.8	3
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23	The complexing of oxygen with the Group II impurities Be, Cd and Zn in silicon. *Materials Science and Engineering B: Solid-State Materials for Advanced Technology*, **1996**, 36, 116-119	3.1	3
22	Aluminium oxide formation via atomic layer deposition using a polymer brush mediated selective infiltration approach. *Applied Surface Science*, **2020**, 515, 145987	6.7	2
21	Chemical and electrical characterisation of the segregation of Al from a CuAl alloy (90%:10% wt) with thermal anneal. *Thin Solid Films*, **2016**, 599, 59-63	2.2	2

20	Comment on "Thermodynamic derivations of the mechanical equilibrium conditions for fluid surfaces: Young's and Laplace's equations," by P. Roura [Am. J. Phys. 73 (12), 1139–1147 (2005)]. *American Journal of Physics*, **2006**, 74, 937-938	0.7	2
19	P-type nitrogen- and phosphorus-doped ZnO thin films grown by pulsed laser deposition on sapphire substrates **2007**,		2
18	The 777meV photoluminescence band in Si:Pt. *Physica B: Condensed Matter*, **1999**, 273-274, 420-423	2.8	2
17	Deep level anomalies in silicon doped with radioactive Au atoms. *Physica B: Condensed Matter*, **1999** , 273-274, 433-436	2.8	2
16	Local atomic environment of the Cu-related defect in zinc oxide. *Journal Physics D: Applied Physics*, **2017**, 50, 145105	3	1
15	Growth of 18O isotopically enriched ZnO nanorods by two novel VPT methods. *Journal of Crystal Growth*, **2017**, 460, 85-93	1.6	1
14	The Hg isoelectronic defect in ZnO. *Journal of Applied Physics*, **2013**, 114, 193515	2.5	1
13	A photoluminescence study of a series of closely related axial defects of monoclinic I and rhombic I symmetry in oxygen-rich, zinc-doped silicon. *Semiconductor Science and Technology*, **1996**, 11, 930-934	1.8	1
12	A note on linking electrical current, magnetic fields, charges and the pole in a barn paradox in special relativity. *European Journal of Physics*, **2008**, 29, N63-N67	0.8	1
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10	Piezo-spectroscopic induced perturbations for defects in cubic crystals under uniaxial stress applied along arbitrary low-symmetry crystal directions. *Journal of Physics Condensed Matter*, **2000**, 12, 7055-7068	1.8	1
9	Crystal Symmetry, Lattice Vibrations, and Optical Spectroscopy of Solids: A Group Theoretical Approach. *Contemporary Physics*, **2016**, 57, 96-99	3.3	
8	Observation of epitaxially ordered twinned zinc aluminate "nanoblades" on c-sapphire. *Journal of Materials Science: Materials in Electronics*, **2012**, 23, 758-765	2.1	
7	Comparison of Linear and Nonlinear Optical Properties of ZnO Nanorods. *Nano-optics and Nanophotonics*, **2015**, 193-206	0	
6	Morphological control of ZnO nanostructures grown on silicon **2007**, 6474, 238		
5	Photoluminescence study of GaN grown by pulsed laser deposition in nitrogen atmosphere. *Materials Science and Engineering B: Solid-State Materials for Advanced Technology*, **2001**, 82, 128-130	3.1	
4	Photoluminescence spectroscopy of an Al-C complex in silicon. *Physical Review B*, **1999**, 59, 10084-10090	3.3	
3	Study of bound exciton excited state structure using photothermal ionisation spectroscopy. *Physica B: Condensed Matter*, **1999**, 273-274, 1011-1014	2.8	

2	Cadmium□thium defects in silicon. *Materials Science and Engineering B: Solid-State Materials for Advanced Technology*, **1999**, 58, 159-162	3.1
1	Imaging semiconductor wafers using photoluminescence. *Optical Engineering*, **1994**, 33, 3974	1.1