Robert J Young

List of Publications by Year in Descending Order

79 papers	3,251 citations	27 h-index	56 g-index
93 ext. papers	3,676 ext. citations	5.4 avg, IF	4.87 L-index

#	Paper	IF	Citations
79	Improving the longevity of optically-read quantum dot physical unclonable functions. *Scientific Reports*, **2021**, 11, 10999	4.9	0
78	Enhancing and quantifying spatial homogeneity in monolayer WS. *Scientific Reports*, **2021**, 11, 14831	4.9	2
77	Resonant-Tunnelling Diodes as PUF Building Blocks. *IEEE Transactions on Emerging Topics in Computing*, **2021**, 9, 878-885	4.1	3
76	Hotspot generation for unique identification with nanomaterials. *Scientific Reports*, **2021**, 11, 1528	4.9	0
75	Fetal eye movements in response to a visual stimulus. *Brain and Behavior*, **2020**, 10, e01676	3.4	7
74	Edible unclonable functions. *Nature Communications*, **2020**, 11, 328	17.4	58
73	Porous Silica-Pillared MXenes with Controllable Interlayer Distances for Long-Life Na-Ion Batteries. *Langmuir*, **2020**, 36, 4370-4382	4	18
72	Signing information in the quantum era. *AVS Quantum Science*, **2020**, 2, 044101	10.3	1
71	Photodetecting Heterostructures from Graphene and Encapsulated Colloidal Quantum Dot Films. *ACS Omega*, **2019**, 4, 15824-15828	3.9	2
70	A PUF taxonomy. *Applied Physics Reviews*, **2019**, 6, 011303	17.3	102
69	Large-Area Heterostructures from Graphene and Encapsulated Colloidal Quantum Dots via the Langmuir-Blodgett Method. *ACS Applied Materials & Interfaces*, **2018**, 10, 6805-6809	9.5	9
68	Room-Temperature Mid-Infrared Emission from Faceted InAsSb Multi Quantum Wells Embedded in InAs Nanowires. *Nano Letters*, **2018**, 18, 235-240	11.5	9
67	Response to Scheel et al. *Current Biology*, **2018**, 28, R596-R597	6.3	2
66	Combined metallic nano-rings and solid-immersion lenses for bright emission from single InAs/GaAs quantum dots. *Applied Physics Letters*, **2018**, 112, 221102	3.4	4
65	Silicon-Based Single Quantum Dot Emission in the Telecoms C-Band. *ACS Photonics*, **2017**, 4, 1740-1746	6.3	7
64	The Human Fetus Preferentially Engages with Face-like Visual Stimuli. *Current Biology*, **2017**, 27, 1825-1828.e3	6.3	151
63	Increasing the light extraction and longevity of TMDC monolayers using liquid formed micro-lenses. *2D Materials*, **2017**, 4, 015032	5.9	8

62	Optical identification using imperfections in 2D materials. *2D Materials*, **2017**, 4, 045021	5.9	16
61	Extracting random numbers from quantum tunnelling through a single diode. *Scientific Reports*, **2017**, 7, 17879	4.9	9
60	Dispersal of pristine graphene for biological studies. *RSC Advances*, **2016**, 6, 69551-69559	3.7	8
59	Heterodimensional charge-carrier confinement in stacked submonolayer InAs in GaAs. *Physical Review B*, **2016**, 93,	3.3	29
58	Photonic Crystals for Enhanced Light Extraction from 2D Materials. *ACS Photonics*, **2016**, 3, 2515-2520	6.3	37
57	Atomic-scale Authentication with Resonant Tunneling Diodes. *MRS Advances*, **2016**, 1, 1625-1629	0.7	
56	Visible Spectrum Quantum Light Sources Based on InxGa1⊠N/GaN Quantum Dots. *ACS Photonics*, **2015**, 2, 958-963	6.3	18
55	Using Quantum Confinement to Uniquely Identify Devices. *Scientific Reports*, **2015**, 5, 16456	4.9	20
54	Hybrid type-I InAs/GaAs and type-II GaSb/GaAs quantum dot structure with enhanced photoluminescence. *Applied Physics Letters*, **2015**, 106, 103104	3.4	14
53	Multimodal microscopy using ↑half and half↑contact mode and ultrasonic force microscopy. *Nanotechnology*, **2014**, 25, 335708	3.4	2
52	Photoluminescence studies of individual and few GaSb/GaAs quantum rings. *AIP Advances*, **2014**, 4, 117127	1.5	8
51	Rapid thermal annealing and photoluminescence of type-II GaSb single monolayer quantum dot stacks. *Journal Physics D: Applied Physics*, **2013**, 46, 305104	3	4
50	Long-Wavelength Photoluminescence from Stacked Layers of High-Quality Type-II GaSb/GaAs Quantum Rings. *Crystal Growth and Design*, **2013**, 13, 1226-1230	3.5	13
49	The structural, electronic and optical properties of GaSb/GaAs nanostructures for charge-based memory. *Journal Physics D: Applied Physics*, **2013**, 46, 264001	3	37
48	High-accuracy analysis of nanoscale semiconductor layers using beam-exit ar-ion polishing and scanning probe microscopy. *ACS Applied Materials & Interfaces*, **2013**, 5, 3241-5	9.5	13
47	Blueshifts of the emission energy in type-II quantum dot and quantum ring nanostructures. *Journal of Applied Physics*, **2013**, 114, 073519	2.5	22
46	Positive lidocaine toxicology screen after J-Tip for venipuncture. *Pediatric Emergency Care*, **2013**, 29, 1278-9	1.4	1
45	Microtopography of the eye surface of the crab Carcinus maenas: an atomic force microscope study suggesting a possible antifouling potential. *Journal of the Royal Society Interface*, **2013**, 10, 20130122	4.1	11

44	Hole migration and optically induced charge depletion in GaSb/GaAs wetting layers and quantum rings. *Physical Review B*, **2013**, 88,	3.3	4
43	Linking structural and electronic properties of high-purity self-assembled GaSb/GaAs quantum dots. *Physical Review B*, **2012**, 86,	3.3	29
42	. *IEEE Journal of Quantum Electronics*, **2012**, 48, 1467-1475	2	4
41	Optical observation of single-carrier charging in type-II quantum ring ensembles. *Applied Physics Letters*, **2012**, 100, 082104	3.4	35
40	GaSb/GaAs quantum dot formation and demolition studied with cross-sectional scanning tunneling microscopy. *Applied Physics Letters*, **2012**, 100, 142116	3.4	40
39	Compact Electroabsorption Modulators for Photonic Integrated Circuits, Using an Isolated Pedestal Contact Scheme. *IEEE Photonics Technology Letters*, **2012**, 24, 356-358	2.2	6
38	Quantum information to the home. *New Journal of Physics*, **2011**, 13, 063039	2.9	57
37	Relevance of the purity level in a MetalOrganic Vapour Phase Epitaxy reactor environment for the growth of high quality pyramidal site-controlled Quantum Dots. *Journal of Crystal Growth*, **2011**, 315, 119-122	1.6	6
36	Tuning the properties of exciton complexes in self-assembled GaSb/GaAs quantum rings. *Physical Review B*, **2011**, 83,	3.3	34
35	Quantum key distribution on a 10Gb/s WDM-PON. *Optics Express*, **2010**, 18, 9600-12	3.3	57
34	Quantum memories. *European Physical Journal D*, **2010**, 58, 1-22	1.3	323
33	Low-angle misorientation dependence of the optical properties of InGaAs/InAlAs quantum wells. *Journal of Crystal Growth*, **2010**, 312, 1546-1550	1.6	12
32	AlGaAs/GaAs/AlGaAs quantum wells as a sensitive tool for the MOVPE reactor environment. *Journal of Crystal Growth*, **2010**, 312, 3057-3062	1.6	36
31	Pyramidal quantum dots: High uniformity and narrow excitonic emission. *Superlattices and Microstructures*, **2010**, 47, 78-82	2.8	4
30	Physics of novel site controlled InGaAs quantum dots on (111) oriented substrates. *Physica E: Low-Dimensional Systems and Nanostructures*, **2010**, 42, 2761-2764	3	11
29	Growth and structural characterization of pyramidal site-controlled quantum dots with high uniformity and spectral purity. *Physica Status Solidi (B): Basic Research*, **2010**, 247, 1862-1866	1.3	15
28	A site-controlled quantum dot system offering both high uniformity and spectral purity. *Applied Physics Letters*, **2009**, 94, 223121	3.4	71
27	Bell-inequality violation with a triggered photon-pair source. *Physical Review Letters*, **2009**, 102, 030406	7.4	56

26	Single Semiconductor Quantum Dots. *Nanoscience and Technology*, **2009**,	0.6	113
25	Entangled Photon Generation by Quantum Dots. *Nanoscience and Technology*, **2009**, 227-265	0.6	2
24	Modulation of single quantum dot energy levels by a surface-acoustic-wave. *Applied Physics Letters*, **2008**, 93, 081115	3.4	77
23	Evolution of entanglement between distinguishable light states. *Physical Review Letters*, **2008**, 101, 170501	7.4	93
22	Biphoton interference with a quantum dot source of entangled light. *Physica E: Low-Dimensional Systems and Nanostructures*, **2008**, 40, 1888-1890	3	
21	Quantum Dots in Planar Cavities Single and Entangled Photon Sources **2008**, 59-69		
20	Source of triggered entangled photon pairs? (Reply). *Nature*, **2007**, 445, E5-E6	50.4	1
19	Coherence of an entangled exciton-photon state. *Physical Review Letters*, **2007**, 99, 266802	7.4	111
18	Single electron-spin memory with a semiconductor quantum dot. *New Journal of Physics*, **2007**, 9, 365-365	2.9	36
17	Entangled photons from the biexciton cascade of quantum dotsa). *Journal of Applied Physics*, **2007**, 101, 081711	2.5	8
16	Controlling the polarization correlation of photon pairs from a charge-tunable quantum dot. *Applied Physics Letters*, **2007**, 91, 011114	3.4	9
15	Biphoton interference with a quantum dot entangled light source. *Optics Express*, **2007**, 15, 6507-12	3.3	16
14	. *Proceedings of the IEEE*, **2007**, 95, 1805-1814	14.3	7
13	Control of fine-structure splitting of individual InAs quantum dots by rapid thermal annealing. *Applied Physics Letters*, **2007**, 90, 011907	3.4	57
12	Entangled photons on-demand from a single quantum dot **2006**,		1
11	Improved fidelity of triggered entangled photons from single quantum dots. *New Journal of Physics* , **2006**, 8, 29-29	2.9	208
10	Magnetic-field-induced reduction of the exciton polarization splitting in InAs quantum dots. *Physical Review B*, **2006**, 73,	3.3	153
9	Entangled photon pairs from a quantum dot source. *Physica Status Solidi C: Current Topics in Solid State Physics*, **2006**, 3, 3697-3701		

8	A semiconductor source of triggered entangled photon pairs. *Nature*, **2006**, 439, 179-82	50.4	707
7	Cancellation of fine-structure splitting in quantum dots by a magnetic field. *Physica E: Low-Dimensional Systems and Nanostructures*, **2006**, 32, 135-138	3	1
6	Inversion of the exciton fine structure splitting in quantum dots. *Physica E: Low-Dimensional Systems and Nanostructures*, **2006**, 32, 97-100	3	3
5	Quantum dots for single photon and photon pair technology **2006**, 288-297		
4	Inversion of exciton level splitting in quantum dots. *Physical Review B*, **2005**, 72,	3.3	157
3	Strong directional dependence of single-quantum-dot fine structure. *Applied Physics Letters*, **2005**, 87, 133120	3.4	9
2	Time-resolved studies of single quantum dots in magnetic fields. *Physica E: Low-Dimensional Systems and Nanostructures*, **2004**, 21, 381-384	3	10
1	Monitoring epiready semiconductor wafers. *Thin Solid Films*, **2002**, 412, 76-83	2.2	27