

# Richard Beanland

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/8018582/publications.pdf>

Version: 2024-02-01

195  
papers

5,762  
citations

101543

36  
h-index

88630

70  
g-index

205  
all docs

205  
docs citations

205  
times ranked

8702  
citing authors

#	ARTICLE	IF	CITATIONS
1	Electrodeposited WS <sub>2</sub> monolayers on patterned graphene. 2D Materials, 2022, 9, 015025.	4.4	3
2	ULTRARAM: A Low-Energy, High-Endurance, Compound-Semiconductor Memory on Silicon. Advanced Electronic Materials, 2022, 8, 2101103.	5.1	4
3	Ferroelectric incommensurate spin crystals. Nature, 2022, 602, 240-244.	27.8	30
4	Atomic-scale investigation of the reversible $\pm$ - to $\bar{0}$ -phase lithium ion charge " discharge characteristics of electrodeposited vanadium pentoxide nanobelts. Journal of Materials Chemistry A, 2022, 10, 8515-8527.	10.3	4
5	AC-assisted deposition of aggregate free silica films with vertical pore structure. Nanoscale, 2022, 14, 5404-5411.	5.6	7
6	Back-End-of-Line SiC-Based Memristor for Resistive Memory and Artificial Synapse. Advanced Electronic Materials, 2022, 8, .	5.1	16
7	Electron Beam Transparent Boron Doped Diamond Electrodes for Combined Electrochemistry" Transmission Electron Microscopy. ACS Measurement Science Au, 2022, 2, 439-448.	4.4	1
8	Multiple radial phosphorus segregations in GaAsP core-shell nanowires. Nano Research, 2021, 14, 157-164.	10.4	3
9	A new electron diffraction approach for structure refinement applied to Ca <sub>3</sub> Mn <sub>2</sub> O <sub>7</sub> . Acta Crystallographica Section A: Foundations and Advances, 2021, 77, 196-207.	0.1	2
10	Characterizing oxygen atoms in perovskite and pyrochlore oxides using ADF-STEM at a resolution of a few tens of picometers. Acta Materialia, 2021, 208, 116717.	7.9	4
11	Lateral Growth of MoS <sub>2</sub> 2D Material Semiconductors Over an Insulator Via Electrodeposition. Advanced Electronic Materials, 2021, 7, 2100419.	5.1	6
12	Refinement of crystal structure using "digital" large angle convergent beam electron diffraction. Microscopy and Microanalysis, 2021, 27, 1282-1284.	0.4	0
13	Spatial distribution of defects in a plastically deformed natural brown diamond. Diamond and Related Materials, 2021, 117, 108465.	3.9	7
14	Phase-Change Memory by GeSbTe Electrodeposition in Crossbar Arrays. ACS Applied Electronic Materials, 2021, 3, 3610-3618.	4.3	12
15	All-MBE grown InAs/GaAs quantum dot lasers with thin Ge buffer layer on Si substrates. Journal Physics D: Applied Physics, 2021, 54, 035103.	2.8	23
16	Electrodeposition of GeSbTe-Based Resistive Switching Memory in Crossbar Arrays. Journal of Physical Chemistry C, 2021, 125, 26247-26255.	3.1	9
17	GaAsP/SiGe tandem solar cells on porous Si substrates. Solar Energy, 2021, 230, 925-934.	6.1	8
18	Origin of Defect Tolerance in InAs/GaAs Quantum Dot Lasers Grown on Silicon. Journal of Lightwave Technology, 2020, 38, 240-248.	4.6	46

#	ARTICLE	IF	CITATIONS
19	Large-Area Electrodeposition of Few-Layer MoS <sub>2</sub> on Graphene for 2D Material Heterostructures. ACS Applied Materials & Interfaces, 2020, 12, 49786-49794.	8.0	21
20	Controlling palladium morphology in electrodeposition from nanoparticles to dendrites via the use of mixed solvents. Nanoscale, 2020, 12, 21757-21769.	5.6	9
21	Polarization Screening Mechanisms at La <sub>0.7</sub> Sr <sub>0.3</sub> MnO <sub>3</sub> –PbTiO <sub>3</sub> Interfaces. ACS Applied Materials & Interfaces, 2020, 12, 10657-10663.	8.0	7
22	Point defects and interstitial climb of 90Å° partial dislocations in brown type IIa natural diamond. Acta Materialia, 2020, 201, 494-503.	7.9	3
23	Mid-infrared type-II InAs/InAsSb quantum wells integrated on silicon. Applied Physics Letters, 2020, 117, .	3.3	15
24	Atomic level termination for passivation and functionalisation of silicon surfaces. Nanoscale, 2020, 12, 17332-17341.	5.6	16
25	Inversion Boundary Annihilation in GaAs Monolithically Grown on On-Axis Silicon (001). Advanced Optical Materials, 2020, 8, 2000970.	7.3	22
26	Measuring the Thickness of 2D Materials Using EDS. Microscopy and Microanalysis, 2020, 26, 1212-1214.	0.4	0
27	Partial Scanning Transmission Electron Microscopy with Deep Learning. Scientific Reports, 2020, 10, 8332.	3.3	35
28	Assessment of acid and thermal oxidation treatments for removing sp <sup>2</sup> bonded carbon from the surface of boron doped diamond. Carbon, 2020, 167, 1-10.	10.3	32
29	Adaptive learning rate clipping stabilizes learning. Machine Learning: Science and Technology, 2020, 1, 015011.	5.0	17
30	GaAsP nanowires containing intentional and self-forming quantum dots. , 2020, , .		0
31	Heteroepitaxial integration of InAs/InAsSb type-II superlattice barrier photodetectors onto silicon. , 2020, , .		0
32	Towards a 3D GeSbTe phase change memory with integrated selector by non-aqueous electrodeposition. Faraday Discussions, 2019, 213, 339-355.	3.2	14
33	Atomic structure and interface chemistry in a high-stiffness and high-strength Al–Si–Mg/TiB <sub>2</sub> nanocomposite. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2019, 763, 138072.	5.6	21
34	Mid-Infrared InAs/InAsSb Superlattice nBn Photodetector Monolithically Integrated onto Silicon. ACS Photonics, 2019, 6, 538-544.	6.6	53
35	Self-Formed Quantum Wires and Dots in GaAsP–GaAsP Core–Shell Nanowires. Nano Letters, 2019, 19, 4158-4165.	9.1	15
36	Defect Dynamics in Self-Catalyzed III–V Semiconductor Nanowires. Nano Letters, 2019, 19, 4574-4580.	9.1	5

#	ARTICLE	IF	CITATIONS
37	Improving electron micrograph signal-to-noise with an atrous convolutional encoder-decoder. Ultramicroscopy, 2019, 202, 18-25.	1.9	23
38	Thin Ge buffer layer on silicon for integration of III-V on silicon. Journal of Crystal Growth, 2019, 514, 109-113.	1.5	17
39	Low bandgap GaInAsSb thermophotovoltaic cells on GaAs substrate with advanced metamorphic buffer layer. Solar Energy Materials and Solar Cells, 2019, 191, 406-412.	6.2	19
40	Structure refinement from $\tilde{\text{digital}}^{\text{TM}}$ large angle convergent beam electron diffraction patterns. Ultramicroscopy, 2019, 198, 1-9.	1.9	8
41	O-band InAs/GaAs quantum dot laser monolithically integrated on exact ( $0^{\circ}0^{\circ}1$ ) Si substrate. Journal of Crystal Growth, 2019, 511, 56-60.	1.5	31
42	Quantitative High-Dynamic-Range Electron Diffraction of Polar Nanodomains in $\text{Pb}_{2-x}\text{ScTaO}_6$ . Advanced Materials, 2019, 31, e1806498.	21.0	12
43	Stable Defects in Semiconductor Nanowires. Nano Letters, 2018, 18, 3081-3087.	9.1	16
44	Exploration of the Smallest Diameter Tin Nanowires Achievable with Electrodeposition: Sub 7 nm Sn Nanowires Produced by Electrodeposition from a Supercritical Fluid. Nano Letters, 2018, 18, 941-947.	9.1	21
45	Electron-irradiation induced defects in $\text{Yb}_2\text{Ti}_2\text{O}_7$ . Acta Materialia, 2018, 143, 291-297.	7.9	11
46	Lithium ion batteries (NMC/graphite) cycling at $80^{\circ}\text{C}$ : Different electrolytes and related degradation mechanism. Journal of Power Sources, 2018, 373, 172-183.	7.8	59
47	Electrodeposition of Crystalline HgTe from a Non-Aqueous Plating Bath. Journal of the Electrochemical Society, 2018, 165, D802-D807.	2.9	5
48	Optical and structural properties of InGaSb/GaAs quantum dots grown by molecular beam epitaxy. Semiconductor Science and Technology, 2018, 33, 125021.	2.0	6
49	Managing dose-, damage- and data-rates in multi-frame spectrum-imaging. Microscopy (Oxford, U.K.), 2018, 2018, 1-14.	1.5	42
50	Tracking Metal Electrodeposition Dynamics from Nucleation and Growth of a Single Atom to a Crystalline Nanoparticle. ACS Nano, 2018, 12, 7388-7396.	14.6	74
51	Electrodeposition of tin nanowires from a dichloromethane based electrolyte. RSC Advances, 2018, 8, 24013-24020.	3.6	11
52	GaAsP nanowires and nanowire devices grown on silicon substrates. Proceedings of SPIE, 2017, , , .	0.8	3
53	Fabrication, mechanical properties and in vitro degradation behavior of newly developed Zn Ag alloys for degradable implant applications. Materials Science and Engineering C, 2017, 77, 1170-1181.	7.3	197
54	Silicon-Based Single Quantum Dot Emission in the Telecoms C-Band. ACS Photonics, 2017, 4, 1740-1746.	6.6	10

#	ARTICLE	IF	CITATIONS
55	Nonradiative Step Facets in Semiconductor Nanowires. Nano Letters, 2017, 17, 2454-2459. Atomic structure study of the pyrochlore	9.1	17
56	Atomic structure study of the pyrochlore Atomic structure study of the pyrochlore	3.2	26
57	The Germanate Anomaly in Alkaline Earth Germanate Glasses. Journal of Physical Chemistry C, 2017, 121, 9462-9479.	3.1	26
58	Retarding oxidation of copper nanoparticles without electrical isolation and the size dependence of work function. Nature Communications, 2017, 8, 1894.	12.8	78
59	Compliance-Free ZrO <sub>2</sub> /ZrO <sub>2</sub> Resistive Memory with Controllable Interfacial Multistate Switching Behaviour. Nanoscale Research Letters, 2017, 12, 384.	5.7	31
60	Metalorganic vapor phase epitaxy growth, transmission electron microscopy, and magneto-optical spectroscopy of individual InAs <sub>x</sub> P <sub>1-x</sub> /Ga <sub>0.5</sub> In <sub>0.5</sub> P quantum dots. Physical Review Materials, 2017, 1, .	2.4	1
61	InAsP/AlGaInP/GaAs QD laser operating at $\lambda \approx 770$ nm. Journal of Physics: Conference Series, 2016, 740, 012008.	0.4	7
62	Electrodeposition of Protocrystalline Germanium from Supercritical Difluoromethane. ChemElectroChem, 2016, 3, 726-733.	3.4	9
63	Analysing radiative and non-radiative recombination in InAs QDs on Si for integrated laser applications. Proceedings of SPIE, 2016, , .	0.8	0
64	Novel Zn-based alloys for biodegradable stent applications: Design, development and in vitro degradation. Journal of the Mechanical Behavior of Biomedical Materials, 2016, 60, 581-602.	3.1	316
65	Optimizations of Defect Filter Layers for 1.3- $\mu$ m InAs/GaAs Quantum-Dot Lasers Monolithically Grown on Si Substrates. IEEE Journal of Selected Topics in Quantum Electronics, 2016, 22, 50-56.	2.9	69
66	On the vertical stacking in semiconducting WSe <sub>2</sub> bilayers. Materials Science and Technology, 2016, 32, 226-231.	1.6	3
67	Growth of high-quality self-catalyzed core-shell GaAsP nanowires on Si substrates. Proceedings of SPIE, 2016, , .	0.8	0
68	Polarization curling and flux closures in multiferroic tunnel junctions. Nature Communications, 2016, 7, 13484.	12.8	58
69	Electron-beam-induced ferroelectric domain behavior in the transmission electron microscope: Toward deterministic domain patterning. Physical Review B, 2016, 94, .	3.2	26
70	Growth and characterisation of InAsP/AlGaInP QD laser structures. , 2016, , .		1
71	Preparation of a hybrid Cu <sub>2</sub> O/CuMoO <sub>4</sub> nanosheet electrode for high-performance asymmetric supercapacitors. Journal of Materials Chemistry A, 2016, 4, 17749-17756.	10.3	71
72	Preface of 19th Microscopy of Semiconducting Materials conference. Journal of Microscopy, 2016, 262, 131-133.	1.8	1

#	ARTICLE	IF	CITATIONS
73	In situ annealing enhancement of the optical properties and laser device performance of InAs quantum dots grown on Si substrates. <i>Optics Express</i> , 2016, 24, 6196.	3.4	26
74	Looking for the potential in digital large-angle electron diffraction patterns. <i>Acta Crystallographica Section A: Foundations and Advances</i> , 2016, 72, s327-s327.	0.1	0
75	Structure refinement using 'digital' electron diffraction. <i>Acta Crystallographica Section A: Foundations and Advances</i> , 2015, 71, s104-s104.	0.1	0
76	Imaging the dynamics of polar nanoregions in PbSc <sub>0.5</sub> Ta <sub>0.5</sub> O <sub>3</sub> using transmission electron microscopy and 'digital' electron diffraction. <i>Acta Crystallographica Section A: Foundations and Advances</i> , 2015, 71, s66-s66.	0.1	0
77	Dislocation filters in GaAs on Si. <i>Semiconductor Science and Technology</i> , 2015, 30, 114004.	2.0	40
78	Growth and structural characterization of GaAsBi/GaAs multiple quantum wells. <i>Semiconductor Science and Technology</i> , 2015, 30, 094013.	2.0	14
79	Improving the SNR of Atomic Resolution STEM EELS & EDX Mapping while Reducing Beam-damage by using Non-rigid Spectrum-image Averaging. <i>Microscopy and Microanalysis</i> , 2015, 21, 1215-1216.	0.4	1
80	Optimising the defect filter layer design for III/V QDs on Si for integrated laser applications. , 2015, , .		0
81	Structural, optical and vibrational properties of self-assembled Pbn+1(Ti1 <sup>n</sup> xFex)nO3n+1 <sup>n</sup> Ruddlesden-Popper superstructures. <i>Scientific Reports</i> , 2015, 5, 7719.	3.3	8
82	InAsP quantum dot lasers. , 2015, , .		0
83	Bayesian Estimation of Density via Multiple Sequential Inversions of Two-Dimensional Images With Application to Electron Microscopy. <i>Technometrics</i> , 2015, 57, 217-233.	1.9	2
84	InAsP quantum dot lasers grown by MOVPE. <i>Optics Express</i> , 2015, 23, 27282.	3.4	16
85	Continuous-wave emission of III <sup>n</sup> V quantum dot lasers grown directly on Si substrates. , 2015, , .		0
86	Effect of annealing in the Sb and In distribution of type II GaAsSb-capped InAs quantum dots. <i>Semiconductor Science and Technology</i> , 2015, 30, 114006.	2.0	12
87	Ordered mesoporous silica films with pores oriented perpendicular to a titanium nitride substrate. <i>Physical Chemistry Chemical Physics</i> , 2015, 17, 4763-4770.	2.8	39
88	Artefacts in geometric phase analysis of compound materials. <i>Ultramicroscopy</i> , 2015, 157, 91-97.	1.9	64
89	Mechanistic Insight into the Synthesis of Silica-Based $\alpha$ -Matchstick $\beta$ -Colloids. <i>Langmuir</i> , 2015, 31, 9017-9025.	3.5	20
90	Osmium Atoms and Os <sub>2</sub> Molecules Move Faster on Selenium-Doped Compared to Sulfur-Doped Boronic Graphenic Surfaces. <i>Chemistry of Materials</i> , 2015, 27, 5100-5105.	6.7	14

#	ARTICLE	IF	CITATIONS
91	Polarity-Driven Quasi-3-Fold Composition Symmetry of Self-Catalyzed III-V Ternary Core-Shell Nanowires. Nano Letters, 2015, 15, 3128-3133.	9.1	39
92	MBE grown GaAsBi/GaAs multiple quantum well structures: Structural and optical characterization. Journal of Crystal Growth, 2015, 425, 237-240.	1.5	22
93	InSb quantum dots for the mid-infrared spectral range grown on GaAs substrates using metamorphic InAs buffer layers. Semiconductor Science and Technology, 2014, 29, 075011.	2.0	18
94	Submonolayer InGaAs/GaAs quantum dot solar cells. Solar Energy Materials and Solar Cells, 2014, 126, 83-87.	6.2	43
95	Chemotaxis of catalytic silica-manganese oxide particles. Materials Horizons, 2014, 1, 65-68.	12.2	49
96	Fabrication of crystals from single metal atoms. Nature Communications, 2014, 5, 3851.	12.8	31
97	Anisotropy in the hole mobility measured along the [110] and [1 <sup>-10</sup> ] orientations in a strained Ge quantum well. Applied Physics Letters, 2014, 104, 104101.	3.3	15
98	Symmetry and defects in rhombohedral single-crystalline Na <sub>0.5</sub> Bi <sub>0.5</sub> TiO <sub>3</sub> . Applied Physics Letters, 2014, 104, 104102.	3.2	51
99	The Electrodeposition of Silver from Supercritical Carbon Dioxide/Acetonitrile. ChemElectroChem, 2014, 1, 187-194.	3.4	19
100	Lateral heterojunctions within monolayer MoSe <sub>2</sub> /WSe <sub>2</sub> semiconductors. Nature Materials, 2014, 13, 1096-1101.	27.5	872
101	AgNb <sub>7</sub> O <sub>18</sub> : An Ergodic Relaxor Ferroelectric. Inorganic Chemistry, 2014, 53, 8941-8948.	4.0	8
102	Design rules for dislocation filters. Journal of Applied Physics, 2014, 116, .	2.5	55
103	Wafer-Scale Fabrication of Self-Catalyzed 1.7 eV GaAsP Core-Shell Nanowire Photocathode on Silicon Substrates. Nano Letters, 2014, 14, 2013-2018.	9.1	58
104	Ultra high hole mobilities in a pure strained Ge quantum well. Thin Solid Films, 2014, 557, 329-333.	1.8	11
105	High Dynamic Range Electron Imaging: The New Standard. Microscopy and Microanalysis, 2014, 20, 1601-1604.	0.4	6
106	O <sub>2</sub> + probe-sample conditions for ultra low energy SIMS depth profiling of nanometre scale Si <sub>0.4</sub> Ge <sub>0.6</sub> /Ge quantum wells. Surface and Interface Analysis, 2013, 45, 348-351.	1.8	2
107	Absorption, Gain, and Threshold in InP/AlGaInP Quantum Dot Laser Diodes. IEEE Journal of Quantum Electronics, 2013, 49, 389-394.	1.9	7
108	Digital electron diffraction - seeing the whole picture. Acta Crystallographica Section A: Foundations and Advances, 2013, 69, 427-434.	0.3	17

#	ARTICLE	IF	CITATIONS
109	III-V quantum light source and cavity-QED on Silicon. Scientific Reports, 2013, 3, 1239.	3.3	33
110	Determining symmetry of ferroelectric oxides at the nanometre scale using 'digital' electron diffraction. Acta Crystallographica Section A: Foundations and Advances, 2013, 69, s118-s118.	0.3	0
111	Cubic MnSb: Epitaxial growth of a predicted room temperature half-metal. Physical Review B, 2012, 85, .	3.2	50
112	The effect of strained confinement layers in InP self-assembled quantum dot material. Semiconductor Science and Technology, 2012, 27, 094008.	2.0	13
113	Multiple Hydrogen-Bond Array Reinforced Cellular Polymer Films from Colloidal Crystalline Assemblies of Soft Latex Particles. ACS Macro Letters, 2012, 1, 603-608.	4.8	20
114	Overcoming Low Ge Ionization and Erosion Rate Variation for Quantitative Ultralow Energy Secondary Ion Mass Spectrometry Depth Profiles of Si <sub>1-x</sub> Ge <sub>x</sub> /Ge Quantum Well Structures. Analytical Chemistry, 2012, 84, 2292-2298.	6.5	6
115	Structural analysis of strained quantum dots using nuclear magnetic resonance. Nature Nanotechnology, 2012, 7, 646-650.	31.5	65
116	Resolving the Nanoscale Morphology and Crystallographic Structure of Molecular Thin Films: F <sub>16</sub> CuPc on Graphene Oxide. Chemistry of Materials, 2012, 24, 1365-1370.	6.7	30
117	Low voltage STEM imaging of multi-walled carbon nanotubes. Micron, 2012, 43, 428-434.	2.2	11
118	'Digital' electron diffraction. Acta Crystallographica Section A: Foundations and Advances, 2012, 68, s101-s101.	0.3	0
119	Three-dimensional measurement of composition changes in InAs/GaAs quantum dots. Journal of Physics: Conference Series, 2011, 326, 012048.	0.4	1
120	Imaging planar tetragonal sheets in rhombohedral Na <sub>0.5</sub> Bi <sub>0.5</sub> TiO <sub>3</sub> using transmission electron microscopy. Scripta Materialia, 2011, 65, 440-443.	5.2	46
121	Structure of planar defects in tilted perovskites. Acta Crystallographica Section A: Foundations and Advances, 2011, 67, 191-199.	0.3	29
122	The influence of beam energy on apparent layer thickness using ultralow energy O <sub>2</sub> <sup>+</sup> SIMS on surface Si <sub>1-x</sub> Ge <sub>x</sub> . Surface and Interface Analysis, 2011, 43, 211-213.	1.8	4
123	Accuracy of composition measurement using X-ray spectroscopy in precipitate-strengthened alloys: Application to Ni-base superalloys. Acta Materialia, 2011, 59, 1003-1013.	7.9	17
124	Progress towards site-specific dopant profiling in the scanning electron microscope. Journal of Physics: Conference Series, 2010, 209, 012068.	0.4	3
125	Accurate ultra-low energy secondary ion mass spectrometry analysis of wide bandgap GaN/In <sub>x</sub> Ga <sub>1-x</sub> N structures using optical conductivity enhancement. Rapid Communications in Mass Spectrometry, 2010, 24, 2122-2126.	1.5	2
126	Electron tomography of III-V quantum dots using dark field 002 imaging conditions. Journal of Microscopy, 2010, 237, 148-154.	1.8	5

#	ARTICLE	IF	CITATIONS
127	On the structure and topography of free-standing chemically modified graphene. <i>New Journal of Physics</i> , 2010, 12, 125010.	2.9	49
128	Hot electron transport and impact ionization in the narrow energy gap InAs <sub>1-x</sub> N <sub>x</sub> alloy. <i>Applied Physics Letters</i> , 2010, 96, 052115.	3.3	7
129	Lattice distortions in GaN thin films on (0001) sapphire. <i>Journal of Physics: Conference Series</i> , 2010, 209, 012022.	0.4	2
130	Blocking of indium incorporation by antimony in In <sub>0.926</sub> Sb <sub>0.063</sub> N <sub>0.011</sub> /InAs multi-quantum wells in the mid-infrared spectral range. <i>Nanotechnology</i> , 2010, 21, 145606.	2.6	16
131	Photoluminescence of InAs <sub>0.926</sub> Sb <sub>0.063</sub> N <sub>0.011</sub> /InAs multi-quantum wells in the mid-infrared spectral range. <i>Journal Physics D: Applied Physics</i> , 2010, 43, 345103.	2.8	7
132	Site-selective dopant profiling of p-n junction specimens in the dual-beam FIB/SEM system. <i>Journal of Physics: Conference Series</i> , 2010, 209, 012069.	0.4	6
133	Correlation between defect density and current leakage in InAs <sub>x</sub> GaAs quantum dot-in-well structures. <i>Journal of Applied Physics</i> , 2009, 106, .	2.5	16
134	Microstructure and Solidification Sequence of the Interdendritic Region in a Third Generation Single-Crystal Nickel-Base Superalloy. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2009, 40, 1660-1669.	2.2	48
135	Graphene Oxide: Structural Analysis and Application as a Highly Transparent Support for Electron Microscopy. <i>ACS Nano</i> , 2009, 3, 2547-2556.	14.6	629
136	Quantum dots in strained layers preventing relaxation through the precipitate hardening effect. <i>Journal of Applied Physics</i> , 2008, 104, .	2.5	9
137	Structural analysis of life tested 1.3 μm quantum dot lasers. <i>Journal of Applied Physics</i> , 2008, 103, .	2.5	45
138	Electron tomography using compositional-sensitive diffraction contrast for 3D characterization of self-assembled semiconductor quantum dots. <i>Microscopy and Microanalysis</i> , 2008, 14, 1052-1053.	0.4	0
139	GROWTH AND CHARACTERIZATION OF MULTI-LAYER 1.3 μm QUANTUM DOT LASERS. <i>International Journal of Nanoscience</i> , 2007, 06, 291-296.	0.7	1
140	A TEM study of the evolution of InAs/GaAs self-assembled dots on (3% <sub>1</sub> )B GaAs with growth interruption. <i>Semiconductor Science and Technology</i> , 2007, 22, 168-170.	2.0	3
141	Effects of spacer growth temperature on the optical properties of quantum dot laser structures. , 2007, , .		0
142	Quantitative Strain Mapping Applied to Aberration-Corrected HAADF Images. <i>Microscopy and Microanalysis</i> , 2006, 12, 285-294.	0.4	22
143	An approach to the systematic distortion correction in aberration-corrected HAADF images. <i>Journal of Microscopy</i> , 2006, 221, 1-7.	1.8	34
144	High performance 1.3 μm InAs/GaAs quantum dot lasers with low threshold current and negative characteristic temperature. , 2006, 6184, 374.		6

#	ARTICLE	IF	CITATIONS
145	Mapping the effective mass of electrons in III-V semiconductor quantum confined structures. Physical Review B, 2006, 73, .	3.2	16
146	Nanometer-scale strain measurements in semiconductors: An innovative approach using the plasmon peak in electron energy loss spectra. Applied Physics Letters, 2006, 88, 051917.	3.3	7
147	Strain interactions and defect formation in stacked InGaAs quantum dot and dot-in-well structures. Physica E: Low-Dimensional Systems and Nanostructures, 2005, 26, 245-251.	2.7	10
148	Optimizing the growth of 1.3- $\mu\text{m}$ InAs/InGaAs dots-in-a-well structure: Achievement of high-performance laser. Materials Science and Engineering C, 2005, 25, 779-783.	7.3	10
149	Dark field transmission electron microscope images of III-V quantum dot structures. Ultramicroscopy, 2005, 102, 115-125.	1.9	43
150	Growth and Characterization of 1.3- $\mu\text{m}$ Multi-Layer Quantum Dots Lasers Incorporating High Growth Temperature Spacer Layers. AIP Conference Proceedings, 2005, , .	0.4	0
151	Mapping quantum dot-in-well structures on the nanoscale using the plasmon peak in electron energy loss spectra. Physical Review B, 2005, 72, .	3.2	21
152	Mechanism for improvements of optical properties of 1.3- $\mu\text{m}$ InAs-GaAs quantum dots by a combined InAlAs-InGaAs cap layer. Journal of Applied Physics, 2005, 98, 083516.	2.5	21
153	Mapping of the effective electron mass in III-V semiconductors. , 2005, , 491-494.		0
154	Changes in plasmon peak position in a GaAs/Tn <sub>0.2</sub> Ga <sub>0.8</sub> As structure. , 2005, , 163-166.		0
155	Improved performance of 1.3- $\mu\text{m}$ multilayer InAs quantum-dot lasers using a high-growth-temperature GaAs spacer layer. Applied Physics Letters, 2004, 85, 704-706.	3.3	267
156	Influences of the spacer layer growth temperature on multilayer InAs-GaAs quantum dot structures. Journal of Applied Physics, 2004, 96, 1988-1992.	2.5	85
157	Correction for the loss of depth resolution with accurate depth calibration when profiling with Cs <sup>+</sup> at angles of incidence above 50° to normal. Applied Surface Science, 2003, 203-204, 260-263.	6.1	7
158	On determining accurate positions, separations, and internal profiles for delta layers. Applied Surface Science, 2003, 203-204, 273-276.	6.1	15
159	Rapid Cross-Section TEM Specimen Preparation of III-V Materials. Microscopy Today, 2003, 11, 29-32.	0.3	7
160	A comparison of commercial sources of epitaxial material for GaN HFETs fabrication. Journal of Crystal Growth, 2001, 230, 569-572.	1.5	5
161	Material optimisation for AlGaIn/GaN HFET applications. Journal of Crystal Growth, 2001, 230, 573-578.	1.5	29
162	Photoluminescence characterization of defects in Si and SiGe structures. Journal of Physics Condensed Matter, 2000, 12, 10105-10121.	1.8	24

#	ARTICLE	IF	CITATIONS
163	Optimization of Polysilicon Encapsulated Local Oxidation of Silicon: Cavity Dimension Effects on Mechanical Stress and Gate Oxide Integrity. Journal of the Electrochemical Society, 1998, 145, 1653-1659.	2.9	4
164	Microstructural characterization of sol-gel lead-zirconate-titanate thin films. Journal of Applied Physics, 1998, 83, 2202-2208.	2.5	65
165	Plastic relaxation and relaxed buffer layers for semiconductor epitaxy. Advances in Physics, 1996, 45, 87-146.	14.4	185
166	Observations of sol-gel deposited lead zirconium titanate films using transmission electron microscopy and X-ray diffraction. Integrated Ferroelectrics, 1996, 13, 179-194.	0.7	2
167	Predictability of plastic relaxation in metamorphic epitaxy. Materials Science and Technology, 1996, 12, 181-186.	1.6	19
168	Non-uniform strain relaxation in In <sub>x</sub> Ga <sub>1-x</sub> As layers. Solid-State Electronics, 1996, 40, 647-651.	1.4	3
169	An in-situ laser-light scattering study of the development of surface topography during GaAs and In <sub>x</sub> Ga <sub>1-x</sub> As chemical beam epitaxy. Journal of Crystal Growth, 1996, 164, 51-57.	1.5	10
170	A novel design method for the suppression of edge dislocation formation in step-graded InGaAs/GaAs layers. Philosophical Magazine A: Physics of Condensed Matter, Structure, Defects and Mechanical Properties, 1996, 73, 1439-1450.	0.6	6
171	A study of surface cross-hatch and misfit dislocation structure in grown by chemical beam epitaxy. Journal of Crystal Growth, 1995, 149, 1-11.	1.5	52
172	A model for the distribution of misfit dislocations near epitaxial layer interfaces. Philosophical Magazine A: Physics of Condensed Matter, Structure, Defects and Mechanical Properties, 1995, 72, 1531-1545.	0.6	10
173	On the development of misfit dislocation distributions in strained epitaxial layer interfaces. Scripta Metallurgica Et Materialia, 1995, 33, 123-128.	1.0	11
174	Dislocation multiplication mechanisms in low-misfit strained epitaxial layers. Journal of Applied Physics, 1995, 77, 6217-6222.	2.5	56
175	Relaxation of InGaAs layers grown on (111)B GaAs. Applied Physics Letters, 1994, 65, 3212-3214.	3.3	31
176	Orientations and morphology of Al layers grown on GaAs by chemical beam epitaxy. Journal of Crystal Growth, 1993, 132, 592-598.	1.5	2
177	X-ray measurement of deformation and dislocation density in semiconductor strained layers. Journal of Crystal Growth, 1993, 130, 394-404.	1.5	13
178	Surface morphology of photo-assisted chemical beam epitaxial growth of gallium arsenide. Journal of Crystal Growth, 1993, 127, 148-151.	1.5	0
179	An investigation of misfit dislocations in Al on (001) GaAs grown by chemical beam epitaxy. Journal of Materials Science, 1993, 1, 99.	1.2	0
180	Structural aspects of strained layers I. Application of the Frank-Bilby equation to epitaxial layers. Philosophical Magazine A: Physics of Condensed Matter, Structure, Defects and Mechanical Properties, 1993, 67, 585-603.	0.6	4

#	ARTICLE	IF	CITATIONS
181	Microstructure of GaAs grown by excimer laser-assisted chemical beam epitaxy. Semiconductor Science and Technology, 1993, 8, 1112-1117.	2.0	7
182	Tilted Epitaxial Films. Materials Science Forum, 1993, 126-128, 281-284.	0.3	2
183	Optical evaluation of an AlAs/AlGaAs visible Bragg reflector grown by chemical beam epitaxy. Applied Physics Letters, 1992, 61, 2770-2772.	3.3	14
184	Multiplication of misfit dislocations in epitaxial layers. Journal of Applied Physics, 1992, 72, 4031-4035.	2.5	95
185	Defects in Photo-Assisted CBE-Grown GaAs. Materials Research Society Symposia Proceedings, 1992, 282, 39.	0.1	0
186	On charge density determinations in intermetallics by quantitative convergent beam electron diffraction. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 1992, 152, 237-239.	5.6	1
187	Tilts in Thin Strained Layers.. Materials Research Society Symposia Proceedings, 1991, 238, 17.	0.1	2
188	Dislocation Dissociation in the $\{111\}$ Grain Boundary in Silicon. Materials Research Society Symposia Proceedings, 1991, 238, 151.	0.1	0
189	The Critical Thickness of Layers Subject to Anisotropic Misfit.. Materials Research Society Symposia Proceedings, 1991, 239, 407.	0.1	0
190	The Interactions Between Misfit Dislocations in InGaAs/GaAs Interfaces.. Materials Research Society Symposia Proceedings, 1991, 239, 413.	0.1	0
191	Dislocation Arrays in Epitaxial Interfaces.. Materials Research Society Symposia Proceedings, 1990, 198, 111.	0.1	1
192	Simulation of advanced-LOCOS capability for sub-0.25 micron CMOS isolation. , 0, , .		2
193	Nanoanalysis of InAs/GaAs quantum dots using low-loss EELS spectra. , 0, , 259-262.		0
194	Three-dimensional imaging of semiconductor nanostructures by compositional-sensitive diffraction contrast electron tomography studies. , 0, , 313-314.		0
195	Confining the growth of mesoporous silica films into nanospaces: towards surface nanopatterning. Nanoscale Advances, 0, , .	4.6	2