# Anthony J Kenyon

## List of Publications by Citations

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135 papers

4,438 citations

33 h-index

64 g-index

156 ext. papers

5,112 ext. citations

**5.1** avg, IF

5.73 L-index

| #   | Paper                                                                                                                                                                                                             | IF             | Citations |
|-----|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------|-----------|
| 135 | Recent developments in rare-earth doped materials for optoelectronics. <i>Progress in Quantum Electronics</i> , <b>2002</b> , 26, 225-284                                                                         | 9.1            | 679       |
| 134 | Recommended Methods to Study Resistive Switching Devices. <i>Advanced Electronic Materials</i> , <b>2019</b> , 5, 1800143                                                                                         | 6.4            | 297       |
| 133 | Erbium in silicon. Semiconductor Science and Technology, <b>2005</b> , 20, R65-R84                                                                                                                                | 1.8            | 199       |
| 132 | Optical properties of PECVD erbium-doped silicon-rich silica: evidence for energy transfer between silicon microclusters and erbium ions. <i>Journal of Physics Condensed Matter</i> , <b>1994</b> , 6, L319-L324 | 1.8            | 195       |
| 131 | The origin of photoluminescence from thin films of silicon-rich silica. <i>Journal of Applied Physics</i> , <b>1996</b> , 79, 9291-9300                                                                           | 2.5            | 185       |
| 130 | Resistive switching in silicon suboxide films. <i>Journal of Applied Physics</i> , <b>2012</b> , 111, 074507                                                                                                      | 2.5            | 173       |
| 129 | Modeling the contribution of quantum confinement to luminescence from silicon nanoclusters.<br>Journal of Applied Physics, 1998, 83, 3789-3794                                                                    | 2.5            | 167       |
| 128 | Luminescence from erbium-doped silicon nanocrystals in silica: Excitation mechanisms. <i>Journal of Applied Physics</i> , <b>2002</b> , 91, 367                                                                   | 2.5            | 145       |
| 127 | Quantum conductance in silicon oxide resistive memory devices. <i>Scientific Reports</i> , <b>2013</b> , 3, 2708                                                                                                  | 4.9            | 126       |
| 126 | Evidence of energy coupling between Si nanocrystals and Er3+ in ion-implanted silica thin films. <i>Applied Physics Letters</i> , <b>1999</b> , 75, 2011-2013                                                     | 3.4            | 119       |
| 125 | Silicon Oxide (SiO ): A Promising Material for Resistance Switching?. <i>Advanced Materials</i> , <b>2018</b> , 30, e180                                                                                          | 01 <u>1</u> 87 | 105       |
| 124 | Electrically tailored resistance switching in silicon oxide. <i>Nanotechnology</i> , <b>2012</b> , 23, 455201                                                                                                     | 3.4            | 84        |
| 123 | Emulating the Electrical Activity of the Neuron Using a Silicon Oxide RRAM Cell. <i>Frontiers in Neuroscience</i> , <b>2016</b> , 10, 57                                                                          | 5.1            | 77        |
| 122 | Structural changes and conductance thresholds in metal-free intrinsic SiOx resistive random access memory. <i>Journal of Applied Physics</i> , <b>2015</b> , 117, 124505                                          | 2.5            | 69        |
| 121 | Towards population inversion of electrically pumped Er ions sensitized by Si nanoclusters. <i>Optics Express</i> , <b>2010</b> , 18, 2230-5                                                                       | 3.3            | 69        |
| 120 | The vapour phase detection of explosive markers and derivatives using two fluorescent metalBrganic frameworks. <i>Journal of Materials Chemistry A</i> , <b>2015</b> , 3, 6351-6359                               | 13             | 63        |
| 119 | Losses in luminescent solar concentrators unveiled. <i>Solar Energy Materials and Solar Cells</i> , <b>2016</b> , 144, 40-47                                                                                      | 6.4            | 61        |

# (2006-2003)

| 118 | FTIR and XPS investigation of Er-doped SiO2IIiO2 films. <i>Materials Science and Engineering B: Solid-State Materials for Advanced Technology</i> , <b>2003</b> , 105, 209-213                                                | 3.1  | 60 |
|-----|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|----|
| 117 | Conductance tomography of conductive filaments in intrinsic silicon-rich silica RRAM. <i>Nanoscale</i> , <b>2015</b> , 7, 18030-5                                                                                             | 7.7  | 51 |
| 116 | Amorphous and nanocrystalline luminescent Si and Ge obtained via a solid-state chemical metathesis synthesis route. <i>Journal of Solid State Chemistry</i> , <b>2005</b> , 178, 937-949                                      | 3.3  | 50 |
| 115 | Self-assembly of metallic nanoparticles into one dimensional arrays. <i>Journal of Materials Chemistry A</i> , <b>2013</b> , 1, 6985                                                                                          | 13   | 49 |
| 114 | Memristors <b>f</b> rom In-Memory Computing, Deep Learning Acceleration, and Spiking Neural Networks to the Future of Neuromorphic and Bio-Inspired Computing. <i>Advanced Intelligent Systems</i> , <b>2020</b> , 2, 2000085 | 6    | 47 |
| 113 | On the ability of FEster resonance energy transfer to enhance luminescent solar concentrator efficiency. <i>Nano Energy</i> , <b>2017</b> , 32, 263-270                                                                       | 17.1 | 45 |
| 112 | Intrinsic resistance switching in amorphous silicon oxide for high performance SiOx ReRAM devices. <i>Microelectronic Engineering</i> , <b>2017</b> , 178, 98-103                                                             | 2.5  | 45 |
| 111 | Nanoscale Transformations in Metastable, Amorphous, Silicon-Rich Silica. <i>Advanced Materials</i> , <b>2016</b> , 28, 7486-93                                                                                                | 24   | 43 |
| 110 | Probing the phonon confinement in ultrasmall silicon nanocrystals reveals a size-dependent surface energy. <i>Journal of Applied Physics</i> , <b>2011</b> , 109, 083534                                                      | 2.5  | 42 |
| 109 | Complementary Metal-Oxide Semiconductor and Memristive Hardware for Neuromorphic Computing. <i>Advanced Intelligent Systems</i> , <b>2020</b> , 2, 1900189                                                                    | 6    | 39 |
| 108 | Current transport and electroluminescence mechanisms in thin SiO2 films containing Si nanocluster-sensitized erbium ions. <i>Journal of Applied Physics</i> , <b>2009</b> , 106, 063526                                       | 2.5  | 39 |
| 107 | Electrospray synthesis and properties of hierarchically structured PLGA TIPS microspheres for use as controlled release technologies. <i>Journal of Colloid and Interface Science</i> , <b>2016</b> , 467, 220-229            | 9.3  | 38 |
| 106 | Standards for the Characterization of Endurance in Resistive Switching Devices. ACS Nano, 2021,                                                                                                                               | 16.7 | 36 |
| 105 | Sensing and Discrimination of Explosives at Variable Concentrations with a Large-Pore MOF as Part of a Luminescent Array. <i>ACS Applied Materials &amp; Empt. Interfaces</i> , <b>2019</b> , 11, 11618-11626                 | 9.5  | 35 |
| 104 | Light-activated resistance switching in SiOx RRAM devices. <i>Applied Physics Letters</i> , <b>2017</b> , 111, 233502                                                                                                         | 3.4  | 34 |
| 103 | Simulation of Inference Accuracy Using Realistic RRAM Devices. Frontiers in Neuroscience, <b>2019</b> , 13, 593                                                                                                               | 5.1  | 33 |
| 102 | Intrinsic Resistance Switching in Amorphous Silicon Suboxides: The Role of Columnar Microstructure. <i>Scientific Reports</i> , <b>2017</b> , 7, 9274                                                                         | 4.9  | 31 |
| 101 | Er3+ excited state absorption and the low fraction of nanocluster-excitable Er3+ in SiOx. <i>Applied Physics Letters</i> , <b>2006</b> , 89, 031116                                                                           | 3.4  | 31 |

| 100 | Modeling of Quantized Conductance Effects in Electrochemical Metallization Cells. <i>IEEE Nanotechnology Magazine</i> , <b>2015</b> , 14, 505-512                                                              | 2.6   | 30 |
|-----|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------|----|
| 99  | Liquid surface dynamics: a quantum-resolved scattering study. <i>Chemical Physics Letters</i> , <b>1992</b> , 190, 55-5                                                                                        | 582.5 | 27 |
| 98  | Quantum confinement in rare-earth doped semiconductor systems. <i>Current Opinion in Solid State and Materials Science</i> , <b>2003</b> , 7, 143-149                                                          | 12    | 26 |
| 97  | Investigation of dynamical processes at liquid surfaces by molecular scattering. <i>Journal of the Chemical Society, Faraday Transactions</i> , <b>1993</b> , 89, 3877                                         |       | 26 |
| 96  | The interaction of gold and silver nanoparticles with a range of anionic and cationic dyes. <i>Physical Chemistry Chemical Physics</i> , <b>2014</b> , 16, 6050-9                                              | 3.6   | 25 |
| 95  | Homeotropic alignment and FEster resonance energy transfer: The way to a brighter luminescent solar concentrator. <i>Journal of Applied Physics</i> , <b>2014</b> , 116, 173103                                | 2.5   | 25 |
| 94  | Generalized rate-equation analysis of excitation exchange between silicon nanoclusters and erbium ions. <i>Physical Review B</i> , <b>2008</b> , 77,                                                           | 3.3   | 23 |
| 93  | Probing electrochemistry at the nanoscale: in situ TEM and STM characterizations of conducting filaments in memristive devices. <i>Journal of Electroceramics</i> , <b>2017</b> , 39, 73-93                    | 1.5   | 22 |
| 92  | Efficiency and loss mechanisms of plasmonic Luminescent Solar Concentrators. <i>Optics Express</i> , <b>2013</b> , 21 Suppl 5, A735-49                                                                         | 3.3   | 22 |
| 91  | Luminescence efficiency measurements of silicon nanoclusters. <i>Applied Physics Letters</i> , <b>1998</b> , 73, 523-5                                                                                         | 25.4  | 22 |
| 90  | Flexible and fluorophore-doped luminescent solar concentrators based on polydimethylsiloxane. <i>Optics Letters</i> , <b>2016</b> , 41, 713-6                                                                  | 3     | 21 |
| 89  | The origin of the 0.78 eV luminescence band in dislocated silicon. <i>Journal of Physics Condensed Matter</i> , <b>2003</b> , 15, S2843-S2850                                                                  | 1.8   | 21 |
| 88  | Committee machines-a universal method to deal with non-idealities in memristor-based neural networks. <i>Nature Communications</i> , <b>2020</b> , 11, 4273                                                    | 17.4  | 20 |
| 87  | Brain-inspired computing needs a master plan <i>Nature</i> , <b>2022</b> , 604, 255-260                                                                                                                        | 50.4  | 19 |
| 86  | Doping Group IIB Metal Ions into Quantum Dot Shells via the One-Pot Decomposition of Metal-Dithiocarbamates. <i>Advanced Optical Materials</i> , <b>2015</b> , 3, 704-712                                      | 8.1   | 18 |
| 85  | Investigation of quartz grain surface textures by atomic force microscopy for forensic analysis. <i>Forensic Science International</i> , <b>2012</b> , 223, 245-55                                             | 2.6   | 17 |
| 84  | Investigation of resistance switching in SiO RRAM cells using a 3D multi-scale kinetic Monte Carlo simulator. <i>Journal of Physics Condensed Matter</i> , <b>2018</b> , 30, 084005                            | 1.8   | 16 |
| 83  | Microscopic and spectroscopic analysis of the nature of conductivity changes during resistive switching in silicon-rich silicon oxide. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , |       | 16 |

### (2013-1993)

| 82 | Dynamics of the gas/liquid interface from laser molecular beam scattering. <i>Faraday Discussions</i> , <b>1993</b> , 96, 245                                                               | 3.6              | 16 |
|----|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------|----|
| 81 | Spike-Timing Dependent Plasticity in Unipolar Silicon Oxide RRAM Devices. <i>Frontiers in Neuroscience</i> , <b>2018</b> , 12, 57                                                           | 5.1              | 15 |
| 80 | Self-assembled ultra-high aspect ratio silver nanochains. <i>Advanced Materials</i> , <b>2012</b> , 24, 5227-35                                                                             | 24               | 15 |
| 79 | An analysis of erbium excited state absorption in silicon-rich silica. <i>Journal of Luminescence</i> , <b>2006</b> , 121, 193-198                                                          | 3.8              | 14 |
| 78 | Remote-coupled sensing of plasma harmonics and process end-point detection. <i>Vacuum</i> , <b>2000</b> , 57, 351                                                                           | -3 <del>64</del> | 14 |
| 77 | Indirect excitation of 1.5 th emission from Er3+ in silicon-rich silica. <i>Applied Physics Letters</i> , <b>2000</b> , 76, 688-690                                                         | 3.4              | 14 |
| 76 | Fluorescence depolarization as a probe of molecular dynamics within liquid jets. <i>Molecular Physics</i> , <b>1991</b> , 72, 965-970                                                       | 1.7              | 14 |
| 75 | On the Limits of Scalpel AFM for the 3D Electrical Characterization of Nanomaterials. <i>Advanced Functional Materials</i> , <b>2018</b> , 28, 1802266                                      | 15.6             | 14 |
| 74 | Multi-channel conduction in redox-based resistive switch modelled using quantum point contact theory. <i>Applied Physics Letters</i> , <b>2013</b> , 103, 222904                            | 3.4              | 13 |
| 73 | Probing energy transfer in an ensemble of silicon nanocrystals. <i>Journal of Applied Physics</i> , <b>2011</b> , 110, 033522                                                               | 2.5              | 13 |
| 72 | Modification of the Er3+ radiative lifetime from proximity to silicon nanoclusters in silicon-rich silicon oxide. <i>Optics Express</i> , <b>2009</b> , 17, 906-11                          | 3.3              | 13 |
| 71 | A study of molecular dynamics within liquid flows using fluorescence depolarization. <i>Molecular Physics</i> , <b>1991</b> , 74, 871-884                                                   | 1.7              | 13 |
| 70 | Resistive Switching in Oxides. Springer Series in Surface Sciences, 2015, 401-428                                                                                                           | 0.4              | 12 |
| 69 | Structural factors impacting carrier transport and electroluminescence from Si nanocluster-sensitized Er ions. <i>Optics Express</i> , <b>2012</b> , 20, 22490-502                          | 3.3              | 12 |
| 68 | Nanosecond Analog Programming of Substoichiometric Silicon Oxide Resistive RAM. <i>IEEE Nanotechnology Magazine</i> , <b>2016</b> , 15, 428-434                                             | 2.6              | 11 |
| 67 | Rf probe technology for the next generation of technological plasmas. <i>Journal Physics D: Applied Physics</i> , <b>2001</b> , 34, 2726-2733                                               | 3                | 11 |
| 66 | An oxygen vacancy mediated Ag reduction and nucleation mechanism in SiO2 RRAM devices. <i>Microelectronics Reliability</i> , <b>2019</b> , 98, 144-152                                      | 1.2              | 10 |
| 65 | Donor ionization in size controlled silicon nanocrystals: The transition from defect passivation to free electron generation. <i>Journal of Applied Physics</i> , <b>2013</b> , 113, 024304 | 2.5              | 10 |

| 64 | Continuous hydrothermal synthesis of surface-functionalised nanophosphors for biological imaging. <i>RSC Advances</i> , <b>2012</b> , 2, 10037                                                                         | 3.7 | 10 |
|----|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|----|
| 63 | DC electroluminescence from PECVD grown thin films of silicon-rich silica. <i>Electronics Letters</i> , <b>1996</b> , 32, 1703                                                                                         | 1.1 | 10 |
| 62 | Excited state absorption in the Si nanocluster-Er material system. <i>IEEE Photonics Technology Letters</i> , <b>2006</b> , 18, 289-291                                                                                | 2.2 | 10 |
| 61 | Broadband sensitization of 1.53th Er3+ luminescence in erbium-implanted alumina. <i>Applied Physics Letters</i> , <b>2004</b> , 85, 5200-5202                                                                          | 3.4 | 9  |
| 60 | In situ transmission electron microscopy of resistive switching in thin silicon oxide layers. <i>Resolution and Discovery</i> , <b>2016</b> , 1, 27-33                                                                 | 0.9 | 9  |
| 59 | Silica: Nanoscale Transformations in Metastable, Amorphous, Silicon-Rich Silica (Adv. Mater. 34/2016). <i>Advanced Materials</i> , <b>2016</b> , 28, 7549-7549                                                         | 24  | 9  |
| 58 | . IEEE Nanotechnology Magazine, <b>2018</b> , 17, 884-888                                                                                                                                                              | 2.6 | 8  |
| 57 | The interplay between structure and function in redox-based resistance switching. <i>Faraday Discussions</i> , <b>2019</b> , 213, 151-163                                                                              | 3.6 | 8  |
| 56 | X-ray spectromicroscopy investigation of soft and hard breakdown in RRAM devices. <i>Nanotechnology</i> , <b>2016</b> , 27, 345705                                                                                     | 3.4 | 8  |
| 55 | Modification of erbium photoluminescence decay rate due to ITO layers on thin films of SiO2:Er doped with Si-nanoclusters. <i>Journal of Luminescence</i> , <b>2013</b> , 136, 407-410                                 | 3.8 | 7  |
| 54 | Multiple Diode-Like Conduction in Resistive Switching SiOx-Based MIM Devices. <i>IEEE Nanotechnology Magazine</i> , <b>2015</b> , 14, 15-17                                                                            | 2.6 | 7  |
| 53 | Increasing the efficiency of erbium-based sources using silicon quantum dots. <i>Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences</i> , <b>2003</b> , 361, 345-61; discussion 361 | 32  | 7  |
| 52 | Broad-band and flashlamp pumping of 1.53 th emission from erbium-doped silicon nanocrystals. <i>Materials Science and Engineering B: Solid-State Materials for Advanced Technology</i> , <b>2001</b> , 81, 19-22       | 3.1 | 7  |
| 51 | Memristor-Based Edge Detection for Spike Encoded Pixels. <i>Frontiers in Neuroscience</i> , <b>2019</b> , 13, 1386                                                                                                     | 5.1 | 6  |
| 50 | Rate equation modelling of erbium luminescence dynamics in erbium-doped silicon-rich-silicon-oxide. <i>Journal of Luminescence</i> , <b>2012</b> , 132, 3103-3112                                                      | 3.8 | 6  |
| 49 | A frequency domain measurement diagnostic technique for plasma-tools. <i>Measurement Science and Technology</i> , <b>2004</b> , 15, 231-236                                                                            | 2   | 6  |
| 48 | Visible photoluminescence from nanocrystalline Ge grown at room temperature by photo-oxidation of SiGe using a 126 nm lamp. <i>Applied Surface Science</i> , <b>2003</b> , 208-209, 364-368                            | 6.7 | 6  |
| 47 | It's Not for Lazy Students like Me R International Journal of Electrical Engineering and Education, 2005, 42, 41-51                                                                                                    | 0.6 | 6  |

| 46 | A noninvasive rf probe for the study of ionization and dissociation processes in technological plasmas. <i>Journal of Applied Physics</i> , <b>1999</b> , 86, 4100-4106                               | 2.5  | 6 |
|----|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|---|
| 45 | Size limit on the phosphorous doped silicon nanocrystals for dopant activation. <i>Nuclear Instruments &amp; Methods in Physics Research B</i> , <b>2013</b> , 307, 456-458                           | 1.2  | 5 |
| 44 | Electrically pumped silicon waveguide light sources. <i>Optics Express</i> , <b>2011</b> , 19, 24569-76                                                                                               | 3.3  | 5 |
| 43 | Introducing scenario based learning: Experiences from an undergraduate electronic and electrical engineering course <b>2010</b> ,                                                                     |      | 5 |
| 42 | Investigation of energy exchange between silicon nanocrystals and Er3+ in silica. <i>Materials Science and Engineering B: Solid-State Materials for Advanced Technology</i> , <b>2001</b> , 81, 16-18 | 3.1  | 5 |
| 41 | Conductive AFM Topography of Intrinsic Conductivity Variations in Silica Based Dielectrics for Memory Applications. <i>ECS Transactions</i> , <b>2016</b> , 75, 3-9                                   | 1    | 5 |
| 40 | Simulation of Cycle-to-Cycle Instabilities in SiO \$_{{x}}\$ -Based ReRAM Devices Using a Self-Correlated Process With Long-Term Variation. <i>IEEE Electron Device Letters</i> , <b>2018</b> , 1-1   | 4.4  | 5 |
| 39 | Electrochemical metallization ReRAMs (ECM) - Experiments and modelling: general discussion. <i>Faraday Discussions</i> , <b>2019</b> , 213, 115-150                                                   | 3.6  | 4 |
| 38 | Advanced physical modeling of SiOx resistive random access memories <b>2016</b> ,                                                                                                                     |      | 4 |
| 37 | Time-correlated single-photon counting study of multiple photoluminescence lifetime components of silicon nanoclusters. <i>Journal of Luminescence</i> , <b>2013</b> , 136, 57-62                     | 3.8  | 4 |
| 36 | Time-resolved measurements of dislocation-related photoluminescence bands in silicon. <i>Semiconductor Science and Technology</i> , <b>2008</b> , 23, 025010                                          | 1.8  | 4 |
| 35 | Retention of data in heat-damaged SIM cards and potential recovery methods. <i>Forensic Science International</i> , <b>2008</b> , 177, 42-6                                                           | 2.6  | 4 |
| 34 | Nonideality-Aware Training for Accurate and Robust Low-Power Memristive Neural Networks <i>Advanced Science</i> , <b>2022</b> , e2105784                                                              | 13.6 | 4 |
| 33 | . IEEE Transactions on Electron Devices, <b>2009</b> , 56, 692-695                                                                                                                                    | 2.9  | 3 |
| 32 | Silicon nanocluster-sensitized emission from erbium: The role of stress in the formation of silicon nanoclusters. <i>Journal of Applied Physics</i> , <b>2008</b> , 104, 123108                       | 2.5  | 3 |
| 31 | Process harmonic pulling in RIE plasma-tool. <i>Electronics Letters</i> , <b>2006</b> , 42, 120                                                                                                       | 1.1  | 3 |
| 30 | The infra-red photoresponse of erbium-doped silicon nanocrystals. <i>Materials Science and Engineering B: Solid-State Materials for Advanced Technology</i> , <b>2003</b> , 105, 230-235              | 3.1  | 3 |
| 29 | Rare-Earth Doped Silicon-Rich Silica: Evidence for Energy Transfer between Silicon Microclusters and Rare-Earth Ions. <i>Materials Research Society Symposia Proceedings</i> , <b>1994</b> , 358, 117 |      | 3 |

| 28                   | Improving the Consistency of Nanoscale Etching for Atomic Force Microscopy Tomography Applications. <i>Frontiers in Materials</i> , <b>2019</b> , 6,                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | 4   | 2           |
|----------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|-------------|
| 27                   | Design and Fabrication of Suspended Indium Phosphide Waveguides for MEMS-Actuated Optical Buffering. <i>IEEE Journal of Selected Topics in Quantum Electronics</i> , <b>2015</b> , 21, 240-246                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | 3.8 | 2           |
| 26                   | Controlling and modelling the wetting properties of III-V semiconductor surfaces using re-entrant nanostructures. <i>Scientific Reports</i> , <b>2018</b> , 8, 3544                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | 4.9 | 2           |
| 25                   | Silicon nanoclusters containing nitrogen and sensitization of erbium luminescence in SiOx:Er. <i>Materials Science and Engineering B: Solid-State Materials for Advanced Technology</i> , <b>2008</b> , 146, 175-178                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | 3.1 | 2           |
| 24                   | Sensitisation of erbium luminescence in erbium-implanted alumina. <i>Optical Materials</i> , <b>2006</b> , 28, 655-659                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | 3.3 | 2           |
| 23                   | Enhancement of Er emission by coupling to silicon nanoclusters: a route to flashlamp-pumped Er amplifiers? <b>2001</b> ,                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |     | 2           |
| 22                   | . IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, <b>1994</b> , 41, 565-568                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | 3.2 | 2           |
| 21                   | Synaptic and neuromorphic functions: general discussion. <i>Faraday Discussions</i> , <b>2019</b> , 213, 553-578                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | 3.6 | 1           |
| 20                   | MEMS actuation for a continuously tunable optical buffer 2014,                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |     | 1           |
|                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |     |             |
| 19                   | Design and fabrication of InP free-standing optical waveguides for MEMS <b>2014</b> ,                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |     | 1           |
| 19                   | Design and fabrication of InP free-standing optical waveguides for MEMS 2014,  Time-resolved measurements of dislocation-related photoluminescence bands in silicon. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , 2009, 6, 1811-1816                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |     | 1           |
|                      | Time-resolved measurements of dislocation-related photoluminescence bands in silicon. <i>Physica</i>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | 3   |             |
| 18                   | Time-resolved measurements of dislocation-related photoluminescence bands in silicon. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , <b>2009</b> , 6, 1811-1816  Harmonic monitoring of the switched silicon etched process. <i>Journal Physics D: Applied Physics</i> ,                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | 3.1 | 1           |
| 18                   | Time-resolved measurements of dislocation-related photoluminescence bands in silicon. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , <b>2009</b> , 6, 1811-1816  Harmonic monitoring of the switched silicon etched process. <i>Journal Physics D: Applied Physics</i> , <b>2003</b> , 36, 2146-2151  Flashlamp pumping of erbium-doped silicon nanoclusters. <i>Applied Organometallic Chemistry</i> , <b>2001</b> ,                                                                                                                                                                                                                                                                                                                                                             |     | 1           |
| 18<br>17<br>16       | Time-resolved measurements of dislocation-related photoluminescence bands in silicon. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , <b>2009</b> , 6, 1811-1816  Harmonic monitoring of the switched silicon etched process. <i>Journal Physics D: Applied Physics</i> , <b>2003</b> , 36, 2146-2151  Flashlamp pumping of erbium-doped silicon nanoclusters. <i>Applied Organometallic Chemistry</i> , <b>2001</b> , 15, 352-358  Non-Destructive Assessment Of Semiconductor Carrier Lifetime Using Photothermal Radiometry.                                                                                                                                                                                                                                                    |     | 1 1         |
| 18<br>17<br>16       | Time-resolved measurements of dislocation-related photoluminescence bands in silicon. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , <b>2009</b> , 6, 1811-1816  Harmonic monitoring of the switched silicon etched process. <i>Journal Physics D: Applied Physics</i> , <b>2003</b> , 36, 2146-2151  Flashlamp pumping of erbium-doped silicon nanoclusters. <i>Applied Organometallic Chemistry</i> , <b>2001</b> , 15, 352-358  Non-Destructive Assessment Of Semiconductor Carrier Lifetime Using Photothermal Radiometry. <i>Materials Research Society Symposia Proceedings</i> , <b>1996</b> , 428, 455  A nanoscale analysis method to reveal oxygen exchange between environment, oxide, and                                                                             | 3.1 | 1<br>1<br>1 |
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