

# Paul Berger

## List of Publications by Year in descending order

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188  
papers

3,096  
citations

212478

28  
h-index

242451

47  
g-index

193  
all docs

193  
docs citations

193  
times ranked

3166  
citing authors

| #  | ARTICLE   | IF  | CITATIONS |
|----|---|-----|-----------|
| 1  | Flexible, solution-processed, indium oxide (In <sub>2</sub> O <sub>3</sub> ) thin film transistors (TFT) and circuits for internet-of-things (IoT). Materials Science in Semiconductor Processing, 2022, 139, 106354.                                   | 1.9 | 15        |
| 2  | Selective atomic layer deposition on flexible polymeric substrates employing a polyimide adhesive as a physical mask. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2021, 39, 012405.   | 0.9 | 6         |
| 3  | Foreword Special Issue on Low-Temperature Processing of Electronic Materials for Cutting Edge Devices. IEEE Transactions on Electron Devices, 2021, 68, 3138-3141.  | 1.6 | 0         |
| 4  | Temperature Characterization of Unipolar-Doped Electroluminescence in Vertical GaN/AlN Heterostructures. Energies, 2021, 14, 6654.  | 1.6 | 0         |
| 5  | Flexible, Gallium Oxide (Ga <sub>2</sub> O <sub>3</sub> ) Thin Film Transistors (TFTs) and Circuits for the Internet of Things (IoT). , 2021, , .   |     | 2         |
| 6  | Flexible Thin Film Transistor (TFT) and Circuits for Internet of Things (IoT) based on Solution Processed Indium Gallium Zinc Oxide (IGZO). , 2021, , .   |     | 0         |
| 7  | Electroluminescence in Unipolar-Doped $\text{In}_{0.53}\text{Ga}_{0.47}\text{N}$ Resonant-Tunneling Diodes: A Competition between Interband Tunneling and Impact Ionization. Physical Review Applied, 2021, 16, .                                       | 1.5 | 11        |
| 8  | Investigation of Switching Time in GaN/AlN Resonant Tunneling Diodes by Experiments and P-SPICE Models. IEEE Transactions on Electron Devices, 2020, 67, 75-79.   | 1.6 | 12        |
| 9  | 0.7-GHz Solution-Processed Indium Oxide Rectifying Diodes. IEEE Transactions on Electron Devices, 2020, 67, 360-364.  | 1.6 | 8         |
| 10 | RTD Light Emission around 1550 nm with IQE up to 6% at 300 K. , 2020, , .   |     | 2         |
| 11 | Effects of growth temperature on electrical properties of GaN/AlN based resonant tunneling diodes with peak current density up to 1.01 MA/cm <sup>2</sup> . AIP Advances, 2020, 10, .   | 0.6 | 7         |
| 12 | Superior growth, yield, repeatability, and switching performance in GaN-based resonant tunneling diodes. Applied Physics Letters, 2020, 116, .  | 1.5 | 22        |
| 13 | Dependence of growth temperature on the electrical properties and microstructure of MBE-grown AlN/GaN resonant tunneling diodes on sapphire. Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics, 2020, 38, 032214.          | 0.6 | 4         |
| 14 | 0.6V Threshold Voltage Thin Film Transistors With Solution Processable Indium Oxide (In <sub>2</sub> O <sub>3</sub> ) Channel and Anodized High- $\kappa$ Al <sub>2</sub> O <sub>3</sub> Dielectric. IEEE Electron Device Letters, 2019, 40, 1112-1115. | 2.2 | 13        |
| 15 | Advancements in Solution Processable Devices using Metal Oxides For Printed Internet-of-Things Objects. , 2019, , .   |     | 4         |
| 16 | 930 kA/cm <sup>2</sup> peak tunneling current density in GaN/AlN resonant tunneling diodes grown on MOCVD GaN-on-sapphire template. Applied Physics Letters, 2019, 114, .   | 1.5 | 17        |
| 17 | 2-volt Solution-Processed, Indium Oxide (In <sub>2</sub> O <sub>3</sub> ) Thin Film Transistors on flexible Kapton. , 2019, , .   |     | 2         |
| 18 | New Device Physics of Cross-Gap Electroluminescence in Unipolar-Doped InGaAs/AlAs RTDs. , 2019, , .   |     | 1         |

| #  | ARTICLE  | IF  | CITATIONS |
|----|--|-----|-----------|
| 19 | Pulsed characteristics for high current, large area GaN/AlN resonant tunneling diodes. , 2019, , .   |     | 0         |
| 20 | Polymer solar cells: P3HT:PCBM and beyond. Journal of Renewable and Sustainable Energy, 2018, 10, .  | 0.8 | 104       |
| 21 | 431 kA/cm <sup>2</sup> peak tunneling current density in GaN/AlN resonant tunneling diodes. Applied Physics Letters, 2018, 112, .  | 1.5 | 41        |
| 22 | Near-UV electroluminescence in unipolar-doped, bipolar-tunneling GaN/AlN heterostructures. Light: Science and Applications, 2018, 7, 17150-17150.  | 7.7 | 47        |
| 23 | Guest Editorial Special Section on the Second Electron Devices Technology and Manufacturing (EDTM) Conference 2018. IEEE Journal of the Electron Devices Society, 2018, 6, 1197-1199.                      | 1.2 | 0         |
| 24 | M2M Communication Assessment in Energy-Harvesting and Wake-Up Radio Assisted Scenarios Using Practical Components. Sensors, 2018, 18, 3992.  | 2.1 | 5         |
| 25 | Increasing the Efficiency of Organic Solar Cells by Antireflection Coatings Based on Fluoride Composites. Technical Physics Letters, 2018, 44, 295-296.  | 0.2 | 3         |
| 26 | Negative differential resistance in polymer tunnel diodes using atomic layer deposited, TiO <sub>2</sub> tunneling barriers at various deposition temperatures. Organic Electronics, 2017, 47, 228-234.    | 1.4 | 7         |
| 27 | Wireless Energy Harvesting and Communications: Limits and Reliability. , 2017, , .   |     | 3         |
| 28 | Viability Bounds of M2M Communication Using Energy-Harvesting and Passive Wake-Up Radio. IEEE Access, 2017, 5, 27868-27878.  | 2.6 | 15        |
| 29 | Feasibility and Fundamental Limits of Energy-Harvesting Based M2M Communications. International Journal of Wireless Information Networks, 2017, 24, 291-299.   | 1.8 | 10        |
| 30 | AlN/GaN/AlN resonant tunneling diodes grown by rf-plasma assisted molecular beam epitaxy on freestanding GaN. Journal of Vacuum Science and Technology B: Nanotechnology and Microelectronics, 2017, 35, . | 0.6 | 11        |
| 31 | Printed and organic diodes: devices, circuits and applications. Flexible and Printed Electronics, 2017, 2, 033001.   | 1.5 | 14        |
| 32 | Antireflection coatings based on fluoride formulations for organic solar cells. Technical Physics Letters, 2016, 42, 359-361.  | 0.2 | 4         |
| 33 | Feasibility and fundamental limits of energy-harvesting based M2M communications. , 2016, , .  |     | 6         |
| 34 | Antireflection composite coatings for organic solar cells. Applied Solar Energy (English Translation) Tj ETQq0 0 0 rgBT <sub>2</sub> Overlock 10 Tf 50   | 0.2 | 4         |
| 35 | Highly repeatable room temperature negative differential resistance in AlN/GaN resonant tunneling diodes grown by molecular beam epitaxy. Applied Physics Letters, 2016, 109, .                            | 1.5 | 52        |
| 36 | Foreword Special Issue on Advanced Technology for Ultra-Low Power Electronic Devices. IEEE Journal of the Electron Devices Society, 2016, 4, 203-204.  | 1.2 | 0         |

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|----|--|-----|-----------|
| 37 | A Nonlinear Circuit Simulation of Switching Process in Resonant-Tunneling Diodes. IEEE Transactions on Electron Devices, 2016, 63, 4993-4997.  | 1.6 | 9         |
| 38 | Experimental determination of quantum-well lifetime effect on large-signal resonant tunneling diode switching time. Applied Physics Letters, 2015, 107, .  | 1.5 | 7         |
| 39 | Tuning the Plasmonic Extinction Resonances of Hexagonal Arrays of Ag Nanoparticles. Plasmonics, 2015, 10, 1505-1512.   | 1.8 | 5         |
| 40 | Anodic Oxidation of Ultra-Thin Ti Layers on ITO Substrates and their Application in Organic Electronic Memory Elements. Electrochimica Acta, 2014, 137, 91-98.   | 2.6 | 12        |
| 41 | Broadband Finite-Difference Time-Domain Modeling of Plasmonic Organic Photovoltaics. ETRI Journal, 2014, 36, 654-661.  | 1.2 | 2         |
| 42 | Towards <i>in vivo</i> biosensors for low-cost protein sensing. Electronics Letters, 2013, 49, 450-451.  | 0.5 | 6         |
| 43 | (Invited) Si/SiGe Resonant Interband Tunnel Diodes Grown by Large-Area Chemical Vapor Deposition. ECS Transactions, 2013, 58, 81-88.   | 0.3 | 0         |
| 44 | Demonstration of hybrid prototype sealant for encapsulating organic photovoltaics. , 2013, , .   |     | 0         |
| 45 | High 5.2 peak-to-valley current ratio in Si/SiGe resonant interband tunnel diodes grown by chemical vapor deposition. Applied Physics Letters, 2012, 100, .  | 1.5 | 28        |
| 46 | 200-mm CVD Grown Si/SiGe Resonant Interband Tunnel Diodes Optimized for High Peak-to-Valley Current Ratios. , 2012, , .  |     | 0         |
| 47 | Selective deuteron production using target normal sheath acceleration. Physics of Plasmas, 2012, 19, .   | 0.7 | 23        |
| 48 | Methods for attaining high interband tunneling current in III-Nitrides. , 2012, , .  |     | 5         |
| 49 | Boron Delta-Doping Dependence on Si/SiGe Resonant Interband Tunneling Diodes Grown by Chemical Vapor Deposition. IEEE Transactions on Electron Devices, 2012, 59, 602-609.                                       | 1.6 | 11        |
| 50 | 90 nm $32 \times 32$ bit Tunneling SRAM Memory Array With 0.5 ns Write Access Time, 1 ns Read Access Time and 0.5 V Operation. IEEE Transactions on Circuits and Systems I: Regular Papers, 2011, 58, 2432-2445. | 3.5 | 16        |
| 51 | Negative Differential Resistance Devices and Circuits. , 2011, , 176-241.  |     | 27        |
| 52 | Interfacial design and structure of protein/polymer films on oxidized AlGaN surfaces. Journal Physics D: Applied Physics, 2011, 44, 034010.  | 1.3 | 9         |
| 53 | Plasma-polymerized multistacked bipolar gate dielectric for organic thin-film transistors. Organic Electronics, 2010, 11, 1767-1771.   | 1.4 | 15        |
| 54 | Atomic layer deposited HfO <sub>2</sub> gate dielectrics for low-voltage operating, high-performance poly-(3-hexythiophene) organic thin-film transistors. Organic Electronics, 2010, 11, 1719-1722.             | 1.4 | 32        |

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|----|---|------|-----------|
| 55 | Plasmon-enhanced optical absorption and photocurrent in organic bulk heterojunction photovoltaic devices using self-assembled layer of silver nanoparticles. <i>Solar Energy Materials and Solar Cells</i> , 2010, 94, 128-132.   | 3.0  | 195       |
| 56 | Fabrication of nanowires with high aspect ratios utilized by dry etching with SF <sub>6</sub> :C <sub>4</sub> F <sub>8</sub> and self-limiting thermal oxidation on Si substrate. <i>Journal of Vacuum Science and Technology B: Nanotechnology and Microelectronics</i> , 2010, 28, 763-768. | 0.6  | 13        |
| 57 | Zero-bias Si backward diodes detectors incorporating P and B &#x03B4;-doping layers grown by chemical vapor deposition. , 2009, , .   |      | 0         |
| 58 | Efficient poly(3-hexylthiophene)-fullerene derivative bulk heterojunction photovoltaic devices using unique self-assembled layer of Ag nanoparticles with controllable particle-to-particle spacing. , 2009, , .  |      | 0         |
| 59 | Efficient organic bulk heterojunction solar cells through near infrared absorbing metallated thiophene complexes. , 2009, , .   |      | 0         |
| 60 | Observation of strain in pseudomorphic Si <sub>1-x</sub> Ge <sub>x</sub> by tracking phonon participation in Si <sup>+</sup> SiGe resonant interband tunnel diodes via electron tunneling spectroscopy. <i>Journal of Applied Physics</i> , 2009, 106, 034501.                                | 1.1  | 3         |
| 61 | P and B doped Si resonant interband tunnel diodes with as-grown negative differential resistance. <i>Electronics Letters</i> , 2009, 45, 759.   | 0.5  | 10        |
| 62 | Si/SiGe Resonant Interband Tunneling Diodes Incorporating $\delta$ -Doping Layers Grown by Chemical Vapor Deposition. <i>IEEE Electron Device Letters</i> , 2009, 30, 1173-1175.  | 2.2  | 27        |
| 63 | Plasma-Polymerized Multistacked Organic Bipolar Films: A New Approach to Flexible High- $\kappa$ Dielectrics. <i>Advanced Materials</i> , 2008, 20, 2383-2388.  | 11.1 | 26        |
| 64 | Surface modification to the indium tin oxide (ITO) anodes through plasma oxidized silver for efficient P3HT:PCBM (1:0.8) bulk heterojunction photovoltaic devices. <i>Conference Record of the IEEE Photovoltaic Specialists Conference</i> , 2008, , .                                       | 0.0  | 0         |
| 65 | Strain-Engineered Si/SiGe Resonant Interband Tunneling Diodes Grown on $\text{Si}_{0.8}\text{Ge}_{0.2}$ Virtual Substrates With Strained Si Cladding Layers. <i>IEEE Electron Device Letters</i> , 2008, 29, 599-602.   | 2.2  | 7         |
| 66 | Enhanced Emission Using Thin Li-Halide Cathodic Interlayers for Improved Injection into Poly(p-phenylene vinylene) Derivative PLEDs. <i>Electrochemical and Solid-State Letters</i> , 2008, 11, J76.  | 2.2  | 5         |
| 67 | 4.8% efficient poly(3-hexylthiophene)-fullerene derivative (1:0.8) bulk heterojunction photovoltaic devices with plasma treated AgO [sub x]/indium tin oxide anode modification. <i>Applied Physics Letters</i> , 2008, 92, 013306.   | 1.5  | 47        |
| 68 | Strain engineered Si <sup>+</sup> SiGe resonant interband tunneling diodes with outside barriers grown on Si <sub>0.8</sub> Ge <sub>0.2</sub> virtual substrates. <i>Applied Physics Letters</i> , 2008, 93, 102113.  | 1.5  | 3         |
| 69 | Delta-Doped Si/SiGe Zero-Bias Backward Diodes for Micro-Wave Detection. <i>Device Research Conference, IEEE Annual</i> , 2007, , .  | 0.0  | 2         |
| 70 | Temperature dependent empirical modeling of proximity diffused Si esaki diodes and memory circuits. , 2007, , .   |      | 0         |
| 71 | Sensitivity of Si-based zero-bias backward diodes for microwave detection. <i>Electronics Letters</i> , 2007, 43, 295.  | 0.5  | 12        |
| 72 | Anneal time study of Si resonant interband tunnel diodes grown by low-temperature molecular-beam epitaxy. , 2007, , .   |      | 0         |

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|----|--|-----|-----------|
| 73 | Simplified Si resonant interband tunnel diodes. , 2007, , .  |     | 1         |
| 74 | Analysis of the Voltage Swing for Logic and Memory Applications in Si/SiGe Resonant Interband Tunnel Diodes Grown by Molecular Beam Epitaxy. IEEE Nanotechnology Magazine, 2007, 6, 158-163.                                 | 1.1 | 8         |
| 75 | Characterization and Electrical Properties of Individual Au-Ni-Au Heterojunction Nanowires. IEEE Nanotechnology Magazine, 2007, 6, 676-681.  | 1.1 | 15        |
| 76 | NMOS/SiGe Resonant Interband Tunneling Diode Static Random Access Memory. , 2006, , .  |     | 9         |
| 77 | Integration of Si/SiGe HBT and Si-based RITD demonstrating controllable negative differential resistance for wireless applications. Solid-State Electronics, 2006, 50, 973-978.  | 0.8 | 11        |
| 78 | The Effect of Spacer Thicknesses on Si-Based Resonant Interband Tunneling Diode Performance and Their Application to Low-Power Tunneling Diode SRAM Circuits. IEEE Transactions on Electron Devices, 2006, 53, 2243-2249.    | 1.6 | 26        |
| 79 | Si-Based Resonant Interband Tunnel Diode/CMOS Integrated Memory Circuit. , 2006, , .   |     | 0         |
| 80 | Low sidewall damage plasma etching using ICP-RIE with HBr chemistry of Si-SiGe resonant interband tunnel diodes. Electronics Letters, 2006, 42, 719.   | 0.5 | 6         |
| 81 | Pulsed plasma polymerized dichlorotetramethyldisiloxane high-k gate dielectrics for polymer field-effect transistors. Journal of Applied Physics, 2006, 99, 014104.  | 1.1 | 6         |
| 82 | Si/SiGe resonant interband tunnel diode with $f_{\text{r0}}$ 20.2 GHz and peak current density 218 kA/cm <sup>2</sup> for K-band mixed-signal applications. IEEE Electron Device Letters, 2006, 27, 364-367.                 | 2.2 | 28        |
| 83 | Resonant Tunneling and Room Temperature Negative Differential Resistance in TiO <sub>2</sub> /MEH-PPV Junctions for Quantum Functional Circuits. , 2006, , .   |     | 0         |
| 84 | Phosphorus diffusion in Si-based resonant interband tunneling diodes and tri-state logic using vertically stacked diodes. Materials Science in Semiconductor Processing, 2005, 8, 411-416.                                   | 1.9 | 0         |
| 85 | RF Performance and Modeling of Si/SiGe Resonant Interband Tunneling Diodes. IEEE Transactions on Electron Devices, 2005, 52, 2129-2135.  | 1.6 | 17        |
| 86 | Temperature dependent DC-RF performance of Si-SiGe resonant interband tunnelling diodes. Electronics Letters, 2005, 41, 559.   | 0.5 | 2         |
| 87 | Room-temperature negative differential resistance in polymer tunnel diodes using a thin oxide layer and demonstration of threshold logic. Applied Physics Letters, 2005, 87, 203506.   | 1.5 | 45        |
| 88 | High-k Polymerized Dichlorotetramethyldisiloxane Films Deposited by Radio Frequency Pulsed Plasma for Gate Dielectrics in Polymer Field Effect Transistors. Materials Research Society Symposia Proceedings, 2005, 870, 131. | 0.1 | 2         |
| 89 | High sensitivity Si-based backward diodes for zero-biased square-law detection and the effect of post-growth annealing on performance. IEEE Electron Device Letters, 2005, 26, 575-578.                                      | 2.2 | 15        |
| 90 | Annealing of defect density and excess currents in Si-based tunnel diodes grown by low-temperature molecular-beam epitaxy. Journal of Applied Physics, 2004, 96, 747-753.  | 1.1 | 17        |

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|-----|--|-----|-----------|
| 91  | Three-terminal Si-based negative differential resistance circuit element with adjustable peak-to-valley current ratios using a monolithic vertical integration. Applied Physics Letters, 2004, 84, 2688-2690.  | 1.5 | 31        |
| 92  | High electric-field effects on short-channel polythiophene polymer field-effect transistors. Journal of Applied Physics, 2004, 95, 1497-1501.  | 1.1 | 27        |
| 93  | Radiation tolerance of Si/Si <sub>0.6</sub> Ge <sub>0.4</sub> resonant interband tunneling diodes. Journal of Applied Physics, 2004, 95, 6406-6408.  | 1.1 | 9         |
| 94  | Photoresponsivity of polymer thin-film transistors based on polyphenyleneethynylene derivative with improved hole injection. Applied Physics Letters, 2004, 85, 4219-4221.   | 1.5 | 60        |
| 95  | Light Sensitive Polymer Thin Film Transistors Based on BAS-PPE. Materials Research Society Symposia Proceedings, 2004, 814, 152.   | 0.1 | 0         |
| 96  | Improved vertically stacked Si <sup>n</sup> /SiGe resonant interband tunnel diode pair with small peak voltage shift and unequal peak currents. Electronics Letters, 2004, 40, 1548.   | 0.5 | 6         |
| 97  | Capacitance-voltage characterization of pulsed plasma polymerized allylamine dielectrics for flexible polymeric field effect transistors. Journal of Electronic Materials, 2004, 33, 1240-1247.  | 1.0 | 17        |
| 98  | Monolithically integrated Si/SiGe resonant interband tunnel diode/CMOS demonstrating low voltage MOBILE operation. Solid-State Electronics, 2004, 48, 1907-1910.   | 0.8 | 44        |
| 99  | Tri-State Logic Using Vertically Integrated Si <sup>n</sup> /SiGe Resonant Interband Tunneling Diodes With Double NDR. IEEE Electron Device Letters, 2004, 25, 646-648.  | 2.2 | 55        |
| 100 | Diffusion barrier cladding in Si/SiGe resonant interband tunneling diodes and their patterned growth on PMOS source/drain regions. IEEE Transactions on Electron Devices, 2003, 50, 1876-1884.   | 1.6 | 45        |
| 101 | Growth temperature and dopant species effects on deep levels in Si grown by low temperature molecular beam epitaxy. Journal of Applied Physics, 2003, 93, 9104-9110.   | 1.1 | 16        |
| 102 | 151 A/cm <sup>2</sup> peak current densities in Si/SiGe resonant interband tunneling diodes for high-power mixed-signal applications. Applied Physics Letters, 2003, 83, 3308-3310.  | 1.5 | 38        |
| 103 | Full band modeling of the excess current in a delta-doped silicon tunnel diode. Journal of Applied Physics, 2003, 94, 5005.  | 1.1 | 31        |
| 104 | Nanometer-period gratings in hydrogen silsesquioxane fabricated by electron beam lithography. Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena, 2003, 21, L12. | 1.6 | 80        |
| 105 | Capacitance-Voltage Characterization of Pulsed Plasma Polymerized Allylamine Dielectrics. Materials Research Society Symposia Proceedings, 2002, 736, 1.   | 0.1 | 0         |
| 106 | Growth Temperature Effects on Deep-Levels in Si Grown by Low Temperature Molecular Beam Epitaxy. Materials Research Society Symposia Proceedings, 2002, 745, 691.  | 0.1 | 0         |
| 107 | Metal-semiconductor-metal photodetectors. , 2001, 4285, 198.   |     | 14        |
| 108 | œp-on-n-Si interband tunnel diode grown by molecular beam epitaxy. Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena, 2001, 19, 290.                            | 1.6 | 15        |



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|-----|--|-----|-----------|
| 109 | pnp Si resonant interband tunnel diode with symmetrical NDR. Electronics Letters, 2001, 37, 1412.  | 0.5 | 9         |
| 110 | Full-band simulation of indirect phonon assisted tunneling in a silicon tunnel diode with delta-doped contacts. Applied Physics Letters, 2001, 78, 814-816.  | 1.5 | 60        |
| 111 | Epitaxial Si-based tunnel diodes. Thin Solid Films, 2000, 380, 145-150.  | 0.8 | 16        |
| 112 | Current-voltage characteristics of high current density silicon Esaki diodes grown by molecular beam epitaxy and the influence of thermal annealing. IEEE Transactions on Electron Devices, 2000, 47, 1707-1714. | 1.6 | 47        |
| 113 | Epitaxially grown Si resonant interband tunnel diodes exhibiting high current densities. IEEE Electron Device Letters, 1999, 20, 329-331.  | 2.2 | 30        |
| 114 | Strain modification in thin $\text{Si}_{1-x}\text{Ge}_x$ alloys on (100) Si for formation of high density and uniformly sized quantum dots. Journal of Applied Physics, 1999, 85, 578-582.                       | 1.1 | 12        |
| 115 | Si resonant interband tunnel diodes grown by low-temperature molecular-beam epitaxy. Applied Physics Letters, 1999, 75, 1308-1310.   | 1.5 | 29        |
| 116 | <title>Optically interconnected static RAM for instruction-level parallel processors</title>. , 1999, , .  |     | 0         |
| 117 | Electrical and optical properties of phosphorus doped $\text{Ge}_{1-x}\text{Si}_x$ . Thin Solid Films, 1998, 321, 47-50.   | 0.8 | 0         |
| 118 | Room temperature operation of epitaxially grown Si/Si <sub>0.5</sub> Ge <sub>0.5</sub> /Si resonant interband tunneling diodes. Applied Physics Letters, 1998, 73, 2191-2193.                                    | 1.5 | 104       |
| 119 | 1.3 $\mu\text{m}$ photoresponsivity in Si-based $\text{Ge}_{1-x}\text{Si}_x$ photodiodes. Applied Physics Letters, 1998, 72, 1860-1862.  | 1.5 | 25        |
| 120 | Photoluminescence Of $\text{Si}_{1-x}\text{Ge}_x$ Alloys Grown On (100) Si Substrates. Materials Research Society Symposia Proceedings, 1998, 533, 327.  | 0.1 | 1         |
| 121 | $\text{Ge}_{1-x}\text{Si}_x$ /Si heterojunction photodiode. , 1997, 3007, 162.   |     | 0         |
| 122 | <title>Equivalent circuit modeling of metal-semiconductor-metal photodiodes with transparent conductor electrodes</title>. , 1997, , .   |     | 1         |
| 123 | A p- $\text{Ge}_{1-x}\text{C}_x$ /n-Si heterojunction diode grown by molecular beam epitaxy. IEEE Electron Device Letters, 1997, 18, 411-413.  | 2.2 | 5         |
| 124 | Low resistance ohmic contacts to p- $\text{Ge}_{1-x}\text{C}_x$ on Si. IEEE Electron Device Letters, 1997, 18, 7-9.  | 2.2 | 4         |
| 125 | Near band edge photoluminescence from pseudomorphic tensially strained $\text{Si}_{0.985}\text{C}_{0.015}$ alloy. Thin Solid Films, 1997, 294, 122-124.  | 0.8 | 2         |
| 126 | In <sub>0.53</sub> Ga <sub>0.47</sub> As MSM photodiodes with transparent CTO Schottky contacts and digital superlattice grading. IEEE Transactions on Electron Devices, 1997, 44, 2174-2179.                    | 1.6 | 23        |



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|-----|---|-----|-----------|
| 127 | Band-edge photoluminescence from pseudomorphic Si <sub>0.96</sub> Sn <sub>0.04</sub> alloy. Applied Physics Letters, 1996, 68, 3105-3107.   | 1.5 | 20        |
| 128 | MSM photodiodes. IEEE Potentials, 1996, 15, 25-29.  | 0.2 | 26        |
| 129 | Current transport characteristics of SiGeC/Si heterojunction diode. IEEE Electron Device Letters, 1996, 17, 589-591.  | 2.2 | 10        |
| 130 | Liquid-phase epitaxial growth process of InGaAs on InP with rare-earth treatment. , 1996, , .   |     | 0         |
| 131 | Optical properties of Ge <sub>1-y</sub> Cy alloys. Journal of Electronic Materials, 1996, 25, 297-300.  | 1.0 | 27        |
| 132 | Realization of in-situ sub two-dimensional quantum structures by strained layer growth phenomena in the In <sub>x</sub> Ga <sub>1-x</sub> As/GaAs system. Journal of Electronic Materials, 1996, 25, 479-483. | 1.0 | 14        |
| 133 | Liquid phase epitaxial growth of InGaAs on InP using rare-earth-treated melts. Journal of Applied Physics, 1996, 80, 7094-7103.   | 1.1 | 27        |
| 134 | Optical and electronic properties of SiGeC alloys grown on Si substrates. Journal of Crystal Growth, 1995, 157, 386-391.  | 0.7 | 45        |
| 135 | Transparent and opaque Schottky contacts on undoped In <sub>0.52</sub> Al <sub>0.48</sub> As grown by molecular beam epitaxy. Applied Physics Letters, 1995, 66, 3471-3473.                                   | 1.5 | 33        |
| 136 | In <sub>0.53</sub> Ga <sub>0.47</sub> As metal-semiconductor-metal photodiodes with transparent cadmium tin oxide Schottky contacts. Applied Physics Letters, 1994, 65, 1930-1932.                            | 1.5 | 43        |
| 137 | <title>Monolithic p-i-n-FET photoreceivers</title>. , 1994, 2149, 414.  |     | 0         |
| 138 | Monolithic GaAs/AlGaAs optical transmitter circuit using a single growth step. Electronics Letters, 1994, 30, 490-491.  | 0.5 | 3         |
| 139 | 8-element linear array monolithic p-i-n MODFET photoreceivers using molecular beam epitaxial regrowth. IEEE Photonics Technology Letters, 1993, 5, 63-66.   | 1.3 | 7         |
| 140 | Monolithic GaAs/AlGaAs pin MESFET photoreceiver using a single molecular beam epitaxy growth step. Electronics Letters, 1993, 29, 1133.   | 0.5 | 3         |
| 141 | Substrate orientation effects on dopant incorporation in InP grown by metalorganic chemical vapor deposition. Journal of Applied Physics, 1993, 73, 4095-4097.  | 1.1 | 19        |
| 142 | 10 GHz bandwidth monolithic modulated doped field effect transistor photoreceiver. Applied Physics Letters, 1993, 63, 2115-2116.  | 1.5 | 13        |
| 143 | In <sub>0.53</sub> Ga <sub>0.47</sub> As photodiodes with transparent cadmium tin oxide contacts. Applied Physics Letters, 1992, 61, 1673-1675.   | 1.5 | 10        |
| 144 | <title>Buried heterostucture lasers using a single-step metal-organic chemical vapor deposition growth over patterned substrates</title>. , 1992, 1676, 117.  |     | 2         |

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|-----|--|-----|-----------|
| 145 | 1.0 GHz monolithic p-i-n MODFET photoreceiver using molecular beam epitaxial regrowth. IEEE Photonics Technology Letters, 1992, 4, 891-894.  | 1.3 | 9         |
| 146 | A waveguide directional coupler with a nonlinear coupling medium. IEEE Journal of Quantum Electronics, 1991, 27, 788-795.  | 1.0 | 28        |
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