# Minjoo L Lee

List of Publications by Year
in descending order



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|---|---|---|---|
| 189 papers | 5,769 citations | 81900 39 h-index | 88630 70 g-index |
| 189 all docs | 189 docs citations | 189 times ranked | 6583 citing authors |

| # | Article | IF | Citations |
|---|---|---|---|
| 1 | Strained Si, SiGe, and Ge channels for high-mobility metal-oxide-semiconductor field-effect transistors. Journal of Applied Physics, 2005, 97, 011101. | 2.5 | 818 |
| 2 | Polymer bulk heterojunction solar cells employing FÃ¶rster resonance energy transfer. Nature Photonics, 2013, 7, 479-485. | 31.4 | 389 |
| 3 | Strained Ge channel p-type metalâ€“oxideâ€“semiconductor field-effect transistors grown on Si1âˆ’xGex/Si virtual substrates. Applied Physics Letters, 2001, 79, 3344-3346. | 3.3 | 210 |
| 4 | Hole mobility enhancements and alloy scattering-limited mobility in tensile strained Si/SiGe surface channel metalâ€“oxideâ€“semiconductor field-effect transistors. Journal of Applied Physics, 2002, 92, 3745-3751. | 2.5 | 161 |
| 5 | Electrically pumped continuous-wave 13â€‰â€‰Î¼m quantum-dot lasers epitaxially grown on on-axis (001)â€‰â€‰GaP/Si. Optics Letters, 2017, 42, 338. | 3.3 | 127 |
| 6 | Synthesis of thin-film black phosphorus on a flexible substrate. 2D Materials, 2015, 2, 031002. | 4.4 | 124 |
| 7 | Dual junction GaInP/GaAs solar cells grown on metamorphic SiGe/Si substrates with high open circuit voltage. IEEE Electron Device Letters, 2006, 27, 142-144. | 3.9 | 122 |
| 8 | Ge diffusion in Ge metal oxide semiconductor with chemical vapor deposition HfO2 dielectric. Applied Physics Letters, 2005, 87, 051922. | 3.3 | 119 |
| 9 | Low spatial coherence electrically pumped semiconductor laser for speckle-free full-field imaging. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 1304-1309. | 7.1 | 117 |
| 10 | Impact of dislocation densities on n+âˆ•p and p+âˆ•n junction GaAs diodes and solar cells on SiGe virtual substrates. Journal of Applied Physics, 2005, 98, 014502. | 2.5 | 112 |
| 11 | Growth of highly tensile-strained Ge on relaxed InxGa1âˆ’xAs by metal-organic chemical vapor deposition. Journal of Applied Physics, 2008, 104, . | 2.5 | 111 |
| 12 | Next-generation mid-infrared sources. Journal of Optics (United Kingdom), 2017, 19, 123001. | 2.2 | 107 |
| 13 | Hole mobility enhancements in strained Si/Si1âˆ’yGey p-type metal-oxide-semiconductor field-effect transistors grown on relaxed Si1âˆ’xGex (x<y) virtual substrates. Applied Physics Letters, 2001, 79, 4246-4248. | 3.3 | 100 |
| 14 | Impact of dislocations on minority carrier electron and hole lifetimes in GaAs grown on metamorphic SiGe substrates. Applied Physics Letters, 2004, 84, 3447-3449. | 3.3 | 93 |
| 15 | Bright Mid-Infrared Photoluminescence from Thin-Film Black Phosphorus. Nano Letters, 2019, 19, 1488-1493. | 9.1 | 90 |
| 16 | Large-Area Dry Transfer of Single-Crystalline Epitaxial Bismuth Thin Films. Nano Letters, 2016, 16, 6931-6938. | 9.1 | 87 |
| 17 | High Performance Ultrathin GaAs Solar Cells Enabled with Heterogeneously Integrated Dielectric Periodic Nanostructures. ACS Nano, 2015, 9, 10356-10365. | 14.6 | 78 |
| 18 | Comparison of GaAsP solar cells on GaP and GaP/Si. Applied Physics Letters, 2013, 103, . | 3.3 | 75 |

| # | Article | IF | Citations |
|---|---|---|---|
| 19 | Investigations of High-Performance GaAs Solar Cells Grown on Geâ€“Si<tex>$_1-xhbox Ge_ x$</tex>â€“Si Substrates. IEEE Transactions on Electron Devices, 2005, 52, 1055-1060. | 3.0 | 70 |
| 20 | Bioinspired High-Potential Porphyrin Photoanodes. Journal of Physical Chemistry C, 2012, 116, 4892-4902. | 3.1 | 69 |
| 21 | GaAsP solar cells on GaP/Si with low threading dislocation density. Applied Physics Letters, 2016, 109, . | 3.3 | 69 |
| 22 | Challenges in epitaxial growth of SiGe buffers on Si (111), (110), and (112). Thin Solid Films, 2006, 508, 136-139. | 1.8 | 68 |
| 23 | Strained Si/strained Ge dual-channel heterostructures on relaxed Si0.5Ge0.5 for symmetric mobility p-type and n-type metal-oxide-semiconductor field-effect transistors. Applied Physics Letters, 2003, 83, 4202-4204. | 3.3 | 63 |
| 24 | Implementation of both high-hole and electron mobility in strained Si/strained Si<sub>1-y</sub>Ge<sub>y</sub> on relaxed Si<sub>1-x</sub>Ge<sub>x</sub> (x<y) virtual substrate. IEEE Electron Device Letters, 2003, 24, 460-462. | 3.9 | 57 |
| 25 | Effect of nanodot areal density and period on thermal conductivity in SiGeâˆ•Si nanodot superlattices. Applied Physics Letters, 2008, 92, . | 3.3 | 57 |
| 26 | The fabrication of large-area, free-standing GaN by a novel nanoetching process. Nanotechnology, 2011, 22, 045603. | 2.6 | 56 |
| 27 | Panchromatic polymerâ€“polymer ternary solar cells enhanced by FÃ¶rster resonance energy transfer and solvent vapor annealing. Journal of Materials Chemistry A, 2015, 3, 18611-18621. | 10.3 | 55 |
| 28 | Ge n-MOSFETs on lightly doped substrates with high-/spl kappa/ dielectric and TaN gate. IEEE Electron Device Letters, 2006, 27, 175-178. | 3.9 | 53 |
| 29 | Hole mobility enhancements in nanometer-scale strained-silicon heterostructures grown on Ge-rich relaxed Si1âˆ’xGex. Journal of Applied Physics, 2003, 94, 2590-2596. | 2.5 | 51 |
| 30 | Growth of strained Si and strained Ge heterostructures on relaxed Si[sub 1âˆ’x]Ge[sub x] by ultrahigh vacuum chemical vapor deposition. Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena, 2004, 22, 158. | 1.6 | 47 |
| 31 | Coevaporated Bisquaraine Inverted Solar Cells: Enhancement Due to Energy Transfer and Open Circuit Voltage Control. ACS Photonics, 2015, 2, 86-95. | 6.6 | 47 |
| 32 | Quaternary Organic Solar Cells Enhanced by Cocrystalline Squaraines with Power Conversion Efficiencies >10%. Advanced Energy Materials, 2016, 6, 1600660. | 19.5 | 46 |
| 33 | Solar hydrogen production using epitaxial SrTiO<sub>3</sub> on a GaAs photovoltaic. Energy and Environmental Science, 2017, 10, 377-382. | 30.8 | 46 |
| 34 | 15.3%-Efficient GaAsP Solar Cells on GaP/Si Templates. ACS Energy Letters, 2017, 2, 1911-1918. | 17.4 | 44 |
| 35 | Heterogeneous Integration of InGaAs Nanowires on the Rear Surface of Si Solar Cells for Efficiency Enhancement. ACS Nano, 2012, 6, 11074-11079. | 14.6 | 42 |
| 36 | Effect of rapid thermal annealing on strain in ultrathin strained silicon on insulator layers. Applied Physics Letters, 2003, 83, 875-877. | 3.3 | 41 |

| # | Article | IF | Citations |
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| 37 | Review Article: Molecular beam epitaxy of lattice-matched InAlAs and InGaAs layers on InP (111)A, (111)B, and (110). Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics, 2017, 35, . | 1.2 | 41 |
| 38 | Shape transformation of nanoporous GaN by annealing: From buried cavities to nanomembranes. Applied Physics Letters, 2011, 98, . | 3.3 | 40 |
| 39 | Measurements and Modeling of III-V Solar Cells at High Temperatures up to 400 <inline-formula> <tex-math notation="latex">${}^{circ}$</tex-math> </inline-formula>C. IEEE Journal of Photovoltaics, 2016, 6, 1345-1352. | 2.5 | 40 |
| 40 | InGaAs/GaAs quantum well lasers grown on exact GaP/Si (001). Electronics Letters, 2014, 50, 1226-1227. | 1.0 | 39 |
| 41 | Waveguide-integrated single-crystalline GaP resonators on diamond. Optics Express, 2014, 22, 13555. | 3.4 | 37 |
| 42 | Current-Matched IIIâ€“V/Si Epitaxial Tandem Solar Cells with 25.0% Efficiency. Cell Reports Physical Science, 2020, 1, 100208. | 5.6 | 36 |
| 43 | Tuning Quantum Dot Luminescence Below the Bulk Band Gap Using Tensile Strain. ACS Nano, 2013, 7, 5017-5023. | 14.6 | 34 |
| 44 | Strain-driven growth of GaAs(111) quantum dots with low fine structure splitting. Applied Physics Letters, 2014, 105, . | 3.3 | 33 |
| 45 | 20%-efficient epitaxial GaAsP/Si tandem solar cells. Solar Energy Materials and Solar Cells, 2019, 202, 110144. | 6.2 | 33 |
| 46 | Epitaxial strained germanium p-MOSFETs with HfO/sub 2/ gate dielectric and TaN gate electrode. , 0, , . | | 31 |
| 47 | Coplanar Integration of Lattice-Mismatched Semiconductors with Silicon by Wafer Bonding Ge/Si[sub 1â^'x]Ge[sub x]/Si Virtual Substrates. Journal of the Electrochemical Society, 2004, 151, G443. | 2.9 | 31 |
| 48 | The interfacial reaction of Ni with (111)Ge, (100)Si0.75Ge0.25 and (100)Si at 400 Â°C. Thin Solid Films, 2004, 462-463, 151-155. | 1.8 | 31 |
| 49 | Metamorphic epitaxial materials. MRS Bulletin, 2016, 41, 193-198. | 3.5 | 31 |
| 50 | Fabrication of ultra-thin strained silicon on insulator. Journal of Electronic Materials, 2003, 32, 972-975. | 2.2 | 29 |
| 51 | Ultrathin Strained Si-on-Insulator and SiGe-on-Insulator Created using Low Temperature Wafer Bonding and Metastable Stop Layers. Journal of the Electrochemical Society, 2004, 151, G47. | 2.9 | 29 |
| 52 | Monolithic integration of AlGaInP laser diodes on SiGeâ•Si substrates by molecular beam epitaxy. Journal of Applied Physics, 2006, 100, 013103. | 2.5 | 29 |
| 53 | Self-assembly on (111)-oriented III-V surfaces. Applied Physics Letters, 2011, 99, . | 3.3 | 29 |
| 54 | Metamorphic GaAsP buffers for growth of wide-bandgap InGaP solar cells. Journal of Applied Physics, 2011, 109, . | 2.5 | 29 |

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| 55 | Large-scale GaP-on-diamond integrated photonics platform for NV center-based quantum information. Journal of the Optical Society of America B: Optical Physics, 2016, 33, B35. | 2.1 | 29 |
| 56 | Effect of Pt on agglomeration and Ge out diffusion in Ni(Pt) germanosilicide. Journal of Applied Physics, 2005, 98, 033520. | 2.5 | 28 |
| 57 | Multilayer-Grown Ultrathin Nanostructured GaAs Solar Cells as a Cost-Competitive Materials Platform for IIIâ€“V Photovoltaics. ACS Nano, 2017, 11, 992-999. | 14.6 | 27 |
| 58 | Tensile-strained growth on low-index GaAs. Journal of Applied Physics, 2012, 112, . | 2.5 | 26 |
| 59 | Effect of thermal processing on mobility in strained Si/strained Si1â^'yGey on relaxed Si1â^'xGexâ€Š(x<y) virtual substrates. Applied Physics Letters, 2004, 84, 3319-3321. | 3.3 | 25 |
| 60 | Photoluminescence from In<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msub><mml:mrow /><mml:mrow><mml:mn>0.5</mml:mn></mml:mrow></mml:msub></mml:math>Ga<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msub><mml:mrow /><mml:mrow><mml:mn>0.5</mml:mn></mml:mrow></mml:msub></mml:math>As/GaP quantum dots coupled to photonic crystal cavities. Physical Review B, 2012, 85, . | 3.2 | 25 |
| 61 | Self-assembled In0.5Ga0.5As quantum dots on GaP. Applied Physics Letters, 2010, 97, 223110. | 3.3 | 24 |
| 62 | Congenital Recessive Ichthyosis Unlinked to Loci for Epidermal Transglutaminases. Journal of Investigative Dermatology, 1996, 107, 808-811. | 0.7 | 23 |
| 63 | Towards high efficiency GaAsP solar cells on (001) GaP/Si. , 2014, , . | | 23 |
| 64 | Threading dislocation density characterization in IIIâ€“V photovoltaic materials by electron channeling contrast imaging. Journal of Crystal Growth, 2016, 453, 65-70. | 1.5 | 23 |
| 65 | Relaxed silicon-germanium on insulator substrate by layer transfer. Journal of Electronic Materials, 2001, 30, L37-L39. | 2.2 | 22 |
| 66 | Comparison of single junction AlGaInP and GaInP solar cells grown by molecular beam epitaxy. Journal of Applied Physics, 2015, 117, . | 2.5 | 22 |
| 67 | Fabrication of silicon on lattice-engineered substrate (SOLES) as a platform for monolithic integration of CMOS and optoelectronic devices. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2006, 135, 235-237. | 3.5 | 21 |
| 68 | Metamorphic GaAsP and InGaP Solar Cells on GaAs. IEEE Journal of Photovoltaics, 2012, 2, 56-61. | 2.5 | 21 |
| 69 | Comparison of low-temperature GaN, SiO2, and SiNx as gate insulators on AlGaNâ•GaN heterostructure field-effect transistors. Journal of Applied Physics, 2005, 98, 064506. | 2.5 | 20 |
| 70 | The electrical properties of HfO/sub 2/ dielectric on germanium and the substrate doping effect. IEEE Transactions on Electron Devices, 2006, 53, 2551-2558. | 3.0 | 20 |
| 71 | Single-junction GaAsP solar cells grown on SiGe graded buffers on Si. Applied Physics Letters, 2013, 103, 191901. | 3.3 | 20 |
| 72 | Growth and properties of rare-earth arsenide InGaAs nanocomposites for terahertz generation. Applied Physics Letters, 2015, 106, . | 3.3 | 20 |

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| 73 | Impact of Ion Implantation Damage and Thermal Budget on Mobility Enhancement in Strained-Si N-Channel MOSFETs. IEEE Transactions on Electron Devices, 2004, 51, 2136-2144. | 3.0 | 19 |
| 74 | GaAsP solar cells on GaP substrates by molecular beam epitaxy. Applied Physics Letters, 2012, 101, . | 3.3 | 19 |
| 75 | High-efficiency AlGaInP solar cells grown by molecular beam epitaxy. Applied Physics Letters, 2016, 109, . | 3.3 | 19 |
| 76 | Toward deterministic construction of low noise avalanche photodetector materials. Applied Physics Letters, 2018, 113, . | 3.3 | 19 |
| 77 | Molecular beam epitaxy of metamorphic InyGa1â^'yP solar cells on mixed anion GaAsxP1â^'x/GaAs graded buffers. Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics, 2011, 29, . | 1.2 | 18 |
| 78 | Ultracompact, multifunctional, and highly integrated 3Ã—2 photonic switches. Applied Physics Letters, 2004, 84, 2241-2243. | 3.3 | 17 |
| 79 | Tensile strained island growth at step-edges on GaAs(110). Applied Physics Letters, 2010, 97, . | 3.3 | 17 |
| 80 | Increased InAs quantum dot size and density using bismuth as a surfactant. Applied Physics Letters, 2014, 105, . | 3.3 | 17 |
| 81 | (Al)GaInP/GaAs Tandem Solar Cells for Power Conversion at Elevated Temperature and High Concentration. IEEE Journal of Photovoltaics, 2018, 8, 640-645. | 2.5 | 17 |
| 82 | 2.8â€‰Î¼m emission from type-I quantum wells grown on InAsxP1â^'x/InP metamorphic graded buffers. Applied Physics Letters, 2012, 101, . | 3.3 | 16 |
| 83 | InGaAs/GaP quantum dot light-emitting diodes on Si. Applied Physics Letters, 2013, 103, 141906. | 3.3 | 16 |
| 84 | Plasmonically Enhanced Spectral Upconversion for Improved Performance of GaAs Solar Cells under Nonconcentrated Solar Illumination. ACS Photonics, 2018, 5, 4289-4295. | 6.6 | 16 |
| 85 | Room temperature electroluminescence from light-emitting diodes based on In0.5Ga0.5As/GaP self-assembled quantum dots. Applied Physics Letters, 2012, 100, 251904. | 3.3 | 15 |
| 86 | Room-temperature mid-infrared quantum well lasers on multi-functional metamorphic buffers. Applied Physics Letters, 2016, 109, . | 3.3 | 15 |
| 87 | Highly tensile-strained Ge/InAlAs nanocomposites. Nature Communications, 2017, 8, 14204. | 12.8 | 15 |
| 88 | Highly oriented Ni(Pd)SiGe formation at 400â€‰Â°C. Journal of Applied Physics, 2005, 97, 104917. | 2.5 | 14 |
| 89 | Analysis of SiGe/Si quantum dot superlattices grown by low-pressure chemical vapor deposition for thin solar cells. Thin Solid Films, 2010, 518, S76-S79. | 1.8 | 14 |
| 90 | Relaxed GaP on Si with low threading dislocation density. Applied Physics Letters, 2020, 116, 042102. | 3.3 | 14 |

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| 91 | Hole mobility enhancement in strained-Si/strained-SiGe heterostructure p-MOSFETs fabricated on SiGe-on-insulator (SGOI). Semiconductor Science and Technology, 2004, 19, L48-L51. | 2.0 | 13 |
| 92 | Fully Depleted Strained-SOI n- and p-MOSFETs on Bonded SGOI Substrates and Study of the SiGe/BOX Interface. IEEE Electron Device Letters, 2004, 25, 147-149. | 3.9 | 13 |
| 93 | Tensile GaAs(111) quantum dashes with tunable luminescence below the bulk bandgap. Applied Physics Letters, 2014, 105, . | 3.3 | 12 |
| 94 | 16.8%-Efficient n<sup>+</sup>/p GaAs Solar Cells on Si With High Short-Circuit Current Density. IEEE Journal of Photovoltaics, 2019, 9, 660-665. | 2.5 | 12 |
| 95 | Mobility Enhancement in Dual-Channel P-MOSFETs. IEEE Transactions on Electron Devices, 2004, 51, 1424-1431. | 3.0 | 11 |
| 96 | Electron mobility characteristics of n-channel metal-oxide-semiconductor field-effect transistors fabricated on Ge-rich single- and dual-channel SiGe heterostructures. Journal of Applied Physics, 2004, 95, 1550-1555. | 2.5 | 11 |
| 97 | Positive Temperature Coefficient of Impact Ionization in Strained-Si. IEEE Transactions on Electron Devices, 2005, 52, 1627-1633. | 3.0 | 11 |
| 98 | Metamorphic 2.1-2.2â€‰eV InGaP solar cells on GaP substrates. Applied Physics Letters, 2014, 104, . | 3.3 | 11 |
| 99 | Defect selective etching of GaAs P1âˆ’ photovoltaic materials. Journal of Crystal Growth, 2014, 404, 140-145. | 1.5 | 11 |
| 100 | Mid-infrared electroluminescence from InAs type-I quantum wells grown on InAsP/InP metamorphic buffers. Journal of Applied Physics, 2015, 118, . | 2.5 | 11 |
| 101 | Initiation strategies for simultaneous control of antiphase domains and stacking faults in GaAs solar cells on Ge. Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics, 2016, 34, . | 1.2 | 11 |
| 102 | Oxide heterostructures for high density 2D electron gases on GaAs. Journal of Applied Physics, 2018, 123, . | 2.5 | 11 |
| 103 | 2.0â€“2.2ÂeV AlGaInP solar cells grown by molecular beam epitaxy. Solar Energy Materials and Solar Cells, 2021, 219, 110774. | 6.2 | 11 |
| 104 | Improved hole mobilities and thermal stability in a strainedâ€Siâˆ•strainedâ€Si1âˆ’yGeyâˆ•strainedâ€Si heterostructure grown on a relaxed Si1âˆ’xGex buffer. Applied Physics Letters, 2005, 86, 192104. | 3.3 | 10 |
| 105 | Growth and properties of AlGaInP resonant cavity light emitting diodes on Geâˆ•SiGeâˆ•Si substrates. Journal of Applied Physics, 2005, 97, 034504. | 2.5 | 10 |
| 106 | Bulk AlInAs on InP(111) as a novel material system for pure single photon emission. Optics Express, 2016, 24, 23198. | 3.4 | 10 |
| 107 | Direct-Gap 2.1â€“2.2 eV AlInP Solar Cells on GaInAs/GaAs Metamorphic Buffers. IEEE Journal of Photovoltaics, 2016, 6, 571-577. | 2.5 | 10 |
| 108 | High-Quality GaAs Planar Coalescence over Embedded Dielectric Microstructures Using an All-MBE Approach. Crystal Growth and Design, 2019, 19, 3085-3091. | 3.0 | 10 |

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| 109 | Low-threshold InP quantum dot and InGaP quantum well visible lasers on silicon (001). Optica, 2021, 8, 1495. | 9.3 | 10 |
| 110 | On the mechanism of ion-implanted As diffusion in relaxed SiGe. Applied Surface Science, 2004, 224, 59-62. | 6.1 | 9 |
| 111 | Effects of growth temperature and device structure on GaP solar cells grown by molecular beam epitaxy. Applied Physics Letters, 2015, 106, . | 3.3 | 9 |
| 112 | Rare-Earth Monopnictide Alloys for Tunable, Epitaxial, Designer Plasmonics. ACS Photonics, 2018, 5, 3051-3056. | 6.6 | 9 |
| 113 | Graded buffer Bragg reflectors with high reflectivity and transparency for metamorphic optoelectronics. Journal of Applied Physics, 2021, 129, 173102. | 2.5 | 9 |
| 114 | Enhanced room temperature infrared LEDs using monolithically integrated plasmonic materials. Optica, 2020, 7, 1355. | 9.3 | 9 |
| 115 | Controlling quantum dot energies using submonolayer bandstructure engineering. Applied Physics Letters, 2014, 105, 081103. | 3.3 | 8 |
| 116 | Atomic structure and stoichiometry of In(Ga)As/GaAs quantum dots grown on an exact-oriented GaP/Si(001) substrate. Applied Physics Letters, 2016, 108, . | 3.3 | 8 |
| 117 | AlGaInP/GaAs tandem solar cells for power conversion at 400Â°C and high concentration. AIP Conference Proceedings, 2017, , . | 0.4 | 8 |
| 118 | InP quantum dots for dislocation-tolerant, visible light emitters on Si. Applied Physics Letters, 2020, 117, . | 3.3 | 8 |
| 119 | High performance ultrathin GaAs solar cells. , 2015, , . | | 7 |
| 120 | GaAsP/Si solar cells and tunnel junctions for III-V/Si tandem devices. , 2016, , . | | 7 |
| 121 | Molecular beam epitaxy growth of germanium junctions for multi-junction solar cell applications. Journal Physics D: Applied Physics, 2016, 49, 465105. | 2.8 | 7 |
| 122 | Surfactant-assisted growth and properties of rare-earth arsenide InGaAs nanocomposites for terahertz generation. Applied Physics Letters, 2016, 108, . | 3.3 | 7 |
| 123 | Low-Intensity High-Temperature (LIHT) Solar Cells for Venus Atmosphere. IEEE Journal of Photovoltaics, 2018, 8, 1621-1626. | 2.5 | 7 |
| 124 | 10-Fold-Stack Multilayer-Grown Nanomembrane GaAs Solar Cells. ACS Photonics, 2018, 5, 2786-2790. | 6.6 | 7 |
| 125 | Impact ionization in strained-Si/SiGe heterostructures. , 0, , . | | 6 |
| 126 | Composition-dependent structural transition in epitaxial <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:msub><mml:mi>Bi</mml:mi><mml:mrow><mml:mn>1</mml:mn></mml:mrow></mml:msub><mml:mi>Fe</mml:mi><mml:msub><mml:mi>O</mml:mi><mml:mn>3</mml:mn></mml:msub></mml:mrow></mml:math> thin films on Si(111). Physical Review Materials, 2019, 3, . | 2.4 | 6 |

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| 127 | Channel Engineering of SiGe-Based Heterostructures for High Mobility MOSFETs. Materials Research Society Symposia Proceedings, 2001, 686, 1. | 0.1 | 5 |
| 128 | In situ cleaning effect on the electrical properties of Ge MOS devices by Ar gas anneal. IEEE Transactions on Electron Devices, 2006, 53, 2661-2664. | 3.0 | 5 |
| 129 | Growth rate and surfactant-assisted enhancements of rare-earth arsenide InGaAs nanocomposites for terahertz generation. APL Materials, 2017, 5, 096106. | 5.1 | 5 |
| 130 | Design and growth of multi-functional InAsP metamorphic buffers for mid-infrared quantum well lasers on InP. Journal of Applied Physics, 2019, 125, . | 2.5 | 5 |
| 131 | Challenges of relaxed n-type GaP on Si and strategies to enable low threading dislocation density. Journal of Applied Physics, 2021, 130, 243104. | 2.5 | 5 |
| 132 | Strained-Si-on-Insulator (SSOI) and SiGe-on-Insulator (SGOI): Fabrication Obstacles and Solutions. Materials Research Society Symposia Proceedings, 2002, 745, 471. | 0.1 | 4 |
| 133 | GaAsP solar cells on GaP/Si grown by molecular beam epitaxy. , 2013, , . | | 4 |
| 134 | Germanium solar cells grown by molecular beam epitaxy for lattice-matched, four-junction solar cells. , 2015, , . | | 4 |
| 135 | Anomalous tilting in InGaAs graded buffers from dislocation sources at wafer edges. Journal of Crystal Growth, 2019, 512, 169-175. | 1.5 | 4 |
| 136 | Improving the performance of GaInP solar cells through rapid thermal annealing and delta doping. Solar Energy Materials and Solar Cells, 2022, 241, 111725. | 6.2 | 4 |
| 137 | Strained Ge Channel p-type MOSFETs Fabricated on Si1â^'xGex/Si Virtual Substrates. Materials Research Society Symposia Proceedings, 2001, 686, 1. | 0.1 | 3 |
| 138 | Graphitized carbon on GaAs(100) substrates. Applied Physics Letters, 2011, 98, 073113. | 3.3 | 3 |
| 139 | Selective Area Heteroepitaxy of p-i-n Junction GaP Nanopillar Arrays on Si (111) by MOCVD. IEEE Journal of Quantum Electronics, 2022, 58, 1-6. | 1.9 | 3 |
| 140 | Tensile strained III-V self-assembled nanostructures on a (110) surface. Proceedings of SPIE, 2010, , . | 0.8 | 2 |
| 141 | Spatially resolved In and As distributions in InGaAs/GaP and InGaAs/GaAs quantum dot systems. Nanotechnology, 2014, 25, 465702. | 2.6 | 2 |
| 142 | Modeling wide bandgap GaInP photovoltaic cells for conversion efficiencies up to 16.5%. , 2015, , . | | 2 |
| 143 | Crystals aligned through graphene. Nature, 2017, 544, 301-302. | 27.8 | 2 |
| 144 | Epitaxial GaAsP/Si Tandem Solar Cells with Integrated Light Trapping. , 2019, , . | | 2 |

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| 145 | Epitaxial GaAsP/Si Solar Cells with High Quantum Efficiency. , 2020, , . | | 2 |
| 146 | Relaxed Silicon-Germanium on Insulator (SGOI). Materials Research Society Symposia Proceedings, 2001, 686, 1. | 0.1 | 1 |
| 147 | Hybrid Valence Bands in Strained-Layer Heterostructures grown on Relaxed SiGe Virtual Substrates. Materials Research Society Symposia Proceedings, 2003, 768, 1101. | 0.1 | 1 |
| 148 | Improved thermal stability and hole mobilities in a strained-Si/strained-Si1âˆ'yGey/strained-Si heterostructure grown on a relaxed Si1âˆ'xGex buffer. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2005, 124-125, 102-106. | 3.5 | 1 |
| 149 | Dislocation engineering in strained mos materials. , 2005, , . | | 1 |
| 150 | High-speed nano-optical photodetector for free space communication. , 2007, , . | | 1 |
| 151 | Thermal stability of nonhydrogenated multilayer amorphous carbon prepared by the filtered cathodic vacuum arc technique. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2007, 25, 421-424. | 2.1 | 1 |
| 152 | Molecular beam epitaxy approach to the graphitization of GaAs(100) surfaces. Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics, 2011, 29, 03C103. | 1.2 | 1 |
| 153 | Growth of metamorphic GaAsP solar cells on GaP. , 2012, , . | | 1 |
| 154 | Improving the performance of P3HT/PCBM solar cells with squaraine dye. Proceedings of SPIE, 2013, , . | 0.8 | 1 |
| 155 | 2.19 eV InGaP solar cells on GaP substrates. , 2013, , . | | 1 |
| 156 | Effect of substrate effcut angle on AlGaInP and GaInP solar cells grown by molecular beam epitaxy. , 2014, , . | | 1 |
| 157 | Fabrication of GaP disk resonator arrays coupled to nitrogen-vacancy centers in diamond. Proceedings of SPIE, 2014, , . | 0.8 | 1 |
| 158 | Solar Cells: Quaternary Organic Solar Cells Enhanced by Cocrystalline Squaraines with Power Conversion Efficiencies >10% (Adv. Energy Mater. 21/2016). Advanced Energy Materials, 2016, 6, . | 19.5 | 1 |
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