# Jir Pangrc

## List of Publications by Citations



| 102 | 786 | 14 | 20 |
|---|---|---|---|
| papers | citations | h-index | g-index |
| 118 | 857 | 2.4 | 3.33 |
| ext. papers | ext. citations | avg, IF | L-index |

| # | Paper | IF | Citations |
|---|---|---|---|
| 102 | On the transport mechanism in porous silicon. *Applied Physics Letters*, **1993**, 63, 180-182 | 3.4 | 40 |
| 101 | Ultrathin Nanocrystalline Diamond Films with Silicon Vacancy Color Centers via Seeding by 2 nm Detonation Nanodiamonds. *ACS Applied Materials & Interfaces*, **2017**, 9, 38842-38853 | 9.5 | 34 |
| 100 | Vapor pressure of metal organic precursors. *Journal of Crystal Growth*, **2003**, 248, 99-107 | 1.6 | 30 |
| 99 | Vapor Pressure of Selected Organic Iodides. *Journal of Chemical & Engineering Data*, **2010**, 55, 4780-4784 | 2.8 | 29 |
| 98 | Type I–type II band alignment of a GaAsSb/InAs/GaAs quantum dot heterostructure influenced by dot size and strain-reducing layer composition. *Journal Physics D: Applied Physics*, **2013**, 46, 095103 | 3 | 24 |
| 97 | Properties of MOVPE InAs/GaAs quantum dots overgrown by InGaAs. *Journal of Crystal Growth*, **2007**, 298, 582-585 | 1.6 | 23 |
| 96 | Surface processes during growth of InAs/GaAs quantum dot structures monitored by reflectance anisotropy spectroscopy. *Surface Science*, **2010**, 604, 318-321 | 1.8 | 22 |
| 95 | Vapour pressure and heat capacities of metal organic precursors, Y(thd)3 and Zr(thd)4. *Journal of Crystal Growth*, **2004**, 264, 192-200 | 1.6 | 22 |
| 94 | Vapour pressure measurement of metal organic precursors used for MOVPE. *Journal of Chemical Thermodynamics*, **2006**, 38, 312-322 | 2.9 | 20 |
| 93 | Photovoltage spectroscopy of InAs/GaAs quantum dot structures. *Journal of Applied Physics*, **2002**, 91, 10103 | 2.5 | 20 |
| 92 | Graded GaAsSb strain reducing layers covering InAs/GaAs quantum dots. *Journal of Crystal Growth*, **2013**, 370, 303-306 | 1.6 | 16 |
| 91 | InGaAs and GaAsSb strain reducing layers covering InAs/GaAs quantum dots. *Journal of Crystal Growth*, **2010**, 312, 1383-1387 | 1.6 | 16 |
| 90 | Growth and properties of InAs/InxGa1−xAs/GaAs quantum dot structures. *Journal of Crystal Growth* , **2008**, 310, 2229-2233 | 1.6 | 15 |
| 89 | Advancement toward ultra-thick and bright InGaN/GaN structures with a high number of QWs. *CrystEngComm*, **2019**, 21, 356-362 | 3.3 | 14 |
| 88 | Growth of InAs/GaAs quantum dots covered by GaAsSb in multiple structures studied by reflectance anisotropy spectroscopy. *Journal of Crystal Growth*, **2015**, 414, 156-160 | 1.6 | 14 |
| 87 | Optical characterisation of MOVPE grown vertically correlated InAs/GaAs quantum dots. *Microelectronics Journal*, **2008**, 39, 1070-1074 | 1.8 | 14 |
| 86 | Influence of growth rate on charge transport in GaSb homojunctions prepared by metalorganic vapor phase epitaxy. *Journal of Applied Physics*, **2004**, 95, 1811-1815 | 2.5 | 14 |

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| 85 | Measurement of vapour pressure of In-based metalorganics for MOVPE. *Journal of Crystal Growth*, **2004**, 272, 42-46 | 1.6 | 14 |
| 84 | Vapor pressure of germanium precursors. *Journal of Crystal Growth*, **2008**, 310, 4720-4723 | 1.6 | 13 |
| 83 | Study of InAs quantum dots in GaAs prepared on misoriented substrates. *Thin Solid Films*, **1998**, 336, 80-83 | 2.2 | 12 |
| 82 | Photoluminescence and magnetophotoluminescence of vertically stacked InAs/GaAs quantum dot structures. *Physica E: Low-Dimensional Systems and Nanostructures*, **2007**, 36, 106-113 | 3 | 12 |
| 81 | Influence of capping layer thickness on electronic states in self assembled MOVPE grown InAs quantum dots in GaAs. *Superlattices and Microstructures*, **2009**, 46, 324-327 | 2.8 | 11 |
| 80 | Influence of strain reducing layers on electroluminescence and photoluminescence of InAs/GaAs QD structures. *Journal of Crystal Growth*, **2011**, 315, 110-113 | 1.6 | 11 |
| 79 | Vapor Pressure of Di-tert-butylsilane. *Journal of Chemical & Engineering Data*, **2005**, 50, 1613-1615 | 2.8 | 11 |
| 78 | Improvement of luminescence properties of GaN buffer layer for fast nitride scintillator structures. *Journal of Crystal Growth*, **2017**, 464, 221-225 | 1.6 | 10 |
| 77 | Effect of the lower and upper interfaces on the quality of InAs/GaAs quantum dots. *Applied Surface Science*, **2014**, 301, 173-177 | 6.7 | 10 |
| 76 | Superlinear electroluminescence due to impact ionization in GaSb-based heterostructures with deep Al(As)Sb/InAsSb/Al(As)Sb quantum wells. *Journal of Applied Physics*, **2012**, 112, 023108 | 2.5 | 10 |
| 75 | Simultaneous characterization of defect states in CVD diamond by PDS, EPR, Raman and photocurrent spectroscopies. *Diamond and Related Materials*, **1998**, 7, 1048-1053 | 3.5 | 10 |
| 74 | Broken-gap heterojunction in the p-GaSb-n-InAs1 Sbx(0 0.18) system. *Technical Physics Letters*, **2001**, 27, 964-966 | 0.7 | 10 |
| 73 | The luminescence behaviour of porous silicon layers. *Solid State Communications*, **1993**, 85, 347-350 | 1.6 | 10 |
| 72 | Epitaxial growth on porous GaAs substrates. *Comptes Rendus Chimie*, **2013**, 16, 59-64 | 2.7 | 9 |
| 71 | Growth and properties of AIIIBV QD structures for intermediate band solar cells. *Journal of Crystal Growth*, **2015**, 414, 172-176 | 1.6 | 9 |
| 70 | Lateral shape of InAs/GaAs quantum dots in vertically correlated structures. *Journal of Crystal Growth*, **2007**, 298, 570-573 | 1.6 | 9 |
| 69 | GaSb based lasers operating near 2.3 microm for high resolution absorption spectroscopy. *Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy*, **2005**, 61, 3066-9 | 4.4 | 9 |
| 68 | GaAsSb/InAs/(In)GaAs type II quantum dots for solar cell applications. *Journal of Crystal Growth*, **2017**, 464, 64-68 | 1.6 | 8 |

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| 67 | MOVPE prepared InAs/GaAs quantum dots covered by GaAsSb layer with long wavelength emission at 1.8 μm. *Journal of Crystal Growth*, **2015**, 414, 167-171 | 1.6 | 8 |
| 66 | Combined vertically correlated InAs and GaAsSb quantum dots separated by triangular GaAsSb barrier. *Journal of Applied Physics*, **2013**, 114, 174305 | 2.5 | 8 |
| 65 | 1.3 μm emission from InAs/GaAs quantum dots. *Physica Status Solidi C: Current Topics in Solid State Physics*, **2006**, 3, 3811-3814 | | 8 |
| 64 | Polarization anisotropy of photoluminescence from multilayer InAs/GaAs quantum dots. *Physica E: Low-Dimensional Systems and Nanostructures*, **2002**, 13, 229-232 | 3 | 8 |
| 63 | On the correlations between the excitonic luminescence efficiency and the QW numbers in multiple InGaN/GaN QW structure. *Journal of Applied Physics*, **2017**, 121, 214505 | 2.5 | 8 |
| 62 | Misfit dislocation reduction in InGaAs epilayers grown on porous GaAs substrates. *Applied Surface Science*, **2014**, 306, 89-93 | 6.7 | 7 |
| 61 | InAs/GaAs quantum dot structures covered by InGaAs strain reducing layer characterized by photomodulated reflectance. *Materials Science and Engineering B: Solid-State Materials for Advanced Technology*, **2008**, 147, 175-178 | 3.1 | 7 |
| 60 | Out-of-Plane Weak Localization in Two-Dimensional Electron Structures. *Physical Review Letters*, **1998**, 80, 4020-4023 | 7.4 | 7 |
| 59 | Electroluminescence and photoelectric properties of type II broken-gap n-In(Ga)As(Sb)/N-GaSb heterostructures. *Journal of Applied Physics*, **1999**, 86, 6264-6268 | 2.5 | 7 |
| 58 | Influence of Si doping of GaN layers surrounding InGaN quantum wells on structure photoluminescence properties. *Journal of Crystal Growth*, **2019**, 506, 8-13 | 1.6 | 7 |
| 57 | Size and nitrogen inhomogeneity in detonation and laser synthesized primary nanodiamond particles revealed via salt-assisted deaggregation. *Carbon*, **2021**, 171, 230-239 | 10.4 | 7 |
| 56 | Self-assembled InAs/GaAs quantum dots covered by different strain reducing layers exhibiting strong photo- and electroluminescence in 1.3 and 1.55 microm bands. *Journal of Nanoscience and Nanotechnology*, **2011**, 11, 6804-9 | 1.3 | 6 |
| 55 | Electroluminescence in p-InAs/AlSb/InAsSb/AlSb/p(n)-GaSb type II heterostructures with deep quantum wells at the interface. *Semiconductors*, **2010**, 44, 66-71 | 0.7 | 6 |
| 54 | Influence of capping layer on the properties of MOVPE-grown InAs/GaAs quantum dots. *Journal of Crystal Growth*, **2008**, 310, 5081-5084 | 1.6 | 6 |
| 53 | Room-temperature diode laser photoacoustic spectroscopy near 2.3 μm. *Applied Physics B: Lasers and Optics*, **2005**, 81, 857-861 | 1.9 | 6 |
| 52 | InAs/GaAs multiple quantum dot structures grown by LP-MOVPE. *Thin Solid Films*, **2000**, 380, 101-104 | 2.2 | 6 |
| 51 | Comparison of MOVPE grown GaAs, InGaAs and GaAsSb covering layers for different InAs/GaAs quantum dot applications. *Journal of Crystal Growth*, **2017**, 464, 59-63 | 1.6 | 5 |
| 50 | Intense interface luminescence in type II narrow-gap InAs-based heterostructures at room temperature. *Physics Procedia*, **2010**, 3, 1189-1193 | | 5 |

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| 49 | Ballistic electron emission spectroscopy/microscopy of self-assembled InAs quantum dots of different sizes embedded in GaAs/AlGaAs heterostructure. *Applied Physics Letters*, **2008**, 92, 012101 | 3.4 | 5 |
| 48 | Room-temperature electroluminescence of AlSb/InAsSb single quantum wells grown by metal organic vapor phase epitaxy. *Applied Physics Letters*, **2006**, 88, 132102 | 3.4 | 5 |
| 47 | InAs/GaAs lasers with very thin active layer. *Thin Solid Films*, **2000**, 380, 233-236 | 2.2 | 5 |
| 46 | Temperature behaviour of luminescence of free-standing porous silicon. *Solid State Communications*, **1994**, 89, 297-300 | 1.6 | 5 |
| 45 | Influence of GaN buffer layer under InGaN/GaN MQWs on luminescent properties. *Journal of Crystal Growth*, **2019**, 507, 246-250 | 1.6 | 5 |
| 44 | InAs/GaSb/AlSb composite quantum well structure preparation with help of reflectance anisotropy spectroscopy. *Journal of Crystal Growth*, **2017**, 464, 206-210 | 1.6 | 4 |
| 43 | InGaN/GaN Structures: Effect of the Quantum Well Number on the Cathodoluminescent Properties. *Physica Status Solidi (B): Basic Research*, **2018**, 255, 1700464 | 1.3 | 4 |
| 42 | Vapor pressures of dimethylcadmium, trimethylbismuth, and tris(dimethylamino)antimony. *Fluid Phase Equilibria*, **2013**, 360, 106-110 | 2.5 | 4 |
| 41 | Vapor Pressure of Trimethylantimony and tert-Butyldimethylantimony. *Journal of Chemical & Engineering Data*, **2010**, 55, 362-365 | 2.8 | 4 |
| 40 | Vapor Pressure of Tetrakis(dimethylamino)germanium. *Journal of Chemical & Engineering Data*, **2010**, 55, 4095-4097 | 2.8 | 4 |
| 39 | Photovoltaic detector based on type II p-InAs/AlSb/InAsSb/AlSb/p-GaSb heterostructures with a single quantum well for mid-infrared spectral range **2008**, | | 4 |
| 38 | Transport-controlling deep defects in MOVPE grown GaSb. *Semiconductor Science and Technology*, **2006**, 21, 180-183 | 1.8 | 4 |
| 37 | Study of InAs quantum dots in AlGaAs/GaAs heterostructure by ballistic electron emission microscopy/spectroscopy. *Applied Physics Letters*, **2007**, 91, 042110 | 3.4 | 4 |
| 36 | InAs layer structures in GaAs grown by MOVPE and characterised by luminescence and photocurrent spectroscopy. *Journal of Crystal Growth*, **2003**, 248, 328-332 | 1.6 | 4 |
| 35 | Current–voltage characteristics of GaSb homojunctions prepared by MOVPE. *Solid-State Electronics*, **2003**, 47, 1471-1478 | 1.7 | 4 |
| 34 | Charge transport study and spectral response of GaSb/GaAs heterojunctions prepared by MOVPE. *Solar Energy Materials and Solar Cells*, **2003**, 76, 135-145 | 6.4 | 4 |
| 33 | Growth and properties of the MOVPE GaAs/InAs/GaAsSb quantum dot structures. *Physica B: Condensed Matter*, **2016**, 480, 14-22 | 2.8 | 3 |
| 32 | Magneto-photoluminescence study of electronic transitions in InAs/GaAs quantum dot layers. *Materials Science and Engineering B: Solid-State Materials for Advanced Technology*, **2002**, 88, 247-251 | 3.1 | 3 |

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| 31 | Lasers with InAs layers in GaAs. *Materials Science and Engineering B: Solid-State Materials for Advanced Technology*, **2002**, 88, 312-316 | 3.1 | 3 |
| 30 | Origin of recombination transitions at the lattice-matched GaInAsSb-GaSb n-N type-II heterojunctions. *Journal of Applied Physics*, **1994**, 75, 4189-4193 | 2.5 | 3 |
| 29 | Complexes of divalent platinum with diphenylphosphineacetic acid. *Collection of Czechoslovak Chemical Communications*, **1981**, 46, 1222-1228 | | 3 |
| 28 | Photoelectric and luminescence properties of GaSb-Based nanoheterostructures with a deep Al(As)Sb/InAsSb/Al(As)Sb quantum well grown by metalorganic vapor-phase epitaxy. *Semiconductors*, **2013**, 47, 1041-1045 | 0.7 | 2 |
| 27 | Integral and local density of states of InAs quantum dots in GaAs/AlGaAs heterostructure observed by ballistic electron emission spectroscopy near one-electron ground state. *Physica E: Low-Dimensional Systems and Nanostructures*, **2013**, 48, 61-65 | 3 | 2 |
| 26 | Two-band superlinear electroluminescence in GaSb based nanoheterostructures with AlSb/InAs1 Sbx/AlSb deep quantum well. *Journal of Applied Physics*, **2014**, 115, 223102 | 2.5 | 2 |
| 25 | Performance study of radiation detectors based on semi-insulating GaAs with P+ homo- and heterojunction blocking electrode. *Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment*, **2006**, 563, 159-162 | 1.2 | 2 |
| 24 | Ultrathin InAs and modulated InGaAs layers in GaAs grown by MOVPE studied by photomodulated reflectance spectroscopy. *Applied Surface Science*, **2006**, 253, 85-89 | 6.7 | 2 |
| 23 | Ga1-xInxSb - MOVPE growth and thermodynamic model. *Semiconductor Science and Technology*, **2001**, 16, 759-762 | 1.8 | 2 |
| 22 | Strong suppression of In desorption from InGaN QW by improved technology of upper InGaN/GaN QW interface. *Journal of Crystal Growth*, **2019**, 507, 310-315 | 1.6 | 2 |
| 21 | Vertical transport in type-II heterojunctions with InAs/GaSb/AlSb composite quantum wells in a high magnetic field. *Semiconductors*, **2017**, 51, 1343-1349 | 0.7 | 1 |
| 20 | Microwave radiation absorption and Shubnikov: de Haas oscillations in semi-metal InAs/GaSb/AlSb composite quantum wells **2016**, | | 1 |
| 19 | InAs/GaAs quantum dot capping in kinetically limited MOVPE growth regime. *Journal of Crystal Growth*, **2011**, 317, 39-42 | 1.6 | 1 |
| 18 | InAs/GaAs quantum dot structures emitting in the 1.55 m band. *IOP Conference Series: Materials Science and Engineering*, **2009**, 6, 012007 | 0.4 | 1 |
| 17 | Preliminary comparison of ballistic electron emission spectroscopy measurements on InAs quantum dots in a GaAs/AlGaAs heterostructure grown by MBE and MOVPE. *Microelectronics Journal*, **2009**, 40, 496-498 | 1.8 | 1 |
| 16 | Thermal conversion and epitaxial overgrowth of nanopores etched in InP and GaAs. *International Journal of Nanotechnology*, **2012**, 9, 732 | 1.5 | 1 |
| 15 | Influence of photon recycling on photovoltage spectra of GaSb diodes. *Journal of Applied Physics*, **2004**, 95, 5104-5110 | 2.5 | 1 |
| 14 | Electroluminescence in a semimetal channel at a single type II broken-gap heterointerface. *Semiconductors*, **2003**, 37, 1185-1189 | 0.7 | 1 |

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| 13 | Electroluminescence of type II broken-gap p-Ga0.84In0.16As0.22Sb0.78/n-InAs heterostructures with a high-mobility electron channel at the interface. *Journal of Applied Physics*, **2005**, 98, 083512 | 2.5 | 1 |
| 12 | Microwave radiation absorption and Shubnikov-de Haas oscillations in semimetal InAs/GaSb/AlSb composite quantum wells. *Journal of Nanophotonics*, **2016**, 10, 046013 | 1.1 | 1 |
| 11 | Luminescence redshift of thick InGaN/GaN heterostructures induced by the migration of surface adsorbed atoms. *Journal of Crystal Growth*, **2021**, 565, 126151 | 1.6 | 1 |
| 10 | GaAsSb-capped InAs QD type-II solar cell structures: Improvement by composition profiling of layers surrounding QD. *Materials Research Express*, **2017**, 4, 025502 | 1.7 | |
| 9 | Structural and photoluminescent properties of low temperature InAs buffer layer grown by MOVPE on GaAs substrates. *Journal of Crystal Growth*, **2014**, 396, 54-60 | 1.6 | |
| 8 | Vapor Pressures of (3-(Dimethylamino)propyl)dimethylindium, (tert-Butylimino)bis(diethylamino)cyclopentadienyltantalum, and (tert-Butylimino)tris(ethylmethylamino)tantalum. *Journal of Chemical & Engineering Data*, **2014**, 59, 4179-4183 | 2.8 | |
| 7 | Light emitting diodes with InAs/GaAsSb self-assembled quantum dot layer embedded in GaAs. *Thin Solid Films*, **2013**, 543, 83-87 | 2.2 | |
| 6 | Electro- and photoluminescence of InAs/GaAs quantum dot structures. *Journal of Physics: Conference Series*, **2010**, 245, 012080 | 0.3 | |
| 5 | Quantum confinement in MOVPE-grown structures with self-assembled InAs/GaAs quantum dots. *Journal of Physics: Conference Series*, **2010**, 245, 012079 | 0.3 | |
| 4 | Optical characterization of MOVPE grown InAs layers in GaAs. *Physica Status Solidi C: Current Topics in Solid State Physics*, **2005**, 2, 1319-1324 | | |
| 3 | Strained In x Ga1 As/GaAs multiple quantum wells grown by MOVPE. *European Physical Journal D*, **1999**, 49, 805-811 | | |
| 2 | Optical constants of electrochemically grown oxides on Ga-V semiconductor surfaces in the VUV region. *Physica Scripta*, **1990**, 41, 154-156 | 2.6 | |
| 1 | Microwave radiation absorption by 2D-electrons in the type II composite InAs/GaSb/AlSb quantum wells in a magnetic field. *Journal of Physics: Conference Series*, **2016**, 769, 012075 | 0.3 | |