# Fernando Gonzalez-Posada

List of Publications by Year
in descending order



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|---|---|---|---|
| 45 papers | 827 citations | 567281 15 h-index | 501196 28 g-index |
| 45 all docs | 45 docs citations | 45 times ranked | 1457 citing authors |

| # | Article | IF | Citations |
|---|---|---|---|
| 1 | Room-Temperature Photodetection Dynamics of Single GaN Nanowires. Nano Letters, 2012, 12, 172-176. | 9.1 | 139 |
| 2 | Effects of plasmon excitation on photocatalytic activity of Ag/TiO2 and Au/TiO2 nanocomposites. Journal of Catalysis, 2013, 307, 214-221. | 6.2 | 77 |
| 3 | Correlation of Polarity and Crystal Structure with Optoelectronic and Transport Properties of GaN/AlN/GaN Nanowire Sensors. Nano Letters, 2012, 12, 5691-5696. | 9.1 | 73 |
| 4 | All-semiconductor plasmonic gratings for biosensing applications in the mid-infrared spectral range. Optics Express, 2016, 24, 16175. | 3.4 | 57 |
| 5 | Surface cleaning and preparation in AlGaN/GaN-based HEMT processing as assessed by X-ray photoelectron spectroscopy. Applied Surface Science, 2007, 253, 6185-6190. | 6.1 | 42 |
| 6 | Effects of $hbox{N}_{2}$ Plasma Pretreatment on the SiN Passivation of AlGaN/GaN HEMT. IEEE Electron Device Letters, 2008, 29, 209-211. | 3.9 | 36 |
| 7 | Highly doped semiconductor plasmonic nanoantenna arrays for polarization selective broadband surface-enhanced infrared absorption spectroscopy of vanillin. Nanophotonics, 2017, 7, 507-516. | 6.0 | 33 |
| 8 | Surface-Enhanced Thermal Emission Spectroscopy with Perfect Absorber Metasurfaces. ACS Photonics, 2019, 6, 1506-1514. | 6.6 | 28 |
| 9 | Heavily Doped Semiconductor Metamaterials for Midâ€Infrared Multispectral Perfect Absorption and Thermal Emission. Advanced Optical Materials, 2020, 8, 1901502. | 7.3 | 27 |
| 10 | Temperature-dependent terahertz spectroscopy of inverted-band three-layer InAs/GaSb/InAs quantum well. Physical Review B, 2018, 97, . | 3.2 | 24 |
| 11 | Localized surface plasmon resonance frequency tuning in highly doped InAsSb/GaSb one-dimensional nanostructures. Nanotechnology, 2016, 27, 425201. | 2.6 | 23 |
| 12 | Impact of $hbox{N}_{2}$ Plasma Power Discharge on AlGaN/GaN HEMT Performance. IEEE Transactions on Electron Devices, 2012, 59, 374-379. | 3.0 | 22 |
| 13 | Photovoltaic Response of InGaN/GaN Multiple-Quantum Well Solar Cells. Japanese Journal of Applied Physics, 2013, 52, 08JH05. | 1.5 | 22 |
| 14 | Environmental sensitivity of n-i-n and undoped single GaN nanowire photodetectors. Applied Physics Letters, 2013, 102, . | 3.3 | 21 |
| 15 | Investigation of different mechanisms of GaN growth induced on AlN and GaN nucleation layers. Journal of Applied Physics, 2009, 105, . | 2.5 | 15 |
| 16 | Surface-enhanced infrared absorption with Si-doped InAsSb/GaSb nano-antennas. Optics Express, 2017, 25, 26651. | 3.4 | 15 |
| 17 | Massless Dirac fermions in III-V semiconductor quantum wells. Physical Review B, 2019, 99, . | 3.2 | 14 |
| 18 | Photoluminescence enhancement in quaternary III-nitrides alloys grown by molecular beam epitaxy with increasing Al content. Journal of Applied Physics, 2008, 103, 046104. | 2.5 | 13 |

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|---|---|---|---|
| 19 | Metal-insulator-metal antennas in the far-infrared range based on highly doped InAsSb. Applied Physics Letters, 2017, 111, . | 3.3 | 13 |
| 20 | Quantum wells of dilute nitrides grown on GaAs by molecular beam epitaxy. Physica E: Low-Dimensional Systems and Nanostructures, 2004, 23, 352-355. | 2.7 | 12 |
| 21 | Aluminium incorporation in AlxGa1â^'xN/GaN heterostructures: A comparative study by ion beam analysis and X-ray diffraction. Thin Solid Films, 2008, 516, 8447-8452. | 1.8 | 12 |
| 22 | Single GaN-Based Nanowires for Photodetection and Sensing Applications. Japanese Journal of Applied Physics, 2013, 52, 11NG01. | 1.5 | 12 |
| 23 | Oxidation of copper nanoparticles in water monitored in situ by localized surface plasmon resonance spectroscopy. RSC Advances, 2014, 4, 20659. | 3.6 | 12 |
| 24 | Phosphonate monolayers on InAsSb and GaSb surfaces for mid-IR plasmonics. Applied Surface Science, 2018, 451, 241-249. | 6.1 | 12 |
| 25 | Fano-like resonances sustained by Si doped InAsSb plasmonic resonators integrated in GaSb matrix. Optics Express, 2015, 23, 29423. | 3.4 | 10 |
| 26 | Spectroscopic Nanoimaging of All-Semiconductor Plasmonic Gratings Using Photoinduced Force and Scattering Type Nanoscopy. ACS Photonics, 2018, 5, 4352-4359. | 6.6 | 10 |
| 27 | Microfluidic surface-enhanced infrared spectroscopy with semiconductor plasmonics for the fingerprint region. Reaction Chemistry and Engineering, 2020, 5, 124-135. | 3.7 | 10 |
| 28 | Giant Rabi splitting at the phonon line within all-semiconductor metallic-insulator-metallic antennas. Physical Review B, 2019, 100, . | 3.2 | 7 |
| 29 | Epsilon near-zero all-optical terahertz modulator. Applied Physics Letters, 2020, 117, . | 3.3 | 7 |
| 30 | Responsivity and photocurrent dynamics in single GaN nanowires. Physica Status Solidi C: Current Topics in Solid State Physics, 2012, 9, 642-645. | 0.8 | 6 |
| 31 | Magnetoabsorption of Dirac Fermions in InAs/GaSb/InAs â€œThree-Layerâ€•Gapless Quantum Wells. JETP Letters, 2017, 106, 727-732. | 1.4 | 5 |
| 32 | Pedestal formation of all-semiconductor gratings through GaSb oxidation for mid-IR plasmonics. Journal Physics D: Applied Physics, 2018, 51, 015104. | 2.8 | 5 |
| 33 | Photogenerated metasurfaces at terahertz frequencies induced by a continuous-wave low pump. Physical Review B, 2018, 98, . | 3.2 | 5 |
| 34 | Terahertz Spectroscopy of Two-Dimensional Semimetal in Three-Layer InAs/GaSb/InAs Quantum Well. JETP Letters, 2019, 109, 96-101. | 1.4 | 4 |
| 35 | GaN-based nanowire photodetectors. Proceedings of SPIE, 2012, , . | 0.8 | 2 |
| 36 | Study of SiN<sub>x</sub>:H<sub>y</sub> passivant layers for AlGaN/GaN high electron mobility transistors. Physica Status Solidi C: Current Topics in Solid State Physics, 2008, 5, 518-521. | 0.8 | 1 |

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|---|---|---|---|
| 37 | Semiconductor-based nanostructures for spectral filtering. , 2019, , . | | 1 |
| 38 | 2-DEG Characteristics Improvement by N2-plasma exposure in GaN HEMT heterostructures. , 2007, , . | | 0 |
| 39 | Photocurrent Phenomena in Nanoribbon InAlN/GaN High Electron Mobility Transistors. Japanese Journal of Applied Physics, 2013, 52, 08JE19. | 1.5 | 0 |
| 40 | Terahertz studies of 2D and 3D topological transitions. Journal of Physics: Conference Series, 2015, 647, 012037. | 0.4 | 0 |
| 41 | THz absorbers with highly doped semiconductors based in plasmonic nano-resonators. , 2016, , . | | 0 |
| 42 | Highly doped InAsSb plasmonic arrays for mid-infrared biosensing. , 2016, , . | | 0 |
| 43 | Low-pump irradiance to modulate THz waves driven by photo-generated carriers in an InAs slab. , 2019, , . | | 0 |
| 44 | Semiconductor plasmonics and metamaterials for IR applications. , 2022, , . | | 0 |
| 45 | Quantum plasmonics and hyperbolic material for biosensing. , 2022, , . | | 0 |