# J-M Chauveau

List of Publications by Year
in descending order

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|---|---|---|---|
| 100 papers | 1,711 citations | 236925 25 h-index | 330143 37 g-index |
| 100 all docs | 100 docs citations | 100 times ranked | 1537 citing authors |

| # | Article | IF | Citations |
|---|---|---|---|
| 1 | Induced structural modifications in ZnS nanowires via physical state of catalyst: Highlights of 15R crystal phase. Nano Research, 2022, 15, 377. | 10.4 | 9 |
| 2 | In situ analysis of the nucleation of O- and Zn-polar ZnO nanowires using synchrotron-based X-ray diffraction. Nanoscale, 2022, 14, 680-690. | 5.6 | 1 |
| 3 | Assessing the electrical activity of individual ZnO nanowires thermally annealed in air. Nanoscale Advances, 2022, 4, 1125-1135. | 4.6 | 3 |
| 4 | Polarization-resolved photoluminescence study of an atom probe tip containing a ZnO-(Mg,Zn)O heterostructure. , 2022, , . | | 1 |
| 5 | Exciton ionization induced by intersubband absorption in nonpolar ZnO-ZnMgO quantum wells at room temperature. Physical Review B, 2022, 105, . | 3.2 | 0 |
| 6 | Identification by deuterium diffusion of a nitrogen-related deep donor preventing the p-type doping of ZnO. Applied Physics Letters, 2021, 118, . | 3.3 | 6 |
| 7 | Evidence of Piezoelectric Potential and Screening Effect in Single Highly Doped ZnO:Ga and ZnO:Al Nanowires by Advanced Scanning Probe Microscopy. Journal of Physical Chemistry C, 2021, 125, 15373-15383. | 3.1 | 15 |
| 8 | Use of interface phonon-polaritons for the alloy determination in ZnO/(Zn,Mg)O multiple quantum wells. Applied Surface Science, 2021, 567, 150816. | 6.1 | 0 |
| 9 | A photonic atom probe coupling 3D atomic scale analysis with in situ photoluminescence spectroscopy. Review of Scientific Instruments, 2020, 91, 083704. | 1.3 | 16 |
| 10 | Super-resolution Optical Spectroscopy of Nanoscale Emitters within a Photonic Atom Probe. Nano Letters, 2020, 20, 8733-8738. | 9.1 | 8 |
| 11 | Why is it difficult to grow spontaneous ZnO nanowires using molecular beam epitaxy?. Nanotechnology, 2020, 31, 385601. | 2.6 | 4 |
| 12 | Observation of Intersubband Absorption in <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline" overflow="scroll"><mml:mrow><mml:mi>Zn</mml:mi><mml:mi mathvariant="normal">O</mml:mi></mml:mrow></mml:math> Coupled Quantum Wells. Physical Review Applied, 2019, 12, . | 3.8 | 11 |
| 13 | Optical Phase Transition in Semiconductor Quantum Metamaterials. Physical Review Letters, 2019, 123, 117401. | 7.8 | 15 |
| 14 | Short infrared wavelength quantum cascade detectors based on non-polar ZnO/ZnMgO quantum wells. , 2019, , . | | 0 |
| 15 | Intersubband absorption at normal incidence by m-plane ZnO/MgZnO quantum wells. , 2019, , . | | 0 |
| 16 | Time-resolved photoluminescence investigation of (Mg, Zn) O alloy growth on a non-polar plane. Superlattices and Microstructures, 2018, 116, 105-113. | 3.1 | 2 |
| 17 | Short infrared wavelength quantum cascade detectors based on m-plane ZnO/ZnMgO quantum wells. Applied Physics Letters, 2018, 113, . | 3.3 | 24 |
| 18 | Well-ordered ZnO nanowires with controllable inclination on semipolar ZnO surfaces by chemical bath deposition. Nanotechnology, 2018, 29, 475601. | 2.6 | 32 |

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| 19 | Intersubband plasmons induced negative refraction at mid-IR frequency in heterostructured semiconductor metamaterials. Journal of Physics: Conference Series, 2018, 1092, 012034. | 0.4 | 0 |
| 20 | Breaking the Intersubband Selection Rules for Absorption with <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline" overflow="scroll"><mml:mi>Zn</mml:mi><mml:mrow><mml:mrow><mml:mi mathvariant="normal">O</mml:mi></mml:mrow></mml:mrow></mml:math> Quantum Wells: Light Polarization Sensitivity under Normal Incidence. Physical Review Applied, 2018, 10, . | 3.8 | 3 |
| 21 | Evidence of exciton complexes in non polar ZnO/(Zn,Mg)O A-plane quantum well. Superlattices and Microstructures, 2018, 120, 410-418. | 3.1 | 9 |
| 22 | Ga-doping of nonpolar m-plane ZnMgO with high Mg contents. Journal of Alloys and Compounds, 2018, 766, 436-441. | 5.5 | 5 |
| 23 | Composition Metrology of Ternary Semiconductor Alloys Analyzed by Atom Probe Tomography. Journal of Physical Chemistry C, 2018, 122, 16704-16714. | 3.1 | 22 |
| 24 | Multisubband Plasmons in Doped <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline" overflow="scroll"><mml:mi>Zn</mml:mi><mml:mrow><mml:mrow><mml:mi mathvariant="normal">O</mml:mi></mml:mrow></mml:mrow></mml:math> Quantum Wells. Physical Review Applied, 2018, 10, . | 3.8 | 20 |
| 25 | Intersubband transitions and many body effects in ZnMgO/ZnO quantum wells. , 2018, , . | | 0 |
| 26 | Deep-level spectroscopy in metalâ€“insulatorâ€“semiconductor structures. Journal Physics D: Applied Physics, 2017, 50, 065104. | 2.8 | 6 |
| 27 | Non-metal to metal transition in n-type ZnO single crystal materials. Journal of Applied Physics, 2017, 121, . | 2.5 | 14 |
| 28 | Intersubband absorption in m-plane ZnO/ZnMgO MQWs. Proceedings of SPIE, 2017, , . | 0.8 | 2 |
| 29 | Demonstrating the decoupling regime of the electron-phonon interaction in a quantum dot using chirped optical excitation. Physical Review B, 2017, 95, . | 3.2 | 31 |
| 30 | Three-dimensional atomic-scale investigation of ZnO-MgxZn1â^'xO m-plane heterostructures. Applied Physics Letters, 2017, 111, . | 3.3 | 24 |
| 31 | Homoepitaxy of non-polar ZnO/(Zn,Mg)O multi-quantum wells: From a precise growth control to the observation of intersubband transitions. Applied Physics Letters, 2017, 111, . | 3.3 | 32 |
| 32 | Characterization of carrier concentration in ZnO nanowires by scanning capacitance microscopy. Physica Status Solidi C: Current Topics in Solid State Physics, 2016, 13, 576-580. | 0.8 | 9 |
| 33 | Inversion of absorption anisotropy and bowing of crystal field splitting in wurtzite MgZnO. Applied Physics Letters, 2016, 108, . | 3.3 | 11 |
| 34 | Access to residual carrier concentration in ZnO nanowires by calibrated scanning spreading resistance microscopy. Applied Physics Letters, 2016, 108, . | 3.3 | 10 |
| 35 | Electrical mechanisms for carrier compensation in homoepitaxial nonpolar m-ZnO doped with nitrogen. Semiconductor Science and Technology, 2016, 31, 035010. | 2.0 | 1 |
| 36 | ZnMgO-based UV photodiodes: a comparison of films grown by spray pyrolysis and MBE. , 2016, , . | | 4 |

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| 37 | Optimized In composition and quantum well thickness for yellow-emitting (Ga,In)N/GaN multiple quantum wells. Journal of Crystal Growth, 2016, 434, 25-29. | 1.5 | 6 |
| 38 | Nanoscale calibration of n-type ZnO staircase structures by scanning capacitance microscopy. Applied Physics Letters, 2015, 107, . | 3.3 | 6 |
| 39 | Light polarization sensitive photodetectors with m- and r-plane homoepitaxial ZnO/ZnMgO quantum wells. Applied Physics Letters, 2015, 106, . | 3.3 | 17 |
| 40 | Native point defect energies, densities, and electrostatic repulsion across (Mg,Zn)O alloys. Physica Status Solidi (A) Applications and Materials Science, 2015, 212, 1448-1454. | 1.8 | 3 |
| 41 | ZnO/ZnMgO multiple quantum well light polarization sensitive photodetectors. , 2015, , . | | 0 |
| 42 | Impact of Mg content on native point defects in Mg<sub>x</sub>Zn<sub>1â^'x</sub>O (0 â‰¤ x â‰¤ 0.56). APL Materials, 2015, 3, 062801. | 5.1 | 7 |
| 43 | Transport of indirect excitons in ZnO quantum wells. Optics Letters, 2015, 40, 3667. | 3.3 | 17 |
| 44 | GaN-based heterostructures grown on ZnO substrates: from polarity control to the fabrication of blue LEDs. , 2014, , . | | 0 |
| 45 | Optical spectroscopy of a-plane-oriented ZnO epilayers grown by plasma-assisted molecular beam epitaxy. Applied Physics A: Materials Science and Processing, 2014, 115, 257-261. | 2.3 | 0 |
| 46 | Growth of Ga- and N-polar GaN layers on O face ZnO substrates by molecular beam epitaxy. Journal of Crystal Growth, 2014, 388, 35-41. | 1.5 | 10 |
| 47 | Non Polar GaN and (Ga,In)N/GaN Heterostructures Grown On A-Plane (1 1 -2 0) ZnO Subtrates. , 2014, , . | | 0 |
| 48 | Built-in electric field in ZnO based semipolar quantum wells grown on (101Â¯2) ZnO substrates. Applied Physics Letters, 2013, 103, . | 3.3 | 11 |
| 49 | Blue Light-Emitting Diodes Grown on ZnO Substrates. Applied Physics Express, 2013, 6, 042101. | 2.4 | 14 |
| 50 | Zinc Oxide and Related Materials. Physica Status Solidi C: Current Topics in Solid State Physics, 2013, 10, 1258-1260. | 0.8 | 0 |
| 51 | On the growth of Zn<sub>1â€“x</sub>Mn<sub>x</sub>O thin films by plasmaâ€assisted MBE. Physica Status Solidi C: Current Topics in Solid State Physics, 2013, 10, 1322-1324. | 0.8 | 2 |
| 52 | Deep levels in a-plane, high Mg-content MgxZn1â^'xO epitaxial layers grown by molecular beam epitaxy. Journal of Applied Physics, 2012, 112, 123709. | 2.5 | 22 |
| 53 | Donor and acceptor levels in ZnO homoepitaxial thin films grown by molecular beam epitaxy and doped with plasma-activated nitrogen. Applied Physics Letters, 2012, 101, . | 3.3 | 12 |
| 54 | On the origin of basal stacking faults in nonpolar wurtzite films epitaxially grown on sapphire substrates. Journal of Applied Physics, 2012, 112, . | 2.5 | 25 |

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| 55 | Single phase a-plane MgZnO epilayers for UV optoelectronics: substitutional behaviour of Mg at large contents. CrystEngComm, 2012, 14, 1637-1640. | 2.6 | 29 |
| 56 | Growth optimization and characterization of lattice-matched Al0.82In0.18N optical confinement layer for edge emitting nitride laser diodes. Journal of Crystal Growth, 2012, 338, 20-29. | 1.5 | 10 |
| 57 | Optical investigations of nonpolar homoepitaxial ZnO/(Zn,Mg)O quantum wells. Physica Status Solidi C: Current Topics in Solid State Physics, 2012, 9, 1320-1324. | 0.8 | 3 |
| 58 | Exciton radiative properties in nonpolar homoepitaxial ZnO/(Zn,Mg)O quantum wells. Physical Review B, 2011, 84, . | 3.2 | 66 |
| 59 | The influence of various MOCVD parameters on the growth of Al1â^'xInxN ternary alloy on GaN templates. Journal of Crystal Growth, 2011, 316, 30-36. | 1.5 | 27 |
| 60 | Polarization-sensitive Schottky photodiodes based on a-plane ZnO/ZnMgO multiple quantum-wells. Applied Physics Letters, 2011, 99, . | 3.3 | 32 |
| 61 | Residual and nitrogen doping of homoepitaxial nonpolar m-plane ZnO films grown by molecular beam epitaxy. Applied Physics Letters, 2011, 98, . | 3.3 | 43 |
| 62 | Optical properties of a-plane (Al, Ga)N/GaN multiple quantum wells grown on strain engineered Zn1â^'xMgxO layers by molecular beam epitaxy. Applied Physics Letters, 2011, 99, 261910. | 3.3 | 3 |
| 63 | Anisotropic strain effects on the photoluminescence emission from heteroepitaxial and homoepitaxial nonpolar (Zn,Mg)O/ZnO quantum wells. Journal of Applied Physics, 2011, 109, . | 2.5 | 21 |
| 64 | Low temperature reflectivity study of nonpolar ZnO/(Zn,Mg)O quantum wells grown on M-plane ZnO substrates. Applied Physics Letters, 2011, 98, 101913. | 3.3 | 33 |
| 65 | Growth of GaN based structures on Si(110) by molecular beam epitaxy. Journal of Crystal Growth, 2010, 312, 2683-2688. | 1.5 | 25 |
| 66 | Benefits of homoepitaxy on the properties of nonpolar (Zn,Mg)O/ZnO quantum wells on a-plane ZnO substrates. Applied Physics Letters, 2010, 97, . | 3.3 | 68 |
| 67 | Transmission electron microscopy investigation of microtwins and double positioning domains in (111) 3C-SiC in relation with the carbonization conditions. Applied Physics Letters, 2009, 95, . | 3.3 | 25 |
| 68 | (Zn, Mg)O/ZnO-based heterostructures grown by molecular beam epitaxy on sapphire: Polar vs. non-polar. Microelectronics Journal, 2009, 40, 512-516. | 2.0 | 20 |
| 69 | Interfacial structure and defect analysis of nonpolar ZnO films grown on R-plane sapphire by molecular beam epitaxy. Journal of Applied Physics, 2008, 103, . | 2.5 | 52 |
| 70 | Non-polara-plane ZnMgO1/ZnO quantum wells grown by molecular beam epitaxy. Semiconductor Science and Technology, 2008, 23, 035005. | 2.0 | 59 |
| 71 | Interface structure and anisotropic strain relaxation of nonpolar wurtzite (112Â¯) and (101Â¯) orientations: ZnO epilayers grown on sapphire. Journal of Applied Physics, 2008, 104, . | 2.5 | 57 |
| 72 | Residual strain in nonpolar a-plane Zn1â^'xMgxO (0<x<0.55) and its effect on the band structure of (Zn,Mg)O/ZnO quantum wells. Applied Physics Letters, 2008, 93, 231911. | 3.3 | 31 |

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| 73 | Growth and Characterization of Non-Polar (Zn,Mg)O/ZnO Quantum Wells and Multiple Quantum Wells. Journal of the Korean Physical Society, 2008, 53, 2934-2938. | 0.7 | 1 |
| 74 | Blue-shift mechanisms in annealed(Ga,In)(N,As)âˆ•GaAsquantum wells. Physical Review B, 2007, 75, . | 3.2 | 24 |
| 75 | Optical determination of the effective wetting layer thickness and composition in<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:mi mathvariant="normal">In</mml:mi><mml:mi mathvariant="normal">As</mml:mi><mml:mo>âˆ•</mml:mo><mml:mi mathvariant="normal">Ga</mml:mi><mml:mrow><mml:mo>(</mml:mo><mml:mi mathvariant="normal | 3.2 | 33 |
| 76 | Investigation of Non-Radiative Processes in InAs/(Ga,In)(N,As) Quantum Dots. Japanese Journal of Applied Physics, 2007, 46, L317-L319. | 1.5 | 2 |
| 77 | Growth of non-polar ZnO/(Zn,Mg)O quantum well structures on R-sapphire by plasma-assisted molecular beam epitaxy. Journal of Crystal Growth, 2007, 301-302, 366-369. | 1.5 | 41 |
| 78 | Growth and characterization of A-plane ZnO and ZnCoO based heterostructures. Applied Physics A: Materials Science and Processing, 2007, 88, 65-69. | 2.3 | 28 |
| 79 | Optimization of InAs/(Ga,In)As quantum dots in view of efficient emission at 1.5 Âµm. Physica Status Solidi C: Current Topics in Solid State Physics, 2006, 3, 3979-3982. | 0.8 | 2 |
| 80 | Correlation between quantum well morphology, carrier localization and the optoelectronic properties of GaInNAs/GaAs light emitting diodes. Semiconductor Science and Technology, 2006, 21, 1047-1052. | 2.0 | 5 |
| 81 | Structural and electronic properties of ZnMgO/ZnO quantum wells. Superlattices and Microstructures, 2005, 38, 455-463. | 3.1 | 33 |
| 82 | Correlation between interface structure and light emission at 1.3â€“1.55 Î¼m of (Ga,In)(N,As) diluted nitride heterostructures on GaAs substrates. Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena, 2004, 22, 2195. | 1.6 | 34 |
| 83 | Nitrogen-dependent optimum annealing temperature of Ga(As,N). Journal of Crystal Growth, 2004, 267, 60-66. | 1.5 | 24 |
| 84 | Nanoscale analysis of the In and N spatial redistributions upon annealing of GaInNAs quantum wells. Applied Physics Letters, 2004, 84, 2503-2505. | 3.3 | 57 |
| 85 | Correlations between structural and optical properties of GaInNAs quantum wells grown by MBE. Journal of Crystal Growth, 2003, 251, 383-387. | 1.5 | 31 |
| 86 | Influence of MBE growth conditions on the quality of InAlAs/InGaAs metamorphic HEMTs on GaAs. Journal of Crystal Growth, 2003, 251, 822-826. | 1.5 | 18 |
| 87 | Interplay between relaxation, surface morphology and composition modulation in InAlAs graded buffer layers. Journal of Crystal Growth, 2003, 251, 112-117. | 1.5 | 26 |
| 88 | Characterization of the GaN/GaAs/GaN structure grown by molecular beam epitaxy. Solid-State Electronics, 2003, 47, 539-542. | 1.4 | 3 |
| 89 | Indium content measurements in metamorphic high electron mobility transistor structures by combination of x-ray reciprocal space mapping and transmission electron microscopy. Journal of Applied Physics, 2003, 93, 4219-4225. | 2.5 | 53 |
| 90 | Annealing effects on the crystal structure of GaInNAs quantum wells with large In and N content grown by molecular beam epitaxy. Journal of Applied Physics, 2003, 94, 2319-2324. | 2.5 | 60 |

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| 91 | Arsenic incorporation and its influence on microstructure of wurtzite GaN grown by molecular-beam epitaxy. Journal of Applied Physics, 2003, 94, 7193-7200. | 2.5 | 2 |
| 92 | GaInNAs/GaAs quantum wells grown by molecular-beam epitaxy emitting above 1.5 Î¼m. Applied Physics Letters, 2003, 82, 1845-1847. | 3.3 | 38 |
| 93 | Interplay between the growth temperature, microstructure, and optical properties of GaInNAs quantum wells. Applied Physics Letters, 2003, 82, 3451-3453. | 3.3 | 36 |
| 94 | As-mediated stacking fault in wurtzite GaN epilayers. Applied Physics Letters, 2002, 81, 3407-3409. | 3.3 | 9 |
| 95 | Stacking of metamorphic InAlAs/InGaAs heterostructures on GaAs substrate. Journal of Applied Physics, 2001, 90, 5774-5777. | 2.5 | 8 |
| 96 | Surface morphology and strain relaxation of InAlAs buffer layers grown lattice mismatched on GaAs with inverse steps. Applied Surface Science, 2000, 166, 442-445. | 6.1 | 20 |
| 97 | Comparison of In[sub 0.33]Al[sub 0.67]As/In[sub 0.34]Ga[sub 0.66]As on GaAs metamorphic high electron mobility transistors grown by molecular beam epitaxy with normal and inverse step on linear graded buffer layers. Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena, 2000, 18, 2513. | 1.6 | 15 |
| 98 | Interplays between plastic relaxation, surface morphology and composition modulation in InAlAs graded buffer layers under various growth conditions. , 0, , . | | 1 |
| 99 | Correlations between growth mode and structural and optical properties of GaInNAs quantum wells grown by MBE. , 0, , . | | 0 |
| 100 | Influence of growth conditions on the structural, optical and electrical quality of MBE grown InAlAs/InGaAs metamorphic HEMTs on GaAs. , 0, , . | | 1 |