

# Bertrand Lacroix

## List of Publications by Year in descending order

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Version: 2024-02-01

48  
papers

692  
citations

516561

16  
h-index

610775

24  
g-index

48  
all docs

48  
docs citations

48  
times ranked

1055  
citing authors

| #  | ARTICLE   | IF  | CITATIONS |
|----|---|-----|-----------|
| 1  | Application of advanced (S)TEM methods for the study of nanostructured porous functional surfaces: A few working examples. <i>Materials Characterization</i> , 2022, 185, 111741.   | 1.9 | 5         |
| 2  | Anisotropic optical properties of indium tin oxide thin films prepared by ion beam sputtering under oblique angle deposition. <i>Applied Surface Science</i> , 2022, 595, 152945.   | 3.1 | 6         |
| 3  | Reduction of N <sub>2</sub> O with hydrosilanes catalysed by RuSNS nanoparticles. <i>Chemical Communications</i> , 2022, 58, 7176-7179.   | 2.2 | 5         |
| 4  | Controlled grain-size thermochromic VO <sub>2</sub> coatings by the fast oxidation of sputtered vanadium or vanadium oxide films deposited at glancing angles. <i>Surfaces and Interfaces</i> , 2021, 27, 101581.               | 1.5 | 6         |
| 5  | Simultaneous Optical and Electrical Characterization of GaN Nanowire Arrays by Means of Vis-IR Spectroscopic Ellipsometry. <i>Journal of Physical Chemistry C</i> , 2020, 124, 1535-1543.                                       | 1.5 | 5         |
| 6  | Biodegradable double cross-linked chitosan hydrogels for drug delivery: Impact of chemistry on rheological and pharmacological performance. <i>International Journal of Biological Macromolecules</i> , 2020, 165, 2205-2218.   | 3.6 | 27        |
| 7  | Optical and nanostructural insights of oblique angle deposited layers applied for photonic coatings. <i>Applied Surface Science</i> , 2020, 520, 146312.  | 3.1 | 7         |
| 8  | Platinum nanoparticles stabilized by N-heterocyclic thiones. Synthesis and catalytic activity in mono- and di-hydroboration of alkynes. <i>Nanoscale</i> , 2020, 12, 6821-6831.   | 2.8 | 18        |
| 9  | On the importance of light scattering for high performances nanostructured antireflective surfaces. <i>Acta Materialia</i> , 2020, 188, 386-393.  | 3.8 | 5         |
| 10 | Surface oxidation of amorphous Si and Ge slanted columnar and mesoporous thin films: Evidence, scrutiny and limitations for infrared optics. <i>Applied Surface Science</i> , 2019, 493, 807-817.                               | 3.1 | 8         |
| 11 | Nanostructure and Physical Properties Control of Indium Tin Oxide Films Prepared at Room Temperature through Ion Beam Sputtering Deposition at Oblique Angles. <i>Journal of Physical Chemistry C</i> , 2019, 123, 14036-14046. | 1.5 | 12        |
| 12 | Porosity Control for Plasma-Assisted Molecular Beam Epitaxy of GaN Nanowires. <i>Crystal Growth and Design</i> , 2019, 19, 2461-2469.   | 1.4 | 7         |
| 13 | Exchange bias and two steps magnetization reversal in porous Co/CoO layer. <i>Materials and Design</i> , 2019, 171, 107691.   | 3.3 | 10        |
| 14 | Towards perfect MWIR transparency using oblique angle deposition. <i>Applied Surface Science</i> , 2019, 470, 943-950.  | 3.1 | 9         |
| 15 | Growth of nanocolumnar thin films on patterned substrates at oblique angles. <i>Plasma Processes and Polymers</i> , 2019, 16, 1800135.  | 1.6 | 11        |
| 16 | The nanostructure of porous cobalt coatings deposited by magnetron sputtering in helium atmosphere. <i>Micron</i> , 2018, 108, 49-54.   | 1.1 | 13        |
| 17 | Engineering of III-Nitride Semiconductors on Low Temperature Co-fired Ceramics. <i>Scientific Reports</i> , 2018, 8, 6879.  | 1.6 | 6         |
| 18 | Fundamental aspects about the first steps of irradiation-induced phase transformations in fluorite-related oxides. <i>Acta Materialia</i> , 2018, 153, 303-313.   | 3.8 | 0         |

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|----|---|-----|-----------|
| 19 | Core cross-linked nanoparticles from self-assembling polyfma-based micelles. Encapsulation of lipophilic molecules. European Polymer Journal, 2017, 89, 406-418.  | 2.6 | 12        |
| 20 | Stabilisation of gold nanoparticles by N-heterocyclic thiones. Dalton Transactions, 2017, 46, 8367-8371.  | 1.6 | 19        |
| 21 | Low temperature epitaxial deposition of GaN on LTCC substrates. , 2017, , .   |     | 1         |
| 22 | Disorderâ€‘order phase transformation in a fluorite-related oxide thin film: In-situ X-ray diffraction and modelling of the residual stress effects. Thin Solid Films, 2016, 601, 84-88.  | 0.8 | 22        |
| 23 | Effects of electronic and nuclear stopping power on disorder induced in GaN under swift heavy ion irradiation. Nuclear Instruments & Methods in Physics Research B, 2016, 381, 39-44.   | 0.6 | 16        |
| 24 | Manganese Dioxide Supported on Porous Biomorphic Carbons as Hybrid Materials for Energy Storage Devices. ACS Applied Materials & Interfaces, 2016, 8, 30890-30898.  | 4.0 | 15        |
| 25 | Nitrogen Nanobubbles in a-SiO <sub>2</sub> Coatings: Evaluation of Its Physical Properties and Chemical Bonding State by Spatially Resolved Electron Energy-Loss Spectroscopy. Journal of Physical Chemistry C, 2016, 120, 5651-5658. | 1.5 | 10        |
| 26 | Fabrication of Optical Multilayer Devices from Porous Silicon Coatings with Closed Porosity by Magnetron Sputtering. ACS Applied Materials & Interfaces, 2015, 7, 13889-13897.  | 4.0 | 13        |
| 27 | STEMâ€‘EELS analysis reveals stable high-density He in nanopores of amorphous silicon coatings deposited by magnetron sputtering. Nanotechnology, 2015, 26, 075703.   | 1.3 | 29        |
| 28 | Direct imaging of rare-earth ion clusters in $\text{YbCaF}_2$ . Physical Review B, 2014, 90, .  | 11  | 34        |
| 29 | Ion irradiation-induced diffusion in bixbyite-fluorite related oxides: Dislocations and phase transformation. Nuclear Instruments & Methods in Physics Research B, 2014, 327, 44-46.  | 0.6 | 1         |
| 30 | Surface and crystal structure of nitridated sapphire substrates and their effect on polar InN layers. Applied Surface Science, 2014, 307, 461-467.  | 3.1 | 11        |
| 31 | Synthesis, structuring and characterization of rare earth oxide thin films: Modeling of the effects of stress and defects on the phase stability. Thin Solid Films, 2014, 553, 43-46.   | 0.8 | 3         |
| 32 | Phase transformations in Y2O3 thin films under swift Xe ions irradiation. Nuclear Instruments & Methods in Physics Research B, 2013, 310, 6-9.  | 0.6 | 16        |
| 33 | Ion irradiation-induced phase transformation mechanisms in Y2O3 thin films. Nuclear Instruments & Methods in Physics Research B, 2013, 311, 86-92.  | 0.6 | 29        |
| 34 | Polarity determination of polar and semipolar (112 $\bar{2}$ )â€™InN and GaN layers by valence band photoemission spectroscopy. Journal of Applied Physics, 2013, 114, .  | 1.1 | 30        |
| 35 | Mechanisms of damage formation in Eu-implanted AlN. Journal of Applied Physics, 2012, 112, .  | 1.1 | 27        |
| 36 | Defect evolution and interplay in n-type InN. Applied Physics Letters, 2012, 100, 091907.   | 1.5 | 10        |

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|----|---|-----|-----------|
| 37 | Infrared photoluminescence of high In content InN/InGaN multiple quantum wells. Physica Status Solidi (A) Applications and Materials Science, 2012, 209, 17-20.   | 0.8 | 4         |
| 38 | Ion irradiation-induced phase transformations in bixbyite-fluorite related oxides: The role of dislocation loop nucleation. Nuclear Instruments & Methods in Physics Research B, 2012, 277, 18-20.  | 0.6 | 3         |
| 39 | A mechanism for damage formation in GaN during rare earth ion implantation at medium range energy and room temperature. Journal of Applied Physics, 2011, 109, .  | 1.1 | 47        |
| 40 | Microstructural and conductivity changes induced by annealing of ZnO:B thin films deposited by chemical vapour deposition. Journal of Physics Condensed Matter, 2011, 23, 334209.   | 0.7 | 13        |
| 41 | Mechanisms of damage formation in Eu-implanted GaN probed by X-ray diffraction. Europhysics Letters, 2011, 96, 46002.   | 0.7 | 39        |
| 42 | The high sensitivity of InN under rare earth ion implantation at medium range energy. Journal Physics D: Applied Physics, 2011, 44, 295402.   | 1.3 | 13        |
| 43 | Nonlinear absorption of InN/InGaN multiple-quantum-well structures at optical telecommunication wavelengths. Applied Physics Letters, 2011, 98, 081101.   | 1.5 | 27        |
| 44 | Crystal defects and related stress in $Y_2O_3$ thin films: Damage formation in GaN under medium energy range implantation of rare earth ions: a combined TEM, XRD and RBS/C investigation. Materials Research Society Symposia Proceedings, 2011, 1342, 35. | 1.1 | 46        |
| 45 | Damage formation in GaN under medium energy range implantation of rare earth ions: a combined TEM, XRD and RBS/C investigation. Materials Research Society Symposia Proceedings, 2011, 1342, 35.  | 0.1 | 0         |
| 46 | Efficient blocking of planar defects by prismatic stacking faults in semipolar (112̄)-GaN layers on m-sapphire by epitaxial lateral overgrowth. Applied Physics Letters, 2011, 98, 121916.  | 1.5 | 21        |
| 47 | Study of defects and structural transformations induced by ion irradiation of Y2O3 thin films deposited by Ion Beam Sputtering. Materials Research Society Symposia Proceedings, 2008, 1122, 4.   | 0.1 | 0         |
| 48 | Yttrium oxide thin films: Influence of the oxygen vacancy network organization on the microstructure. Thin Solid Films, 2007, 515, 6385-6390.   | 0.8 | 21        |