

Equipe Films Minces pour l'Energie et Applications Publications 2019

Articles dans des revues internationales à comité de lecture

- P2019.202.1 C. Celindano, E. Haye, S. Bruyère, P. Boulet, A. Boileau, S. Migot, S. Mathieu, P. Miska, S. Barrat, F. Capon
«*Probing the growth window of LaVO₃ perovskites thin films elaborated using magnetron co-sputtering*»
Ceramics International **45**, 16658 (2019)
DOI: <https://doi.org/10.1016/j.ceramint.2019.05.208>
- P2019.202.2 O. Myronyuk, D. Baklan, S. Barrat, S. Yezhov, V. Svidersky
«*Influence of plasticizers on fire retarding properties of carbon foams of intumescent coatings*»
Eastern-European Journal of Enterprise Technologies **2**, 2019, (6) 98
DOI: <https://doi.org/10.15587/1729-4061.2019.162554>
- P2019.202.3 K.M. Calamba, M.P. Johansson Jöesaar, S. Bruyère, J.F. Pierson, R. Boyd, J.M. Andersson, M. Odén
«*The effect of nitrogen vacancies on initial wear in arc deposited (Ti_{0.52},Al_{0.48})N_y, (y < 1) coatings during machining*»
Surface and Coatings Technology **358**, 452-460 (2019)
DOI: <https://doi.org/10.1016/j.surfcoat.2018.11.062>
- P2019.202.4 H. Elaakib, J.F. Pierson, M. Chaik, C. Samba Vall, H. Ait Dads, A. Narjis, A. Outzourhit
«*Evolution of the structural, morphological, optical and electrical properties of reactively RF-sputtered cobalt oxide thin films with oxygen pressure*»
Vacuum **159**, 346-352 (2019)
DOI: <https://doi.org/10.1016/j.vacuum.2018.10.065>
- P2019.202.5 W. Chaze, O. Caballina, G. Castanet, J.F. Pierson, F. Lemoine, D. Maillet
«*Heat flux reconstruction by inversion of experimental infrared temperature measurements - Application to the impact of a droplet in the film boiling regime*»
International Journal of Heat and Mass Transfer **128**, 469-478 (2019)
DOI: <https://doi.org/10.1016/j.ijheatmasstransfer.2018.08.069>
- P2019.202.6 Y. Wang, J. Ghanbaja, P. Boulet, D. Horwat, J.F. Pierson
«*Growth, interfacial microstructure and optical properties of NiO thin films with various types of texture*»
Acta Materialia **164**, 648-653 (2019)
DOI: <https://doi.org/10.1016/j.actamat.2018.11.018>
- P2019.202.7 K. Calamba, J.F. Pierson, S. Bruyère, A. Le Febvrier, P. Eklund, J. Barrirero, F. Mücklich, R. Boyd, M. Johansson Jöesaar, M. Odén
«*Dislocation structure and microstrain evolution during spinodal decomposition of reactive magnetron sputtered heteroepitaxial c-(Ti_{0.36},Al_{0.64})N/c-TiN films grown on MgO(001) and (111) substrates*»
Journal of Applied Physics **125**, 105301 (2019)
DOI: <https://doi.org/10.1063/1.5051609>
- P2019.202.8 C. de Melo, M. Jullien, Y. Battie, A. En Naciri, J. Ghanbaja, F. Montaigne, J.F. Pierson, F. Rigon, N. Almqvis, A. Vomiero, S. Migot, F. Mücklich, D. Horwat
«*Semi-transparent p-Cu₂O/n-ZnO nanoscale-film heterojunctions for photodetection and photovoltaic applications*»
ACS Applied Nano Materials **2**, 4358-4366 (2019)
DOI: <https://pubs.acs.org/doi/abs/10.1021/acsanm.9b00808>
- P2019.202.9 K.M. Calamba, J. Barrirero, M. Johansson Jöesaar, R. Boyd, S. Bruyère, J.F. Pierson, A. Le Febvrier, Frank Mücklich, Magnus Oden
«*Growth and high temperature decomposition of epitaxial metastable wurtzite (Ti_{1-x},Al_x)N(0001) thin films*»
Thin Solid Films **688**, 137414 (2019)

DOI: <https://doi.org/10.1016/j.tsf.2019.137414>

- P2019.202.10 [A. Borroto](#), [S. Bruyère](#), S. Migot, [J.F. Pierson](#), T. Gries, F. Mücklich, [D. Horwat](#)
«Controlling surface morphology by nanocrystalline/amorphous competitive self-phase separation in thin films: thickness-modulated reflectance and interference phenomena»
Acta Materialia **181**, 78-86 (2019)
DOI: <https://doi.org/10.1016/j.actamat.2019.09.036>
- P2019.202.11 [J. Luo](#), C. Hein, J. Ghanbaja, [J.F. Pierson](#), F. Mücklich
«Bacteria accumulate copper ions and inhibit oxide formation on copper surface during antibacterial efficiency test»
Micron **127**, 102759 (2019)
DOI: <https://doi.org/10.1016/j.micron.2019.102759>
- P2019.202.12 [J. Luo](#), C. Hein, [J.F. Pierson](#), F. Mücklich
«Localised corrosion attacks and oxide growth on copper in phosphate-buffered saline»
Materials Characterization **158**, 109985 (2019)
DOI: <https://doi.org/10.1016/j.matchar.2019.109985>
- P2019.202.13 Y. Wang, T. Ohsawa, X. Meng, [F. Alnjjiman](#), [J.F. Pierson](#), N. Ohashi
«Suppressing the carrier concentration of zinc tin nitride thin films by excess zinc content and low temperature growth»
Applied Physics Letters **115**, 232104 (2019)
DOI: <https://doi.org/10.1063/1.5129879>
- P2019.202.14 [J. Luo](#), C. Hein, [J.F. Pierson](#), F. Mücklich
«Early-stage corrosion, ion release, and the antibacterial effect of copper and cuprous oxide in physiological buffers: Phosphate-buffered saline vs Na-4-(2-hydroxyethyl)-1-piperazineethanesulfonic acid»
Biointerphases **14**, 061004 (2019)
DOI: <https://doi.org/10.1063/1.5123039>
- P2019.202.15 A. Zimmer, M. Gilliot, [M. Tresse](#), L. Broch, [E. Kessein Tillous](#), C. Boulanger, N. Stein, [D. Horwat](#)
«Coloration Mechanism of electrochromic Na_xWO_3 thin films»
Optics Letters **44**, 1104 (2019)
DOI: <https://doi.org/10.1364/OL.44.001104>
- P2019.202.16 [A. E Giba](#), P. Pigeat, [S. Bruyere](#), H. Rinnert, F. Soldera, F. Mücklich, R. Gago, [D. Horwat](#)
«Ultraviolet to infrared downshifting in Ce and Yb co-doped aluminum oxynitride thin films»
Journal of Physics D: Applied Physics **52**, 285105 (2019)
DOI: <https://doi.org/10.1088/1361-6463/ab1830>
- P2019.202.17 B. Hyot, M. Rollès, [P. Miska](#)
«Design of Efficient Type-II $\text{ZnGeN}_2/\text{In}_0.16\text{Ga}_0.84\text{N}$ Quantum Well-Based Red LEDs»
Physica Status Solidi - Rapid Research Letters **13**, 1900170 (2019)
DOI: <https://doi.org/10.1002/pssr.201900170>
- P2019.202.18 I. Shahine, N. Beydoun, J-J. Gaumet, E-E. Bendeif, H. Rinnert, P. Magri, A. En Naciri, [P. Miska](#), S. Jradi, S. Akil
«Pure, Size Tunable ZnO Nanocrystals Assembled into Large Area PMMA Layer as Efficient Catalyst»
Catalysts **9**, 162 (2019)
DOI: <https://doi.org/10.3390/catal9020162>
- P2019.202.19 T. Pérez, A. Imam, [D. Pilloud](#), J. Ghanbaja, [P. Miska](#), T. Belmonte, T. Gries
«Tunable morphologies of ultrathin ZnO nanostructures synthesized by a plasma afterglow-assisted oxidation process and their photocatalytic properties»
Plasma Sources Science and Technology **28**, 045008 (2019)
DOI: <https://doi.org/10.1088/1361-6595/ab1238>
- P2019.202.20 R. A. Makin, K. York, S. M. Durbin, N. Senabulya, J. Mathis, R. Clarke, [N. Feldberg](#), [P. Miska](#), C.M. Jones,

- Z. Deng, L. Williams, E. Kioupakis, R.J. Reeves
«*Alloy-Free Band Gap Tuning across the Visible Spectrum*»
Physical Review Letters **122**, 256403 (2019)
DOI: <https://doi.org/10.1103/PhysRevLett.122.256403>
- P2019.202.21 A. Gokarna, R. Aad, J. Zhou, K. Nomenyo, A. Lusson, P. Miska, G. Lerondel
«*On the origin of the enhancement of defect related visible emission in annealed ZnO micropods*»
Journal of Applied Physics **126**, 145104 (2019)
DOI: <https://doi.org/10.1063/1.5111184>
- P2019.202.22 J. Martin, A. Nominé, V. Ntomprougkidis, S. Migot, S. Bruyère, F. Soldera, T. Belmonte, G. Henrion
«*Formation of a metastable nanostructured mullite during Plasma Electrolytic Oxidation of aluminium in "soft" regime condition* »
Materials and Design **180**, 107977 (2019)
DOI: <https://doi.org/10.1016/j.matdes.2019.107977>
- P2019.202.23 AA. Krasilin, DP. Danilovich, EB. Yudina, S. Bruyere, J. Ghanbaja, VK. Ivanov
«*Crystal violet adsorption by oppositely twisted heat-treated halloysite and pecoraite nanoscrolls*»
Applied Clay Science **173**, 1 (2019)
DOI: <https://doi.org/10.1016/j.clay.2019.03.007>
- P2019.202.24 J Martin, AV Nominé, J Stef, A Nominé, JX Zou, G Henrion, T Grosdidie
«*The influence of metallurgical state of substrate on the efficiency of plasma electrolytic oxidation (PEO) process on magnesium alloy*»
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DOI: <https://doi.org/10.1016/j.matdes.2019.107859>
- P2019.202.25 V. Ntomprougkidis, J. Martin, A. Nominé, G Henrion
«*Sequential run of the PEO process with various pulsed bipolar current waveforms*»
Surface and Coatings Technology **374**, 713-724 (2019)
DOI: <https://doi.org/10.1016/j.surfcoat.2019.06.057>
- P2019.202.26 M. Trad, A. Nominé, N. Tarasenko, J. Ghanbaja, C. Noël, M. Tabbal, T. Belmonte
«*Synthesis of Ag-Cd alloy nanoparticles by nanosecond pulsed-discharge in liquid nitrogen: A way to understand alloying in high pressure discharges*»
Frontiers of Chemical Science and Engineering **13**, 360–368 (2019)
DOI: <https://doi.org/10.1007/s11705-019-1802-7>
- P2019.202.27 A. A. Krasilin, E. K. Khrapova, A. Nominé, J. Ghanbaja, T. Belmonte, V. V. Gusarov
«*Cations redistribution along the spiral of Ni-doped phyllosilicate nanoscrolls: energy modelling and STEM/EDS study*»
ChemPhysChem **20**, 719–726 (2019)
DOI: <https://doi.org/10.1002/cphc.201801144>

Articles de synthèse / revues bibliographiques

- R2019.202.1 Yuri A Mezenov, Andrei A Krasilin, Vladimir P Dzyuba, Alexandre Nominé, Valentin A Milichko
«*Metal–Organic Frameworks in Modern Physics: Highlights and Perspectives*»
Advanced Science **6**, 1900506 (2019)
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