

## Publications 2020

Les publications sont triées par ordre alphabétique (1er auteur)

Afin d'identifier les contributions par équipes de recherches, des carrés colorés ont été mis en place avec le code suivant : ■ PCNANO ■ ST ■ NEE ■ D2SM ■ TSM

■ I. Adell, M.C. Pujol, R.M. Solé, M. Lancry, N. Ollier, M. Aguilo, F. Diaz, *Single crystal growth, optical absorption and luminescence properties under VUV-UV synchrotron excitation of type III Pr<sup>3+</sup>:KGd(PO<sub>3</sub>)<sub>4</sub>*. Scientific Reports, 10 (2020) 6712.

■ A. Aouina, M. Gatti, L. Reining, *Strategies to build functionals of the density, or functionals of Green's functions: what can we learn?*, Faraday Discussions, 10.1039/d0fd00068j (2020)

■ J. Aragon Sanchez, G. Rumi, R.C. Maldonado, N.R. Cejas-Bolecek, J. Puig, P. Pedrazzini, G. Nieva, M.I. Dolz, M. Konczykowski, C.J. Van der Beek, A.B. Kolton, Y. Fasano, *Non-Gaussian tail in the force distribution: a hallmark of correlated disorder in the host media of elastic objects*. Scientific Reports, 10(1) (2020) 19452.

■ A. Ashfaq, M.-C. Clochard, X. Coqueret, C. Dispenza, M. Driscoll, P. Ulanski, M. Al-Sheikhly, *Polymerization reactions and modifications of polymers by ionizing radiation*. Polymers, 12(12) (2020) 2877.

■ ■ P. Aversa, S. Öz, F. Jung, O. Plantevin, O. Cavani, N. Ollier, J.-E. Bourée, B. Geffroy, T. Miyasaka, S. Mathur, C. Corbel, *Electron irradiation induced aging effects on radiative recombination properties of quadruple cation organic-inorganic perovskite layers*. Emergent Materials, 3 (2020) 133-160.

■ J.G. Brandenburg, K. Burke, E. Fromager, M. Gatti, S. Giarrusso, N.I. Gidopoulos, P. Gori-Giorgi, D. Gowland, T. Helgaker, M.J.P. Hodgson, L. Lacombe, P.-F. Loos, N.T. Maitra, E. Maurina Morais, N. Mehta, et al., *New approaches to study excited states in density functional theory: general discussion*. Faraday Discussions, 224 (2020) 483-508.

■ A. Chakraborti, N. Vast, Y. Le Godec, *Elemental synthesis of boron carbide from its elements at high pressures and high temperatures*. Solid State Sciences, 104 (2020) 106265.

■ A. Chakraborti, N. Vast, Y. Le Godec, *Préparation du bore alpha rhomboédrique en présence d'une source de carbone*. Patent WO Patent App. PCT/FR2020/050872, 2020.

■ ■ Z. Chen, J. Dong, C. Giorgetti, E. Papalazarou, M. Marsi, Z. Zhang, B. Tian, Q. Ma, Y. Cheng, J.-P. Rueff, A. Taleb-Ibrahimi, L. Perfetti, *Spectroscopy of buried states in black phosphorus with surface doping*. 2D Materials, 7(3) (2020) 035027.

■ ■ Z. Chen, J. Sjakste, J. Dong, A. Taleb-Ibrahimi, J.-P. Rueff, A. Shukla, J. Peretti, E. Papalazarou, M. Marsi, L. Perfetti, *Ultrafast dynamics of hot carriers in a quasi-two-dimensional electron gas in InSe*. Proceedings of the National Academy of Sciences of the United States of America, 117(36) (2020) 21962-21967.

- A. Christoulaki, D. Lairez, E. Dubois, N. Jouault, *Probing polyelectrolyte adsorption in charged nanochannels by streaming potential measurements*. American Chemical Society Macro Letter, (2020) 794-798.
- M. Creff, F. Faisant, J.M. Rubi, J.-E. Wegrowe, *Surface currents in Hall devices*. Journal of Applied Physics, 128(5) 10.1063/5.0013182 (2020) 054501.
- M.-N. de Noirfontaine, *Apport de la nouvelle plateforme de diffraction des rayons X aux études de cristallographie des oxydes complexes des matrices cimentaires*. Oct 20, Faits Marquants IRAMIS, (2020).
- P.-M. Déjardin, J.-E. Wegrowe, *Stochastic description of the stationary Hall effect*. Journal of Applied Physics, 128 (2020) 184504.
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