

PUBLICATIONS 2019 - OXYDES COMPLEXES FONCTIONNELS

S Ben Moumen, Y Gagou, M Chettab, D Mezzane, M Amjoud, S Fourcade, L Hajji, Z Kutnjak, M El Marssi, Y El Amraoui, Y. Kopelevich, I. L. Luk'yanchuk : *Synthesis of La_{0.5}Ca_{0.5}xMnO₃ nanocrystalline manganites by sucrose assisted auto combustion route and study of their structural, magnetic and magnetocaloric properties*

Journal of Materials Science: Materials in Electronics 30, 20459.

M Hadouchi, A Assani, M Saadi, Y Kopelevich, R da Silva, A Lahmar, H Bouyanif, M El Marssi, L El Ammari : *Unconventional spin-glass-like state in AgCo₂V₃O₁₀, the novel magnetically frustrated material*

LABORATOIRE DE PHYSIQUE DE LA MATIÈRE CONDENSÉE

Journal of Magnetism and Magnetic Materials 491 165623.

A Ihyadn, A Lahmar, D Mezzane, L Bih, A Alimoussa, M Amjoud, M El Marssi and I A Luk'yanchuk : *Structural, eleectrical and energy storage properties of BaO-Na₂O-Nb₂O₅-WO₃-P₂O₅ glass-ceramics system*

Materials Research Express 6, 115203

N Lamsakhar, M Hadouchi, M Zriouil, A Assani, M Saadi, A Lahmar, M El Marssi, L El Ammari: *A novel alluaudite-type vanadate, Na₂Zn₂Fe(VO₄)₃: Synthesis, crystal structure, characterization and magnetic properties*

Inorganic Chemistry Communications 107, 107472

Z Mahhouti, H El Moussaoui, T Mahfoud, M Hamedoun, M El Marssi, A Lahmar, A El Kenz, A Benyoussef : *C hemical synthesis and magnetic properties of monodisperse cobalt ferrite nanoparticles*

Journal of Materials Science: Materials in Electronics 30, 14913

S Ben Moumen, Y Gagou, S Belkadir, D Mezzane, M Amjoud, B Roži, L Hajji, Z Kutnjak, Z Jaglicic, M Jagodic, M El Marssi, Y Kopelevich, I A Luk'yanchuk : *Structural, Dielectric, and Magnetic Properties of Multiferroic (1-x) La_{0.5}Ca_{0.5}MnO₃-(x) BaTi_{0.8}Sn_{0.2}O₃ Laminated Composites*

IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 66 1935

Z. Hanani, D. Mezzane, M. Amjoud, S. Fourcade, A. G. Razumnaya, I. A. Luk'yanchuk, M. Gouné : *Enhancement of dielectric properties of lead-free BCZT ferroelectric ceramics by grain size engineering*

Superlattices and Microstructures 127, 109

L Eddahby, MA Popov, SA Stankevich, AA Kozlova, MO Svideniuk, D Mezzane, I Lukyanchuk, A Larabi, H Ibouh,

Assessing Vegetation Structural Changes in OASIS Agro-Ecosystems Using SENTINEL-2 Image Time Series: Case Study for DRÂA-TAFILALET Region Morocco

International Archives of the Photogrammetry, Remote Sensing and Spatial Information Sciences, 42, 69

Luk'yanchuk, I., Y. Tikhonov, A. Sené, A. Razumnaya, and V. M. Vinokur : *Harnessing ferroelectric domains for negative capacitance*

Communications Physics 2, 22

Íñiguez, J., Zubko, P., Luk'yanchuk, I. & Cano, A. . *Ferroelectric negative capacitance*.
Nature Reviews Materials, **4**, 243

Lukyanchuk, E Zaitseva, V Levashenko, M Kvassay, S Kondovych, Yu Tikhonov, L Baudry, A Razumnaya,
Ferroelectric multiple-valued logic units,
Ferroelectrics **543**, 213

Gor'kovaya E. D., Tikhonov Yu. A., Torgashev V. I., Mikheykin A. S., Lukyanchuk, I., Mezzane D., Ortega, N., Kumar A., Katiyar R. S., and Razumnaya A. G.,
Properties of the low-frequency phonon spectra of ferroelectric barium titanate-based heterostructures
Ferroelectrics **543**, 36

M Hadouchi, A Assani, M Saadi, A Lahmar, M El Marssi, M Sajieddine, L El Ammari :*Synthesis, Characterization, and Magnetic Properties of A2Co2Fe(VO4)3 (A = Ag or Na) Alluaudite-Type Vanadates*
Journal of Superconductivity and Novel Magnetism **32** 2437

S Belkadir, A Neqali, M Amjoud, D Mezzane, A Alimoussa, E Choukri, Y Gagou, I Raevski, M El Marssi, I A Luk'yanchuk, B Roži, Z Kutnjak : *Structural, dielectric and electrocaloric properties of (Ba0.85Ca0.15)(Ti0.9Zr0.1xSnx)O3ceramics elaborated by sol-gel method*
Journal of Materials Science: Materials in Electronics **30**, 14099

MG Ghanem, Y Badr, Talaat A Hameed, M El Marssi, A Lahmar, HA Wahab, IK Battisha: *Synthesis and characterization of undoped and Er-doped ZnO nano-structure thin films deposited by sol-gel spin coating technique*

Materials Research Express **6** 085916

H Zaitouni, L Hajji, E Choukri, D Mezzane, Z Abkhar, L Essaleh, A Alimoussa, M El Marssi, I A Lukyanchuk: *Dielectric relaxation and predominance of NSPT and OLPT conduction processes in Ba0.9Sr0.1TiO3*
Superlattices and Microstructures **127**, 176

M Hadouchi, A Assani, M Saadi, A Lahmar, M El Marssi, L El Ammari: *Magnetic properties of a new cobalt hydrogen vanadate with a dumortieritelike structure: Co13.5(OH)6(H0.5VO3.5)2(VO4)6*
Acta Crystallographica Section C: Structural Chemistry **75**.

J Belhadi, J Ruvalcaba, S Yousfi, M El Marssi, T Cordova, S Matzen, P Lecoeur, H Bouyanif: *Conduction mechanism and switchable photovoltaic effect in (111) oriented BiFe0.95Mn0.05O3 thin film*
J. Phys.: Condens. Matter **31** 275701

S Belkadir, S Ben Moumen, B Asbani, M Amjoud, D Mezzane, Igoor A Luk'yanchuk, E Choukri, L Hajji, Y Gagou, M El Marssi: *Impedance spectroscopy analysis of the diffuse phase transition in lead-free (Ba0.85Ca0.15)(Zr0.1Ti0.9)O3 ceramic elaborated by sol-gel method*
Superlattices and Microstructures **127**, 71

Z Hanani, D Mezzane, M Amjoud, A G Razumnaya, S Fourcade, Y Gagou, K Hoummada, M. El Marssi, M Gouné: *Phase transitions, energy storage performances and electrocaloric effect of the lead-free Ba0.85Ca0.15Zr0.10Ti0.90O3 ceramic relaxor*
Journal of Materials Science: Materials in Electronics **30**, 6430

O. El-sayed, WM Mousa, S K El-Mahy, MA Salem, IK Battisha, R Mahani, A. Lahmar, M El Marssi: *Photoluminescence, structural, morphology and dielectric properties of BaTi0.9Sn0.1O3 doped with Nd3+ and Nd3+/Yb3+ ions*
Journal of Scientific Research in Science **36**, 248

M Zannen, J Belhadi, M Benyoussef, H Khemakhem, K Zaidat, M El Marssi, A Lahmar: *Electrostatic energy storage in antiferroelectric like perovskite*
Superlattices and Microstructures **127**, 43

VG Trotsenko, A Lahmar, NV Lyanguzov, M El Marssi, VI Torgashev: *Phase separation and local lattice distortions analysis of charge-ordered manganese films $La_{1-x}Ca_xMnO_3$ by Raman spectroscopy*
Superlattices and Microstructures 127, 100

M. Benyoussef, J. Belhadi, A. Lahmar, M. El Marssi: *Tailoring the dielectric and energy storage properties in BaTiO₃/BaZrO₃ superlattices*
Materials Letters 234, 279-282