

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}MnO₃ nanocrystalline manganites by sucrose assisted auto combustion route and study of their structural, magnetic and magnetocaloric properties*
Journal of Materials Science: Materials in Electronics30, 20459.

M Hadouchi, A Assani, M Saadi, Y Kopelevich, R da Silva, [A Lahmar](#), H Bouyanfif, [M El Marssi](#), L El Ammari :*Unconventional spin-glass-like state in AgCo₂V₃O₁₀, the novel magnetically frustrated material*
Journal of Magnetism and Magnetic Materials491 165623.

A Ihyadn, A Lahmar, D Mezzane, L Bih, A Alimoussa, M Amjoud, [M El Marssi](#) and [I A Luk'yanchuk](#) :
Structural, electrical 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 Communications107, 107472

Z Mahhouti, H El Moussaoui, T Mahfoud, M Hamedoun, [M El Marssi](#), [A Lahmar](#), [A El Kenz](#), [A Benyoussef](#) : *Chemical synthesis and magnetic properties of monodisperse cobalt ferrite nanoparticles*
Journal of Materials Science: Materials in Electronics30, 14913

S Ben Moumen, [Y Gagou](#), S Belkhadir, 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 $A_2Co_2Fe(VO_4)_3$ ($A = Ag$ or Na) Alluaudite-Type Vanadates*
Journal of Superconductivity and Novel Magnetism **32** 2437

S Belkhadir, 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 $(Ba_{0.85}Ca_{0.15})(Ti_{0.9}Zr_{0.1}xSn_x)O_3$ ceramics 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 Luk'yanchuk:
Dielectric relaxation and predominance of NSPT and OLPT conduction processes in $Ba_{0.9}Sr_{0.1}TiO_3$
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: $Co_{13.5}(OH)_6(H_{0.5}VO_{3.5})_2(VO_4)_6$*
Acta Crystallographica Section C: Structural Chemistry **75**.

J Belhadi, J Ruvalcaba, S Yousfi, **M El Marssi**, T Cordova, S Matzen, P Lecoeur, H Bouyanfif: *Conduction mechanism and switchable photovoltaic effect in (111) oriented $BiFe_{0.95}Mn_{0.05}O_3$ thin film*
J. Phys.: Condens. Matter **31** 275701

S Belkhadir, S Ben Moumen, B Asbani, M Amjoud, D Mezzane, Igor A Luk'yanchuk, E Choukri, L Hajji, Y Gagou, **M El Marssi**: *Impedance spectroscopy analysis of the diffuse phase transition in lead-free $(Ba_{0.85}Ca_{0.15})(Zr_{0.1}Ti_{0.9})O_3$ 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 $Ba_{0.85}Ca_{0.15}Zr_{0.10}Ti_{0.90}O_3$ 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 $BaTi_{0.9}Sn_{0.1}O_3$ doped with Nd^{3+} and Nd^{3+}/Yb^{3+} 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 $BaTiO_3/BaZrO_3$ superlattices*
Materials Letters 234, 279-282