

## Publications 2017 - Oxydes Ferroélectriques

S. Yousfi, H. Bouyanfif, M. El Marssi: Conduction mechanism in epitaxial  $\text{BiFeO}_3 \cdot 0.95\text{MnO}_3 \cdot 0.05\text{O}_3$  thin film  
**Journal of Applied Physics** **122** (12), 124101

B. Allouche, Y. Gagou, A. Zeinert, MA Fremy, M. El Marssi: Structural and optical properties of  $\text{Pb}_2\text{KNb}_5\text{O}_{15}$  and  $\text{GdK}_2\text{Nb}_5\text{O}_{15}$  tungsten bronze thin films grown by pulsed laser deposition  
**Journal of Alloys and Compounds** **724**, 1070-1074

VG Trotsenko, AS Mikheykin, VB Shirokov, AG Razumnaya, M. El Marssi, BP Gorshunov, AA Bush, VI Torgashev : Invar effect accompanying charge order in  $\text{La}_{0.25}\text{Ca}_{0.75}\text{MnO}_3$   
**Solid State Sciences** **72**, 144-149

B. Carcan, H. Bouyanfif, M. El Marssi, F. Le Marrec, L. Dupont, C. Davoisne, J. Wolfman, D. C. Arnold : Phase Diagram of  $\text{BiFeO}_3/\text{LaFeO}_3$  Superlattices: Antiferroelectric Like State Stability Arising from Strain Effects and Symmetry Mismatch at Heterointerfaces  
**Advanced Materials Interfaces**, **4**, 1601036

A. Lahmar, J. Belhadi, M. El Marssi, M. Zannen, H. Khemakhem, N. Al-Dahoudi: Energy storage property of Lead-free  $\text{Na}_{0.5}\text{Bi}_{0.5}\text{TiO}_3$  ceramic and thin film  
**Conference IEEE 2017, Energy and Sustainability in Small Developing Economies (ES2DE)**;

B. Allouche, Y. Gagou, A. Belboukhari, F. Le Marrec, M. El Marssi : Structural and electrical properties of  $\text{K}_3\text{Li}_2\text{Nb}_5\text{O}_{15}$  thin film grown by pulsed laser deposition  
**Materials Research Bulletin** **94** ; 287–290

Y. Gagou, J. Belhadi, B. Asbani, M. El Marssi, J-L. Dellis, Yu. I. Yuzyuk, I. P. Raevski and J. F. Scott : Intrinsic dead layer effects in relaxed epitaxial  $\text{BaTiO}_3$  thin film grown by pulsed laser deposition  
**Materials and Design**, **122**, 157-163

H. Kaddoussi, A. Lahmar, Y. Gagou, B. Manoun, J.N. Chotard, J-L. Dellis, Z. Kutnjak, H. Khemakhem, B. Elouadiand M. El Marssi : Sequence of structural transitions and electrocaloric properties in  $(\text{Ba}_{1-x}\text{Ca}_x)(\text{Zr}_{0.1}\text{Ti}_{0.9})\text{O}_3$  ceramics  
**Journal of Alloys and Compounds (Review)**, **713**, 164-179

B. Asbani, Y. Gagou, J-L. Dellis, M. Trcek, Z. Kutnjak, M. Amjoud, A. Lahmar, D. Mezzane, M. El Marssi : Lead free  $\text{Ba}_{0.8}\text{Ca}_{0.2}\text{Ti}_{1-x}\text{O}_3$  ferroelectric ceramics exhibiting high electrocaloric properties  
**J. Appl. Phys.** **121**, 064103

Yu. I. Yuzyuk, I.P. Raevski, S.I. Raevskaya, N. Lemée, M.G. Karkut, W. Peng, M. El Marssi, H. Chen : Misfit strain-induced changes in the Fe-sublattice of multiferroic  $\text{Pb}(\text{Fe}_{1/2}\text{Nb}_{1/2})\text{O}_3$  epitaxial nanofilm seen via Raman spectroscopy  
**Journal of Alloys and Compounds** **695**, 1821

M. Zannen, A. Lahmar, Z. Kutnjak, J. Belhadi, H. Khemakhem, M. El Marssi: Electrocaloric effect and energy storage in lead free  $\text{Gd}_{0.02}\text{Na}_{0.5}\text{Bi}_{0.48}\text{TiO}_3$  ceramic  
**Solid State Sciences** **66**, 31-37

G. Razumnaya, A. S. Mikheykin, I. A. Lukyanchuk, V. B. Shirokov, Y. I. Golovko, V. M. Mukhortov, **M. EI Marssi**, Y. I. Yuzyuk : *Unexpectedly high Curie temperature in weakly strained ferroelectric film*  
**Physica status solidi (b) 254**,160041

C Chalfouh, A Lahmar, N Abdelmoula, H Khemakhem : *Structural and dielectrics properties of Pr<sup>3+</sup>doped BaTi<sub>0.925</sub>(Yb<sub>0.5</sub>Nb<sub>0.5</sub>)<sub>0.075</sub>O<sub>3</sub> ceramics*; **Journal of Alloys and Compounds****729**, 858

Abdelilah Lahmar: *Multiferroic properties and frequency dependent coercive field in BiFeO<sub>3</sub>- LaMn<sub>0.5</sub>Co<sub>0.5</sub>O<sub>3</sub> thin films*

**Journal of Magnetism and Magnetic Materials** **439**, 30

C. Chalfouh, A Lahmar, S Zaghal, R. Hannachi, N Abdelmoula, H Khemakhem : *Effects of lanthanide amphoteric incorporation on structural, electrical, and photoluminescence properties of BaTi<sub>0.925</sub>(Yb<sub>0.5</sub>Nb<sub>0.5</sub>)<sub>0.075</sub>O<sub>3</sub> ceramic*

**Journal of Alloys and Compounds****711**, 20

S. Kondovych, I. Lukyanchuk,

*Nondestructive method of thin film dielectric constant measurements by two-wire capacitor*

**Physica Status Solidi**, **B254**, 1600476

D. V. Stryukov, A. G. Razumnaya, Yu. I. Golovko, A. S. Anokhin, I. A. Lukyanchuk, V. B. Shirokov, V. M. Mukhortov

*Lattice dynamics and structural distortions in the multiferroic (Ba, Sr) TiO<sub>3</sub>/(Bi, Nd)FeO<sub>3</sub> heterostructures*

**Thin Solid Films**.**636**, 220

V. A. Saroka, I. Lukyanchuk, M. E. Portnoi, H. Abdelsalam

*Electro-optical properties of phosphorene quantum dots.*

**Phys. Rev.** **B96**, 085436

S. Kondovych, I. Luk'yanchuk, T. Baturina, V. Vinokur,

*Gate-tunable electron interaction in high-k dielectric films*

**Scientific. Reports.** **7**,42770

L. Baudry, I. Lukyanchuk, V. Vinokour, *Ferroelectric symmetry-protected multibit memory cell*

**Scientific Reports** **7**,42196