

# PUBLICATIONS 2017 - OXYDES FERROÉLECTRIQUES

S. Yousfi, H. Bouyanfif, **M. El Marssi**: Conduction mechanism in epitaxial BiFeO<sub>3</sub>. 95MnO<sub>3</sub>. 05O<sub>3</sub> 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 Pb<sub>2</sub>KNb<sub>5</sub>O<sub>15</sub> and GaK<sub>2</sub>Nb<sub>5</sub>O<sub>15</sub> 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 La<sub>0.25</sub>Ca<sub>0.75</sub>MnO<sub>3</sub>

## LABORATOIRE DE PHYSIQUE DE LA MATIÈRE CONDENSÉE

**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 BiFeO<sub>3</sub>/LaFeO<sub>3</sub> 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 Na<sub>0.5</sub>Bi<sub>0.5</sub>TiO<sub>3</sub> 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 K<sub>3</sub>Li<sub>2</sub>Nb<sub>5</sub>O<sub>15</sub> 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 BaTiO<sub>3</sub> 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. Elouadi and **M. El Marssi** : Sequence of structural transitions and electrocaloric properties in (Ba<sub>1-x</sub>Ca<sub>x</sub>)(Zr<sub>0.1</sub>Ti<sub>0.9</sub>)O<sub>3</sub> 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 Ba<sub>0.8</sub>Ca<sub>0.2</sub>TexTi<sub>1-x</sub>O<sub>3</sub> 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 Pb(Fe<sub>1/2</sub>Nb<sub>1/2</sub>)O<sub>3</sub> 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 Gd<sub>0.02</sub>Na<sub>0.5</sub>Bi<sub>0.48</sub>TiO<sub>3</sub> 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. El 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