

1. Personal information

Name and surname: Florin TUDORACHE

Date and place of birth: January 23, 1975, Bârlad, Romania

Present academic position: Scientific Researcher III, RAMTECH Center, “Alexandru Ioan Cuza” University, Iași, Romania),

Current address: RAMTECH Center “Alexandru Ioan Cuza” University, Blvd. Carol I, no. 11, Iași, RO-700506, Romania

Phone number, e-mail address: +40232201102, int. 2515 (office), florin.tudorache@uaic.ro

2. Education

2002-2007 Ph.D. studies at the “Alexandru Ioan Cuza” University of Iași, Romania

1998-2000 Master of Science in Physics at the “Alexandru Ioan Cuza” University of Iași, Romania

1994-1998 Faculty of Physics at the “Alexandru Ioan Cuza” University of Iași, Romania (Bachelor of Science degree in Physics)

1989-1993 “Liceul Industrial Nr. 1” High School, Bârlad, Romania

3. Selected, peer-reviewed research work

1. **F. Tudorache**, I. Petrila, *Effects of partial replacement of Iron with Tungsten on microstructure, electrical, magnetic and humidity properties of Copper-Zinc ferrite material*, **Journal of Electronic Materials** 43 (2014) 3522-3526.
2. I. Petrila, **F. Tudorache**, *Influence of partial substitution of Fe^{3+} with W^{3+} on the microstructure, humidity sensitivity, magnetic and electrical properties of barium hexaferrite*, **Superlattices and Microstructures** 70 (2014) 46-53.
3. **F. Tudorache**, I. Petrila, K. Popa, A. M. Catargiu, *Electrical properties and humidity sensor characteristics of lead hydroxyapatite material*, **Applied Surface Science** 303 (2014) 175-179.
4. Z.V. Mocanu, M. Airimioaei, C.E. Ciomaga, L. Curecheriu, **F. Tudorache**, S. Tascu, A.R. Iordan, N.M. Palamaru and L. Mitoseriu, *Investigation of the functional properties of $Mg_xNi_{1-x}Fe_2O_4$ ceramics*, **Journal of Materials Science** 49 (2014) 3276-3286.
5. **F. Tudorache**, P.D. Popa, M. Dobromir, F. Iacomi, *Studies on the structure and gas sensing properties of nickel-cobalt ferrite thin films prepared by spin coating*, **Journal of Materials Science and Engineering B** 178 (2013) 1334-1338.
6. **F. Tudorache**, I. Petrila, P. D. Popa, S. Tascu, *Influence of thermal treatment on the structure, humidity sensitivity, electrical and magnetic properties of barium-tungsten ferrite*, **Composites:Part B** 51 (2013) 106-111.
7. I. Petrila, **F. Tudorache**, *Humidity sensor applicative material based on copper-zinc-tungsten spinel ferrite*, **Materials Letters** 108 (2013) 129-133.
8. I. Petrila, **F. Tudorache**, S. Tascu, *Micromagnetic investigation of all-optical switching*, **Physics Letters A** 377 (2013) 1495-1498.
9. M. Grigoras, A. M. Catargiu, **F. Tudorache**, *Molecular composites obtained by polyaniline synthesis in the presence of p-octasulfonated calixarene macrocycle*, **Journal of Applied Polymer Science** 127 (4) (2013) 2796-2802.
10. **F. Tudorache**, K. Popa, L. Mitoseriu, N. Lupu, D. Bregiroux, G. Wallez, *Dielectric investigation of $M^{II}M^{IV}(PO_4)_2$ double orthophosphates ($M^{II}=Ca, Sr, Ba, Pb$; $M^{IV}=Ti, Zr, Hf, Ge, Sn$)*, **Journal of Alloy and Compounds** 509 (2011) 9127-9132.

4. Research interests

Preparation of magnetic, electrical and optical materials (ferrite, perovskite etc.). Electrical, magnetic and optical characterizations of materials and devices. Resistive and capacitive humidity and gas sensors (bulk, thin films etc.).

Ph.D. Scientific Researcher III Florin TUDORACHE