

Listă publicații științifice și brevete relevante

Conf. Dr. Nicoleta A. CORNEI

Articole ISI:

1. Mita, C; Frenti, M; **Cornei, N**; Bulai, G; Dobromir, M; Doroshkevich, A; Mezentseva, Z; Mardare, D *High stability and photocatalytic activity of N-doped ZrO₂ thin films*, Journal of Alloys and Compounds, **1002**, 175134, 2024.
2. Mita, C.; **Cornei, N.***; Bulai, G.; Dobromir, M.; Girtan, M.; Doroshkevich, Al.; Gyorgy; Mardare, D. *The enhancement of the photocatalytic properties of SmFe_{0.7}Co_{0.3}O₃ thin films by synergistic effect of Sr doping and H₂O₂ as co-catalyst*, Ceramics International, **49**(9), 14225-14237, 2023.
3. Mita, C.; **Cornei, N.***; Frenti, M.; Bulai, .; Dobromir, M.; Tiron, V.; Doroshkevich, Al. S.; Mardare, D., *Photocatalytic Activity of N-Doped ZrO₂ Thin Films Determined by Direct and Indirect Irradiation*, Materials, **16**(17), 5901:1-18, 2023.
4. Mardare, D.; **Cornei, N.**; Mita, C., Florea, D.; Stancu, A.; Tiron, V., Manole, A., Adomnitei, C., “*Low temperature TiO₂ based gas sensors for CO₂*”, Ceramics International, **42** (6), 7353-7359, 2016.
5. D. Gherca, A Pui, O Caltun, V. Nica, **N. Cornei***, *Eco-environmental synthesis and characterization of nanophase powders of Co, Mg, Mn and Ni ferrites*, Ceramics International, **40**, 9599–9607, 2014.
6. D. Mardare, **N. Cornei**, D. Luca, M. Dobromir, S. A. Irimescu, L. Punga, A. Pui, C. Adomnitei, *Synthesis and hydrophilic properties of Mo doped TiO₂ thin films*, J. Applied Phys. **115**, 213501, 2014.
7. A. Pui; D. Gherca, **N. Cornei**, *Synthesis and characterization of MFe₂O₄ (M=Mg, Mn, Ni) nanoparticles*, Mater. Research Bull, **48**(4), 1357-1362, 2013.
8. D. Gherca, **N. Cornei**, O. Mentré, H. Kabbour, S. Daviero-Minaud, A. Pui, *In situ surface treatment of nanocrystalline MFe₂O₄ (M = Co, Mg, Mn, Ni) spinel ferrites using linseed oil*, Appl. Surf. Sci. **287**, 490-498, 2013.
9. D. Gherca , A. Pui, **N. Cornei**, A. Cojocariu, V. Nica, O. Caltun, *Synthesis, characterization and magnetic properties of MFe₂O₄ (M = Co, Mg, Mn, Ni) nanoparticles using ricin oil as capping agent*, J. Magn. Mater, **324**, 3906–3911, 2012.
10. **N. Cornei**, N. Tancrét, F. Abraham, O. Mentré, *New epsilon-Bi₂O₃ metastable polymorph*, Inorganic Chemistry **45**, 4886-4888, 2006.

Brevete de invenție:

1) Brevet național: MAGNETORESISTIVE SENORS Patent Number(s): RO125633-B1, an 2008, Inventor(s): CORNEI N, CRAUS M L, DOBREA V, FOSALAU C I, GHEORGHIU D A, LOZOVAN M, LUCA D, MITA C.

Cărți științifice relevante:

- 1) **N. Cornei**, C. Vîrlan, A. Pui, Materiale anorganice biocompatibile, Ed. Universității “Al. I. Cuza” Iași, 241 pagini, ISBN: 978-606-714-508-3 Iasi, 2018.
- 2) A. Pui, **N. Cornei**, D.G. Cozma, Analiză structurală anorganică, Ed. Performantica, Iasi, 2008.
- 3) M-L Craus, **N. Cornei**, M. Lozovan, V. Dobrea, Perovskiti magnetorezistivi, Ed. Alfa, Iasi, 2008.