

List of publications:

- First author of the article: ***“XPS on $\text{Co}_{0.95}\text{R}_{0.05}\text{Fe}_2\text{O}_4$ Nanoparticles with $\text{R} = \text{Gd or Ho}$ ”*** Ádám Szatmári, Rares Bortnic, Tiberiu Dragoiu, Radu Georghe Hategan, Lucian Barbu-Tudoran, Coriolan Tiusan, Raluca Lucacel-Ciceo, Roxana Dudric and Romulus Tetean, Applied Science 2025, 15(15), 8313. Doi: <https://doi.org/10.3390/app15158313>
- Co-author of the article: ***“The Influence of Light Rare-Earth Substitution on Electronic and Magnetic Properties of CoFe_2O_4 Nanoparticles”***, Rares Bortnic, Ádám Szatmári, Tiberiu Dragoiu, Radu Georghe Hategan, Lucian Barbu-Tudoran, Coriolan Tiusan, Raluca Lucacel-Ciceo, Roxana Dudric and Romulus Tetean, Nanoparticles. Nanomaterials 2025, 15(15), 1152. Doi: <https://doi.org/10.3390/nano15151152>
- First author of the article: ***“Enhanced Magnetic Properties of $\text{Co}_{1-x}\text{MnxFe}_2\text{O}_4$ Nanoparticles”*** Adam Szatmari, Rares Bortnic, Roman Atanasov, Lucian Barbu-Tudoran, Fran Nekvapil, Roxana Dudric, and Romulus Tetean, Nanoparticles. Appl. Sci. 2025, 15, 290. Doi: <https://doi.org/10.3390/app15010290>
- Co-author of the article: ***“Magnetic Properties and Magnetocaloric Effect of Polycrystalline and Nano-Manganites $\text{Pr}_{0.65}\text{Sr}_{(0.35-x)}\text{Ca}_x\text{MnO}_3$ ($x \leq 0.3$)”***, Roman Atanasov, Dorin Ailenei, Rares Bortnic, Razvan Hirian, Gabriela Souca, Adam Szatmari, Lucian Barbu-Tudoran and Iosif Grigore Deac, Journal of Alloys and Compounds, Volume 1004, 2024, 175932, ISSN 0925-8388. Doi: <https://doi.org/10.1016/j.jallcom.2024.175932>
- Co-author of the article: ***“Synthesis and Characterization of CoFe_2O_4 Nanoparticles and $\text{CoFe}_2\text{O}_4/\text{BaTiO}_3$ Nanocomposites for Biomedical Applications”***, V Vințeler, R Dudric, R Bortnic, A Szatmari, L Barbu-Tudoran, R Tetean, Rom. J. Phys, Voume 69, Page 611, Doi: <https://doi.org/10.59277/RomJPhys.2024.69.611>
- Co-author of the article: ***“Near-room-temperature magnetic properties and magnetocaloric effect of polycrystalline and nano-scale manganites $\text{Pr}_{(0.65-x)}\text{Nd}_x\text{Sr}_{0.35}\text{MnO}_3$ ($x \leq 0.35$)”***, Roman Atanasov, Razvan Hirian, Rares Bortnic, Gabriela Souca, Adam Szatmari, Lucian Barbu-Tudoran, Iosif Grigore Deac, Nanomaterials 2023, 13, 1373. Doi: <https://doi.org/10.3390/nano13081373>

- First author of the article: ***“The Influence of Zn Substitution on Physical Properties of CoFe_2O_4 Nanoparticles”***, Adam Szatmari, Rares Bortnic, Gabriela Souca, Razvan Hirian, Lucian Barbu-Tudoran, Fran Nekvapil, Cristian Iacovita, Emil Burzo, Roxana Dudric, and Romulus Tetean, Nanomaterials 2023, 13,189. Doi: <https://doi.org/10.3390/nano13010189>
- Co-author of the article: ***“New Insights into the Magnetic Properties of $\text{CoFe}_2\text{O}_4@ \text{SiO}_2@ \text{Au}$ Magnetoplasmonic Nanoparticles”***, Rares Bortnic, Adam Szatmari, Gabriela Souca, Răzvan Hirian, Roxana Dudric 1, Lucian Barbu-Tudoran, Valentin Toma, Rares, StiuŃiuc, Romulus Tetean, and Emil Burzo, Nanomaterials 2022, 12(6), 942. Doi: <https://doi.org/10.3390/nano12060942>
- Co-author of the article: ***„Magnetite nanoparticles for medical applications”***, Roxana Dudric, Gabriela Souca, Ádám Szatmári, Tamás Szilárd, Stefan Nitica, Cristian Iacovita, Alin Iulian Moldovan, Rares StiuŃiuc Romulus Tetean, and Emil Burzo, AIP Conference Proceedings 2218, 030014 (2020), DOI:<https://doi.org/10.1063/5.0001198>
- Poster presenter at the conference: TIM 19 Physics Conference with the title: ***„Magnetite nanoparticles for medical application”***, R.A. Bortnic, Roxana Dudric, Gabriela Souca, Ádám Szatmári, Tamás Szilárd, Stefan Nitica, Cristian Iacovita, Alin Iulian Moldovan, Rares StiuŃiuc, Romulus Tetean and Emil Burzo (2019)
- Co-author at the poster which was presented at the conference: TIM 19 Physics Conference with the title: ***„Synthesis and characterization of size and shape controlled CoFe_2O_4 nanoparticles with PVP usage”***, R.A. Bortnic, Roxana Dudric, Gabriela Souca, Ádám Szatmári, Tamás Szilárd, Alin Iulian Moldovan, Rares StiuŃiuc, Romulus Tetean and Emil Burzo. Conference Proceedings 2218, 030014 (2019)
- Poster presenter at the conference: ICPAM-13, PAMS4 Advanced Materials Conference with the title: ***„Structural and morphological properties of core shell $\text{CoFe}_2\text{O}_4@ \text{SiO}_2@ \text{Au}$ nanoparticels”***, Ádám Szatmári, R.A. Bortnic, Roxana Dudric, Gabriela Souca, Rares StiuŃiuc, Romulus Tetean and Emil Burzo (2021)
- Oral presenter at the conference: ICPAM-14, PAMS5 Advanced Materials Conference with the title: ***„Structural, morphological and magnetic study of $\text{Co}_{1-x}\text{M}_x\text{Fe}_2\text{O}_4$ ($M = \text{Ni}, \text{Zn}, \text{Mn}$) obtained through a green, sucrose based, sol-gel method”*** Ádám Szatmári, R.A. Bortnic, Roxana Dudric, Romulus Tetean (2022)