

## PRENUME / NUME

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EXPERIENȚA  
PROFESIONALĂ

## POZITIA ACTUALA

Cercetator științific

Grupul Nanostructuri de Carbon: Sinteza și aplicații, Spectrometrie de masă, cromatografie și fizică aplicată, Institutul Național de Cercetare Dezvoltare pentru Tehnologii Izotopice și Moleculare Cluj – Napoca, România

## EDUCAȚIE ȘI FORMARE

2014-prezent

Doctorat în Fizică

Universitatea Babes-Bolyai, Facultatea de Fizică,  
Cluj-Napoca, România

2012-2014

Diploma de masterat în Fizica Corpului Solid (titlul lucrării: Determinarea structurii cristaline a compusilor farmaceutici),  
Universitatea Babes-Bolyai, Facultatea de Fizică,  
Cluj-Napoca, România

2008-2012

Diploma de licență, având ca bază difracția de raze X  
Universitatea Babes-Bolyai, Facultatea de Fizică, Cluj-Napoca, RomâniaDOMENIILE DE  
CERCETARE

Difracție de raze X pe pulberi

Analiza cantitativă și calitativă de fază  
Dimensiuni de cristalite și stres în rețea  
Gradul de orientare preferențială  
Determinarea structurii cristaline din pulberi cristalineDifracție de raze X pe  
monocristale

Determinarea structurii cristaline pentru compuși metalici și organometalici

Cristalizare și polimorfism

Obținerea și creșterea monocristalelor utilizând diferite metode: difuzie în stare de vapori, difuzie în stare lichidă, evaporare lentă, cristalizare de tip high-throughput

## ANEXE

## Publicații

1. A. C. Hangan, **A. Turza**, R. L. Stan, R. Stefan, L. S. Oprean, Synthesis, crystal structure, properties, and nuclease activity of a new Cu(II) complex [Cu(L)(2)(Py)(2)(H<sub>2</sub>O)] (HL = N-(5-(4-methylphenyl)-[1,3,4]-thiadiazole-2-yl)toluenesulfonamide), RUSSIAN JOURNAL OF COORDINATION CHEMISTRY, 41, 395-404 (2015).
2. M. C. Rosu, M. Coros, F. Pogacean, L. Magerusan, C. Socaci, **A. Turza**, S. Pruneanu, Azo dyes degradation using TiO<sub>2</sub>-Pt/graphene oxide and TiO<sub>2</sub>-Pt/reduced graphene oxide photocatalysts under UV and natural sunlight irradiation, SOLID STATE SCIENCES, Volume: 70, 1 Pages 3-20 (2017).
3. A. C. Hangan; **A. Turza**; R. L. Stan; B. Sevastre; E. Pall; S. Cetean; L. S. Oprean, Synthesis, crystal structure and characterization of new biologically active Cu(II) complexes with ligand derived from N-substituted sulfonamide, JOURNAL OF CHEMICAL SCIENCES, Volume: 128, Pages:815-824 (2016).

4. C. Marutiou, L. Trosan, V. D. Toader, Z. Moldovan, **A. Turza**, C. Tanaselia, I. Bratu, Scientific investigation of pigments employed for "crucifixion" processional flag painting from the ethnographic museum of transylvania heritage, *STUDIA UNIVERSITATIS BABES-BOLYAI CHEMIA*, 58, 161-172 (2013).
5. A. C. Hangan; L. Stan; **A. Turza**; L. S. Oprean; E. Pall; S. G-Cetean, Synthesis, crystal structures, characterization and antitumor activities of two copper(II) complexes of a sulfonamide ligand, *TRANSITION METAL CHEMISTRY*, Volume 42, Pages: 153-164 (2017).
6. L. Magerusan, C. Socaci, F. Pogacean, M. C. Rosu, A. R. Biris, M. Coros, **A. Turza**, V. Floare-Avram, G. Katona, S. Pruneanu, Enhancement of peroxidase-like activity of N-doped graphene assembled with iron-tetrapyridylporphyrin, *RSC ADVANCES*, Volume 6, Pages: 79497-79506 (2016).
7. M. C. Rosu, E. Pall, C. Socaci, L. Magerusan, F. Pogacean, M. Coros, **A. Turza**, S. Pruneanu, Cytotoxicity of methylcellulose-based films containing graphenes and curcumin on human lung fibroblasts, *PROCESS BIOCHEMISTRY*. Volume: 52, Pages: 243-249 (2017).
8. A. C. Hangan, **A. Turza**, R. L. Stan, L. S. Oprean, Synthesis, Crystal Structures and Characterization of a New Antitumor Cu(II) Complex with N-sulfonamide Ligand, *REV.CHIM.(Bucharest)*, Volume 69, Pages: 1407-1410 (2018).
9. F. Pogacean, M. Coros, L. Magerusan, V. Mirel, **A. Turza**, G. Katona, R-I. S-van Staden, S. Pruneanu, Exfoliation of graphite rods via pulses of current for graphene synthesis: Sensitive detection of 8-hydroxy-2'-deoxyguanosine, *Talanta*, Volume 196, Pages: 182-190 (2019).
10. T. Dippong, E.A. Levei, L. Senila, **A. Turza**, Synthesis of Acetylsalicylic Acid by two alternative methods that can be used in food industry, *Mineral Processing, Non-ferrous Metallurgy, Geology and Environmental Engineering* Volume XXVIII, No. 1 (2014).
11. G. Borodi, **A. Turza**, O. Onija, A. Bende, "Succinic, fumaric, adipic and oxalic acid cocrystals of promethazine hydrochloride", *Acta Cryst.* (2019). C75

#### Conferințe

1. M C Rosu, F Pogacean, M Coros, C Socaci, A Biris, A Turza, G Katona, S Pruneanu Amaranth dye degradation by UV-assisted TiO<sub>2</sub>-Ag/graphene composites, 10th International Conference Processes in Isotopes and Molecules PIM 2015, Cluj – Napoca
2. L. Măgerușan, C. Socaci, F. Pogăcean, M. Coroș, M. C. Roșu, A. Turza, S. Pruneanu, N- doped graphene nanomaterial for chemical/electrochemical detection of H<sub>2</sub>O<sub>2</sub>, Analytical and Nanoanalytical Methods for Biomedical and Environmental Sciences "IC-ANMBES 2016" 29 June-1 July 2016, Brașov, Romania
3. F. Pogăcean, M. Coroș, L. Măgerușan, M. C. Roșu, A. Turza, C. Socaci, S. Pruneanu, Electrochemical detection of phenolic compounds with graphene- porphyrin modified electrode, 11<sup>th</sup> biennial International Conference on Processes in Isotopes and Molecules (PIM 2017), 27-29 September 2017, Cluj- Napoca, Romania
4. M. Coroș, M. C. Roșu, F. Pogăcean, L. Măgerușan, C. Socaci, A. Turza, S. Pruneanu, TiO<sub>2</sub>- Pt based photocatalysts sunset yellow degradation under natural solar exposure, containing graphene oxide and reduced graphene oxide for Advances on Photocatalysis, AdvPhotoCat- E 2017, The 2nd International Workshop, 14-16 July, 2017 Technological Educational Institute (TEI) of Crete, Heraklion, Greece
5. F. Pogăcean, M. C. Roșu, M. Coroș, L. Măgerușan, A. Turza, C. Socaci, S. Pruneanu, Photocatalytic efficiency of TiO<sub>2</sub>- Au/graphene oxide catalysts on amaranth degradation under sun light irradiation, Advances on Photocatalysis, AdvPhotoCat- E 2017, The 2nd International Workshop, 14-16 July, 2017 Technological Educational Institute (TEI) of Crete, Heraklion, Greece
6. S. Pruneanu, F. Pogăcean, M. Coroș, L. Măgerușan, M. C. Roșu, C. Socaci, A. Biriș, A. Turza, A. S. Porav, Synthesis of graphene- based nanomaterials: their applications in electrochemical detection of organic molecules, International Research Center in Critical Raw Materials for Advanced Industrial Technologies" (ICCRAM), 2-3 October 2017, Burgos, Spain
7. M. Coros, F. Pogacean, M.C. Rosu, L. Magerusan, C. Socaci, A. Turza, S. Pruneanu, International Conference on Processes in Isotopes and Molecules (PIM 2017), 27-29 September 2017, Cluj-Napoca, Romania – poster "Graphene-gold nanoparticles composites: Synthesis and application
8. International Conference on Processes in Isotopes and Molecules (PIM 2017), 27-29 September 2017, Cluj-Napoca, Romania – Oral presentation "Graphene synthesis through electrochemical exfoliation of graphite rod" S. Pruneanu, F. Pogacean, M. Coros, L. Magerusan, M. C. Rosu, C.

- Socaci, A. Turza (CO).
9. Synthesis of graphene-based nanomaterials: their applications in electrochemical detection of organic molecules, Stela Pruneanu, Florina Pogacean, Maria Coros, Lidia Magerusan, Marcela-Corina Rosu, Crina Socaci, Alexandru Biris, Alexandru Turza, Alin Sebastian Porav - oral presentation (NANOGENTOOLS AUTUMN SCHOOL "ADVANCED TRAINING IN UNDERSTANDING THE SAFETY OF NANOMATERIAL"; 2nd-3rd October 2017, Burgos, Spain).