Lista de lucrări în domeniul de ştiinţă definit de disciplinele din postul scos la concurs

NUMELE ŞI PRENUMELE: Kovács Gábor

I. LISTA PUBLICAȚIILOR RELEVANTE

(Lista celor maximum 10 lucrări considerate de candidat a fi cele mai relevante pentru realizările profesionale proprii, care sunt incluse în format electronic în dosar şi care se pot regăsi şi în celelalte categorii de lucrări)

1. **Kovacs, G**., Ortiz, R., Coman, V., Harreither, W., Popescu, I. C., Ludwig, R., and Gorton, L. (2012) Graphite electrodes modified with Neurospora crassa cellobiose dehydrogenase: Comparative electrochemical characterization under direct and mediated electron transfer, Bioelectrochemistry 88, 84-91. (I.F.: 3,947)

2. Karácsonyi, É., Baia, L., Dombi, A., Danciu, V., Mogyorósi, K., Pop, L. C., **Kovács, G.,** Coşoveanu, V., Vulpoi, A., Simon, S., and Pap, Z. (2013) The photocatalytic activity of TiO_2/WO_3/noble metal (Au or Pt) nanoarchitectures obtained by selective photodeposition, Catalysis Today 208, 19-27. (I.F.: 3,309)

3. Baia, L., Vulpoi, A., Radu, T., Karácsonyi, T., Dombi, A., Hernádi, K., Danciu, V., Simon, S., Norén, K., Canton, S. E., **Kovács, G**., and Pap, Z. (2014) TiO_2/WO_3/Au nanoarchitectures' photocatalytic activity "from degradation intermediates to catalysts' structural peculiarities" Part II: Aerogel based composites - fine details by spectroscopic means, Applied Catalysis B: Environmental 148-149, 589-600. (I.F.: 7,435)

4. **Kovács, G**., Baia, L., Vulpoi, A., Radu, T., Karácsonyi, T., Dombi, A., Hernádi, K., Danciu, V., Simon, S., and Pap, Z. (2014) TiO2/WO3/Au nanoarchitectures' photocatalytic activity, "from degradation intermediates to catalysts' structural peculiarities", Part I: Aeroxide P25 based composites, Applied Catalysis B: Environmental 147, 508-517. (I.F.: 7,435)

5. Kovács, G., Fodor, S., Vulpoi, A., Schrantz, K., Dombi, A., Hernádi, K., Danciu, V., Pap, Z., and Baia, L. (2015) Polyhedral Pt vs. spherical Pt nanoparticles on commercial titanias: Is shape tailoring a guarantee of achieving high activity?, Journal of Catalysis 325, 156-167. (I.F.: 7,354)

6. Vajda, K., Kása, Z., Dombi, A., Németh, Z., **Kovács, G**., Danciu, V., Radu, T., Ghica, C., Baia, L., Hernádi, K., and Pap, Z. (2015) "Crystallographic" holes: New insights for a beneficial structural feature for photocatalytic applications, Nanoscale 7, 5776-5786. (I.F.: 7,76)

7. Hampel, B., **Kovács, G**., Czekes, Zs., Hernádi, K., Danciu, V., Ersen, O., Girleanu, M., Focsan, M., Baia, L., and Pap, Z. (2018) Mapping the photocatalytic activity and ecotoxicology of Au, Pt/TiO2 composite photocatalysts, ACS Sustainable Chemistry and Engineering 6(10), 12993-13006. (I.F.: 6,140)

8. Tóth, Z. R., Pap Z., Danciu V., Cosoveanu V., Baia L., and **Kovács G**., Detailed investigation of phenol degradation on Au/TiO_2 composite materials, Journal of Nanoscience and Nanotechnologies (2019) 18, 1-7. (I.F.: 1.483)

9. Tóth, Z. R., Hernádi, K., Baia, L., **Kovács, G.** and Pap, Zs. Controlled formation of Ag-AgxO nanoparticles on the surface of commercial TiO_2 based composites for enhanced photocatalytic degradation of oxalic acid and phenol, Catalysis Today (2020), in press (I.F.:5.825)

10. Tóth, Z. R., Pap, Z., Kiss, J., Baia, L., Gyulavári, T., Czekes, Z., Todea, M., Magyari, K., **Kovács, G**. and Hernádi, K. (2021) Shape tailoring of AgBr microstructures: effect of the cations of different bromide sources and applied surfactants, RSC Advances, 11, 9709-9720 (I.F.: 3.119)

II. LISTA COMPLETĂ DE PUBLICAȚII, CREAȚII, INVENȚII

A. Teza de doctorat.
Amperometric biosensors for detection of analytes of biotechnological interest (Biosenzori amperometrici pentru detecția unor analiți de interes biotehnologic);
conducător de doctorat Prof. Dr. Ionel Cătălin Popescu, Facultatea de Chimie și Inginerie Chimică, Universitatea Babeș-Bolyai, Cluj-Napoca, România
(Titlul, conducătorul tezei, denumirea exactă a instituţiei unde s-a realizat, calificativul obţinut, dacă s-a publicat atunci şi datele de identificare a publicaţiei)

B. Cărti publicate
(Autor/autorii, titlul, volumul, editura, localitatea unde are sediul editura, anul, numărul de pagini totale, capitolul şi numărul de pagini ce revin autorului, ISBN.)

B1. Cărţi (manuale, monografii, tratate, îndrumare etc.) publicate la edituri recunoscute în străinătate.

B2. Cărţi (manuale, monografii, tratate, îndrumare etc.) publicate în ţară, la edituri recunoscute CNCSIS/CNCS.

B3. Cărţi (manuale, monografii, tratate, îndrumare etc.) publicate la alte edituri sau pe plan local.

B4. Cărţi (manuale, monografii, tratate, îndrumare etc.) publicate pe web.

B5. Capitole de cărţi publicate în străinătate
Kása, Z., Gyulavári, T., Veréb, G., **Kovács, G.**, Baia, L., Pap, Z., and Hernádi, K. Novel Applications and Future Perspectives of Nanocomposites, in Nanocomposites for Visible Light-induced Photocatalysis, Springer International Publishing, Cham (2017), pp 333-398, ISBN: 978-3-319-62446-4

B6. Capitole de cărţi publicate în ţară

C. Lucrări ştiinţifice publicate
(Autor/ autorii în ordinea înscrisă în publicaţie, titlul lucrării, periodicul, volumul, anul, numărul, paginile)

C1. Lucrări ştiinţifice publicate în reviste cotate ISI

1. **Kovács, G.,** and Popescu, I. C. Electrochemical behavior of cellobiose dehydrogenase from Neurospora crassa immobilized on graphite and Au-4-mercaptophenol modified electrodes, Studia Universitatis Babes-Bolyai Chemia (2011) 4(1) 199-210. (I.F.: 0,129)

2. **Kovacs, G**., Ortiz, R., Coman, V., Harreither, W., Popescu, I. C., Ludwig, R., and Gorton, L. Graphite electrodes modified with Neurospora crassa cellobiose dehydrogenase: Comparative electrochemical characterization under direct and mediated electron transfer, Bioelectrochemistry (2012) 88, 84-91. (I.F.: 3,947)

3. **Kovacs, G.**, Ortiz, R., Coman, V., Harreither, W., Popescu, I. C., Ludwig, R., and Gorton, L. Influence of Sam structure on direct electron transfer at au electrodes modified with cellobiose dehydrogenase from Neurospora crassa, Revue Roumanie de Chimie (2012) 57, 361-368. (I.F.: 0,331)

4. Karácsonyi, É., Baia, L., Dombi, A., Danciu, V., Mogyorósi, K., Pop, L. C., **Kovács, G**., Coşoveanu, V., Vulpoi, A., Simon, S., and Pap, Z. The photocatalytic activity of TiO_2/WO_3/noble metal (Au or Pt) nanoarchitectures obtained by selective photodeposition, Catalysis Today (2013) 208, 19-27. (I.F.: 3,309)

5. Baia, L., Vulpoi, A., Radu, T., Karácsonyi, T., Dombi, A., Hernádi, K., Danciu, V., Simon, S., Norén, K., Canton, S. E., **Kovács, G**., and Pap, Z. TiO_2/WO3/Au nanoarchitectures' photocatalytic activity "from degradation intermediates to catalysts' structural peculiarities" Part II: Aerogel based composites - fine details by spectroscopic means, Applied Catalysis B: Environmental (2014) 148-149, 589-600. (I.F.: 7,435)

6. **Kovács, G.**, Baia, L., Vulpoi, A., Radu, T., Karácsonyi, T., Dombi, A., Hernádi, K., Danciu, V., Simon, S., and Pap, Z. TiO_2/WO_3/Au nanoarchitectures' photocatalytic activity, "from degradation intermediates to catalysts' structural peculiarities", Part I: Aeroxide P25 based composites, Applied Catalysis B: Environmental (2014) 147, 508-517. (I.F.: 7,435)

7. Puskelova, J., Baia, L., Vulpoi, A., Baia, M., Antoniadou, M., Dracopoulos, V., Stathatos, E., **Gabor, K**., Pap, Z., Danciu, V., and Lianos, P. Photocatalytic hydrogen production using TiO_2-Pt aerogels, Chemical Engineering Journal (2014) 242, 96-101. (I.F.: 4,321)

8. Fleaca, C. T., Scarisoreanu, M., Morjan, I., Luculescu, C., Niculescu, A. M., Badoi, A., Vasile, E., and **Kovacs, G**. Laser oxidative pyrolysis synthesis and annealing of TiO_2 nanoparticles embedded in carbon-silica shells/matrix, Applied Surface Science (2015) 336, 226-233. (I.F.: 3,15)

9. **Kovács, G**., Fodor, S., Vulpoi, A., Schrantz, K., Dombi, A., Hernádi, K., Danciu, V., Pap, Z., and Baia, L. Polyhedral Pt vs. spherical Pt nanoparticles on commercial titanias: Is shape tailoring a guarantee of achieving high activity?, Journal of Catalysis (2015) 325, 156-167. (I.F.: 7,354)

10. **Kovács, G.**, Pap, Z., Coteţ, C., Coşoveanu, V., Baia, L., and Danciu, V. Photocatalytic, morphological and structural properties of the TiO_2-SiO_2-Ag porous structures based system, Materials (2015) 8, 1059-1073. (I.F.: 2,728)

11. Pap, Z., Tóth, Z. R., Danciu, V., Baia, L., and **Kovács, G**. Differently shaped au nanoparticles: A case study on the enhancement of the photocatalytic activity of commercial TiO_2, Materials (2015) 8, 162-180. (I.F.: 2,728)

12. Vajda, K., Kása, Z., Dombi, A., Németh, Z., **Kovács, G**., Danciu, V., Radu, T., Ghica, C., Baia, L., Hernádi, K., and Pap, Z. "Crystallographic" holes: New insights for a beneficial structural feature for photocatalytic applications, Nanoscale (2015) 7, 5776-5786. (I.F.: 7,76)

13. Baia, L., Orbán, E., Fodor, S., Hampel, B., Kedves, E. Z., Saszet, K., Székely, I., Karácsonyi, É., Réti, B., Berki, P., Vulpoi, A., Magyari, K., Csavdári, A., Bolla, C., Coşoveanu, V., Hernádi, K., Baia, M., Dombi, A., Danciu, V., **Kovács, G**., and Pap, Z. Preparation of TiO_2/WO_3 composite photocatalysts by the adjustment of the semiconductors' surface charge, Material Science in Semiconductor Processing (2016) 42, 66-71. (I.F.: 2,359)

14. Székely, I., **Kovács, G**., Baia, L., Danciu, V., and Pap, Z. Synthesis of shape-tailored WO_3 micro-/nanocrystals and the photocatalytic activity of WO_3/TiO_2 composites, Materials (2016) 9. (I.F.: 2,654)

15. Vajda, K., Saszet, K., Kedves, E. Z., Kása, Z., Danciu, V., Baia, L., Magyari, K., Hernádi, K., **Kovács, G.,** and Pap, Z. Shape-controlled agglomeration of TiO_2 nanoparticles. New insights on polycrystallinity vs. single crystals in photocatalysis, Ceramics International (2016) 42, 3077-3087. (2,986)

16. Fodor, S., **Kovács, G**., Hernádi, K., Danciu, V., Baia, L., and Pap, Z. Shape tailored Pd nanoparticles' effect on the photocatalytic activity of commercial TiO_2, Catalysis Today (2017) 284, 137-145. (I.F.: 4,636)

17. Gyulavári, T., Pap, Z., **Kovács, G**., Baia, L., Todea, M., Hernádi, K., and Veréb, G. Peroxo group enhanced nanorutile as visible light active photocatalyst, Catalysis Today (2017) 284, 129-136. (I.F.: 4,636)

18. Tóth, Z. R., **Kovács, G**., Hernádi, K., Baia, L., and Pap, Z. The investigation of the photocatalytic efficiency of spherical gold nanocages/TiO_2 and silver nanospheres/TiO_2 composites, Separation and Purification Technologies (2017) 183, 216-225. (I.F.: 3,359)

19. Bárdos, E., **Kovács, G**., Gyulavári, T., Németh, K., Kecsenovity, E., Berki, P., Baia, L., Pap, Z., and Hernádi, K. Novel synthesis approaches for WO_3-TiO_2/MWCNT composite photocatalysts- problematic issues of photoactivity enhancement factors, Catalysis Today (2018) 300, 28-38. (I.F.: 4.636)

20. Hampel, B., **Kovács, G.,** Czekes, Zs., Hernádi, K., Danciu, V., Ersen, O., Girleanu, M., Focsan, M., Baia, L., and Pap, Z. Mapping the photocatalytic activity and ecotoxicology of Au, Pt/TiO_2 composite photocatalysts, ACS Sustainable Chemistry and Engineering (2018) 6(10), 12993-13006. (I.F.: 6,140)

21. Tóth, Z. R., Pap Z., Danciu V., Cosoveanu V., Baia L., and **Kovács G**., Detailed investigation of phenol degradation on Au/TiO_2 composite materials, Journal of Nanoscience and Nanotechnologies (2019) 18, 1-7. (I.F.: 1.483)

22. Veréb, G., Kálmán, V., Gyulavári, T, Kertész, Sz., Beszédes, S., **Kovács, G**., Hernádi, K., Pap, Zs., Hodur, C., László, Zs. Advantages of TiO_2/carbon nanotube modified photocatalytic membranes in the purification of oil-in-water emulsions, Water Supply (2019) 19(4), 1167-1174 (I.F.: 0.900)

23. Bárdos, E., Márta, V., Baia, L., Todea, M., **Kovács, G**., Baán, K., Seema, G., Pap, Zs. and Hernádi, K. Hydrothermal crystallization of bismuth oxybromide (BiOBr) in the presence of different shape controlling agents, Applied Surface Science (2020) 518, 146184 (I.F.: 5.270)

24. Gyulavári, T., Kovács, K., Kovács, Z., Bárdos, E., **Kovács, G**., Baán, K., Magyari, K., Veréb, G., Pap, Zs. and Hernádi, K., Preparation and characterization of noble metal modified titanium dioxide hollow spheres – new insights concerning the light trapping efficiency, Applied Surface Science (2020), 534, 147327 (I.F.: 5.270)

25. Rápó, E., Posta, K., Csavdári, A., Vincze, B.É., Mara, Gy., **Kovács, G.**, Haddidi, I. and Tonk, Sz. Performance comparison of Eichornia crassipes and Salvinia natans on azodye (Eriochrome Black T) phytoremediation, Crystals (2020) 10, 565 (I.F.: 2.404)

26. Tóth, Z. R., Hernádi, K., Baia, L., **Kovács, G**. and Pap, Zs. Controlled formation of Ag-AgxO nanoparticles on the surface of commercial TiO_2 based composites for enhanced photocatalytic degradation of oxalic acid and phenol, Catalysis Today (2021) in press (I.F.:5.825)

27. Szabó, A., **Kovács, G.**, Kovács, A., and Hernádi, K. Different pathways for synthesis of WO_3 and vertically aligned carbon nanotube-based nanostructures, Journal of Nanoscience and Nanotechnologies (2021) 21(4), 2388-2393 (I.F.: 1.483)

28. Vajda, K., Hernádi, K., Cotet, C., **Kovács, G**., Pap, Z., Shape-tailored TiO_2 photocatalysts obtained in the presence of different types of carbon materials, Journal of Nanoscience and Nanotechnologies (2021) 21(4), 2360-2367 (I.F.: 1.483)

29. Tóth, Z.R., Maity, S.K., Gyulavári, T., Bárdos, E., Baia, L., **Kovács, G.**, Garg, S., Pap, Z., Hernadi, K., Solvothermal crystallization of Ag/AgxO-AgCl composites: effect of different chloride sources/shape-tailoring agents, Catalysts (2021) 11(3), 379 (I.F.: 3.520)

30. Tóth, Z. R., Pap, Z., Kiss, J., Baia, L., Gyulavári, T., Czekes, Z., Todea, M., Magyari, K., **Kovács, G**. and Hernádi, K. Shape tailoring of AgBr microstructures: effect of the cations of different bromide sources and applied surfactants, RSC Advances (2021) 11, 9709-9720 (I.F.: 3.119)

31. Fodor, S., Baia, L., Baan, K., **Kovács, G**., Pap, Z., Hernádi, K., The effect of the reducing sugars in the synthesis of visible-light-active copper(I) oxide photocatalyst, Molecules (2021) 26(4), 1149 (I.F.: 3.267)

C2. Lucrări ştiinţifice publicate în reviste indexate în baze de date internaţionale (indicaţi şi baza de date).

C3. Lucrări ştiinţifice publicate în reviste din străinătate (altele decât cele menţionate anterior).

1) Rusu, M., **Kovács, G**., Cotet, C., Fort, I., Vulpoi, A., Baia, L., Pap Zs. and Danciu V., N-TiO_2-Ag based porous structures: photocatalytic, morphological and structural properties, Journal of Surfaces and Interfaces of Materials (2014) 2, 305-310.

C4. Lucrări ştiinţifice publicate în reviste din ţară, recunoscute CNCSIS/CNCS (altele decât cele din baze de date internaţionale).

1). Fodor, Sz., Pap, Zs., Hernádi, K., **Kovács, G**., Baia, L., Pd és Pt nanorészecskék alakjának hatása fotokatalitikus hidrogénfejlesztés során, Acta Scientiarum Transylvanica – Múzeumi füzetek **(**2017) 25 (3), 7-16.

2) . Székely, I., Boga, B., Csavdári, A., **Kovács, G.**, Pap, Zs., Baia, M., Hernádi, K., WO_3-TiO_2 alapú félvezető nanoanyagok alkalmazása, mint fotokatalízátor színezékek eltávolítására, Acta Scientiarum Transylvanica – Múzeumi füzetek **(**2017**)** 25 (3), 44-51.

3). Tóth, Z. R., Pap Z., Hernádi, K., Baia L., and **Kovács G**., (**2017**) TiO_2 aktivitásának befolyásolása Au és Ag nanorészecskékkel és a keletkezett kompozitok fotokatalitikus aktivitásának vizsgálata, Acta Scientiarum Transylvanica – Múzeumi füzetek **(**2017) 25 (3), 36-43.

C5. Lucrări ştiinţifice publicate în reviste, altele decât cele menţionate anterior

C6. Lucrări ştiinţifice publicate în volumele manifestărilor ştiinţifice – *cele mai relevante 10 lucrări*
(Autor/autorii în ordinea înscrisă în publicaţiei, titlul lucrării, titlul volumului, editorul sau redactorul, editura, locul, volumul, anul, paginile)

1) Kovács, G., Karácsonyi, É., Pap, Z., Baia, L, Norén, K., Dombi, A., Pop, L.C., Vulpoi, A., Radu, T., Danciu, V., Cosoveanu, V., Baia, L., Correlation of the TiO_2/WO_3/Au composites; structure with phenol photodegradation intermediates, in 4th International Conference on Semiconductor Photochemistry (SP4) (2013) Prague, Czech Republic., 35.

2) Fodor, Szilvia; Kovács, Gábor; Pap, Zsolt; Danciu, Virginia; Vulpoi, Adriana; Magyari, Klára; Dombi, András; Hernádi, Klára; Baia, Lucian, Kereskedelmi TiO_2 módosítása Pt nanokockákkal/gömbökkel: Pt nanorészecske alakjának hatása a szennyezők fotokatalitikus bontására illetve a H_2 fejlesztésre, XIX. Nemzetközi Vegyészkonferencia, Kolozsvár, Románia : Erdélyi Magyar Műszaki Tudományos Társaság (EMT) (2013) 127.

3) Kása, Zsolt; Vajda, Krisztina; Zsolt, Pap ; András, Dombi ; Klára, Hernádi ; Gábor, Kovács ; Virginia, Danciu ; Lucian, Baia TiO2 mikrokristályok alakjának finomhangolása különböző szénfajták segítségével XX. Nemzetközi Vegyészkonferencia Kolozsvár, Románia : Erdélyi Magyar Műszaki Tudományos Társaság (EMT) (2014) 153.

4) Kovács, G., Tóth, Z.R., Fodor, S., Pap, Z., Danciu, V., Dombi, A., Hernádi, K., Baia, L., Differently shaped Pt/Au nanoparticles: activity enhancement of commercial TiO_2 photocatalysts, in 8th European Meeting on Solar Chemistry and Photocatalysis: Environmental Applications – SPEA8 (2014), Thessaloniki, Greece, 42-43.

5) Bárdos, E., Kovács, G., Orbán, E., Gyulavári, T., Németh, K., Kecsenovity, E., Berki, P., Baia, L., Pap, Z., Hernádi, K. Szerves modellszennyezők lebontása TiO_2-WO_3 alapú nanokompozitok segítségével, in: MTA, Analitikai és Környezeti Kémiai Tudományos

Bizottság Környezeti Kémiai Munkabizottsága - Ötödik Környezetkémiai Szimpózium (2016), 16-16.

6) Kovács, G., Szabó, A., Kovács, A., Gyulavári, T., Pap, Z., Hernádi, K., Függőlegesen rendezett szerkezetű szén nanocsövek és CNT-WO_3-alapú kompozitjainak előállítása és jellemzése / Synthesis and Characterization of Vertically Aligned Carbon Nanotubes and CNT-WO_3-based Composites, in: MAJDIK, Kornélia - XXIII. Nemzetközi Vegyészkonferencia : 23rd International Conference on Chemistry, Kolozsvár, Románia : Erdélyi Magyar Műszaki Tudományos Társaság (EMT) (2017), 101.

7) Szabó, A., Kovács, A., Gyulavári, T., Kovács, G., Pap, Z., Hernádi, K., Synthesis and characterization of vertically aligned carbon nanotubes and CNT-WO_3-based composites, in: Josef, Krysa - 5th European Conference on Environmental Applications of Advanced Oxidation Processes (EAAOP5) : Book of abstracts, Prague, Csehország : University of Chemistry and Technology (UCT) (2017) 452 p. pp. 275-275.

8) Tóth Z.R, Kovács, G., Baia, L., Pap, Z., Hernádi, K., Synthesis, characterization and photocatalytic activity of spherical gold nanocages/TiO_2 and silver nanospheres/TiO_2 composites, in: Carlos, Lodeiro; José, Luis Capelo - III. International Symposium on Nanoparticles/Nanomaterials and Applications Lisszabon, Portugália : Associacao Cientifica Proteomass (2018) 319 p. pp. 265-266.

9) Hampel, B., Almási, E.E., Hernádi, K., Pap, Z., Czekes Z., Hernádi, K., Kovács, G. Investigations of photocatalytic activity and ecotoxicology of Au, Pt/TiO_2 composite catalysts, in: Gábor, Rákhely; Cecilia, Hodúr - II. Sustainable Raw Materials Conference Book - International Project Week and Scientific Conference, Szeged, Magyarország : University of Szeged (2019) 33-36.

10) Hampel, B., Kovács, G., Czekes Z., Hernádi, K., Baia., L., Ersen, O., Pap, Z., Correlation between photocatalytic activity and ecotoxicology of noble metal/TiO_2 nanocomposites, in: Albin, Pintar; Petar, Djinović; Janvit, Teržan; Gregor, Žerjav; Nataša, Novak Tušar: Book of Abstracts 6th European Conference on Environmetal Applications of Advanced Oxidation Processes (2019) p. 336

D. Traduceri de cărţi, capitole de cărţi, alte lucrări ştiinţifice

E. Editare, coordonare de volume
(Redactor/redactorii), titlul, volumul, editura, localitatea unde are sediul editura, anul, numărul de pagini, ISBN)

F. Brevete de invenții și alte titluri de proprietate
(Autor/autorii invenţiei/titlului, titlul, nr şi data, numărul şi data înregistrării, titularul)

1) Peter, A., Nicula, C., Mihaly, C.L., Mihaly, C.A., Danciu, V., Baia, G.L., **Kovács, G.,** Ciric, C., Begea, M., Craciun, L, Craciun, G., Dutuc, G., Falup, A., Ziemkowska, W., Jastrezebska, A., Kurtycz, P., Karwowska, E., Miaskiewicz-Peska, E., Zaleska-Radziwill, M, Olszyna, A., Kunicki, A., Sitarz, K., Roslov, M., Process for obtaining nanocompozite food packages, EP 3078275A1, 12.10.2016, Bulletin 2016/41; 15464006.4, 28.08.2015, Universitatea Tehnica din Cluj-Napoca, Universitatea Babeș-Bolyai, ICA Research and Development SRL, București, L&D Consulting SRL, București, Warsaw University of Technology, Poland.

G. Contracte de cercetare (menţionaţi calitatea de director sau membru)
(Titlul contractului, beneficiar/finanţator, valoarea totală şi valoarea care revine instituţiei conform devizului, calitatea persoanei (director, membru în echipă), modul de valorificare, exemple elocvente de publicaţii, brevete)

1) Fotokatalitikus nanoszobrászat: különböző kristályformákkal rendelkező TiO_2-Au nanokompozitok előállítása és szennyezőanyaglebontó képességeinek vizsgálata, Domus Hungarica Scholarship, Hungarian Academy of Sciences, 320.000 HUF (director de proiect) – valorificare: C1.4,5,6.

2) New pathways to enhance the activity of nano-sized titania/noble metal nanocomposites: crystal shape tailoring and aerogels – New Central Europe Young Researcher Scholarship, National Research, Development and Innovation Office (Hungary), 2.700.000 HUF (director de proiect) - valorificare: C1.7,8,10.

3) Fotokatalitikus alakszabászat: Pd nanorészecskék alakjának a hatása TiO_2 alapú kompozitokban szerves szennyezők bontására illetve H_2 fejlesztésre, Domus Hungarica Scholarship, Hungarian Academy of Sciences, 240.000 HUF (director de proiect) - valorificare: C1.16.

4) Szén nanocső alapú kompozitok előállítása és jellemzése, Postdoctoral Scholarship, Hungarian Academy of Sciences, 7.200.000 HUF (director de proiect, sub îndrumarea Prof. Hernádi Klára) - valorificare: C1.14,19,24.

5) Nemesfém-TiO_2 alapú tercier fotokatalizátorok előállítása és alkalmazhatósági spektrumának szélesítése, National Research, Development and Innovation Office (Hungary), 14.085.000 HUF (director de proiect) - valorificare: C1.20,24,28.

6) AgBr alapú fotokatalizátorok előállítása és szerves szennyezőanyagokkal szembeni bontási hatásfokának vizsgálata, National Research, Development and Innovation Office (Hungary), 2.000.000 HUF (director proiect), valorificare: C1.30.

7) Szén nanocső erdők kontrollált szintézise: jellemzés, módosítás és alkalmazási lehetőségek, National Research, Development and Innovation Office (Hungary), 35.251.000 HUF (membru în echipă) - C1.14,19,24.

8) Nanorészecskékkel módosított membránok fejlesztése és alkalmazása olajszennyezett vizek hatékony kezelésére, National Research, Development and Innovation Office (Hungary), 37.409.000 HUF (membru în echipă)

9) Designing composite nanoarchitectures for hydrogen production and environmental depollution, CNCS – UEFISCDI, PN-II-ID-PCE-2011-3-0442, 1.500.000 RON (membru în echipă) valorificare: C1.4,5,6,7,9,12,13,14,15,16.

10) Efficient wastewater treatment with nanocrystalline transient metal oxides modified with noble metals and nonmetals, Romanian-Greece bilateral project, 20.000 RON, membru în echipă) - valorificare: C1.7.

11) Smart functions of packages containing nano-structured materials in food preservation (SMARTPACK), ERA-NET Project, 530.000 EUR (membru în echipă) - valorificare: C1.8,10; .C3.1, F.1.

H. Creaţia artistică – ***nu este cazul***

H1 Participări la manifestaţii artistice internaţionale
H2. Participări la manifestaţii artistice naţionale
H3. Expoziţii, filme, spectacole, concerte, discuri de autor, opere internaţionale
H4. Expoziţii, filme, spectacole, concerte, discuri de autor, opere naţionale
H5. Produse cu drept de proprietate intelectuală în domeniul artistic

III. RECUNOAȘTEREA

I. Premii, distincţii.

- Distincția Paál Zoltán în Cataliză, acordat de Comitetului de lucru în Cataliză, Academia de Științe al Ungariei**, 2018**

- **Premiul I,** acordat pentru prezentarea în plenul de doctoranzi al conferinței 14th International Conference on Chemistry, Cluj, 2008

- **Premiul I,** acordat pentru cea mai bună prezentarea tip poster al conferinței 13th International Conference on Chemistry, Cluj, 2007

J. Citări (total/independente)

Scopus – H-index: 364/226 – 11
Web of Science: 361/240 - 12
Google Scholar: 433 - 13

K. Alte realizări semnificative.

- îndrumător al 7 lucrări de licență și 3 dizertații, nivel master.
- îndrumător al numeroaselor lucrări studențești (de tip Studenți pentru Studenți sau TDK: ETDK/MTDK), dintre care 8 premii I-III și 5 mențiuni.

Data,
18 iunie, 2021

Semnătura,

NOTĂ:

1. ***Lista se prezintă în ordine invers cronologică, între ani se lasă un rând liber la fiecare categorie.***
2. ***Informaţiile expricative nu vor figura în documentele depuse de candidat***