

LISTA DE LUCRĂRI

a) Lista celor maximum 10 lucrări relevante pentru realizările profesionale proprii (AP = autor principal, P = prim autor; C = autor de corespondenta; Q = cuartila revistei; IF = factor de impact revistă; Q si IF - indicati de WoS in august 2024)

	Titlu art / autori	AP	Q	IF	
1	C.I. Fort; A. Sanou, M. Coulibaly, K.B. Yao, G.L. Turdean, Green modified electrode for sensitive simultaneous heavy metal ions electrodedetection, <i>Sensors and Actuators B: Chemical</i> , 418 (2024) 136326. https://doi.org/10.1016/J.SNB.2024.136326	P	Q1	8	
2	C.I. Fort, L.C. Cotet, A. Vulpoi, G.L. Turdean, V. Danciu, L. Baia, I.C. Popescu, Bismuth doped carbon xerogel nanocomposite incorporated in chitosan matrix for ultrasensitive voltammetric detection of Pb(II) and Cd(II), <i>Sensors and Actuators, B: Chemical</i> , 220 (2015) 712-719. https://doi.org/10.1016/j.snb.2015.05.124	P,C	Q1	8	
3	M.M. Rusu, C.I. Fort, L.C. Cotet, A. Vulpoi, M. Todea, G.L. Turdean, V. Danciu, I.C. Popescu, L. Baia, Insights into the morphological and structural particularities of highly sensitive porous bismuth-carbon nanocomposites based electrochemical sensors, <i>Sensors & Actuators: B. Chemical</i> , 628 (2018) 398-410. https://doi.org/10.1016/j.snb.2018.04.103	P,C	Q1	8	
4	C. I. Fort, L. C. Pop, Heavy metal and metalloid electrochemical detection by composite nanostructures, in <i>Advanced Nanostructures for Environmental Health</i> , edited by L. Baia, Z. Pap, K. Hernadi, M. Baia, Elsevier, 2019, pages 185-250	P,C	Elsevier_Capitol de carte		
5	C.I. Fort, R. Ortiz, L.C. Cotet, V. Danciu, I.C. Popescu, L. Gorton, Carbon Aerogel as Electrode Material for Improved Direct Electron Transfer in Biosensors Incorporating Cellobiose Dehydrogenase, <i>Electroanalysis</i> 28(10)(2016)2311-2319. https://doi.org/10.1002/elan.201600219	P,C	Q2	2.7	
6	J. Hidalgo, C.I. Fort, I. Galambos, H. Jankovics, L. Hidalgo, G.L. Turdean, TiO2 aerogel - A sensing electrode matrix for the sensitive detection of diclofenac sodium, <i>Microchemical Journal</i> , 207 (2024) 111855. http://doi.org/10.1016/j.microc.2024.111855	C	Q1	4.9	
7	C I. Fort, C.S.A. Cobzac, G.L. Turdean, Conductive polymer-based modified electrode for total antioxidant capacity determination, <i>Microchemical Journal</i> , 2024 https://doi.org/10.1016/J.MICROC.2024.110309	P	Q1	4.9	
8	Patent obținut de la Oficiul Român de Patente (OSIM): Nr. 133255B1/27.11.2020 Titlul: „Procedeu de obținere a materialelor compozite de tipul cărbune nanoporos/grafen/nanoparticule de bismut și fier/oxid de titan cu proprietăți analitice și de fotodegradare”, Autori: L.C. Cotet, L.G. Baia, C.I. Fort, L.C. Pop, M. Rusu, Proprietar: Babes-Bolyai University (Romania).	Brevet			
9	C.I. Fort, S.C.A. Cobzac, G.L. Turdean, Second-order derivative of square-wave voltammetry for determination of vanillin at platinum electrode, <i>Food Chemistry</i> , 385 (2022) 132711. https://doi.org/10.1016/j.foodchem.2022.132711	P	Q1	8.5	
10	G.L. Turdean, I.C. Fort, V. Simon, In vitro short-time stability of a bioactive glass-chitosan composite coating evaluated by using electrochemical methods, <i>Electrochimica Acta</i> , 182(2015)707-714. https://doi.org/10.1016/j.electacta.2015.09.132		Q1	5.5	

b) Teza de doctorat:

Titlul: **Oxidarea catalitică a NADH pe electrozi compoziți, modificați cu Meldola Blue, imobilizat pe materiale semiconductoare**, februarie 2007;

Coordonator: Prof. Dr. Ionel Cătălin Popescu.

Instituția gazdă: Universitatea Babeș-Bolyai, Facultatea de Chimie și Inginerie Chimică

c) Brevete de invenție și alte titluri de proprietate industrială:

1. Patent obținut de la Oficiul Român de Patente (OSIM): Nr. 1037524/23.10.2017,

Titlul: „*Obtaining process of resorcinol-formaldehyde xerogel / ceramic and carbon xerogel / ceramic composites*”.

Autori: L.C. Cotet, **C.I. Fort**, V. Danciu

Proprietar: Babes-Bolyai University (Romania).

2. Patent obținut de la Oficiul Român de Patente (OSIM): Nr. 133255B1/27.11.2020

Titlul: „*Procedeu de obținere a materialelor compozite de tipul cărbune nanoporos/grafen/nanoparticule de bismut și fier/oxid de titan cu proprietăți analitice și de fotodegradare*”

Autori: L.C. Cotet, L.G. Baia, **C.I. Fort**, L.C. Pop, M. Rusu

Proprietar: Babes-Bolyai University (Romania).

d) Capitole de carte:

1. **C.I. Fort**, L.C. Cotet, L.C. Pop, M. Baia, L. Baia, "Advanced graphene based materials for electrochemical biomarker and protein detection" in the book "Graphene - Chemistry and Applications", ISBN 978-1-83769-283-5, edited by Dr. Enos Wamalwa Wambu, IntechOpen 2023.

2. **C. I. Fort**, L. C. Pop, Heavy metal and metalloid electrochemical detection by composite nanostructures, in Advanced Nanostructures for Environmental Health, edited by L. Baia, Z. Pap, K. Hernadi, M. Baia, Elsevier, 2019, pages 185-250

3. L.C. Cotet, **C.I. Fort**, L.C. Pop, M. Baia, L. Baia, “Insights Into Graphene-Based Materials as Counter Electrodes for Dye-Sensitized Solar Cells” in “Dye-Sensitized Solar Cells. Mathematical modeling, and Materials design and optimization”, Pub. Date: 2019, Edited by M. Soroush, K.K.S. Lau, ISBN: 978-0-12-814541-8, pag. 341-397, Academic Press, Elsevier.

e) Articole/studii in extenso, publicate in reviste din fluxul stiintific international principal ISI:

	Titlu art / autori	AP	Q	IF
1.	C.I. Fort, M.M. Rusu, L.C. Cotet, A. Vulpoi, M. Todea, M. Baia, L. Baia, The Impact of Ar or N2 Atmosphere on the Structure of Bi-Fe-Carbon Xerogel Based Composites as Electrode Material for Detection of Pb ²⁺ and H ₂ O ₂ , Gels, 10 (2024) 230. https://doi.org/10.3390/GELS10040230	P	Q1	5
2.	E. Goncarenco, I.P. Morjan, C. Fleaca, E. Dutu, A. Criveanu, C. Viespe, A.C. Galca, A.V. Maraloiu, M.S. Stan, C.I. Fort, M. Scarisoreanu, The Influence of SnO ₂ and Noble Metals on the Properties of TiO ₂ for Environmental Sustainability, Sustainability, 16 (2024) 2904. https://doi.org/10.3390/SU16072904	C	Q2	3.3
3.	A. Sanou, M. Coulibaly, S.R. N'dri, T.L. Tămaș, L. Bizo, T. Frentiu, E. Covaci, K. Désiré Martial Abro, P. Jean-Marie Richard Dablé, K.B. Yao, C.I. Fort, G.L. Turdean, Raw clay material-based modified carbon paste electrodes for sensitive heavy metal detection in drinking water, Journal of Materials Science 59 (2024) 13961–13977. https://doi.org/10.1007/S10853-024-09945-2	C	Q2	3.5

4.	J.S. Hidalgo, É. Tóth, H. Jankovics, C.I. Fort, G.L. Turdean, E. Tombacz, I. Galambos, Bioengineered Flagellin–TiO ₂ Nanoparticle-Based Modified Glassy Carbon Electrodes as a Highly Selective Platform for the Determination of Diclofenac Sodium. <i>Chemosensors</i> , 11 (2023) 576. https://doi.org/10.3390/chemosensors11120576		Q2	3.7
5.	M.M. Rusu, C.I. Fort, A. Vulpoi, L. Barbu-Tudoran, M. Baia, L.C. Cotet, L. Baia, Ultrasensitive Electroanalytical Detection of Pb ²⁺ and H ₂ O ₂ Using Bi and Fe—Based Nanoparticles Embedded into Porous Carbon Xerogel — The Influence of Nanocomposite Pyrolysis Temperatures. <i>Gels</i> , 9 (2023) 868. https://doi.org/10.3390/gels9110868	C	Q1	5
6.	A. Belcovici, C.I. Fort, L.E. Mureşan, I. Perhaiţa, G. Borodi, G.L. Turdean, Zinc oxide nanostructured platform for electrochemical detection of heavy metals, <i>Electroanalysis</i> , 35 (2023) e202200395, https://doi.org/10.1002/elan.202200395		Q2	2.7
7.	M.M Rusu, A. Vulpoi, I. Maurin, L.C Cotet, L.C Pop, C.I Fort, M. Baia, L. Baia, I. Florea, Thermal Evolution of C–Fe–Bi Nanocomposite System: From Nanoparticle Formation to Heterogeneous Graphitization Stage, <i>Microscopy and Microanalysis</i> , 28 (2022) 317–329. https://doi.org/10.1017/S1431927622000241		Q1	2.9
8.	R. Barabás, C.I. Fort, G.L. Turdean, L. Bizo, Influence of HAP on the morpho-structural properties and corrosion resistance of zro ₂ -based composites for biomedical applications, <i>Crystals</i> 11 (2021) 1–16 202 https://doi.org/10.3390/cryst11020202		Q2	2.4
9.	T.T. Hien Ngo, I.C. Fort, T.H. Pham, G.L. Turdean, Ordered Mesoporous Silica Incorporating Platinum Nanoparticles as Electrode Material for Paracetamol Detection, <i>Electroanalysis</i> , 33 (2021) 323–335. https://doi.org/10.1002/elan.202060131		Q2	2.7
10.	C.I. Fort, M.M. Rusu, L.C. Cotet, A. Vulpoi, I. Florea, S. Tuseau-Nenez, M. Baia, M. Baibarac, L. Baia, Carbon Xerogel Nanostructures with Integrated Bi and Fe Components for Hydrogen Peroxide and Heavy Metal Detection, <i>Molecules</i> (Basel, Switzerland) 26(1) (2020) 117. https://doi.org/10.3390/molecules26010117	P	Q2	4.2
11.	M. Scarisoreanu, A. Ilie, E. Goncarencu, A. Banici, I. Morjan, E. Dutu, E. Tanasa, Cl. Fort, M. Stan, C. Mihailescu, C. Fleaca, Ag, Au and Pt decorated TiO ₂ biocompatible nanospheres for UV & vis photocatalytic water treatment, <i>Applied Surface Science</i> 509 (2020) 145217. https://doi.org/10.1016/j.apsusc.2019.145217		Q1	6.3
12.	M. Scarisoreanu, C. Fleaca, I. Morjan, A.-M. Niculescu, C. Luculescu, E. Dutu, A. Ilie, I. Morjan, L.G. Florescu, E. Vasile, C.I. Fort, High photoactive TiO ₂ /SnO ₂ nanocomposites prepared by laser pyrolysis, <i>Applied Surface Science</i> 418(2017)491-498. https://doi.org/10.1016/j.apsusc.2016.12.122		Q1	6.3
13.	M.M. Rusu, R.A. Wahyuono, C.I. Fort, A Dellith, J. Dellith, A. Ignaszak, A. Vulpoi, V. Danciu, B. Dietzek, L. Baia, Impact of drying procedure on the morphology and structure of TiO ₂ xerogels and the performance of dye sensitized solar cells, <i>Journal of Sol-Gel Science and Technology</i> 81(3)(2017)693-703. https://doi.org/10.1007/s10971-016-4237-3	C	Q2	2.3
14.	C.I. Fort, L.C. Cotet, F. Vasiliu, P. Marginean, V. Danciu, I.C. Popescu, Methanol oxidation at carbon paste electrodes modified with (Pt-Ru)/carbon aerogels nanocomposites, <i>Materials Chemistry and Physics</i> , 172(2016)179-188. https://doi.org/10.1016/j.matchemphys.2016.01.061	P,C	Q2	4.3
15.	D. Bamba, M. Coulibaly, C.I. Fort, C.L. Cotet, Z. Pap, K. Vajda, E.G. Zoro, N.A. Yao, V. Danciu, D. Robert, Synthesis and characterization of TiO ₂ /C nanomaterials: Applications in water treatment, <i>Physica Status Solidi (B)</i> 252(11)(2015)2503-2511. https://doi.org/10.1002/pssb.201552219	C	Q3	1.5
16.	C.I. Fort, Zs. Pap, E. Indrea, L. Baia, V. Danciu, M. Popa, Pt/N–TiO ₂ Aerogel Composites Used for Hydrogen Production Via Photocatalysis Process, <i>Catalysis Letters</i> , 144 (2014)1955-1961, https://doi.org/10.1007/s10562-014-1353-y	P,C	Q3	2.3
17.	L.C. Cotet, K. Briceño, C.I. Fort, V. Danciu, R. Garcia-Valls, D. Montané, Preparation, characterization and gas permeation investigation of resorcinol-formaldehyde polymer or carbon xerogels/tubular ceramic composites, <i>Acta Chimica Slovenica</i> ; 60(2)(2013)343-50		Q3	1.2

18.	C.I. Fort, L.C. Cotet, V. Danciu, G. Turdean, I. C. Popescu, Iron doped carbon aerogel - New electrode material for electrocatalytic reduction of H ₂ O ₂ , <i>Materials Chemistry And Physics</i> , 138 (2013) 893-898. https://doi.org/10.1016/J.MATCHEMPHYS.2012.12.079		Q2	4.3
19.	L.C. Cotet, C.I. Fort, V. Danciu, A. Maicaneanu, Alpha-Cypermethrin Pesticide Adsorption on Carbon Aerogel and Aerogel, <i>Separation Science and Technology</i> , 48(2013)2649-2658, https://doi.org/10.1080/01496395.2013.805782		Q3	2.4
20.	I.C. Ladiu, I.C. Popescu, Lo Gorton, NADH Electrocatalytic Oxidation at Carbon Paste modified Electrodes with Meldola Blue Adsorbed on Zirconium Phosphate, <i>J. Solid State Electrochem.</i> , 9 (2005) 296-303. https://doi.org/10.1007/S10008-004-0618-6	P	Q3	2.6
21.	Hien Ngo, T.T., Fort, I.C., Pham, T.H., Turdean, G.L., Paracetamol detection at a graphite paste modified electrode based on platinum nanoparticles immobilised on Al-SBA-15 composite material, <i>STUDIA UBB CHEMIA</i> , 65 (2020), 27-38. https://doi.org/10.24193/subbchem.2020.1.03			0.5
22.	L. Stingsescu, C. Cadar, L.C. Cotet, L. Baia, K. Saszetd, K. Magyarid, A.G. Mihis, C.I Fort, M. Stroea, E. Matei, A. Nila, I. Anghel, M. Baiac, M. Baibarac, V. Danciu, Morphological and structural investigation of the poly(vinylchloride)/graphene oxide composites, <i>STUDIA UBB CHEMIA</i> , 65(3) (2020), 245-258. https://doi.org/10.24193/subbchem.2020.3.19			0.5
23.	I. C. Fort, G. L Turdean, R. Barabás, D. Popa, A. Ispas, M. Constantiniuc, Study of the hydrogen peroxide based whitening gel on the corrosion of dental metallic alloys, <i>Studia Universitatis Babes-Bolyai Chemia</i> 2019, 64(1):125-133. https://doi.org/10.24193/subbchem.2019.1.10	P		0.5
24.	Fort, C.I., Coteș, L.C., Turdean, G.L., Danciu, V., Meldola blue immobilised on mesoporous carbon aerogel - New electrode material for NADH electrocatalytic oxidation, <i>Studia Universitatis Babes-Bolyai Chemia</i> 60(3)(2015)215-224.	P,C		0.5
25.	Silai, I.E., Fort, I.C., Casoni, D., Turdean, G.L., Epinephrine detection at Pt-nanoparticles modified graphite electrode by square-wave voltammetry, <i>Revue Roumaine de Chimie</i> 60(7-8)(2015)689-696			0.4
26.	I.C. Fort, I.E. Silai, D. Casoni, G.L. Turdean, Electrochemical study of isoprenaline and epinephrine at platinum-nanoparticles-chitosan modified graphite electrode, <i>Studia Universitatis Babes-Bolyai Chemia</i> 01/2013; 4(58):193	P		0.5
27.	L.C Cotet, C. I. Fort, V. Danciu, Influence Of Tubular TiO ₂ -ZrO ₂ Ceramic Support On The Morpho-Structural Properties Of The Undoped And Cu Doped Carbon Xerogels., <i>Studia Ubb Chemia</i> , 3(2012) 73-80			0.5
28.	C.I. Fort, I.C. Popescu, NADH oxidation at Meldola Blue modified glassy carbon electrodes. A comparative study, <i>Studia UBB CHEMIA</i> , 56(2011) 255-264	P,C		0.5
29.	D. Georgescu, Zs. Pap, M. Baia, C.I. Fort, V. Danciu, G. Melinte, L. Baia, S. Simon, Photocatalytic activity of highly porous TiO ₂ -AG materials, <i>Studia Universitatis Babes-Bolya Chemia</i> , 56 (2011) 51-58.			0.5
30.	C.I. Ladiu, R. Garcia, I.C. Popescu, L. Gorton, NADH Electrocatalytic Oxidation at Glassy Carbon Paste Electrodes Modified with Meldola Blue Adsorbed on acidic alpha-Titanium Phosphate, <i>Revista de chimie</i> , 58(2007)465-469	P		
31.	C.I. Ladiu, R. Garcia, I.C. Popescu, L. Gorton, NADH Electrocatalytic Oxidation at Glassy Carbon Paste Electrodes Modified with Meldola Blue Adsorbed on acidic alpha-Zirconium Phosphate, <i>Rev. Roum. Chim.</i> , 52(2007)67-74	P		0.4
32.	I.C. Ladiu, V. Danciu, V. Cosoveanu, A. Rustoiu-Csavdari, P. Lianos, Photodegradation of Basic Blue 45 Dye on Undoped and doped TiO ₂ Films, <i>Rev. Roum. Chim.</i> 47(12) (2002) 1247-1253	P,C		0.4
33.	I.C. Ladiu, V. Danciu, V. Cosoveanu, P. Lianos, Pure and doped mesoporous TiO ₂ films made from reverse micelles and their use for the photocatalytic degradation of adsorbed Basic Blue dye <i>Studia Universitatis Babes-Bolya Chemia</i> , 46, 1(2), (2001) 233 – 246	P		0.5

Unde AP – autor principal; P – prim autor, C – autor de corespondenta, Q si IF - indicati de WoS in august 2024.

Scientific papers - journals from international data base:

1. C. Cadar, **C.I. Fort**, A. Mihis, Zs. Kedves, K. Magyari, L. Baia, M. Baia, M. C. Dulescu, I. Olteanu, L.C. Cotet, V. Danciu, APTES functionalized graphene oxide for silane-based consolidation treatments to increase mortar performances, *Journal of Nanoscience and Nanotechnology*, 21(2021) 2351-2359. <https://doi.org/10.1166/jnn.2020.18958> (IF 1.13)
 2. **C.I. Fort**, Mihai M. Rusu, Lucian C. Pop, Liviu C. Cotet, Adriana Vulpoi, Monica Baia, Lucian Baia, Preparation and characterization of carbon xerogel based composites for electrochemical sensing and photocatalytic degradation, *Journal of Nanoscience and Nanotechnology*, 21 (2021) 2323-2333. <https://doi.org/10.1166/jnn.2021.18963> (IF 1.13)
 3. M Rusu, G Kovács, C Cotet, **I Fort**, A Vulpoi, L Baia, Zs Pap, V Danciu, N-TiO₂-Ag Based Porous Structures: Photocatalytic, Morphological and Structural Properties, *J. Surf. Interf. Mater.*4 (2014) 305
 4. **C.I. Ladiu**, I.C. Popescu, R. Garcia, L. Gorton, Electrochemical Oxidation of NADH at Glassy Carbon Paste Electrodes Modified with Meldola Blue Adsorbed on amorphous and crystalline Zirconium Phosphate, *Chem. Bull. Politehnica (Univ. Timisoara)*, 49(2005)51.
 5. E.Grünwald, V. Danciu, V. Cosoveanu, **C.I. Ladiu**, Vergleichende Untersuchungen über cyanidfreie Zinkelektrolyte mit Natrium-bzw. Kaliumhydroxid. II. Eigenschaften der Electrolyte *Galvanotechnik*, 92(3)(2001) 651-657 (EID:2-s2.0-0035274466)
 6. Grünwald E., Jumatate N., Danciu V., Cosoveanu V., **Ladiu I.C.**, Natrium- és káliumhidroxid tartalmú lúgos, cianidmentes horgonyfürdők összehasonlító vizsgálata III. Horgonybevonatok tulajdonságai, *Korroziós Figyelo*, 41(1)(2001)11-17 (EID:2-s2.0-0035049563)
 7. V. Danciu, V. Cosoveanu, E. Grünwald, **I.C. Ladiu**, "The Regal AZ -type additives influence on zinc electrodeposition from weak-acid electrolyte" *U.P.B. Sci. Bull., Series B*, 63(3) (2001) 83-92(EID:2-s2.0-0035736166)
 8. V. Danciu, V. Cosoveanu, E. Grünwald, V. Andronic, M. Dronca, **I.C. Ladiu** "Influenta aditivilor de tip AZ-Regal asupra electrodepunerii zincului din electrolit pe baza de ZnCl₂" *Buletinul Științific (Univ. de Nord, Baia-Mare), seria B, Chimie-Biologie*, XIV, (2001) 26-33
 9. V. Danciu, V. Cosoveanu, **C.I. Ladiu**, E. Grünwald, Vergleichende Untersuchungen über cyanidfreie Zinkelektrolyte mit Natrium-bzw. Kaliumhydroxid. I. Allgemeine Beobachtungen *Galvanotechnik* 91(12)(2000)3364-3373 (EID:2-s2.0-0000431162)
 10. V. Danciu, V. Cosoveanu, **I.C. Ladiu**, E. Grünwald, Natrium es kalium hidroxid tartalmu lúgos, cianidmentes horgonyfürdők összehasonlító vizsgálata. I. Általános megfigyelések, *Korroziós Figyelo*, 40(5)(2000)167-174 (Comparative testing of cyanide-free electrolytes containing sodium and potassium hydroxide as well as zinc salt. I. General observations)(EID:2-s2.0-0033757445)
 11. V. Danciu, V. Cosoveanu, E. Barabas, **I.C. Ladiu**, Influence of ultrasounds in electrochemical processes, *Studia Universitatis Babeș-Bolyai Chemia*, 44(1)(1999) 225-234
- f) Publicatii in extenso, aparute in lucrari ale principalelor conferinte internationale de specialitate:
1. L.C. Cotet, **C.I. Fort**, V. Danciu, A. Maicananu, Cu and Cd Adsorption on Carbon Aerogel and Aerogel, *Proceedings of the 16th International Conference on Heavy Metals*

in the Environment, Roma, Italy 2012, Volume: 1 Published: 2013,
<http://doi.org/10.1051/e3sconf/20130125007>

2. A. Nicoara, V. Cosoveanu, **I.C. Ladiu**, L. Baia, M. Baia, L. Muresan, I. Stamatina, V. Danciu, *Zirconia Aerogel - Polymetalate Composites Synthesis with Applications in Solid Oxide/Acid Fuel Cells*, Clean Technology **2008**, Proceedings [Chapter 5: Fuel Cell & Hydrogen Technologies](#), Pages:298 - 301
3. **C.I. Ladiu**, I.C. Popescu, R. Garcia, Lo Gorton, *Electrocatalytic oxidation of NADH at glassy carbon paste electrodes modified with Meldola Blue adsorbed on crystalline zirconium and titanium phosphate*, Proc. of the Roumanian International Conference on Chemistry and Chemical Engineering XIV, Bucharest, 22-24 Sept. **2005**, Secțiunea 10, p. 11-18

g) Alte lucrari si contributii stiintifice

Peste 60 participari la conferinte nationale si internationale (prezentari orale sau poster)

Data

Dr. Carmen Ioana Fort

5.12.2024