

Universitatea Națională de Știință și Tehnologie POLITEHNICA București

Facultatea: Inginerie Chimică și Biotehnologii

Departamentul: Chimie Anorganică, Chimie Fizică și Electrochimie

Nume Prenume: MAIOR Ioana

Gradul didactic: Conferențiar dr. ing.

L I S T A

lucrărilor științifice în domeniul disciplinelor din postul didactic

A. Teza de doctorat

A1. I. Maior, *Sinteza unor substanțe superficial active cu proprietăți multiple pe bază de alcooli superiori etoxilați*, teză de doctorat, Domeniul Inginerie Chimică, conducător științific prof. dr. ing. Victor Părăușanu, Universitatea Politehnica București, Facultatea de Chimie Industrială, București, **2001**.

B. Cărți și capitole în cărți publicate în ultimii 10 ani

B1. D.I. Văireanu, A. Cojocaru, **I. Maior**, I.A. Ciobotaru, *Food Packaging Interactions in Metal Cans*, capitol în "Reference Module in Food Science", **2018**, Elsevier Publishing House, 17 pagini, <https://doi.org/10.1016/B978-0-08-100596-5.22398-6>

B2. A. Cojocaru, **I. Maior**, S. Căprărescu, I.A. Ciobotaru, D.I. Văireanu, *Electrochimia aplicată în Ingineria Economică*, Ed. Electra, București, **2015**, 280 pagini, ISBN: 978-606-507-081-3;

B3. V. Feroiu, A.M. Joșceanu, O. Iulian, A.V. Crișciu, A. Cotârță, A. Cojocaru, **I. Maior**, *Inovare în predarea și învățarea chimiei*, vol. 3 *Chimie fizică și electrochimie*, curs pentru programele „Privim către viitor – e-Chimie, Basic IT skills, TIC Chimie”, Ed. Politehnica Press, București, **2012**, ISBN 978-606-515-406-3;

C. Lucrări indexate ISI/BDI publicate în ultimii 10 ani

C1. Ilie, Marius Ciprian, Chis, Timur Vasile, **Maior, Ioana**, Raducanu, Cristian Eugen, Deleanu, Iuliana Mihaela, Dobre, Tanase, Parvulescu, Oana Cristina, *Experimental Investigation and Modeling: Considerations of Simultaneous Surface Steel Droplets' Evaporation and Corrosion*, Metals, **2023**, Volume 13, Issue 10, Article Number 1733, DOI 10.3390/met13101733, WOS:001090032200001, eISSN 2075-4701, IF 2,9

C2. Badea, G.E.; Fodor, A.; Petrehele, A.I.G.; **Maior, I.**; Toderaș, M.; Morgovan, C.M., *Evaluation of Phosphopolyoxometalates with Mixed Addenda (Mo, W, V) as Corrosion Inhibitors for Steels*, Materials, **2023**, 16 (24), 7600, <https://doi.org/10.3390/ma16247600>, WOS:001131124200001, eISSN 1996-1944, IF 3,4

C3. K. Maou, A. Belloufi, M. Abdelkrim, **I. Maior**, C. G. Opran, *Mathematical Model for the Assessment of the Effect of Fiber Content on the Mechanical Properties of Phenolic Composite Reinforced Date Palm Fiber*, Macromolecular Symposia, **2023**, 411 (1), 2200192, ISSN 1022-1360, <https://doi.org/10.1002/masy.202200192>, WOS:001085222500001, IF 0,915

C4. Ilie, M.C.; **Maior, I.**; Raducanu, C.E.; Deleanu, I.M.; Dobre, T.; Parvulescu, O.C., *Experimental Investigation and Modeling of Film Flow Corrosion*, Metals, 13 (8), **2023**, 1425, ISSN 2075-4701, <https://doi.org/10.3390/met13081425>, WOS:001055983400001, IF 2,9, **Q1/Q2**

C5. Nicoara, A.I.; Voineagu, T.G.; Alecu, A.E.; Vasile, B.S.; **Maior, I.**; Cojocaru, A.; Trușcă, R.; Popescu, R.C., *Fabrication and Characterisation of Calcium Sulphate Hemihydrate Enhanced with Zn- or B-Doped Hydroxyapatite Nanoparticles for Hard Tissue Restoration*, Nanomaterials, 13 (15), **2023**, pp. 2219, eISSN 2079-4991, <https://doi.org/10.3390/nano13152219>, WOS

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C6. G.E. Badea, C. Hora, **I. Maior**, A. Cojocaru, C. Secui, S.M. Filip, F.C. Dan, *Sustainable Hydrogen Production from Seawater Electrolysis: Through Fundamental Electrochemical Principles to the Most Recent Development*, *Energies*, 15 (22), pp. 8560, **2022**, ISSN 1996-1073, DOI: 10.3390/en15228560, IF 3,2

C7. **I. Maior**, A. Cojocaru, I. A. Ciobotaru, D. I. Vaireanu, G.E. Badea, *Influence of Deacetylation Degree of Chitosan on the Anticorrosive Properties of Carbon Steel Coatings*, *Macromol. Symp.*, 404 (1), Special Issue: SI, Article Number: 2100435, **2022**, ISSN 1022-1360, DOI: 10.1002/masy.202100435, WOS: 000842344000073, IF 0,915

C8. A. Cojocaru, **I. Maior**, I. A. Ciobotaru, D. I. Vaireanu, *The Influence of Chitosan Biopolymer on Aluminum Corrosion Resistance in Chloride Ions Environment*, *Macromol. Symp.*, 396 (1), Special Issue: SI, Article Number: 2000317, **2021**, ISSN 1022-1360, DOI: 10.1002/masy.202000317, WOS: 000641766900002, IF 0,915

C9. I-M. Nicola, D.-I. Văireanu, C.A. Daneş, L. Zaharia, D.V. Budei, **I. Maior**, *Comparative Studies Regarding Cyanide And Sulphite Electrolytes For Brush Electroplating Of Gold Thin Films*, *U.P.B. Sci. Bull., Series B*, 82 (1), **2020**, ISSN 1454-2331, pp. 3-14, IF 0,5

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C11. Albu A.M., **Maior I.**, Popa M.S., *Comparative Studies Regarding the Synthesis and Characterization of Cellulose Based-Polymer Assemblies for Fuel Cell Applications*, *Materials Science Forum*, vol. 957, **2019**, pp. 475-482, DOI: //doi.org/10.4028/www.scientific.net/MSF.957.475

C12. I.M. Nafliu, H.N.A. Al Ani, A.R. Grosu, S.K. Tanczos, **I. Maior**, A.C. Nechifor, *Ionomolecular Separation with Composite Membranes. VII. Nitrophenols Pertraction on Capillary Polypropylene S-EPDM Composite Membranes*, *Rev. Materiale Plastice*, Editura CHIMINFORM DATA S.A., 55 (4), pp. 511-516, **2018**, ISSN 0025-5289, IF 0,8

C13. **I. Maior**, A. Cojocaru, G.E. Badea, I.M. Nicola, I.A. Ciobotaru, A.E. Alecu, *Anticorrosion Protective Coatings by Adsorbed Natural Extract Inhibitor for Mild Steel Corrosion in Neutral Solutions*, *Analele Universităţii din Oradea – Fascicula Chimie*, vol. XXV (25), **2018**, pp. 23–28

C14. I.A. Ciobotaru, O.C. Ciobotea Barbu, A. Cojocaru, **I. Maior**, F.M. Benga, D.I. Văireanu, *Electrochemical Studies on Reinforced BTSE Coatings Deposited on Anodized Aluminium*, *Bulletin of Romanian Chemical Engineering Society*, 5 (1), **2018**, ISSN 2360-4697, pp. 75–82

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C19. I. Hulka, V.A. Şerban, D. Uţu, N.M. Duţeanu, A. Pascu, I. Roată, **I. Maior**, *Wear Resistance of Laser Cladding NiCrBSi Composite Coatings*, *Rom. J. Mat.*, 46 (1), pp. 424–429, **2016**; WOS: 000372938400007; IF 0,612; ISSN 1583-3186;

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C22. **I. Maior**, A.M. Albu, R. Gabor, *New Polymer Assembles with Potential Use as Solid Electrolytes Type Membranes*, Appl. Mechanics and Mat., 760 „Advanced Technologies in Designing and Progressive Development of Manufacturing Systems”, pp. 245 – 250, **2015**; revistă indexată în BDI: Index Copernicus Journals Master List, Google Scholar, Chemical Abstracts (CAS), Cambridge Scientific Abstracts (CSA), Inspec (IET, Institution of Engineering Technology), SCImago Journal & Country Rank (SJR); ISBN 978-3-03835-443-7

C23. S. Căprărescu, V. Purcar, A. Sârbu, A.L. Radu, M. Ghiurea, **I. Maior**, *The Use of Electrodialysis for Cu²⁺ Removal From Wastewater*, Rev. Roum. Chim., 59 (8), pp. 639-644, **2014**; WOS: 000352336500002; IF 0,250; ISSN 0035-3930;

C24. R. Cătrănescu, I. Bobîrnac, M. Crişan, A. Cojocaru, **I. Maior**, *Studies Regarding Electrochemical Polymerization of Aniline in Ionic Liquid and Polymer Properties*, U.P.B. Sci. Bull., series B: Chemistry and Materials Science, 74 (1), pp. 49-58, **2012**; revista indexată ISI şi Scopus; IF 0; ISSN 1454-2331;

D. Lucrări publicate în ultimii 10 anii în reviste şi volume de conferinţe cu referenţi (neindexate)

- Selecţie cu maximum 20 lucrări în volume de conferinţe

D1. **I. Maior**, I.M. Nicola, A. Cojocaru, A.I. Nicoară, I.A. Ciobotaru, D.I. Văireanu, *Electrochemical Studies of Gold Electroplating on Nickel Intermediate Layer from Different Electrolytes*, 22nd Romanian International Conference on Chemistry and Chemical Engineering RICCCE 2022, 7 – 9 September **2022**, Sinaia, Romania; S3 – ID 129

D2. Cojocaru, A., **Maior, I.**, Badea, G.E, *Corrosion inhibition properties of Citrus aurantium essential oil for aluminium in neutral media*, “1st International Advances in Food Chemistry Conference (AdFoodChem 2021), 15-17 aprilie **2021**, Bucureşti, România, Book of Abstracts, vol. 1, PP 27, pp. 114-115

D3. **Maior, I.**, Cojocaru, A., Ciobotaru, I.A., Badea, G.E., Fodor, A., *Effect of Additives on the Corrosion Inhibition of Steel by Chitosan Coatings in Food Packaging Applications*, “1st International Advances in Food Chemistry Conference (AdFoodChem 2021), 15-17 aprilie **2021**, Bucureşti, România, Book of Abstracts, vol. 1, PP 34, pp. 128-129

D4. **I. Maior**, I.M. Nicola, I.A. Ciobotaru, A. Cojocaru, O.C. Pârvulescu, *The Influence of the Operating Parameters on the Applications of the Titanium Passivation Process by Anodizing*, International Chemical Engineering and Material Symposium, SICHEM 2020, 17-18 September **2020**, Book of Abstracts, vol. 1, ISSN 2537-2254, pp. 95-96

D5. **Maior, I.**, Cican, D.P., Todaşcă, M.C., *Preliminary studies for antioxidants evaluation from wine by electrochemical methods*, 9th International Conference of the Chemical Societies of the South-East European Countries «Chemistry a Nature Challenger» (ICOSECS 9), 8-11 mai **2019**, Târgovişte, România, Book of Abstracts, vol. 1, S4_P_14

D6. **I. Maior**, A. Cojocaru, D.I. Văireanu, I.A. Ciobotaru, O.C. Pârvulescu, *Green Corrosion Inhibitor for Mild Steel in Neutral and Acid Solutions*, International Symposium of Chemical Engineering and Materials SICHEM 2018, University Politehnica of Bucharest, Romania, 6 –7 September **2018**, Book of Abstract, ISSN 2537-2254, pg. 130

D7. C. Boscornea, **I. Maior**, A. Cojocaru, A.M. Brezoiu, A. Ivanciu, A. Lascu, *Epoxy Anticorrosive Systems Based on Metal Phthalocyanines*, International Symposium of Chemical

Engineering and Materials SICHEM 2018, University Politehnica of Bucharest, Romania, 6 –7 September **2018**, Book of Abstract, ISSN 2537-2254, pg. 97

D8. I. Maior, A.M. Albu, M.S. Popa, *Comparative Studies Regarding The Synthesis And Characterization Of Cellulose Based-Polymer Assemblies For Fuel Cell Applications*, International Conference of Technology for Polymeric and Composites Products POLCOM 2018, Bucharest, Romania, 1–2 November **2018**, Book of Abstracts, pp. 42–43

D9. I. Maior, A. Cojocaru, D.-I. Văireanu, I.-A. Ciobotaru, *Juglans Regia Extract as Green Corrosion Inhibitor For Mild Steel*, 20th Romanian International Conference on Chemistry and Chemical Engineering RICCCCE 2017, 6 – 9 September **2017**, Poiana Brasov, Romania; S3 – 234

D10. A. Cojocaru, **I. Maior**, G.E. Badea, I.A. Ciobotaru, S. Căprărescu, D.I. Văireanu, *Comparative Evaluation of Natural and Commercial Scale Inhibitors*, 19th Romanian International Conference on Chemistry and Chemical Engineering (RICCCCE), 2-5 septembrie **2015**, Sibiu, Romania;

D11. O.M. Fronoiu, **I. Maior**, I.A. Ciobotaru, H. Iovu, D.I. Văireanu, S. Căprărescu, *A Study on Epoxy-Silane-Nanoparticles Hybrid Coatings. Evaluation of the Corrosion Protection Properties*, 19th Romanian International Conference on Chemistry and Chemical Engineering (RICCCCE), 2-5 septembrie **2015**, Sibiu, Romania;

D12. T. Căpraru, V. Silaghi, C. Borovină, **I. Maior**, *Electrochemical Studies on Cobalt (II)-Phthalocyanine Modified Carbon Electrode*, 11th International Conference "Students for Students", 9-11 aprilie, **2014**, Cluj-Napoca, Romania, Book of Abstracts pp. 102-103;

D13. O. Fronoiu, **I. Maior**, C. Andronescu, S. Stoleriu, *Nanoparticles Influence on the Corrosion Protection Properties of Sol-gel Silane Based Coatings on Mild Steel*, European Chemistry Congress – 5th EuCheMS, August 31 – September 4, **2014**, Istanbul, Turkey, Book of Abstracts pp. 158;

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D15. O. Fronoiu, **I. Maior**, G. Negru, S. Căprărescu, V. Purcar, *Electrochemical Characterization and Anti-Corrosion Properties of Sol–Gel Silane-Based Coatings on Mild Steel*, 18th Romanian International Conference on Chemistry and Chemical Engineering, September 4-7, **2013**, Sinaia, Romania;

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D19. E.G. Nanu, P.C. Solomon, M. Tudoran, **I. Maior**, *Electrochemical Studies on Corrosion Behaviour of Dental Alloys under Simulated Physiological Conditions*, Third Regional Symposium on Electrochemistry: South-Eastern Europe, Satellite Student Regional Symposium on Electrochemistry, Bucharest, Romania, May 13 – 17, **2012**, SS-O-08, Book of Abstracts p. 131;

D20. I. Maior, A. Cojocaru, D.I. Văireanu, S. Căprărescu, *Electrochemical Characterization of Several Natural Extracts With Inhibition Properties of Mineral Scales on Copper*, Third Regional Symposium on Electrochemistry: South-Eastern Europe, Bucharest, Romania, May 13 – 17, **2012**, Section: Environmental Electrochemistry EEH-P-05, Book of Abstracts p. 55;

E. Brevete obținute în întreaga activitate

E1. I. Lingvay, L.C. Pîrvu, D.I. Văireanu, C. Lingvay, S. Niță, A. Cojocaru, S. Colceru Mihul, **I. Maior**, *Inhibitor ecologic destinat controlului simultan al coroziunii și al depunerilor de crustă și procedeu de obținere*, cerere de brevet RO128386-A2, **2011**, Derwent Primary Accession Number: 2013-K50630 [39];

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