

LISTA DE LUCRARI

Prof. dr. ing. Alina Catrinel ION

a. Lista lucrarilor prevazute la art.12 alin. (1) lit.(h), considerate de candidat a fi cele mai relevante pentru realizarile profesionale obtinute ulterior conferirii titlului de doctor in stiinta, care sunt incluse in format electronic in dosar si care se pot regasi si in celelalte categorii de lucrari prevazute de prezentul articol;

A1. I. Ion, **A.C. Ion**, Differential pulse voltammetric analysis of lead in vegetables using a surface amino-functionalized exfoliated graphite nanoplatelet chemically modified electrode, *Sensors & Actuators: B. Chemical* 166-167 (2012) , 842-847, Elsevier, ISSN 0925-4005, **IF-3,242**.

A2. I. Ion, **A.C. Ion**, Determination of chlorpyrifos in broccoli using a voltammetric acetylcholinesterase sensor based on carbon nanostructure-chitosan composite material, *Materials Science and Engineering C* 32(4) 2012, 1001-1004 Elsevier, ISSN 0928-4931, **IF-1,895**

A3. I. Ion, **A.C. Ion**, A. Culetu, Application of an exfoliated graphite nanoplatelet-modified electrode for the determination of quinoxaline, *Materials Science and Engineering C*, 31, 2011, pp.1553-1557, Elsevier, ISSN 0928-4931, **IF-1,895**

A4. **Alina C. Ion**, Alla Alpatova, I. Ion, Alina Culetu, Study on phenol adsorption from aqueous solutions on exfoliated graphitic nanoplatelet, *Materials Science and Engineering B* 176(7) (2011) 588–585, Elsevier, ISSN 0921-5107, **IF-2,394**.

A5. **A. C. Ion**, I. Ion, A. Culetu, Lead adsorption onto exfoliated graphitic nanoplatelets in aqueous solutions, *Materials Science and Engineering B*, 176(6), 2011, 504-509, Elsevier, ISSN 0921-5107, **IF-2,394**.

A6. **A.C.Ion**, I. Ion, A.Culetu, D. Gherase, C.A.Moldovan, R.Iosub, A.Dinescu, Acetylcholinesterase voltammetric biosensors based on carbon nanostructure

chitosan composite material for organophosphate pesticides, *Materials Science and Engineering C*, 30(6), 2010, pp.817-821, Elsevier, ISSN 0928-4931, **IF-1,895**

A7. **A.C. Ion**, R.Vermeylen, I. Kourtchev, J.Cafmeyer, X.Chi, A.Gelencsér, W.Maenhaut, M.Claeys, Polar organic compounds in rural PM_{2.5} aerosols from K-pusztá, Hungary, during a 2003 summer field campaign: Sources and diel variations, *Atmospheric Chemistry and Physics*, 5 (7), 2005, pp. 1805-1814, Elsevier, ISSN: 1680-7316, **IF-5,416**.

A8. M.Claeys, W.Wang, **A.C. Ion**, I. Kourtchev, A.Gelencsér, W.Maenhaut, Formation of secondary organic aerosols from isoprene and its gas-phase oxidation products through reaction with hydrogen peroxide, *Atmospheric Environment*, 38 (25), 2004, pp. 4093-4098, Elsevier, **ISSN: 1352-2310, IF- 3,584**

A9. M. Claeys, W. Wang, **A.C. Ion**, R. Vermeylen, I. Kourtchev, J.Cafmeyer and W. Maenhaut” Characterization of isoprene oxidation products in rural continental aerosols”, *International Conference on carbonaceous particles in the atmosphere, Journal of Aerosol Science (Special Issue EAC 2004)*, vol. 35(S1), 2004, pp.153-155, Elsevier, ISSN: 0021-8502, **IF- 2.983**

A10. **A.C. Ion**, E.Bakker, E. Pretsch, Potentiometric Cd²⁺ - selective electrode with a detection limit in the low ppt range, (2001) *Analytica Chimica Acta*, 440 (2), 2001, pp. 71-79, Elsevier, ISSN 0003-2670, **IF-3,521**; **A.C.Ion**, E. Bakker, E.Pretsch, Erratum: Potentiometric Cd²⁺-selective electrode with a detection limit in the low ppt range (*Analytica Chimica Acta* 440 (2001) (71-79) PII: S0003267001010522) (2002) *Analytica Chimica Acta*, 452 (2), p. 329, Elsevier, ISSN 0003-2670, **IF-3,521**.

A11. M.M.G.Antonisse, B.H.M.Snellink-Ruël, **Alina C. Ion**, J.F.J.Engbersen, D.N.Reinhoudt, Synthesis of novel uranyl salophene derivatives and evaluation as sensing molecules in chemically modified field effect transistors(CHEMFETs) (1999) *Journal of the Chemical Society. Perkin Transactions 2*, (6), 1999, pp. 1211-1218, RSC, ISSN 1364-5471, **IF—1,911**.

A12. A.C.Ion, J.-C.Moutet, A.Pailleret, A.Popescu, E.Saint-Aman, E.Siebert, E.M. Ungureanu, Electrochemical recognition of metal cations by poly (crown ether ferrocene) films investigated by cyclic voltammetry and electrochemical

impedance spectroscopy, Journal of Electroanalytical Chemistry, 464 (1)1999, 24-30, Elsevier, ISSN 1572-6657, **IF-2,530**.

A13. **A. Ion**, I.Ion, A.Popescu, M.Ungureanu, J.-C.Moutet, E.Saint-Aman, A ferrocene crown ether-functionalized polypyrrole film electrode for the electrochemical recognition of barium and calcium cations, Advanced Materials, 9 (9), 1997, pp. 711-713, Wiley-VCH, ISSN 0935-9648, **IF-8,379**.

b. Teza sau tezele de doctorat

A.C. Ion, Compusi macrociclici. Aplicatii analitice, U.P.B. 1996, conducător stiintific prof. dr. doc. Constantin Luca

c. Brevete de inventie si alte titluri de proprietate industrială

-

d. Carti si capitole in carti

D1. **A.C. Ion**, I. Ion, A. Culetu, « Carbon-based nanomaterials. Environmental applications », in serie in Micro and Nanoengineering, vol. 19, « Nanomaterials and nanostructures for various applications », Eds. Gh. Brezeanu, H. Iovu, C. Cobianu, D. Dascalu, Ed. Academiei Romane, Bucuresti 2012, p. 31-57, ISBN 978-973-27-2169-8

D2. **A. C. Ion**, I. Ion, A. Culetu, “Detection and analysis of natural nanoparticles as environmental nanovectors for contaminants in soils”, in Series in Micro and Nanoengineering, vol. 16, “Nanostructuring and nanocharacterization”, Eds. M. Zaharescu, M. Ciurea, I. Kleps, D. Dascalu, Ed. Academiei Romane, Bucuresti, **2010**, p. 37-62, ISBN 978-973-27-1905-3.

D3. D.T. Long, T. C. Voice, **A. C. Ion**, V.C. Lavric, C.P. Bobirica, “Fundamentals environmental chemistry and engineering. Transformation and fate of

contaminants in natural and engineering systems”, “Nanomaterials in the environment: environmental properties” p. 219-239, Bucharest **2010** edition

D4. **A. C. Ion**, I. Ion, A. Ficai, D. N. Stefan, “Environmental analytical chemistry. Applications of nanosensors Chemically modified electrode for NO₂⁻ determination in environmental application”, Series in Micro and Nanoengineering, vol. 11, “Progress in nanoscience and nanotechnologies”, Eds. I. Kleps, A.C. Ion, D. Dascalu, Ed. Academiei Romane, Bucuresti, **2007**, p. 231-239, ISBN 978-973-27-1576-5

D5. I. Ion, **A.C. Ion**, D.N. Stefan, “Analiza instrumentala. Aplicatii”, Editura Printech **2007**, ISBN 978-973-718-678-2, 166 pagini

D6. I.Ion, **A.C. Ion**, A. Ficai, « Probleme de chimie analitică », Editura Printech **2005**, ISBN 973-718-394-0, 321 pagini

D7. I. Ion, **A.C.Ion**, A.Ficai “*Probleme de chimie analitica*“, Editura Cartea Universitara, Bucuresti, **2003** (320 pp, ISBN 973-7956-11-7).

D8. E.Diacu, **A.C.Ion**,”*Quantitative Chemical Analysis*”, Editura Printech, București **2002**(169 pagini, ISBN 973-652-551-1)

D9. **A.C.Ion**, I.Ion, E.Diacu, “*Metode electrochimice de analiză*,”, Editura Printech **2002** (164 pagini, ISBN 973-652- 570 – 1

D10. C1. I.Ion, **A.C.Ion**, “*Chimie Analitică (Vol.1. Echilibre chimice)*”, Editura Printech București, **1999** (151 pagini, ISBN 973-652-032-3).

D11. **A.C.Ion**, I. Ion, “ *Chimie Analitică și Analiză instrumentală. Metode de separare* “, Editura Printech, București, **1999** (121 pagini, ISBN 973-652-033-1).

e. Articole/studii in extenso publicate in reviste din fluxul stiintific international principal

E.1. I. Ion, **A.C. Ion**, Differential pulse voltammetric analysis of lead in vegetables using a surface amino-functionalized exfoliated graphite nanoplatelet chemically modified electrode, *Sensors & Actuators: B. Chemical* 166-167 (2012) , 842-847, Elsevier, ISSN 0925-4005, **IF-3,242**.

E. 2. I.Ion, **A.C. Ion**, Determination of chlorpyrifos in broccoli using a voltammetric acetylcholinesterase sensor based on carbon nanostructure-chitosan composite material, *Materials Science and Engineering C* 32(4) 2012, 1001-1004 Elsevier, ISSN 0928-4931, **IF-1,895**

E. 3. F. Sirbu, O. Iulian, A.C. Ion, I. Ion, Activity coefficients of electrolytes in the NaCl + Na₂SO₄ + H₂O ternary system from potential difference measurements at (298.15, 303.15 and 308.15) K, *Journal of Chemical & Engineering Data*, 56(12) 2011, pp. 4935-4943, American Chemical Society Publications, ISSN 0021-9568, **IF-2.089**

E.4. I. Ion, **A.C. Ion**, A. Culetu, Application of an exfoliated graphite nanoplatelet-modified electrode for the determination of quinoxaline, *Materials Science and Engineering C*, 31, 2011, pp.1553-1557, Elsevier, ISSN 0928-4931, **IF-1,895**

E. 5. **Alina.C.Ion**, Alla Alpatova, I.Ion, Alina Culetu, Study on phenol adsorption from aqueous solutions on exfoliated graphitic nanoplatelet, *Materials Science and Engineering B* 176(7) (2011) 588–585, Elsevier, ISSN 0921-5107, **IF-2,394**.

E.6. **A.C.Ion**, I.Ion, A.Culetu, Lead adsorption onto exfoliated graphitic nanoplatelets in aqueous solutions, *Materials Science and Engineering B*, 176(6), 2011, pp. 504-509, Elsevier, ISSN 0921-5107, **IF-2,394**.

E 7.. **A.C.Ion**, I. Ion, A.Culetu, D. Gherase, C.A.Moldovan, R.Iosub, A.Dinescu, Acetylcholinesterase voltammetric biosensors based on carbon nanostructure chitosan composite material for organophosphate pesticides, *Materials Science and Engineering C*, 30(6), 2010, pp.817-821, Elsevier, ISSN 0928-4931, **IF-1,895**

E 8. I.Ion, A.Culetu, J.Costa, C.Luca, **A.C.Ion**, Polyvinyl chloride-based membranes of 3,7,11 - tris (2-pyridylmethyl)- 3,7,11,17-tetraazabicyclo [11.3.1]

heptadeca-1(17),13,15-triene as a Pb(II)-selective sensor, *Desalination*, 259(1-3), 2010, p.38-43, Elsevier, ISSN 0011-9164, **IF-2,051**.

E 9. .S.Lupu, I. Ion, **A.C.Ion**, Voltammetric determination of phenol at platinum electrodes modified with polypyrrole doped with ferricyanide , *Revue Roumaine de Chimie*, 54 (5),2009, pp. 351-357, Editura Academiei Române, ISSN 0035-3939, **IF-0,284**.

E.10. **A.C. Ion**, I.Ion, D.N.Stefan, L.Barbu, Possible mercury speciation in urine samples using potentiometric methods, *Materials Science and Engineering C*, 29 (1), 2009,pp. 1-4,Elsevier, ISSN 0928-4931, **IF-1,895**.

E 11. **A.C. Ion**, I.Ion, Observations on some polar organic compounds in rural aerosols, *Revue Roumaine de Chimie*, 53 (2), 2008, pp. 133-139, Editura Academiei Române, ISSN 0035-3939, **IF-0,284**.

E. 12. **A.C.Ion**, I. Ion, L. Barbu, Optimization of preconcentration of cadmium and lead from samples with phosphate matrices using Chelex 100, *Revue Roumaine de Chimie*, 51 (12),2006,pp. 1199-1205, Editura Academiei Române, ISSN 0035-3939, **IF-0,284**.

E.13. **A.C. Ion**, R.Vermeulen, I. Kourtchev, J.Cafmeyer, X.Chi, A.Gelencsér, W.Maenhaut, M.Claeys, Polar organic compounds in rural PM_{2.5} aerosols from K-puszt, Hungary, during a 2003 summer field campaign: Sources and diel variations, *Atmospheric Chemistry and Physics*, 5 (7), 2005, pp. 1805-1814, Elsevier, ISSN: 1680-7316, **IF-5,416**.

E.14. **A.C. Ion**, R.Vermeulen, I. Kourtchev, J.Cafmeyer, X.Chi, A.Gelencsér, W.Maenhaut, M.Claeys, Polar organic compounds in rural PM_{2.5} aerosols from K-puszt, Hungary, during a 2003 summer field campaign: Sources and diel variations, *Atmospheric Chemistry and Physics Discuss.*, 5(2), 2005, pp. 1863-1889, Elsevier, ISSN 1680-7367; eISSN: 1680-7375, IF-5,416

E.15. I.Ion, **A.C.Ion**, L.Barbu, Potentiometric determination of fluoride in groundwaters, *Revue Roumaine de Chimie*, 50 (5), 2005, pp. 407-412, Editura Academiei Române, ISSN 0035-3939, **IF-0,284**.

E.16. I. Ion, **A.C.Ion**, Potentiometric speciation of iron(II) and iron(III) in fertilizers by titration with cobalt(II) chloride (2005) *Revue Roumaine de Chimie*, 50 (4), pp. 263-268, Editura Academiei Române, ISSN 0035-3939, **IF-0,284**.

E.17. I.Ion, **A.C.Ion**, Potentiometric determination of monobasic phosphate (H_2PO_4^-) in mineral waters, *Revue Roumaine de Chimie*, 50 (3), 2005, pp. 219-223, Editura Academiei Române, ISSN 0035-3939, **IF-0,284**.

E.18. M.Claeys, W.Wang, **A.C. Ion**, I. Kourtchev, A.Gelencsér, W.Maenhaut, Formation of secondary organic aerosols from isoprene and its gas-phase oxidation products through reaction with hydrogen peroxide, *Atmospheric Environment*, 38 (25), 2004, pp. 4093-4098, Elsevier, **ISSN: 1352-2310, IF- 3,584**

E.19. M. Claeys, W. Wang, **A.C. Ion**, R. Vermeylen, I. Kourtchev, J.Cafmeyer and W. Maenhaut” *Characterization of isoprene oxidation products in rural continental aerosols*”, International Conference on carbonaceous particles in the atmosphere, *Journal of Aerosol Science* (Special Issue EAC 2004), vol. 35(S1), 2004, pp.153-155, Elsevier, **ISSN: 0021-8502, IF- 2.983**

E.20. **A.C.Ion**, E. Bakker, E.Pretsch, Erratum: Potentiometric Cd^{2+} -selective electrode with a detection limit in the low ppt range (*Analytica Chimica Acta* 440 (2001) (71-79) PII: S0003267001010522) (2002) *Analytica Chimica Acta*, 452 (2), p. 329, Elsevier, **ISSN 0003-2670, IF-3,521**.

E. 21. **A.C. Ion**, I.Ion, M.M.G.Antonisse, B.H.M.Snelink-Rüel, D.N.Reinhoudt, Characteristics of fluoride-selective electrode with uranyl salophen receptors in aqueous solutions, *Russian Journal of General Chemistry*, 71 (2), 2001, pp. 159-161, (translated from *Zhurnal Obshchei Khimii* 71(2) 2001, pp.181-184, UDK 543.053), **ISSN 1070-3632, IF-0,466 (in 2001)**.

E.22. **A.C. Ion**, E.Bakker, E. Pretsch, Potentiometric Cd^{2+} - selective electrode with a detection limit in the low ppt range, (2001) *Analytica Chimica Acta*, 440 (2), 2001, pp. 71-79, Elsevier, **ISSN 0003-2670, IF-3,521**.

E. 23. N. Totir, C.Luca, S.Lupu, C.Lete, **A.C.Ion**, I.Ion, Analytical applications of chemically modified electrodes, *Revue Roumaine de Chimie*, 46 (6),2001, 555-565, Editura Academiei Române, **ISSN 0035-3939, IF-0,284**.

E 24. **A.Ion**, I.Ion, J.-C.Moutet, A.Pailleret, A.Popescu, E.Saint-Aman, E.Ungureanu, E.Siebert, R.Ziessel, Electrochemical recognition of metal cations by redox-active receptors in homogeneous solution and in polymer films: Some relevant examples, *Sensors and Actuators, B: Chemical*, 59 (2), 1999, pp. 118-122, Elsevier, ISSN 0925-4005, **IF-3,242**.

E 25. M.M.G.Antonisse, B.H.M.Snellink-Ruël, **Alina C. Ion**, J.F.J.Engbersen, D.N.Reinhoudt, Synthesis of novel uranyl salophene derivatives and evaluation as sensing molecules in chemically modified field effect transistors(CHEMFETs) (1999) *Journal of the Chemical Society. Perkin Transactions 2*, (6),1999, pp. 1211-1218, RSC, ISSN 1364-5471, **IF—1,911**.

E 26. A.C.Ion, J.-C.Moutet, A.Pailleret, A.Popescu, E.Saint-Aman, E.Siebert, E.M. Ungureanu, Electrochemical recognition of metal cations by poly(crown ether ferrocene) films investigated by cyclic voltammetry and electrochemical impedance spectroscopy, *Journal of Electroanalytical Chemistry*, 464 (1),1999, pp. 24-30, Elsevier, ISSN 1572-6657, **IF-2,530**.

E 27. **A. Ion**, I.Ion, A.Popescu, M.Ungureanu, J.-C.Moutet, E.Saint-Aman, A ferrocene crown ether-functionalized polypyrrole film electrode for the electrochemical recognition of barium and calcium cationsm, *Advanced Materials*, 9 (9), 1997, pp. 711-713, Wiley-VCH, ISSN 0935-9648, **IF-8,379**.

E 28. **A.C.Ion**, I.Ion, C.Luca, Bicarbonate-sensitive liquid membrane electrodes (1997) *Revue Roumaine de Chimie*, 42 (4),1997, pp. 267-270, Editura Academiei Române, ISSN 0035-3939, **IF-0,284**

E 29. **A.C.Ion**, I.Ion, C.Luca, Liquid – Liquid ion exchange membrane electrodes for H_2PO_4^- , *Revue Roumaine de Chimie*, 42 (3), 1997, pp. 251-253, Editura Academiei Române, ISSN 0035-3939, **IF-0,284**

E 30. **A.C.Ion**, I.Ion, L. Barbu, C.Luca, Electrode anion selectiv cu membrană lichidă pentru determinarea anionului Cl^- utilizând ca substanță activă compuși organostanici (1996) *Rev.Chim.(București)*, ISSN 0034-7752, **IF-0,261**.

E 31. A.C.Ion, I.Ion, C. Luca, E. Diacu, Adsorption of lead, silver and cadmium on crown-ethers adsorbents”, *Rev. Roum. Chim.*, 39(8),1994, pp. 921 – 926, Editura Academiei Române, ISSN 0035-3939, **IF-0,284**

E 32. I.Ion, **A.C.Ion**, L.Barbu, “*Metodă spectrofotometrică pentru determinarea cadmiului din roci fosfatice*”, Rev.Chim.(Bucureşti), 45, 1994, pp. 224 – 228, Rev.Chim.(Bucureşti), ISSN 0034-7752, **IF-0,261**

E 33. I.Ion, **A.C.Ion**, L.Barbu, “Determinarea aluminiului din soluții de $\text{CuAlCl}_4\text{C}_7\text{H}_8$ ”, Rev.Chim.(Bucureşti), 45(4), 1994, pp. 347 – 348, Revista de Chimie, ISSN 0034-7752, **IF-0,261**

E 34. M.Ungureanu, E.Saint-Aman, I.Ion, A.Popescu, T.Vişan, J.-C.Moutet, **A.C.Ion**, “Electrochemical recognition of group I or II metal cations by redox active ionophores in homogeneous solution or by functionalized modified electrode, ”Studia Universitatis Babes Bolyai”, 41(2), 1996, pp.79 – 88, ISSN 2065-9520, **IF-0,0861**.

f. Publicatii in extenso, aparute in lucrari ale ale principalelor conferinte internationale de specialitate

F1. A. Culetu, I. Ion, **A. C. Ion**, C. Luca, “Potentiometric determination of lead from environmental samples”, International symposium “The Environment and Industry”, Bucharest, October, 28-30th, 2009, Proceedings vol. 2, Editura Estfalia, **2009**, p. 366-373, ISSN 1843-5831

F2. **A. C. Ion**, I.Ion, D.N.Stefan, A.Ficai “Improving mercury speciation in urine samples using potentiometric methods” 10th International Biomedical Engineering Conference, Kaunas University of Technology, Biomedical Engineering Institute, October 26-27, **2006**.

F3. I.Ion, **A.C.Ion**, C. Dragnea, “*Speciation of iron from waters*”, Proceedings of “14th Romanian International Conference on Chemistry and Chemical Engineering”, Sept. **2005**, Bucharest, vol.II, Physical chemistry, analytical chemistry and quality control, electrochemistry and corrosion vol.II, pp.96 - 107), Editura Printech, ISBN 973-718-284-7 și ISBN 973-718-286-3

F4. I.Ion, L.Barbu, C. Dragnea, **A.C.Ion**, “*Optimization of separation and preconcentration of heavy metals from samples with phosphate matrices using chelating resins (Chelex 100)*”, “Proceedings of 14th Romanian International

Conference on Chemistry and Chemical Engineering”, Sept. **2005**, Bucharest (Proceedings vol.II, Physical chemistry, analytical chemistry and quality control, electrochemistry and corrosion, 108 - 116), Editura Printech, ISBN 973-718-284-7 și ISBN 973-718-286-3

F5. I.Ion, **A.C.Ion**, E.Ruse, L.Barbu, ”*Methodes pratiques pour le dosage des especes arseniees d’interet toxicologique*”, “ Proceedings of Troisieme Colloque Franco-Roumain de Chimie Appliquee”, 22-26 sept. 2004, Bacau, Romania, Editions Alma Mater Bacău, ISBN 973-8392-36-5și Tehnica-Info Chișinău, ISBN 9975-63-183-5, pp.416 - 419.

F6. I.Ion, **A.C.Ion**, L.Barbu, ”*Potentiometric determination of iron(II) and iron(III) in mixture by titration with cobalt(II) chloride*”, “Proceedings 13th Romanian International Conference on Chemistry and Chemical Engineering”, sept. **2003**, Bucharest (vol.I, pp.84 - 89), Editura Printech, ISBN 973-652-823-5.

F7. I.Ion, **A.C.Ion**, L.Barbu, ”*Separation and preconcentration of Cu^{2+} , Cd^{2+} , Zn^{2+} on the chelating resin Amberlite XAD-4 loaded with xylene orange*”, “Proceedings of 13th Romanian International Conference on Chemistry and Chemical Engineering”, Sept. **2003**, Bucharest (vol.I, 9 - 95), Editura Printech, ISBN 973-652-823-5.

F8. **A.C.Ion**, I.Ion, ”*Cadmium(II) Selective Membrane Electrode Based on N,N,N’,N’-Tetradodecyl-3,6-Dioxane Dithioamide (ETH 5435)*” Proceedings of 12th Romanian International Conference on Chemistry and Chemical Engineering”, Bucharest, Romania, September 13-15, **2001**, Quality control and analytical chemistry, pp.71 –77, ISBN 973-652-384-5.

F9. **A.C.Ion**, I.Ion, ”*Preliminary Results to Obtain an Ion Selective Electrode for Ag^+ with Low Detection Limit*”, Proceedings of SICHEM International Chemistry Show, 3-6 octombrie 2000, București, pp.364-367.

F10. Ion, **A. C. Ion**, S. Lupu, ”*Aplicații analitice ale electrozilor modificate prin filme de polipirol substituit cu porfirina de cobalt(III) tetraarutenată la determinarea nitriților din ape*”, ” Conferința Internațională de Știința și Ingineria

Materialelor”, Buletin Științific Vol.IV, pp.435-438, 3-5 februarie 1999, Brașov, România.

F11. I.Ion, **A.C.Ion**, S.Lupu, “*Aplicații ale curenților catalitici ai cromului la determinarea urmelor de crom din ape*”, în volumul” Conferința Internațională de Știința și Ingineria Materialelor”, Buletin Științific Vol.IV, pp.439-444, 3-5 februarie 1999, Brașov, România

F12. N.Totir, E.M.Ungureanu, C.Luca, S.Lupu, **A.C.Ion**, I.Ion, “*Preparation of metal-hexacyano-ferrate modified electrodes*”, în Lucrările Conferinței Internaționale de Chimie și Inginerie Chimică, Ediția a –XI-a, 30 sept. – 2 oct. 1999 București (CD –Secțiunea 11-Electrochimie și Procese de coroziune, pp.112 –116).

F13. N.Totir, E.M.Ungureanu, C.Luca, S.Lupu, **A.C.Ion**, I.Ion, “*Electrochemical method for preparation of Prussian blue modified electrode*”, în Lucrările Conferinței Internaționale de Chimie și Inginerie Chimică, Ediția a –XI-a, 30 sept. – 2 oct. 1999 București (CD –Secțiunea 11-Electrochimie și Procese de coroziune, pp.117 –121).

F14. I.Ion, **A.C.Ion**, S.Lupu, L.Barbu, “*Determination of nickel from fertilizers using adsorptive cathodic stripping voltammetry*”, în Lucrările Conferinței Internaționale de Chimie și Inginerie Chimică, Ediția a –XI-a, 30 sept. – 2 oct. 1999 București (CD –Secțiunea 4-Chimie Analitică și Control de calitate, pp.41 – 44).

F15. L.Barbu, I.Ion, **A.C.Ion**, “*Determination of manganese trace from inorganic samples with complex matrix*”, în Lucrările Conferinței Internaționale de Chimie și Inginerie Chimică, Ediția a –XI-a, 30 sept. – 2 oct. 1999 București (CD –Secțiunea 4-Chimie Analitică și Control de calitate, pp.51 –59).

F16. L.Barbu, I.Ion, **A.C.Ion**, “*Determination of cadmium and lead in phosphoric acid and phosphates*”, în Lucrările Conferinței Internaționale de Chimie și Inginerie Chimică, Ediția a –XI-a, 30 sept. – 2 oct. 1999 București (CD –Secțiunea 4-Chimie Analitică și Control de calitate, pp.60 – 64).

F17 . L.Barbu, I.Ion, **A.C.Ion**, “*Determination of chromium trace from samples with phosphatic matrix*”, în Lucrările Conferinței Internaționale de Chimie și Inginerie Chimică, Ediția a –XI-a, 30 sept. – 2 oct. 1999 București (CD –Secțiunea 4-Chimie Analitică și Control de calitate, pp.66 –68).

F18. I.Ion, A.C.Ion, C.Constantinescu, ”*Determinarea voltametrică a conținutului de nichel din îngrășăminte*”, Simpozion Științific Jubiliar (65 ani ai Universității Agrare de Stat din Moldova), pp.158 - 162, 7-9 octombrie 1998, Chișinău, Republica Moldova

F19. I.Ion, **A.C.Ion**, C.Constantinescu, “*Electrod cu membrană lichidă pentru determinarea Fe(III) din îngrășăminte*”, Simpozion Științific Jubiliar (65 ani ai Universității Agrare de Stat din Moldova), pp.156 - 157, 7-9 octombrie 1998, Chișinău, Republica Moldova

F20. M.M.G.Antonisse, R.J.W. Lugtenberg, **A.Ion**, R.J.M.Egberink, B.H.M.Snellink-Ruel, J.F.J.Engbersen, D.N.Reinhoudt, **Editor(s):** vandenBerg, A; Bergveld, P **Title:** Chemically modified field-effect transistors for measurement of ion activities in aqueous solution **Source:** SENSOR TECHNOLOGY IN THE NETHERLANDS: STATE OF THE ART: 97-105 1998 **Book series title:** MESA MONOGRAPHS

g. Alte lucrari si contributii stiintifice

G1. A.C. Ion, I. Ion, A. Culetu, Organochlorine pesticides in several types of Romanian honey, UPB Scientific Bulletin, Series B: Chemistry and Materials Science, 73(3), 2011, pp. 133-140, ISSN: 1454-2331(Indexată: ULRICH'S INTERNATIONAL PERIODICALS DIRECTORY, INSPEC, SCOPUS, CAMBRIDGE SCIENTIFIC ABSTRACTS, CHEMICAL ABSTRACTS SERVICE - DIVISION OF AMERICAN, CHEMICAL SOCIETY, ELSEVIER SCIENCES'S BIBLIOGRAPHIC DATABASES, METALS ABSTRACTS, ENGINEERING VILLAGE, PUBLICATION IN ENGINEERING, METADEX, COMPENDEX)

G2. A.C. Ion, I. Ion, A. Culetu, Adsorption of naphthalene onto carbon nanomaterial graphitic nanoplatelets aqueous solution, UPB Scientific Bulletin, Series B: Chemistry and Materials Science, 73(2), 2011, pp. 55-66, ISSN: 1454-2331(Indexată: ULRICH'S INTERNATIONAL PERIODICALS DIRECTORY, INSPEC, SCOPUS, CAMBRIDGE SCIENTIFIC ABSTRACTS, CHEMICAL ABSTRACTS SERVICE - DIVISION OF AMERICAN, CHEMICAL SOCIETY, ELSEVIER SCIENCES'S BIBLIOGRAPHIC DATABASES, METALS

ABSTRACTS, ENGINEERING VILLAGE, PUBLICATION IN ENGINEERING, METADEX, COMPENDEX)

G3. A.Culețu, **A.C.Ion**, I. Ion, C.Luca, Lead pre-concentration using solid phase extraction, UPB Scientific Bulletin, Series B: Chemistry and Materials Science, 72 (1),2010, pp. 139-146, ISSN: 1454-2331(Indexată: ULRICH'S INTERNATIONAL PERIODICALS DIRECTORY, INSPEC, SCOPUS, CAMBRIDGE SCIENTIFIC ABSTRACTS, CHEMICAL ABSTRACTS SERVICE - DIVISION OF AMERICAN, CHEMICAL SOCIETY, ELSEVIER SCIENCES'S BIBLIOGRAPHIC DATABASES, METALS ABSTRACTS, ENGINEERING VILLAGE, PUBLICATION IN ENGINEERING, METADEX, COMPENDEX)

G4. **A.C.Ion**, J.Costa, I.Ion, D.Gherase, A.Culețu, Potentiometric studies on methyl pyridine derivatives of 14-membered tetraaza macrocycles as selective ionophores for heavy metals, (2009) UPB Scientific Bulletin, Series B: Chemistry and Materials Science, 71 (4),2009, pp. 41-52, ISSN: 1454-2331 (Indexată: ULRICH'S INTERNATIONAL PERIODICALS DIRECTORY, INSPEC, SCOPUS, CAMBRIDGE SCIENTIFIC ABSTRACTS, CHEMICAL ABSTRACTS SERVICE - DIVISION OF AMERICAN, CHEMICAL SOCIETY, ELSEVIER SCIENCES'S BIBLIOGRAPHIC DATABASES, METALS ABSTRACTS, ENGINEERING VILLAGE, PUBLICATION IN ENGINEERING, METADEX, COMPENDEX)

G5. **A.C.Ion**, I.Ion, Short remarque on the provenience of nanoparticles in environmental samples, UPB Scientific Bulletin, Series B: Chemistry and Materials Science, 71 (1),2009, pp. 13-20, ISSN: 1454-2331(Indexată: ULRICH'S INTERNATIONAL PERIODICALS DIRECTORY, INSPEC, SCOPUS, CAMBRIDGE SCIENTIFIC ABSTRACTS, CHEMICAL ABSTRACTS SERVICE - DIVISION OF AMERICAN, CHEMICAL SOCIETY, ELSEVIER SCIENCES'S BIBLIOGRAPHIC DATABASES, METALS ABSTRACTS, ENGINEERING VILLAGE, PUBLICATION IN ENGINEERING, METADEX, COMPENDEX)

G6. **A.C. Ion**, I.Ion, Electrode membranes selective for Ag^+ and their applications in vitamin content potentiometric determination, UPB Scientific Bulletin, Series B: Chemistry and Materials Science, 70 (3),2008, pp. 31-38, ISSN: 1454-2331(Indexată: ULRICH'S INTERNATIONAL PERIODICALS DIRECTORY,

INSPEC, SCOPUS, CAMBRIDGE SCIENTIFIC ABSTRACTS, CHEMICAL ABSTRACTS SERVICE - DIVISION OF AMERICAN, CHEMICAL SOCIETY, ELSEVIER SCIENCES'S BIBLIOGRAPHIC DATABASES, METALS ABSTRACTS, ENGINEERING VILLAGE, PUBLICATION IN ENGINEERING, METADEX, COMPENDEX)

G7. C.Moldovan, R.Iosub, C.Radu, N.Codreanu, M.Ion, C.Codreanu, B.Firtat, D.Necula, **A.C.Ion**, I.Ion, T.Harvey, P. Summersgill, Enzymatic biosensor for insecticides detection, Proceedings of the International Semiconductor Conference, CAS, 1, art.no. 4703353, 2008, pp. 147-150.

G8. A.C. Ion, I. Ion, L. Barbu, Chemically modified electrode for NO₂ - determination in environmental applications, UPB Scientific Bulletin, Series B: Chemistry and Materials Science, 69 (2), 2007, pp. 57-66, ISSN: 1454-2331.

G9. A.C.Ion, I.Ion, S. Lupu, Solvent extraction of potassium metal picrate by benzo 15-crown-5 substituted uranyl salophene (1999) UPB Scientific Bulletin, Series B: Chemistry and Materials Science, 61(1-2), pp. 39-46, ISSN: 1454-2331(Indexată: ULRICH'S INTERNATIONAL PERIODICALS DIRECTORY, INSPEC, SCOPUS, CAMBRIDGE SCIENTIFIC ABSTRACTS, CHEMICAL ABSTRACTS SERVICE - DIVISION OF AMERICAN, CHEMICAL SOCIETY, ELSEVIER SCIENCES'S BIBLIOGRAPHIC DATABASES, METALS ABSTRACTS, ENGINEERING VILLAGE, PUBLICATION IN ENGINEERING, METADEX, COMPENDEX)

G10. A.C.Ion, I.Ion, S.Lupu, Potentiometric determination of iron(III) in fertilizers using ion selective electrode with liquid membrane, UPB Scientific Bulletin, Series B: Chemistry and Materials Science, 61 (1-2), 1999, pp. 33-38, ISSN: 1454-2331(Indexată: ULRICH'S INTERNATIONAL PERIODICALS DIRECTORY, INSPEC, SCOPUS, CAMBRIDGE SCIENTIFIC ABSTRACTS, CHEMICAL ABSTRACTS SERVICE - DIVISION OF AMERICAN, CHEMICAL SOCIETY, ELSEVIER SCIENCES'S BIBLIOGRAPHIC DATABASES, METALS ABSTRACTS, ENGINEERING VILLAGE, PUBLICATION IN ENGINEERING, METADEX, COMPENDEX)

G11. I. Ion, **A. C. Ion**, L. Barbu, “*Metodă spectrofotometrică de determinare a nitriților din apele naturale*”, Izvestia Acad.Nauk Respubliki Moldova, Biologiceskii i Himiceschie Nauki, 2, 1993, 61 – 64, ISSN 0568-5192.

G12. I. Ion, **A.C. Ion** “*Application of temperature programmed reduction (TPR) method for characterization of Pd/Al₂O₃ catalysts*”, Sci. Bull. Polyt. Inst. Bucharest, Chem.and Materials Sci. Series, vol.54(3-4),1992, pp.109-116, ISSN: 1454-2331(Indexată: ULRICH'S INTERNATIONAL PERIODICALS DIRECTORY, INSPEC, SCOPUS, CAMBRIDGE SCIENTIFIC ABSTRACTS, CHEMICAL ABSTRACTS SERVICE - DIVISION OF AMERICAN, CHEMICAL SOCIETY, ELSEVIER SCIENCES'S BIBLIOGRAPHIC DATABASES, METALS ABSTRACTS, ENGINEERING VILLAGE, PUBLICATION IN ENGINEERING, METADEX, COMPENDEX)

G13. **A.C.Ion**, I.Ion, “*Extractif - spectrophotometric determination of ionic platinum in Pt/Al₂O₃ catalyst*”, Sci.Bull.Polyt.Inst.Bucharest, Chem.and Materials Sci.Series, vol.54(1-2),1992, pp. 83 – 88, ISSN: 1454-2331(Indexată: ULRICH'S INTERNATIONAL PERIODICALS DIRECTORY, INSPEC, SCOPUS, CAMBRIDGE SCIENTIFIC ABSTRACTS, CHEMICAL ABSTRACTS SERVICE - DIVISION OF AMERICAN, CHEMICAL SOCIETY, ELSEVIER SCIENCES'S BIBLIOGRAPHIC DATABASES, METALS ABSTRACTS, ENGINEERING VILLAGE, PUBLICATION IN ENGINEERING, METADEX, COMPENDEX)

G14. **A. C. Ion**, I. Ion, A. Culetu, “Carbon nanostructures as sorbents for lead from the environment”, 6th International conference of Nanoscience&Nanotechnologies, July 13-15 July **2009**, Aristotle University of Thessaloniki, Greece, Abstract Book, p. 210.

G15. I. Ion, A. M. Josceanu, **A. C. Ion**, “Pesticides analysis in food matrices.Improvement extraction and analysis steps by GC-MS”, International Conference on Metrology of Environmental, food and nutritional measurements, 9-12 September **2008**, Budapest, Hungary, Abstract Book, p.30-31, ISBN 978-963-9319-83-7

G16. **A. C. Ion**, I. Ion, A. Ficai, “Chemically modified electrode for NO₂⁻ determination. Environmental applications”, 212th Electrochemical Society Meeting ECS, October 7-12th, **2007**, Washington, SUA

G17. A. C. Ion, I. Ion, A. Culetu, L. Barbu, “Cadmium levels in some wines and other alcoholic beverages. Their effects on human health. Comparative potentiometric and spectrometric study”, Journées d’Electrochimie 2009, Sinaia, Roumanie, 6-10- juillet 2009, Resumes, Editura RISOPRINT Cluj-Napoca, p.92.

G18. A.C. Ion, I. Ion, L. Barbu, M. Negru, C. Neagu
“Potentiometric heavy metals determination in clinical samples”, RO-NANOMED Nanomedicine International Workshop, Bucharest, Romania, July 4-5, **2006**

G19. A.C. Ion, I. Ion, L. Barbu, C. Dragnea, “*Optimization of separation and preconcentration of heavy metals from samples with phosphate matrices using chelating resins*”, International conference on Electrochemical Sensors, November 13-18, **2005**, Matrafured, Hungary

G20. M. Claeys, B. Graham, W. Wang, G. Vas, I. Kourtchev, V. Pashynska, A.C. Ion, V. Reinhilde, G. Pascal, J. Cafmeyer, A. Gelencser, L. V. Gatti, A.O. Meinrat, P. Artaxo, W. Maenhaut, “*Formation of secondary organic aerosols through oxidation of isoprene: structural characterization and formation mechanism*”, 8th International Conference on Carbonaceous Particles in the Atmosphere, Sept. 14-16, **2004**, Vienna, Austria, Abstract Book p.35.

G21. W. Wang, I. Kourtchev, A. C. Ion, B. Graham, W. Maenhaut and M. Claeys, “*Structural characterization of polar oxygenated organic compounds related to oxidation of isoprene in forest aerosols*”, , 8th International Conference on Carbonaceous Particles in the Atmosphere, Sept. 14-16, **2004**, Vienna, Austria

G22. A.C. Ion, R. Vermeylen, W. Wang, J. Cafmeyer, A. Gelencser, W. Maenhaut, M. Claeys, “*Speciation of polar organic compounds in continental rural aerosols from K-puszt, Hungary*”, workshop bilateral project Flanders – Hungary, University of Antwerpen, November 10th, **2004**, Belgium

G23. I. Ion, A.C. Ion, “*Potential interfering ions in potentiometric measurement of cadmium in some types of fertilizers*” CEAC Summer Workshop on Metrology, 5-6 July, **2004**, Zurich Switzerland

G24. S. Lupu, A.C. Ion, I. Ion, “*Evaluation of the voltammetric responses of conducting polymers modified microelectrodes towards the oxidation of ascorbic*

acid and dopamine” CEAC Summer Workshop on Metrology, 5-6 July, **2004**, Zurich Switzerland

G25. A. C. Ion, I.Ion, “*Study over the detection limit and selectivity coefficients by using ion-exchange resins in the inner reference solution of ion-selective polymeric membrane electrodes*”, Matrafured 02 International Conference on Electrochemical Sensors, Hungary, October, 13-18, **2002**, pp.34

G26. A.C. Ion, I.Ion, L. Barbu, “*Ion-selective polymeric membrane electrodes for potentiometric measurement of Pb^{2+} in environmental samples at trace level*”, 6th Euroconference on Environmental Analytical Chemistry, Peer, October, 18-23, **2002**

G27. I. Ion, A.C. Ion, “*Potentiometric measurement of lead in environmental samples*”, Proceedings of 3rd International Conference of the Chemical Societies of the South-Eastern European Countries, Bucharest, September 22-25, **2002**, Vol.I.p.47, ISBN 973-569-555-3.

G28. A.C.Ion, I. Ion, L.Barbu, “*Ion selective polymeric membrane electrodes for potentiometric measurement of Pb^{2+} in environmental samples at trace levels*”, Proceedings of 3rd International Conference of the Chemical Societies of the South-Eastern European Countries, Bucharest, September 22-25, **2002**, Vol.I. p.312, ISBN 973-569-555-3.

G29. A.C. Ion, Aurora Ion, E. Saint Aman, J.C. Moutet, O. Reynes, G. Royal, E.M. Ungureanu, „*Recognition of Cu(II) and Ni(II) by ferrocene-azacrown macrocyclic ligands*”, 3rd International Conference of the Chemical Societies of the South Eastern European Countries on Chemistry in the New Millenium-an endless frontier, Sept. 22-25, **2002**, vol.2, pp.71, ISBN 973-569-555-3.

G30. E.Pretsch, A.Ceresa, T.Vigassy, E.Bakker, W.E.Morf, A.C.Ion, “*Perspectives of Potentiometric Membrane Electrodes*”, International Congress on Analytical Sciences **2001**(ICAS 2001),6-10 august 2001,Waseda University, Tokyo, Japan, pp.1B08

G31. E.Pretsch, A.Ceresa, W.Quin, E.Bakker, W.E.Morf, A.C.Ion, T.Vigassy, “*Potentiometric Submicromolar Activity Measurements*” The Pittsburgh Conference (PITTCON **2001**) New Orleans, 4-9 Martie 2001, pp.908

G32. A.C. Ion, I.Ion, M.M.G.Antonisse, B.H.M.Snelink-Rüel, D.N.Reinhoudt, Characteristics of fluoride-selective electrode with uranyl salophen receptors in aqueous solutions, Zhurnal Obshchei Khimii 71(2) 2001, pp.181-184, UDK 543.053 , **IF-0,393**.

G33. A.C.Ion, J.C.Moutet, A.Pailleret, A.Popescu, E.Saint-Aman, E.Siebert, E.M.Ungureanu, "*Reconnaissance electrochimique de cations metaliques par des films de polymeres redox fonctionnalisés: une etude voltamperometrique et impedancemetrique*", Journees d'Electrochimie, pp.3-15, 1-4 juin 1999, Universite Paul Sabatier, Toulouse, France.

G34. A.C. Ion, I. Ion, J.-C. Moutet, A. Pailleret, E. Saint-Aman, E. Ungureanu, E. Siebert, R. Ziessel, « *Reconnaissance electrochimique de cations par des films de polymeres derives de recepteurs moleculaires redox* », POLYCAP 98, Les capteurs de pollution de l'environnement : nouvelles perspectives, Grenoble 7-9 dec. 1998.

G35. A.C. Ion, M.M.M.G. Antonisse, B.H.M. Snellink-Ruel and D.N. Reinhoudt, "*H₂PO₄⁻ ion selective electrode*", ISEAC 1998, pp. 17, March 1 - 5 1998, Geneva, Switzerland

G36. "Neutral bifunctional receptors for simultaneous complexation of cations and anions", XVIII International Symposium on Macrocyclic Chemistry, pp.58, 27 iulie – 2 iulie, 1993, Twente, Enschede, Olanda.

G37. E. Saint-Aman, J. -C.Moutet, I.Ion, **A.Ion**, A.Popescu, L.Tomazewski, M.Ungureanu, I.Gautier-Luneau, "*Reconnaissance electrochimique par des ferrocene - ether - couronnes*" , în " Communication flash et par affiche, S.F.C., Division Chimie de Coordination, Journees 1996" , pp. 31, 11-12 dec.1996, Paris, Franța.

G38. O. Leonte, **A. C. Stănescu (Ion)**, N. Săndescu, "*Regeneration of Leuna-Werke paladium catalyst for selective hydrogenation of phenol to cyclohexanone*", Merseburger Technologische Tages, pp.88, 1990, 20-22 martie, Germania.

Semnatura,

Prof.dr.ing.Alina Catrinel ION