

## LISTA LUCRĂRILOR ELABORATE ȘI/SAU PUBLICATE

Dr.Violeta VASILACHE

### I. Lucrări relevante pentru realizările profesionale proprii

- 1) Vasilache V., Gutt Gh., Vasilache T., (2008), *Electrochemical researches about influence of the additives of Watts solutions on throwing power and brightness*, Revista de Chimie, București, 59(8), p.915-919, ISSN 0034-7752, (ISI 0.389)
- 2) Vasilache V., Gutt Gh., Vasilache T., (2008), *Studies about electrochemical plating with zinc-nickel alloys-the influence of potential through stoichiometric composition*, Revista de Chimie, București, 59(9), p.1005-1009; 2008, ISSN 0034-7752, (ISI 0.389)
- 3) Vasilache V., Gutt S., Gutt G., Vasilache T., Filote C., Sandu I., (2009), *Studies of hardness for the electrodeposited nickel from Watts Baths with addition of polyvinylpyrrolidone (PVP)*, Revue Roumaine de Chimie, 54(3), p.245-248, ISSN: 0035-3930, (ISI 0.263)
- 4) Vasilache V., Gutt G., Vasilache T., Sandu I., (2009), *Studies Concerning Nickel Electrodeposition from Watts bath with Addition of PolyvinylPyrolidone (PVP)*, Revista de Chimie, București, 60(1), p.15-19, ISSN 0034-7752, (ISI 0.552)
- 5) Vasilache V., Gutt S., Gutt G., Vasilache T., (2010), *Studies about magneto-optic Kerr effect on electrodeposited nickel layers*, Revista de Chimie, București, 61(5), p. 471-474, ISSN 0034-7752, (ISI 0.693)
- 6) Matei E., Enculescu I., Vasilache V., Teodorescu C.M., (2010), *Cobalt doped ZnO prepared by electrochemistry: chemistry, morphology, and magnetism*, Physica Status Solidi, Phys.Status Solidi A, 207(11), p.2517-2522, ISSN 1862-6300, (ISI 1.458)
- 7) Vasilache V., Filote C., Cretu M.C., Sandu I., Coisin V., Vasilache T., Maxim C., (2012), *Monitoring of groundwater quality in some vulnerable areas in Botosani county for nitrates and nitrites based pollutants*, Environmental Engineering and Management Journal, vol.11(2), p.471-481, ISSN: 1582-9596, (ISI 1.117)
- 8) Vasilache V., Apostol N.G., Lungu A., Macovei D., Teodorescu C.M., (2012), *Manganese-based room temperature ferromagnetism in gallium arsenide*, Optoelectronics And Advanced Materials – Rapid Communications Vol. 6, No. 11-12, Nov. – Dec. 2012, p. 1054 - 1060, ISSN:1842-6573, (ISI 0.304)
- 9) Preda N., Enculescu M., Zgura I., Socol M., Matei E., Vasilache V., Enculescu I., (2013), *Superhydrophobic properties of cotton fabrics functionalized with by electroless deposition*, Materials Chemistry and Physics, 138, p.253-261, ISSN: 0254-0584, (ISI 2.385)
- 10) Vasilache V., Lungu G.A., Logofatu C., Medianu R.V., Teodorescu C.M., (2013), *Ferromagnetism and reactivity of Fe deposited on GaAs(001) by magnetron sputtering*, Digest Journal of Nanomaterials and Biostructures, Vol. 8, No. 1, January - March 2013, p. 255 - 261, ISSN 1842 - 3582, (ISI 1.2)

## II. Teza de doctorat

Vasilache V., 2008, *Contribuții la optimizarea procesului de depunere galvanică a nichelului și a aliajelor de nichel folosite în construcția de mașini*, Domeniul Științe Inginerești, Știința și Ingineria Materialelor, Diploma de Doctor Seria F, Nr. 0007668

## III. Cărți și capitole în cărți

### III.1. Primautor

- 1) Vasilache V., Sandu I., (2009), *Sisteme disperse și fizico-chimia suprafețelor*, Editura Universității Ștefan cel Mare Suceava, ISBN 978-973-666-319-2; 324 pagini.
- 2) Vasilache V., (2009), *Electrodepunerea nichelului și a aliajelor sale*, Editura Universității Ștefan cel Mare Suceava, ISBN 978-973-666-320-8; 420 pagini.
- 3) Vasilache V., (2012), Vasilache V., (2012), *Chimie anorganică. Îndrumar de laborator* (format electronic). Îndrumarul este disponibil pe web-ul Platformei DidaTec: Proiectul „Școală universitară de formare inițială și continuă a personalului didactic și a trainerilor din domeniul specializărilor tehnice și ingineresti” (cofinanțat din Fondul Social European prin Programul Operațional Sectorial pentru Dezvoltarea Resurselor Umane 2007 – 2013, POSDRU/87/1.3/S/6089), Universitatea Tehnică Cluj-Napoca; 60 pagini.
- 4) Vasilache V., (2012), *Chimie anorganică. Curs* (format electronic). Cursul este disponibil pe web site-ul Platformei DidaTec: Proiectul „Școală universitară de formare inițială și continuă a personalului didactic și a trainerilor din domeniul specializărilor tehnice și ingineresti” (cofinanțat din Fondul Social European prin Programul Operațional Sectorial pentru Dezvoltarea Resurselor Umane 2007 – 2013, POSDRU/87/1.3/S/6089), Universitatea Tehnică Cluj-Napoca; 148 pagini.

## IV. Articole /studii publicate în reviste din fluxul științific internațional principal;

### IV.1. Articole/studii publicate în reviste de circulație internațională, indexate ISI

- 1) Vasilache V., Gutt Gh., Vasilache T., (2008), *Electrochemical researches about influence of the additives of Watts solutions on throwing power and brightness*, Revista de Chimie, București, 59(8), p.915-919, ISSN 0034-7752, (ISI 0.389)
- 2) Vasilache V., Gutt Gh., Vasilache T., (2008), *Studies about electrochemical plating with zinc-nickel alloys-the influence of potential through stoichiometric composition*, Revista de Chimie, București, 59(9), p.1005-1009; 2008, ISSN 0034-7752, (ISI 0.389)
- 3) Vasilache V., Gutt S., Gutt G., Vasilache T., Filote C., Sandu I., (2009), *Studies of hardness for the electrodeposited nickel from Watts Baths with addition of polyvinyl pyrrolidone (PVP)*, Revue Roumaine de Chimie, 54(3), p.245-248, ISSN: 0035-3930, (ISI 0.263)
- 4) Vasilache V., Gutt G., Vasilache T., Sandu I., (2009), *Studies Concerning Nickel Electrodeposition from Watts bath with Addition of PolyvinylPyrolidone (PVP)*, Revista de Chimie, București, 60(1), p.15-19, ISSN 0034-7752, (ISI 0.552)
- 5) Vasilache V., Gutt S., Gutt G., Vasilache T., Sandu I., Sandu G.I., (2009), *Determination of the Dimension of Crystalline Grains of Thin Layers of Zinc - Nickel Alloys Electrochemically Deposited*, Metalurgia International, vol.XIV, no.3, p.49-53, ISSN 1582-2214, (ISI 0.173)
- 6) Vasilache V., Gutt S., Gutt G., Vasilache T., (2010), *Studies about magneto-optic Kerr effect on electrodeposited nickel layers*, Revista de Chimie, București, 61(5), p. 471-474, ISSN 0034-7752, (ISI 0.693)

- 7) Matei E., Enculescu I., Vasilache V., Teodorescu C.M., (2010), *Cobalt doped ZnO prepared by electrochemistry: chemistry, morphology, and magnetism*, Physica Status Solidi, Phys.Status Solidi A, 207(11), p.2517-2522, ISSN 1862-6300, (ISI 1.458)
- 8) Vasilache V., Filote C., Cretu M.C., Sandu I., Coisin V., Vasilache T., Maxim C., (2012), *Monitoring of groundwater quality in some vulnerable areas in Botosani county for nitrates and nitrites based pollutants*, Environmental Engineering and Management Journal, vol.11(2), p.471-481, ISSN: 1582-9596, (ISI 1.117)
- 9) Vasilache V., Apostol N.G., Lungu A., Macovei D., Teodorescu C.M., (2012), *Manganese-based room temperature ferromagnetism in gallium arsenide*, Optoelectronics And Advanced Materials – Rapid Communications Vol. 6, No. 11-12, Nov. – Dec. 2012, p.1054 - 1060, ISSN:1842-6573, (ISI 0.304)
- 10) Preda N., Enculescu M., Zgura I., Socol M., Matei E., Vasilache V., Enculescu I., (2013), *Superhydrophobic properties of cotton fabrics functionalized with by electroless deposition*, Materials Chemistry and Physics, 138, p.253-261, ISSN: 0254-0584, (ISI 2.385)
- 11) Vasilache V., Lungu G.A., Logofatu C., Medianu R.V., Teodorescu C.M., (2013), *Ferromagnetism and reactivity of Fe deposited on GaAs(001) by magnetron sputtering*, Digest Journal of Nanomaterials and Biostructures, Vol. 8, No. 1, January - March 2013, p.255 - 261, ISSN 1842 - 3582, (ISI 1.2)
- 12) Vasilache V., Moldoveanu C., Fărtăiş L., Risca I.-M., (2014), *Effect of Some New Imidazole Derivatives on Wheat (Triticum Aestivum) Germination*, Revista de Chimie, Bucureşti, 65(2), p.177-180, ISSN 0034-7752, (ISI 0.677)
- 13) Moldoveanu C., Vasilache V., Risca I.M., (2015), *Biological Effects of Some New Imidazole Derivatives on Spruce (Picea Abies) Germination*, 66 (1), p.104-108, Revista de Chimie, Bucureşti, ISSN 0034-7752, (ISI 0.677)
- 14) Danac R. Daniloaia T., Antoci V., Vasilache V., Mangalagiu I., (2015), *Design, Synthesis and Antimycobacterial Activity of Some New Azaheterocycles: Phenanthroline with p-halo-benzoyl Skeleton. Part V*, Letters in Drug Design & Discovery, 12, p.14-19, ISSN 1875-628X(Online), ISSN 1570-1808 (Print), (ISI 0.770)
- 15) Vasilache V., Cretu A.-M., Pascu L. F., Risca M.I., Ciornea E., Maxim C., Sandu I.G., Ciobanu C.I., (2015), *Dehydrogenases activity in sludge samples of Suceava River*, International Journal Of Conservation Science, Volume 6, Issue 1, January-March 2015, p. 93-98, ISSN 2067-533X (Print), ISSN 2067-8223 (Online), (Indexată ISI)
- 16) Marusic G., Sandu I., Vasilache V., Filote C., Sevcenco N., Cretu M.C., (2015), *Modeling of Spacio-temporal Evolution of Fluoride Dispersion in "River-type" Systems*, Revista de Chimie, Bucureşti, 66(4), p.503-506, ISSN 0034-7752, (ISI 0,8)
- 17) Mantu D., Antoci V., Vasilache V., Luca C.M, (2016), *Structure and Anticancer Activity of Some bis-pyridazine Derivatives*, Revista de Chimie, Bucureşti, 67(1), p.127-130, ISSN 0034-7752, (ISI 0,8)
- 18) Mantu D., Antoci V., Nicolescu A., Deleanu C., Vasilache V., Mangalagiu I.I, (2016), *Synthesis, Stereochemical Studies and Antimycobacterial Activity of New Acetylhydrazine Pyridazinones*, Current Organic Synthesis, 13(6), in press, ISSN: 1570-1794, (ISI 2.117)
- 19) Ciobanu I.C, Drochioiu G., Carlescu I., Lisa G., Antoci V., Vasilache V., Scutaru D., (2016), *Thermal Behavior of Some Bent-Core Resorcinol Derivatives with Azo-Type Spacers and Variable Flexible Chain*, Letters in Organic Chemistry, 13(2), p. 156-161, ISSN 1875-6255 (Online), ISSN 1570-1786 (Print), (ISI 0.664)

#### IV.2. Articole /studii publicate *in extenso*, în volumele conferințelor internaționale de specialitate

- 1) Vasilache V., (2007), *Dosarul mercurului*, Conferință Internațională Ucraina – România: Realizări și perspective de colaborare transfrontalieră în contextul proceselor de integrare europeană, Cernăuți, Ucraina, 17-18 martie, p. 9-18, YDK 327(477:498)
- 2) Bejinariu C., Sandu A.V., Sandu I., Vasilache V., Sandu I.G., (2009), *New procedures for lubricant phosphatation*, International Scientific Conference UgalMat, Advanced Materials and Tehnologies, Vol.II, Section III, Surface Engineering, 22-23 octombrie, Galați, p.321-325, ISSN 1843-5807
- 3) Bența M., Vasilache V., Zagrean V., (2009), *Experimental research on the measuring methods of metallic surfaces*, International Scientific Conference UgalMat, Advanced Materials and Tehnologies, Vol.II, Section III, Surface Engineering, 22-23 octombrie, Galați, p.343-346, ISSN 1843-5807
- 4) Vasilache V., Gutt S., Vasilache T., Gutt G., Nemțoi L.M., Râșca I.M., (2009), *Optimization of nickel electrodeposition process using computational Taguchi's method by Factorial Design SoftWare*, International Scientific Conference UgalMat 2009, Advanced Materials and Tehnologies, Vol.II, Section III, Surface Engineering, 22-23 octombrie, Galați, p.357-362, ISSN 1843-5807
- 5) Vasilache V., Gutt S., Gutt G., Vasilache T., Sandu A.V., (2009), *Studies regarding nickel electrodeposition from Watts bath with addition of polyvinylpyrrolidone and sodium saccharine*, International Scientific Conference UgalMat, Advanced Materials and Tehnologies, Vol.II, Section III, Surface Engineering, 22-23 octombrie, Galați, p.363-368
- 6) Sandu V. A., Vasilache V., Sandu I., Saviuc M., Sandu I.G., Popa I.M., (2009), *Obtaining and characterisation of thermoresistive pigments*, International Scientific Conference UgalMat 2009, Advanced Materials and Tehnologies, Vol.II, Section III, Surface Engineering, 22-23 octombrie, Galați, p.470-474, ISSN 1843-580768, ISSN 1843-5807
- 7) Gutt G., Gutt S., Vasilache V., Severin T. L., Stroe S., (2010), *Research on universal dynamic hardness test*, 19<sup>th</sup> International Conference on Metallurgy and Materials May 18-20 th 2010 Roznov pod Rodhostem, Czech Republic, EU, ISBN 978-0-87294-15-4, p.166
- 8) Gutt S., Gutt G., Vasilache V., Poroach-Seritan M., (2010), *Contributions to determination of layer thickness and brightness directly into submission of galvanic baths*, 19<sup>th</sup> International Conference on Metallurgy and Materials May 18-20 th 2010 Roznov pod Rodhostem, Czech Republic, EU, ISBN 978-0-87294-15-4, p.166
- 9) Vasilache T., Gutt S., Vasilache V., Gutt G., (2010), *Studies regarding nickel electrodeposition from Watts bath with addition of polyvinylpyrrolidone and sodium lauryl sulfate*, 19<sup>th</sup> International Conference on Metallurgy and Materials May 18-20 th 2010 Roznov pod Rodhostem, Czech Republic, EU, ISBN 978-0-87294-15-4, p.172
- 10) Vasilache V., Gutt S., Vasilache T., Gutt G., (2010), *The influence of working parameters against composition of zinc-cobalt alloy co-deposited layers*, 19<sup>th</sup> International Conference on Metallurgy and Materials May 18-20 th 2010 Roznov pod Rodhostem, Czech Republic, EU, ISBN 978-0-87294-15-4, p.173
- 11) Sasu G., Blanaru C., Onofrei O., Nechifor R., Vasilache V., (2010), *Assessment of water quality in the upper course of Siret river (N-E Romania)*, Large River Basins – Danube meets Elbe, Challenges – Strategies – Solutions, 22–25 June, p.1-6, Dresden, Germany The “Blockhaus”, Neustädter Markt
- 12) Gutt S., Gutt G., Vasilache V., Poroach-Seritan M., (2010), *Contributions to the determination in situ of layer thickness and glossiness of galvanic deposits*, Annals of DAAAM for 2010 Proceedings of the 21<sup>st</sup> International DAAAM Symposium, Vol.21, No.1, ISSN 1726-9679, ISBN 978-3-901509-73-5, p.1005-1007, Viena, Austria
- 13) Gutt S., Gutt G., Vasilache V., Poroach-Seritan M., (2010), *Researches and contributions to carry out a laboratory areometer-viscosimeter*, Annals of DAAAM for 2010 Proceedings of the 21<sup>st</sup> International DAAAM Symposium, Vol.21, No.1, ISSN 1726-9679, ISBN 978-3-901509-73-5, p.1007-1009, Viena, Austria

- 14) Gutt S., Gutt G., Severin T., L., Vasilache V., Poroch-Seritan M., (2010), *Research on the spatial distribution of mechanical characteristics in a cadmium telluride crystal*, Annals of DAAAM for 2010 Proceedings of the 21<sup>st</sup> International DAAAM Symposium, Vol.21, No.1, ISSN 1726-9679, ISBN 978-3-901509-73-5, p.0993-0995, Viena, Austria
- 15) Gutt S., Gutt G., Severin T., L., Vasilache V., Poroch-Seritan M., (2010), *Contributions to design and carry out an universal dynamic hardnessmeter for metallic materials testing*, The 21<sup>st</sup> DAAAM International World Symposium, 20-23<sup>rd</sup> October, Zadar, Croatia, ISBN 978-3-901509-73-5
- 16) Vasilache V., Popa C., Vasilache T., (2012), *Studies about Structure and Some Physical Properties of Nickel and Zinc-Nickel Alloy Layers Electrochemically Deposited*, 21<sup>th</sup> International Conference on Metallurgy and Materials May 23-25<sup>th</sup> 2012 Brno, Czech Republic, EU p.1099-1105
- 17) Vasilache V., Gutt S., Gutt G., Vasilache T., (2010), *Influence of Polyvinylpyrrolidone and Sodium Lauryl Sulfate as additives in watts baths against Nickel Electrodeposition*, International Conference of Applied Sciences. Chemistry and Chemical Engineering, CISA2010, 8 - 11 aprilie 2010, Slanic Moldova-Bacau, ISSN 2066-7817, p.305-311, România
- 18) Vasilache V., Gutt S., Vasilache T., Gutt G., Sandu I., (2010), *Electrodeposition and characterization of zinc-cobalt alloy coatings*, 5<sup>th</sup> International Conference ARTCAST, Casting, From Rigor Of Technique To Art, May 14-15, Galați, p.370-374, ISSN 2068-350
- 19) Bența D.M., Strambu C., Nedelcu St., Vasilache V., (2011), *The description of metallic layers throung sensor-surface interaction*, The 13<sup>th</sup> International Conference of Stiintific Papers AFASES 2011, 26-28 May, Brașov, p.856-860, ISSN 2247-3173, ISSN-L 247-3173
- 20) Marusic G., Sandu I., Moraru V., Vasilache V., Crețu A.M., (2012), *Software for modeling spatial and temporal evolution of river-type systems*, 11<sup>th</sup> International Conference on Development And Application Systems, May 17-19, Suceava, România p.162-165

#### **IV.3. Articole /studii publicate *in extenso* în reviste indexate în baze de date internaționale**

- 1) Vasilache V., (2005), *Difuzii non-Fick în polimeri*, Annals of the Suceava University, Food Engineering, Anul IV. Nr.1., p.15-18, ISSN 1842-4597, B+ CNCSIS category
- 2) Vasilache V., (2006), *The combustion cells with hydrogen*, Annals of the Suceava University, Food Engineering, Anul IV. Nr.1, p.38-44, ISSN 1842-4597, B+ CNCSIS category
- 3) Vasilache V., (2006), *Taguchi 's loss function*, Annals of the Suceava University, Food Engineering, Anul IV. Nr.1, p.44-50, ISSN 1842-4597, B+ CNCSIS category
- 4) Vasilache V., (2006), *Contribuții la elaborarea bilanțului de materiale și energetic pentru procesul de cromare electrochimică (Contributions to the development of materials and energy balance for the electrochemical plating process)*, Lucrări Științifice. USAMV Iași Seria Agronomie, vol.49 Supliment, p.49-52, ISSN 1454-7414, B+ CNCSIS category
- 5) Vasilache V., Vasilache T., (2007), *Studiul procesului de nichelare prin metoda spectroscopiei de impedanță electrochimică*, Lucrări Științifice. USAMV Iași Seria Agronomie, vol.50(2), p.86-92, ISSN 1454-7414, B+ CNCSIS category
- 6) Gutt Gh., Vasilache V., Poroch-Seritan M., Vasilache T., (2007), *Studies About Electrochemical Plating with Zinc-Nickel Alloys*, The Annals of Dunarea de Jos University of Galati, Fascicule IX Metallurgy and Materials Science, No.2, p.125-129, ISSN 1453-083X, B+ CNCSIS category

- 7) Poroch-Serițan M., Vasilache V., Roșu A., Buculei A., (2008), *Studies on high-surface electrode production for water electrolysis*, Annals of the Suceava University, Food Engineering, VII(1), p.140-148, ISSN 1842-4597, B+ CNCSIS category
- 8) Vasilache V., Vasilache T., Gutt Gh., (2008), *Contributions to elaborate a material balance, an energetic balance and an optimization method for nickel electroplating process*, Annals of the Suceava University, Food Engineering, VII(2), p.110-117, ISSN 1842-4597, B+ CNCSIS category
- 9) Vasilache V., (2009), *Advanced characterization methods for nickel layers electrochemically deposited - reflectance of the films*, Annals of the Suceava University, Food Engineering, VIII(2), p.37-40, ISSN 1842-4597, B+ CNCSIS category
- 10) Vasilache V., Gutt S., Vasilache T., Gutt G., Benta M., (2009), *Electrodeposition of nickel layers on copper substrate using pulse current technique*, TEHNOMUS XV New Technologies and products in machine manufacturing technologies, p.275-279, ISSN 1224-029X
- 11) Vasilache V., Severin T., Vasilache T., (2009), *Mathematical model associated to optimization of nickel electroplating*, TEHNOMUS XV New Technologies and products in machine manufacturing technologies, p.279-285, ISSN 1224-029X, B+ CNCSIS category
- 12) Vasilache V., Gutt S., Rusu O.E., Vasilache T., Sasu G., Gutt G., (2010), *Studies regarding the eutrophication of the Negreni reservoir in Botosani county*, International Journal Of Conservation Science, Vol. I(1), p.40-47, ISSN 2067-533X
- 13) Vasilache T., Gutt S., Sandu I., Vasilache V., Gutt G., Rîșca M., Sandu A.V., (2010), *Electrochemical Mechanism of Nickel and Zinc-Nickel Alloy Electrodeposition*, Recent Patents on Corrosion Science, No.2, p.1-5, ISSN: 1877-6108
- 14) Vasilache V., Gutt S., Gutt G., (2010), *Studies regarding the efficiency of a direct methanol fuel cell (DMFC)*, Food and Environment Safety-Journal of Faculty of Food Engineering, Ștefan cel Mare University, IX(1), p.64-68, ISSN 2068 - 6609, B+ CNCSIS category
- 15) Vasilache V., (2010), *Electrodeposition and characterization of zinc-cobalt alloy coatings*, The Annals Of "Dunarea De Jos" University Of Galati, Fascicle IX. Metallurgy And Materials Science, NO. 1, p.37-40, ISSN 1453 – 083X
- 16) Vasilache V., (2010), *The present state of researches regarding electroplating problems*, Food and Environment Safety-Journal of Faculty of Food Engineering, Suceava, IX(3), p. 50-59, ISSN 2068-6609, B+ CNCSIS category
- 17) Gutt S., Gutt G., Vasilache V., (2010), *Messung und Bestimmung wichtiger Größen und Indikatoren bei galvanischen Prozessen, Teil1*, Galvanotechnik, Germania, 101(2), p.268-272, ISSN. 0016-4232
- 18) Vasilache V., Popa C., Filote C., Cretu M.A., Benta M., (2011), *Nanoparticles applications for improving the food safety and food processing*, Recent, Vol. 12, No.1(31), p. 77-81, ISSN 1582-0246
- 19) Vasilache V., Cretu M. A., Sandu I., Vasilache T., (2011), *Pesticides use in Botosani County. Regional informations and perspectives*, The Annals of „Dunarea de Jos” University of Galati, Fascicle IX Metallurgy and Materials Science, Year XXIX(XXXIV), Special Issue, p.175-179, ISSN 1453-083X, B+CNCSIS category
- 20) Vasilache V., Sandu I., Vasilache T., Crețu M. A., (2011), *Studies regarding the quality of waters for some rivers from Suceava County*, The Annals of „Dunarea de Jos” University of Galati, Fascicle IX Metallurgy and Materials Science, Year XXIX(XXXIV), Special Issue, p.169-174, ISSN 1453-083X, B+ CNCSIS category
- 21) Bența M.D., Mihai C., Pearsică M., Strâmbu C., Vasilache V., (2011), *Ways of working the data obtained through atomic force microscopy technology*, Review of the Air Force Academy, The Scientific Informative Review, Brasov, vol. IX, No.1(18), p. 21-25, ISSN-L 1842-9238, B+ CNCSIS category

- 22) Vasilache V., Popa C., Vasilache T., (2011), *New materials for photocatalytic purification of air – a review*, Food and Environment Safety - Journal of Faculty of Food Engineering, Ștefan cel Mare University, X(4), p. 42-48, ISSN 2068-6609, B+ CNCIS category
- 23) Marusic G., Sandu I., Moraru V., Filote C., Ciufudean C., Beșliu V., Vasilache V., Șevcenco N., (2012), *Fluoride dispersion modeling for "River-type" systems*, Meridian Ingineresc, nr.4, p. 28-32, ISSN 1683-853X, Chișinău
- 24) Vasilache V., Crețu A-M., Sandu I., (2014), *Evaluation of the methodology of case study used at the lessons of chemistry*, Rev. Tehnoscopia, 2(11),2014, p.60-70, Chișinău

#### IV.4. Studii publicate în volumele unor manifestări științifice internaționale ca rezumat

- 1) Gutt Gh., Vasilache V., Sandu I., Vasilache T., Sandu V. A., (2008), *In situ monitoring of nickel and zinc-nickel alloy electroplating process using EQCM*, ICPAM-8 (8th International Conference on Physics of Advanced Materials), 4-7 iunie, Iași, România
- 2) Vasilache V., Vasilache T., Gutt Gh., (2008), *Studies about the hardness of nickel layers electrodeposited from Watts electrolyte with addition of polyvinil pyrrolidone (PVP)*, International Conference on Corrosion and Modern Technologies in the Military (ICCMTM), 5-8 november, București, România
- 3) Vasilache V., Gutt S., Sandu I. G., Vasilache T., Gutt Gh., Sandu I., (2009), *Determination of the dimension of crystalline grains of thin layers of zinc-nickel alloys electrochemically deposited*, BRAMAT 2009, International Conference on Materials Science & Engineering, 26-28 februarie, Brașov, România
- 4) Gutt S., Gutt Gh., Vasilache V., Poroach - Seritan M., Severin T., (2009), *Direct Measurement of Layer Brightness and Thickness in Galvanic Coating*, International Workshop „Innovation and Evolution by R&D/ SMEs Strategic Partnership”, september 10-12, Bucharest, România
- 5) Gutt G., Gutt S., Poroach-Seritan M., Vasilache V., (2009), *Contributions to Nickel Plating Baths Monitoring*, International Workshop „Innovation and Evolution by R&D/ SMEs Strategic Partnership”, september 10-12, Bucharest, România
- 6) Gutt S., Gutt G., Vasilache V., Severin T., Ghiguță V., (2009), *Research and Contributions on a High Precision Rheometer*, International Workshop „Innovation and Evolution by R&D/ SMEs Strategic Partnership”, september 10-12, Bucharest, România
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## V. Brevete de invenție

### V.1. Brevete AGEPI

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1) **Patent MD 4298 (B1):** *Process for water treatment of ground and surface waters*,

Inventor(s): Sandu I.(UAIC-RO), Cretu A.M.(UAIC-RO), Lupașcu T.(ASM-MD), Sielienchi Joseph-Marie(CM), Koume I.K.(CM), Guifo K.J.(CM), Sandu A.V.(TUIASI), Vasilache V.(USV-RO), Sandu I.G.(TUIASI), Vasilache V.(UAIC-RO),

2) **Patent MD MD4106 (B1):** *Process for the obtaining of an injection oil silver nanodispersion*

Inventor(s): Hagi B. A. [Ro]; Sandu I. [Ro]; Lupascu T. [Md]; Vasilache V. [Ro]; Tura V. [Ro]; Mangalagiu I. [Ro]; Sandu A. V. [Ro]; Gonchiar V. [Md];

**V. 2. Brevete naționale OSIM**

[http://worldwide.espacenet.com/searchResults?compact=false&ST=singleline&query=Vasilache+Violeta&locale=en\\_EP&DB=worldwide.espacenet.com](http://worldwide.espacenet.com/searchResults?compact=false&ST=singleline&query=Vasilache+Violeta&locale=en_EP&DB=worldwide.espacenet.com)

1) **Patent Number(s): RO125793 (B1)** *Galvanic cell for automatically measuring the lustre and the thickness of a layer*

Inventor(s): Gutt Gh., Gutt S., Vasilache V., Gutt A.

2) **Patent Number(s): RO125457 (B1)**

*Process for the micro crystalline phosphate-coating of iron-based metal pieces*

Inventor(s): Bejinariu C., Sandu I., Sandu I.G., Predescu C., Munteanu C., Sandu A.V., Vasilache V., Bejinariu M.G.

3) **Patent Number(s): RO125456 (B1)**

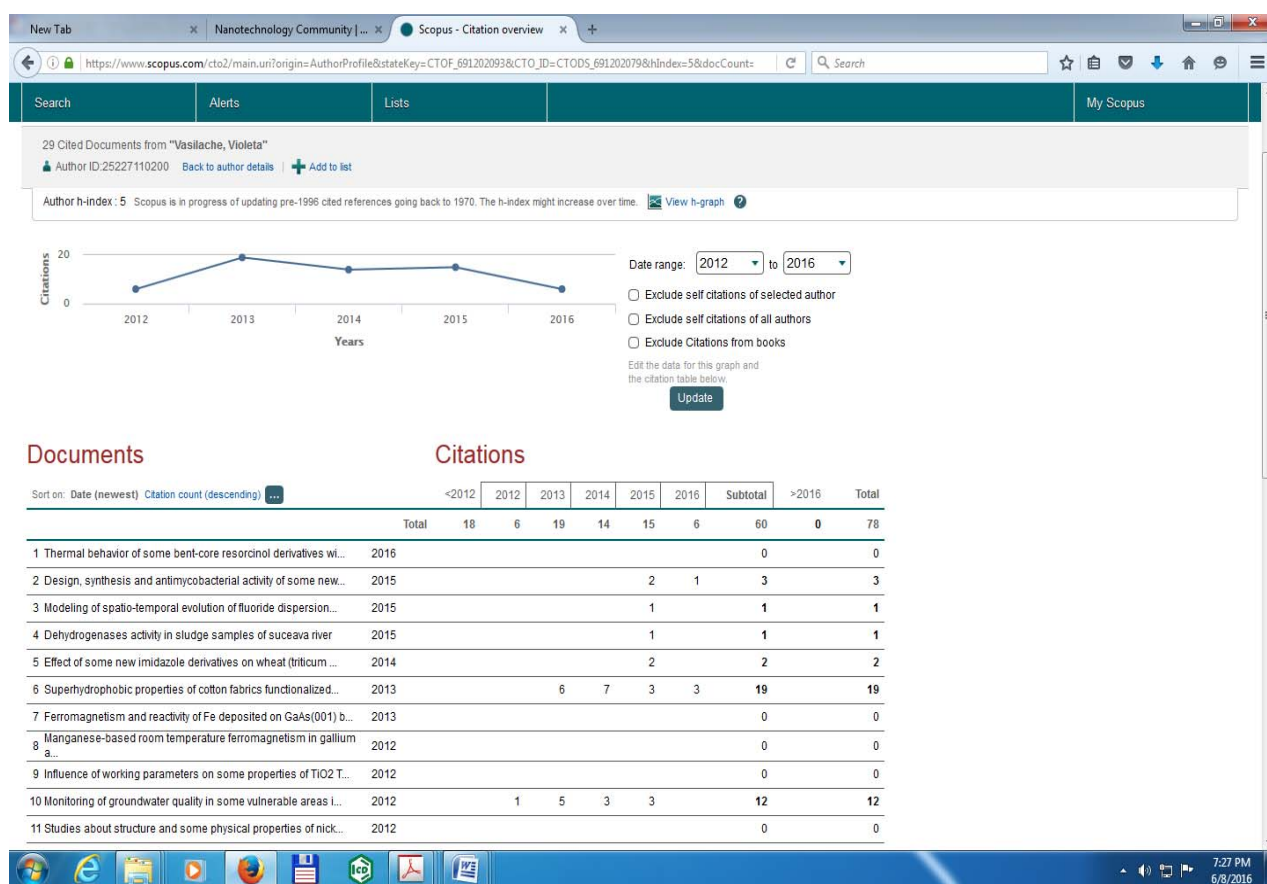
*Process for micro-crystalline phosphate-coating of ferrous metal pieces*

Inventor(s): Bejinariu C., Sandu I., Vasilache V., Sandu I.G., Bejinariu M.G., Sandu A.V.

4) **Patent Number(s): RO127723 (B1)**

*Procedeu de obținere a unei nanodispersii uleioase cu capacitate regenerativă*

Inventor(s): Hagi B.A., Sandu I., Vasilache V., Tura V., Mangalagiu I.I., Mungiu O.C., Filote C., Sandu A.V.



10.06.2016

Dr. Violeta Vasilache