

## LISTA DE LUCRARI

**SÖNMEZ (FICAI) Maria**, doctor inginer din 2011,

### Teza de doctorat:

*MATERIALE COMPOZITE HIBRIDE DE TIP POLIMER/CERAMICA, data sustinerii tezei: 08 decembrie 2011, data conferirii titlului de doctor in domeniul Inginerie chimica: 2011, in baza Ordinului Ministrului Educatiei, Cercetarii, Tineretului si Sportului nr: 6697 din 21.12.2011.*

### ARTICOLE IN EXTENSO IN REVISTE COTATE ISI THOMSON REUTERS

1. **Maria Sonmez**, Cristina Verisan, Georgeta Voicu, Denisa Ficai, Anton Ficai, Alexandra Elena Oprea, Mihaela Vlad, Ecaterina Andronescu. Extended release of vitamins from magnetite loaded polyanionic polymeric beads, *International Journal of Pharmaceutics*, **2016**, 510(2):457-464; (ISSN: 0378-5173 eISSN: 1873-3476), WOS:000380754500007 (IF<sub>3.994</sub>).
2. Oguzhan Gunduz, Mehmet Yetmez, **Maria Sonmez**, Mihai Georgescu, Laura Alexandrescu, Anton Ficai, Denisa Ficai and Ecaterina Andronescu. Mesoporous Materials Used in Medicine and Environmental Applications, *Current Topics in Medicinal Chemistry*, **2015**,15(15): 1501 – 1515; (ISSN: 1568-0266) WOS:000355196100004 (IF<sub>2.9</sub>)
3. Mihaela (Nițuică) Vîlsan, Aurelia Meghea, **Maria Sonmez**, Dana Gurău, Mihai Georgescu "Polyolefin polymer composites reinforced with chemically modified layered clay", *Romanian Journal of Materials*, **2015**, 45(4): 377-383; (ISSN: 1583-3186) WOS:000367029800011 (IF<sub>0.612</sub>).
4. **Maria Sonmez**, Mihai Georgescu, Laurentia Alexandrescu, Dana Gurau, Anton Ficai, Denisa Ficai and Ecaterina Andronescu. Synthesis and applications of Fe<sub>3</sub>O<sub>4</sub>/SiO<sub>2</sub> core-shell materials, *Current Pharmaceutical Design*, **2015**, 21(37): 5324-5335; (ISSN: 1381-6128) WOS:000364518200004 (IF<sub>3.052</sub>)
5. **M. Sönmez**, D. Gudovan, R. Truşca, A. Ficai, D. Ficai, E. Andronescu, B. S. Vasile. Synthesis, characterization and testing of MCM-41/TiO<sub>2</sub> catalyst for organic dye degradation. *Digest Journal of Nanomaterials and Biostructures*, **2015**, 10(4), pp.1329 – 1341; (ISSN: 1842-3582) WOS:000366264800022 (IF<sub>0.756</sub>)
6. Gozde UNSOY, Ufuk Gunduz, Ovidiu OPREA, Denisa FICAI, **Maria SONMEZ**, Marius RADULESCU, Mihaela ALEXIE, Anton FICAI; Magnetite: from synthesis to applications; *Current Topics in Medicinal Chemistry*; **2015**,15(16):1622-1640; (ISSN: 1568-0266) WOS:000355196900009 (IF<sub>2.9</sub>)
7. Denisa Ficai, Anton Ficai, Elena Dinu, Ovidiu Oprea, **Maria Sonmez**, Memduh Kagan Keler, Yesim Muge Sahin, Nazmi Ekren, Ahmet Talat Inan, Sibel Daglilar and Oguzhan Gunduz. Magnetic core shell structures: from 0D to 1D assembling. *Current Pharmaceutical Design*, **2015**, 21(37): 5301-5311; (ISSN: 1381-6128) WOS:000364518200002 (IF<sub>3.052</sub>)
8. Jenel Marian Patrascu, Ioan Avram Nedelcu, **Maria Sönmez**, Denisa Ficai, Anton Ficai, Bogdan Stefan Vasile, Camelia Ungureanu, Madalina G. Albu, Bogdan Andor, Ecaterina Andronescu and Laura Cristina Rusu; Composite Scaffolds based on Silver Nanoparticles for Biomedical Applications; *Journal of Nanomaterials*; **2015**: Article ID 587989; 1-9; (ISSN: 1687-4110) WOS:000363133500001 (IF<sub>1.758</sub>)
9. Denisa Ficai, **Maria Sonmez**, Madalina Georgiana Albu, Dan Eduard Mihaiescu, Anton Ficai, Coralia Bleotu; Antitumoral materials with regenerative function obtained using a layer-by-layer technique; *Drug Design Development and Therapy*; **2015**: 9, 1269-1279; (ISSN: 1177-8881) WOS:000350273700002 (IF<sub>2.881</sub>)
10. **Maria Sonmez**, Mihai Georgescu, Mihaela Valsan, Marius Radulescu, Denisa Ficai, Georgeta Voicu, Anton Ficai, Laurentia Alexandrescu; Design and characterization of polypropylene matrix/glass fibers composite materials; *J. Appl. Polym. Sci.*, **2015**, 132(26), 42163 (10 pages); (ISSN: 0021-8995) WOS:000352656100023 (IS<sub>1.866</sub>)
11. Rusu, L.C., Nedelcu, I.A., Georgiana Albu, M., **Sonmez, M.**, Voicu, G., Radulescu, M., Ficai, D., Ficai, A., Negrutiu, M.-L., Sinescu, C. Tetracycline Loaded Collagen/Hydroxyapatite Composite Materials for Biomedical Applications (Article). *Journal of Nanomaterials* Volume 2015, **2015**, Article number 361969; (ISSN: 1687-4110) WOS:000364130600001 (IF<sub>1.758</sub>)
12. Yesim Muge Sahin, Mehmet Yetmez, Faik N. Oktar, O. Gunduz, Simeon Agathopoulos, Ecaterina Andronescu, Denisa Ficai, **Maria Sonmez**, Anton Ficai. Nanostructured biomaterials with antimicrobial properties, *Current Medicinal Chemistry*; **2014**, 21(29): 3391-3404; (ISSN: 0929-8673) WOS:000341968600007 (IF<sub>3.853</sub>)
13. Catarina Marques, José M.F. Ferreira, Ecaterina Andronescu, Denisa Ficai, **Maria Sonmez**, Anton Ficai. Multifunctional materials for bone cancer treatment. *International Journal of Nanomedicine*; **2014**, 9, 2713-2725; (ISSN: 1178-2013) WOS:000336442900003 (IF<sub>4.383</sub>).
14. Ioan-Avram Nedelcu, Anton Ficai, **Maria Sonmez**, Denisa Ficai, Ovidiu Oprea and Ecaterina Andronescu; Silver Based Materials for Biomedical Applications; *Current Organic Chemistry*; **2014**, 18(2):173-184; (ISSN: 1385-2728) WOS:000333808400004 (IF<sub>2.157</sub>)
15. E. Manaila, G. Craciun, M.D. Stelescu, D. Ighigeanu, **M. Ficai**. Radiation vulcanization of natural rubber with polyfunctional monomers, *Polymer Bulletin*, **2014**,71(1), 57-82; (ISSN: 0170-0839) WOS:000329101400005 (IF<sub>1.438</sub>)
16. Filip, L (Filip, Loredana); Nedelcu, IA (Nedelcu, Ioan-Avram); Ungureanu, C (Ungureanu, Camelia); **Sonmez, M** (Sonmez, Maria); Andronescu, E (Andronescu, Ecaterina); Methylene Blue based Antiseptic Chitosan/hydroxyapatite Composite Materials; REVISTA DE CHIMIE, **2014**, 65(5), 521-524; (ISSN: 0034-7752) WOS:000337011900004 (IF<sub>0.81</sub>)
17. **M. Sonmez**, D.Ficai, A.Ficai, L.Alexandrescu, G. Voicu, E. Andronescu, "Functionalization of glass fibers for obtaining polypropylene based composite materials" *Romanian Journal of Materials*, **2014**, 44 (1), 88-94; (ISSN: 1583-3186) WOS:000335276800012 (IF<sub>0.563</sub>)
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19. Anton Fikai, Madalina Georgiana Albu, Mihaela Birsan, **Maria Sonmez**, Denisa Fikai, Viorica Trandafir Ecaterina Andronescu, "Collagen hydrolysate based collagen/hydroxyapatite composite materials", *Journal of Molecular Structure*, **2013**, 1037, 154–159; (ISSN: 0022-2860) WOS:000316924000022 (IF<sub>1.599</sub>)
20. **Maria Sonmez**, Denisa Fikai, Ana Stan, Coralia Bleotu, Lilia Matei, Anton Fikai, Ecaterina Andronescu, "Synthesis and characterization of hybrid PVA/Al<sub>2</sub>O<sub>3</sub> thin film", *Materials Letters*, **2012**, 74, 132– 136; (ISSN: 0167-577X) WOS:000302763200038 (IF<sub>2.224</sub>);
21. Mihail Scurtu, Ecaterina Andronescu, Cornelia Guran, **Maria Sonmez**, Alexandru Grumezescu, Liv Pall, Anton Fikai, Denisa Fikai. Colloidal Silica Use As Dyes Removing System, *Revista De Chimie*, **2012**, 63(10), 1013-1015; (ISSN: 0034-7752) WOS:000311927200008 (IF<sub>0.538</sub>)
22. Anton Fikai, Ecaterina Andronescu, Denisa Fikai, **Maria Sonmez**, Madalina Georgiana Albu, Georgeta Voicu. Mimicking the morphology of long bone. *Central European Journal of Chemistry*, **2012**, 10(6), 1949-1953; (ISSN: 1895-1066) WOS:000308950500026 (IF<sub>1.167</sub>).
23. **Maria Fikai**, Ioan-Avram Nedelcu, Denisa (Manzu) Fikai, Bogdan Stefan Vasile, Anton Fikai, Ecaterina Andronescu. The Influence of Ultrasonication on the Formation of COLL/HA Composite Materials. *Materiale Plastice*, **2011**, 48(1), 23-26; (ISSN: 0025-5289) WOS:000289661700005 (IF<sub>0.387</sub>).
24. D. Fikai, A. Fikai, B. S. Vasile, **M. Fikai**, O. Oprea, C. Guran, E. Andronescu. Synthesis of rod-like magnetite by using low magnetic field. *Digest Journal of Nanomaterials and Biostructures*, **2011**, 6(3), 943 – 951; (ISSN: 1842-3582) WOS:000297986100007 (IF<sub>1.2</sub>)
25. A.Ilie, E. Andronescu, D. Fikai, G. Voicu, **M. Fikai**, M. Maganu, A. Fikai " New approaches in layer by layer synthesis of collagen/hydroxyapatite composite materials", *Central European Journal of Chemistry*, **2011**, 9(2), 283-289; (ISSN: 1895-1066) WOS:000291252700012 (IF<sub>1.073</sub>).
26. Ecaterina Andronescu, Georgeta Voicu, **Maria Fikai**, Ioana Anita Mohora, Roxana Trusca, Anton Fikai. Collagen/hydroxyapatite composite materials with desired ceramic properties. *Journal of Electron Microscopy*, **2011**, 60(3), 253-259; (ISSN: 0022-0744) WOS:000291489600007 (IF<sub>NA</sub>).
27. A. Fikai, E. Andronescu, M. Maganu, G. Voicu, **M. Sonmez**. Biomimetic mineralization of the human nasal septum, *Digest Journal of Nanomaterials and Biostructures*, **2011**, 6(3), 1377-1383; (ISSN: 1842-3582) WOS:000297986100056 (IF<sub>1.2</sub>)
28. Ecaterina Andronescu, **Maria Fikai**, Georgeta Voicu, Denisa Fikai, Maria Maganu, Anton Fikai. Synthesis and characterization of collagen/hydroxyapatite:magnetite composite material for bone cancer treatment. *Journal of Materials Science - Materials in Medicine*, **2010**; 21(7), 2237-2242; (ISSN: 0957-4530) WOS:000279592600024 (IF<sub>2.325</sub>)
29. **Maria Fikai**, Ecaterina Andronescu, Denisa Fikai, Georgeta Voicu, Anton Fikai. Synthesis and characterization of COLL-PVA/HA hybrid materials with stratified morphology. *Journal Colloids and Surfaces B: Biointerfaces*, **2010**, 81(2), 614-619; (ISSN: 0927-7765) WOS:000282920100033 (IF<sub>2.78</sub>)
30. **Maria Fikai**, Ecaterina Andronescu, Georgeta Voicu, Denisa Fikai, Madalina Georgiana Albu, Anton Fikai. Mollusc shell/collagen composite as potential biomaterial for bone substitutes. *Romanian Journal of Materials*, **2010**, 40(4), 359-364; (ISSN: 1583-3186) WOS:000286039700010 (IF<sub>0.4</sub>)
31. Fikai, A; Andronescu, E; Voicu, G; Manzu, D; **Fikai, M**. Layer by layer deposition of hydroxyapatite onto the collagen matrix. *Materials Science & Engineering C-Materials For Biological Applications*, 2009, 29(7), 2217-2220; (ISSN: 0928-4931) WOS:000270159200021 (IF<sub>NA</sub>)
32. Fikai, A (Fikai, Anton); Andronescu, E (Andronescu, Ecaterina); Ghitulica, C (Ghitulica, Cristina); Voicu, G (Voicu, Georgeta); Trandafir, V (Trandafir, Viorica); Manzu, D (Manzu, Denisa); **Fikai, M** (Fikai, Maria); Pall, S (Pall, Stefan). Collagen/Hydroxyapatite Interactions in Composite Biomaterials. *Materiale Plastice*, **2009**, 46(1), pp.11-15; (ISSN: 0025-5289) WOS:000265431100002 (IF<sub>NA</sub>)

## CAPITOL CARTE

1. Fikai, D., Albu, M.G., **Sonmez, M.**, Fikai, A., Andronescu, E. Advances in the field of soft tissue engineering: From pure regenerative to integrative solutions (Book Chapter). *Nanobiomaterials in Soft Tissue Engineering: Applications of Nanobiomaterials*, March 8, **2016**, Pages 355-386.

## ARTICOLE IN REVISTE INDEXATE IN BAZE DE DATE INTERNATIONALE (BDI)

1. **Maria SÖNMEZ**, Anton FICAI, Denisa FICAI, Roxana TRUSCA, Ecaterina ANDRONESCU. Alginate/cellulose composite beads for environmental applications. *U.P.B. Sci. Bull., Series B*, **2016**, Vol. 78, Iss. 2, 165-176; (ISSN: 14542331)
2. Anton Fikai, **Maria Sonmez**, Denisa Fikai, Ecaterina Andronescu; Synthesis Of Collagen/Hydroxyapatite Composite Materials With Oriented Microstructure Induced By The Interaction Of The Flowing Mineralised Collagen Gel With The Support; *ChemXpress*, **2014**:3(3), 107-110; (ISSN(Print) : 2320 -1967; ISSN(Online): 2320 - 1975)
3. Vilsan, M.N., Meghea, A., **Sonmez, M.**, Georgescu, M. Dynamically cured hybrid polymer nanocomposite based on polypropylene and epdm rubber. *UPB Scientific Bulletin, Series B: Chemistry and Materials Science*, Volume 77, Issue 3, 2015, Pages 165-174; (ISSN: 14542331)
4. Laurentia ALEXANDRESCU, **Maria SONMEZ**, Mihaela NITUICĂ., Dana GURAU and Natalia POPA, (2014), "Hybrid bipolymeric structures based on butadiene-co-acrylonitrile and styrenebutadiene rubber reinforced with nanoparticles", *Leather and Footwear Journal*, Vol 14, Iss.1, pp. 39-52; (ISSN: 1583-4433)
5. Alexandrescu, L., **Fikai, M.**, Albu, L.F., Leca, M., Mihut, M.; Influența nanoparticulelor de montmorilonit asupra proprietăților adezivilor policloroprenici | [Influence of montmorillonite nanoparticles on polychloroprene adhesive properties. *Leather and Footwear Journal*; **2013**; 13 (1), pp. 61-80; (ISSN: 1583-4433)
6. **Fikai M**, Stan, A., Georgescu, M., Vilsan, M., Gurau, D., The influence of montmorillonite on physical-mechanical properties of butadiene-co-acrylonitrile rubber [Influența montmorilonitului asupra proprietăților fizico-mecanice ale cauciucului butadien-co-acrilonitril]; *Leather and Footwear Journal*; **2011**; 11(4);279-292; (ISSN: 1583-4433)
7. **Maria FICAI**, Ecaterina ANDRONESCU, Anton FICAI, GEORGETA VOICU, BOGDAN STEFAN VASILE; "Poly Bis-GMA/HA based hybrid composite materials", *UPB Scientific Bulletin, Series B: Chemistry and Materials Science*, Volume 73, Issue 1, 2011, Pages 75-84; (ISSN:14542331)
8. **Maria FICAI**, Ana STAN, Adriana STEFAN, Mihai GEORGESCU, Mihaela VILSAN, "Influence of various types of reinforcing agents on polymer structures based on butadiene-co-acrylonitrile rubber" [Influența diverselor tipuri de agenți de ranforsare asupra structurilor polimerice pe baza de cauciuc butadien-co-acrilonitrilic], *Leather and Footwear Journal*, **2010**, vol. 10, Nr. 3, pg 59-66; (ISSN: 1583-4433)

9. Laurentia ALEXANDRESCU, **Maria FICAI**, Minodora LECA, Zenovia MOLDOVAN, "Grafted chloroprene elastomer for ecologic adhesive nanodispersions Part I –Spectrometric method of assessing the grafting reaction [Elastomer cloroprenic grefat pentru nanodispersii adezive ecologice Partea I - Metoda spectrometrica de evaluare a reactiei de grefare]", *Leather and Footwear Journal*, Volume 10, Issue 1, **2010**, Pages 63-74; (ISSN: 1583-4433)
10. **Maria Ficai**, Mihaela Vilsan, Mihai Georgescu, "Materiale compozite carbon-carbon", *Revista pielarie incaltaminte*, 9(1), **2009**, Editura CERTEX, ISSN: 1583-4433, p. 43-55.
11. Mihai Georgescu, Mihaela Vilsan, **Maria Ficai**, Teodora Dragomir, Ciprian Chelaru, "The dependency of the diffusion coefficient on the nature of the gas molecule by elongation-stressed polymeric membrane", *Revista pielarie incaltaminte*, 9(2), **2009**, ISSN: 1583-4433, 95-103.
12. Mihaela Vilsan, **Maria Ficai**, Mihai Georgescu, Laura Panturu, Ciprian Chelaru, Teodora Dragomir, "**Applications of advanced polymers in the footwear industry**", *Revista pielarie incaltaminte*, 9(1), 2009., Editura CERTEX, ISSN: 1583-4433, 33-41.

#### ARTICOLE IN EXTENSO IN VOLUMELE UNOR MANIFESTARI STIINTIFICE, INDEXATE IN BAZE DE DATE INTERNATIONALE (BDI)

13. Alexandrescu, L., **Sonmez, M.**, Georgescu, M., Nituica, M., Gurau, D., Moldovan, Z., - „ Influence of particle size and phase distribution on adhesion of adhesive dispersion based on polychloroprene grafted with MMA”, *5th International Conference on Advanced Materials and System, ICAMS 2014, Bucuresti, Romania, 23-25 octombrie 2014*, pp: 21-26; (ISSN: 2068-0783)
14. Georgescu, M., Nituica, M., **Sonmez, M.**, Alexandrescu, L., Gurau, D., Vasilescu I.O – „Hybrid PE/PA/Nanoparticles composites resistant to high temperatures” *5th International Conference on Advanced Materials and System, ICAMS 2014, Bucuresti, Romania, 23-25 octombrie 2014*, pp: 55-60; (ISSN: 2068-0783)
15. Nituica, M., **Sonmez, M.**, Georgescu, M., Alexandrescu, L., Gurau, D., Meghea, A., Stelescu, M. D., Vasilescu I.O., (2014) – „ Polymeric nanostructures based on polyolefins and rubber for the footwear industry”, *5th International Conference on Advanced Materials and System, ICAMS 2014, Bucuresti, Romania, 23-25 octombrie 2014*, pp: 103-108; (ISSN: 2068-0783)
16. **Sonmez, M.**, Nituica, M., Alexandrescu, L., Georgescu, M., Gurau, D., Vasilescu I.O., Ficai, D., Ficai, A. – „Influence of coupling agents on the polymeric material/disperse material interface”, *5th International Conference on Advanced Materials and System, ICAMS 2014, Bucuresti, Romania, 23-25 octombrie 2014*, pp: 121-126; (ISSN: 2068-0783)
17. Alexandrescu, L., Georgescu, M., **Sonmez, M.**, Leca, M., Moldovan, Z. Chemically grafted polychloroprene contact adhesive nanodispersions. part i-methods of assessing the grafting reaction (Conference Paper). Proceedings of the 4th International Conference on Advanced Materials and Systems, ICAMS **2012**, Bucharest; Romania; 27-29 September **2012**, Pages 89-94; (ISSN: 2068-0783)
18. Alexandrescu, L., Georgescu, M., **Sonmez, M.**, Leca, M., Moldovan, Z. Chemically grafted polychloroprene contact adhesive nanodispersions. part II-assessing adherence of adhesive nanodispersions (Conference Paper). Proceedings of the 4th International Conference on Advanced Materials and Systems, ICAMS **2012**, Bucharest; Romania 27-29 September **2012**, Pages 95-100; (ISSN: 2068-0783)
19. FICAI Anton, ANDRONESCU Ecaterina, ALBU Mădălina Georgiana,GRUMEZESCU Alexandru, **SONMEZ Maria**, FICAI Denisa, Synthesis and Characterization of dense COLL/HA Composite Materials - Proceedings of the 4th International Conference on Advanced Materials and Systems, ICAMS **2012**, Bucharest; Romania, 27-29 September **2012**, pp. 249 – 253;(ISSN: 2068-0783)
20. M. Vilsan, **M. Ficai**, M. Georgescu, "Aspects on implementation of advanced pu polymers in the manufacture of high performance products for the leather industry", *The 2ND International conference on advanced materials and systems*, **2008**, editura CERTEX, Bucuresti, p.349-354 ; (ISBN: 978-973-1716-39-8)
21. **M. Ficai**, M.Vilsan, M. Georgescu, "Polyvinyl alcohol – starch- silicate nanocomposites", *The 2nd International Conference on Advanced Materials and Systems*, **2008**, editura CERTEX, Bucuresti, p.40-45; (ISBN: 978-973-1716-39-8)
22. M. Georgescu, M. Vilsan, **M. Ficai**, "*Determination of the diffusion coefficient through an extended polymer membrane*", *The 2ND International Conference on Advanced Materials and Systems*, **2008**, editura CERTEX, Bucuresti, pp. 242-247; (ISBN: 978-973-1716-39-8)
23. Alexandrescu L., L. Albu, **M Ficai**, et all, "New ecological depollution methods by processing chemically treated and compounded protein wastes into advanced polymer alloys", *The 2ND International Conference on Advanced Materials and Systems*, **2008**, editura CERTEX, Bucuresti, p. 17-21; (ISBN: 978-973-1716-39-8)
24. F. Ionescu, L. Alexandrescu, **M. Ficai**, S. Vişan, et all, „Elasto – plastic composites – relationship between the crosslinking systems, vulcanizing variables and processing equipment”, *The 2ND International conference on advanced materials and systems*, **2008**, editura CERTEX, Bucuresti, p. 230-235; (ISBN: 978-973-1716-39-8)
25. F. Ionescu, **M. Ficai**, L. Alexandrescu, et all, "Ageing resistance under dynamic conditions – a quality performance of the structured elastoplastic materials", *The 2ND International Conference on Advanced Materials and Systems*, **2008**, editura CERTEX, Bucuresti, p. 52-56; (ISBN: 978-973-1716-39-8)

#### ARTICOLE IN EXTENSO IN VOLUMELE UNOR MANIFESTARI STIINTIFICE, INDEXATE ISI PROCEEDINGS

26. **Ficai, M** (Ficai, Maria); Stan, A (Stan, Ana); Georgescu, M (Georgescu, Mihai); Vilsan, M (Vilsan, Mihaela). Influence of various types of reinforcing agents on polymer structures based on styrene-butadiene rubber. *Proceedings Of The 3rd International Conference On Advanced Materials And Systems*, **2010**,SEP 16-18, Bucharest, Romania, pp. 247-252; **WOS:000291667100041**
27. Georgescu, M (Georgescu, Mihai); Vilsan, M (Vilsan, Mihaela); **Ficai, M** (Ficai, Maria); Teisanu, F (Teisanu, Florin). Correlating values of flow index with the technological structure and parameters in processing thermoplastics by injection. *Proceedings Of The 3rd International Conference On Advanced Materials And Systems*, **2010**,SEP 16-18, Bucharest, Romania, pp. 253-258; **WOS:000291667100042**
28. Vilsan, M (Vilsan, Mihaela); **Ficai, M** (Ficai, Maria); Georgescu, M (Georgescu, Mihai); Alexandrescu, L (Alexandrescu, Laurentia); Stelescu, DM (Stelescu, Daniela Maria); Meghea, A (Meghea, Aurelia); Teisanu, F (Teisanu, Florin). Modernizing footwear sole injection equipment and establishing injection parameters for new types of compounds. *Proceedings Of The 3rd International Conference On Advanced Materials And Systems*, **2010**,SEP 16-18, Bucharest, Romania, pp. 337-342; **WOS:000291667100056**

#### ARTICOLE IN EXTENSO IN VOLUMELE UNOR MANIFESTARI STIINTIFICE INTERNATIONALE, NEINDEXATE

1. **Maria Sönmez**, Laurentia Alexandrescu, Mihai Georgescu, Daniela Maria Stelescu, Mihaela (Vîlsan) Nițuica, Dana Florentina Gurau, Anton Ficăi, Denisa Ficăi, Ioana Lavinia Ardelean, Ovidiu Oprea, Roxana Truscă. The effect of the functionalizing agent type on processability, mechanical and thermal properties of polypropylene based composites. *ICAMS 2016 – 6<sup>th</sup> International Conference on Advanced Materials and Systems*, 20-22 october **2016**, Bucharest, Romania, pp: 153-158.
2. Laurenția Alexandrescu, **Maria Sönmez**, Mihai Georgescu, Mihaela(Vîlsan) Nițuică, Maria Daniela Stelescu, Anton Ficăi, Constantin Florin Teișanu, Dana Gurău. Polymer Nanocomposites PE / PE-g-MA / EPDM / Nano ZnO Dynamically Vulcanized with Peroxide. *ICAMS 2016 – 6<sup>th</sup> International Conference on Advanced Materials and Systems*, 20-22 october **2016**, Bucharest, Romania, pp:27-31.
3. Mihaela (Vîlsan) Nițuică, **Maria Sönmez**, Laurenția Alexandrescu, Mihai Georgescu, Maria Daniela Stelescu, Dana Gurău, Aurelia Meghea, Carmen Curuțiu, Lia Mara Dițu. Cured Antibacterial Compound Based on Silicone Rubber and TiO<sub>2</sub> and ZnO Nanoparticles. *ICAMS 2016 – 6<sup>th</sup> International Conference on Advanced Materials and Systems*, 20-22 october **2016**, Bucharest, Romania, pp: 141-145.
4. Mihaela (Vîlsan) Nițuică, **Maria Sönmez**, Laurenția Alexandrescu, Stelescu Maria Daniela, Dana Gurău, Roxana Truscă, Ovidiu Oprea, Aurelia Meghea. Morphological and Structural Characterisation of a Dynamically Cured MMT-Reinforced Antimicrobial Polymer Composite. *ICAMS 2016 – 6<sup>th</sup> International Conference on Advanced Materials and Systems*, 20-22 october **2016**, Bucharest, Romania, pp: 147-152.
5. Maria Daniela Stelescu, Elena Mănăilă, Gabriela Crăciun, **Maria Sönmez**, Mihai Georgescu, Mihaela (Vîlsan)Nițuică. Influence of Crosslinking Method on the Properties of Natural Rubber Mixtures. *ICAMS 2016 – 6<sup>th</sup> International Conference on Advanced Materials and Systems*, 20-22 october **2016**, Bucharest, Romania, pp: 165-170.
6. Mihai Georgescu, Laurenția Alexandrescu, Maria Daniela Stelescu, **Maria Sönmez**, Mihaela (Vîlsan) Nițuică, Dana Gurău. New polymeric compounds with high temperature and impact resistance. *ICAMS 2016 – 6<sup>th</sup> International Conference on Advanced Materials and Systems*, 20-22 october **2016**, Bucharest, Romania, pp: 87-92.

## LUCRARI STIINTIFICE PREZENTATE LA CONFERINTE INTERNATIONALE NEINDEXATE

1. Sönmez Maria, Alexandrescu Laurentia, Nituica Mihaela, Georgescu Mihai, Gurau Florentina Dana, Ficăi Denisa, Ficăi Anton, Trusca Roxana, Constantinescu Doina. Layered Composites Based on Recycled PET/Functionalized Woven Flax Fibres, *2<sup>nd</sup> International Conference on Nanomaterials, Nanodevices, Fabrication and Characterization (ICNNFC'17)*, 4-6 april **2017**, Barcelona, Spain.
2. **Sonmez Maria**, Ficăi Denisa, Ficăi Anton, Trusca Roxana, Dana Florentina Gurau. Layered Montmorillonite Mineral Clay Used for Controlled Insulin Release, *2<sup>nd</sup> International Conference on Nanomaterials, Nanodevices, Fabrication and Characterization (ICNNFC'17)*, 4-6 april **2017**, Barcelona, Spain.
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4. **Maria Sonmez**, Anton Ficăi, Denisa Ficăi, Georgeta Voicu, Ecaterina Andronescu, "Synthesis and Characterization of the Anatase Loaded Mesoporous Photocatalyst", *6<sup>th</sup> International Conference on Nanotechnology: Fundamentals and Applications (ICNFA'15)*, Barcelona, Spain, July 15 – 17, **2015**. (ORAL PRESENTATION).
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15. **Sönmez, M.**, Alexandrescu, L., Georgescu, M., Nituica (Vilsan), M., Gurau, D., Ficăi, A., Ficăi, D., (**2014**), „Processing and morphological and structural characterization of polypropylene /silicon carbide nanocomposites”, *27th International Symposium on Polymer Analysis and Characterization (ISPAC), Les Diablerets, Switzerland ISPAC*, 16-18 June 2014.
16. D. Ficăi, Georgeta Voicu, A. Ficăi, **M. Sönmez** and L. Alexandrescu, "Design and characterization of PP-gMAH/glass fibres composite materials", la a 27th International Symposium on Polymer Analysis and Characterization (ISPAC), *Les Diablerets, Switzerland* 16-18 June **2014**.

## BREVET DE INVENTIE (ACCORDAT):

1. Brevet de inventie, Nr. 129558 – „Structuri polimerice pe baza de cauciuc cloroprenic si butadien-co-acrilonitril pentru talpi vulcanizate, utilizate in medii de lucru cu risc termic”, Inventatori: Alexandrescu Laurentia, **Sonmez Maria**, Juganaru Mircea, Juganaru Bogdan.

## CERERI BREVETE DE INVENTIE

1. Cerere de brevet OSIM A/00770/31.10.2016 – “Compozit polimeric antibacterian pe bază de cauciuc siliconic și nanoparticule de ZnO și TiO<sub>2</sub>”, Inventatori: Nituica Mihaela, Alexandrescu Laurentia, **Sonmez Maria**, Georgescu Mihai, Stelescu Maria Daniela.
2. Cerere de brevet OSIM A/00613/06.09.2016 – “Materiale compozite hibride pe bază de polipropilenă armată cu whiskersuri din carbură de siliciu și fibre de sticlă funcționalizate și procedeu de obținere a acestora”, Inventatori: **Sonmez Maria**, Nițuică Mihaela, Alexandrescu Laurenția, Stelescu Daniela, Georgescu Mihai, Fikai Denisa, Fikai Anton, Constantinescu Doina, Constantinescu Murariu Bogdan.
3. Cerere de brevet: A/00643./14.09.2016, „Compozit polimeric pe baza de poliamida, policarbonat si fibre de stica si procedeu de realizare”, Georgescu Mihai, Nituica (Vilsan) Mihaela, **Sonmez Maria**, Alexandrescu Laurentia, Stelescu Maria Daniela.
4. Cerere de brevet OSIM A/01007/15.12.2015 – “Process of obtaining nanoparticles based on SiO<sub>2</sub> intended for capturing methyl violet organic dye”, Inventatori: **Sonmez Maria**, Andronescu Ecaterina.
5. Cerere de brevet OSIM A/00793/27.10.2014 – „Stratified composite materials based on functionalized glass fibre reinforced with polypropylene -” **Maria Sönmez**, Laurenția Alexandrescu, Mihai Georgescu, Mihaela Nituica, Denisa Fikai, Anton Fikai, Lidia Avadanei.
6. Cerere de brevet: OSIM, A00964/ 08.12. 2014 - “Dynamically cured polymer composite based on polypropylene and EPDM rubber reinforced with montmorillonite”, Nituica (Vilsan) Mihaela, **Sonmez Maria**, Alexandrescu Laurentia, Stelescu Maria Daniela, Georgescu Mihai.
7. Cerere de brevet: A/00949-2013, “Polymer architectures based on polypropylene and polyamide for products used in high temperature work environments (150-200°C): Georgescu Mihai, **Sonmez Maria**, Nituica (Vilsan) M, Alexandrescu L.
8. Cerere de brevet: A00240/23.03.2013 - Bone grafts based on collagen, calcium phosphate and zinc and process of obtaining thereof. Anton Fikai, Ecaterina Andronescu, **Maria Sonmez**, Denisa Fikai, Ioan Avram Nedelcu; Madalina Georgiana Albu.
9. Cerere de brevet: A/00238, 20.03.2013 - “Magnetite/thioacids/ Ag or Au multifunctional systems, used for diagnosis and targeted treatment of cancer” – D. Fikai, E. Andronescu, **M. Sonmez**, A. Fikai, O. Oprea, B.S. Vasile.
10. Cerere de brevet A/00950-2012, “Polymeric structures based on chloroprene rubber and butadiene-co acrylonitrile for vulcanized shoe soles used in thermal risk work environments”, Alexandrescu L, **Sonmez Maria**, Juganaru Bogdan, Juganaru Mircea.

**Declar pe proprie răspundere că datele prezentate sunt în conformitate cu realitatea.**

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