

Universitatea POLITEHNICA din București
Facultatea: INGINERIE CHIMICA SI BIOTEHNOLOGII
Departament: CHIMIE GENERALĂ
Conf. dr. ing. Tihan Gratiela Teodora

LISTA lucrărilor științifice în periodice

(a) teza de doctorat;

T1. Gratiela Teodora Tihan, *Contribuții la studiul unor biomateriale polimerice: sinteză, caracterizare fizico-chimică și aplicații*, susținută în data de 04.05.2007.

(b) brevete de invenție

B 1. I. Bujor Ionescu, **G. T. Zgarian**, I. Demetrescu, H. Iovu, D. Iordachescu, *Compoziție biopolimerică și procedeu de obținere a acesteia*, Data eliberării: **30.03.2009**. BOPI nr. 3/2009. Număr patent: **RO122282-B1**.

B 2. **G. T. Tihan**, I. Bujor Ionescu, I. Demetrescu, A. Meghea, *Filme biopolimerice ternare*, Data eliberării: **30.03.2009**. BOPI nr. 3/2009. Număr patent: **RO122287-B1**.

(c) cărți și capitole în cărți;

II. Tihan Gratiela Teodora, Badea Maria Nicoleta, Ionita Mioara Daniela, *Aplicatii de laborator si probleme de chimie pentru facultatile de profil mecanic*, Editura Politehnica Press, ISBN: 978-606-515-033-1, 117 pag., **2009**.

(d) articole / studii *în extenso*, publicate în reviste din fluxul științific internațional principal (*cotate// indexate ISI Thomson Reuters, sau indexate in alte Baze de Date Internationale - BDI specific domeniului, care fac un proces de selectie a revistelor pe baza unor criterii de performanta*)

Ris 1. Ungureanu, C, **Tihan, GT***, Zgarian, RG*, Fierascu, I, Baroi, AM, Raileanu, S, Fierascu, RC, *Metallic and Metal Oxides Nanoparticles for Sensing Food Pathogens-An Overview of Recent Findings and Future Prospects*, **Materials**, **2022**, 15(15), Article Number, 5374, DOI: 10.3390/ma15155374, WOS:000839164100001, Q1, (IF=3.748/2021)

Ris 2. Ana-Maria Manea-Saghin, **Gratiela Teodora Tihan**, Roxana Gabriela Zgarian*, Carla-Cezarina Pădurețu, François Kajzar, Linear and non-linear optical properties of gelatin membranes doped with photoresponsive berries extracts, **Optical Materials** **108** Article number **110429**, **2020** Q2 10.1016/j.optmat.2020.110429, WOS 00058729090002

Ris 3. Simona Caprarescu, Roxana Gabriela Zgarian, **Gratiela Teodora Tihan***, Violeta Purcar, Eugenia Eftimie Totu, Cristina Modrogan, Anita-Laura Chiriac, Cristian Andi Nicolae, *Biopolymeric Membrane Enriched with*

Chitosan and Silver for Metallic Ions Removal, **Polymers** **2020**, *12*, 1792; doi:10.3390/polym12081792, Q1 WOS:000567278500001

Ris 4. Daniel-Cristian Ioan, Ileana Rau, Madalina Georgiana Albu Kaya, Nicoleta Radu, Marinela Bostan, Roxana Gabriela Zgârian, **Gratiela Teodora Tihan**, Cristina-Elena Dinu-Pîrvu, Alina Lupuliasa and Mihaela Violeta Ghica, *Ciprofloxacin-Collagen-Based Materials with Potential Oral Surgical Applications*, **Polymers**, **2020**, *12*, 1915; doi:10.3390/polym12091915, Q1, WOS:000582022800001

Ris 5. **G. T. Tihan**, M. Mindroiu, I. Rau, L. M. Nóbrega de Assis, A. Pawlicka^b, R. G. Zgarian*, The electrochromic device performance with DNA based electrolyte, **Materials Chemistry and Physics**, Volume 241, **2020**, 122349, <https://doi.org/10.1016/j.matchemphys.2019.122349>, Q2, FI = 3.408, ISSN 0254-0584, WOS: 000514749500029

Ris 6. **G. T. Tihan**, I. Rău¹, R. G. Zgârian*, C. Ungureanu*, R. C. Barbaresso, M. G. Albu Kaya, C. Dinu-Pîrvu, M. V. Ghica, *Oxytetracycline versus Doxycycline Collagen Sponges Designed as Potential Carrier Supports in Biomedical Applications*, **Pharmaceutics**, *363*, 11(8), ISSN:1999-4923, pp. 1-20, **2019**, (FI=4.421) (WOS: 000484515100040.), DOI: 10.3390/pharmaceutics11080363, Q1 WOS:000484515100040

Ris 7. Ioan D.C. Rau I., **Tihan G.T.**, Zgarian R.G.*, Ghica M.V., Kaya M.G.A., Dinu-Pirvu, E.C., *Piroxicam-Collagen-Based Sponges for Medical Applications*, **International Journal Of Polymer Science**, Article Number: 6062381, ISSN: 1687-9422 **2019**, (FI= **1.646**) (WOS:000471019400001), DOI: 10.1155/2019/6062381, (ISI WEB of Knowledge) Q2

Ris 8. **Tihan G.T.**, Zgarian R.G.*, Berteanu E., Ionita D., Totea G., Iordachel C., Tatia R., Prodana M., Demetrescu I., *Alkaline Phosphatase Immobilization on New Chitosan Membranes with Mg²⁺ for Biomedical Applications*, **Marine Drugs** *16* (8), article number 287, ISSN: 1660-3397 2018, (FI=4.073) (WOS: 000442868200014). (ISI WEB of Knowledge) Q1

Ris 9. Marin Ș., Albu Kaya M. G., Voicu G., **Tihan G. T.**, *Hidrogeluri compozite sensibile la pH și temperatura pentru tratamentul arsurilor / pH and temperature sensitive composite hydrogels for burn treatment*, **Revista Română de Materiale / Romanian Journal of Materials**, *47* (1), 1583-3186, pp. **78-83**, **2017**, (FI=0.65) (WOS:000396979900010). (ISI Web of Knowledge, SCOPUS) - 0 citări

Ris 10. Zgârian R. G, **Tihan G. T.**, Kajzar F., Rău I., Pawlicka A., Mîndroiu M. V., *Chromophore doped DNA based solid polymer electrolyte for electrochromic devices*, **Arabian Journal of Chemistry**, *10*, ISSN:1878-5352, pp. **232-239**, **2017** (FI=4.762) (WOS:000396238000010). (ISI Web of Knowledge, SCOPUS, ScienceDirect)

Ris 11. Zgârian R. G., Iacob F., Kaya D. A., Rău I., Voicu G., **Tihan G. T.***, *Effect of different essential oils on human dentine structure*, **Farmacia** *47* (1), ISSN: 0014-8237, pp. **247 -251**, **2017**, (FI=1.607) (WOS: 000400126800014). (ISI WEB of Knowledge, SCOPUS)

Ris 12. **Tihan G.T.**, Sreanu V., Meghea A., Voicu G., Albu M.G., Mitran V., Cimpean A., Zgârian R.G., *Innovative methodology for developing a bone grafting composite biomaterial starting from the seashell of *Rapana thomasiana**, **Comptes Rendus - Chimie**, *20*, ISSN: 1631-0748, pp. **440-445**, **2017**, (FI=2.223) (WOS:000400656200014). (ISI Web of Knowledge, SCOPUS) Q2

Ris.13. Gijiu C.L., Dinculescu D.D., Rau I., **Tihan G.**, Ghica M., *Modeling the drugs release from composite materials based on collagen*, **Molecular Crystal & Liquid Crystal**, *655*, 1, pp.250-254, **2017**, DOI: 10.1080/15421406.2017.1361300, ISSN: 1542-1406, WOS:000423110900027

- Ris 14.** Iacob F., **Tihan G.**, Zgârian R., Pauliuc M., Pirvu C., Rau I., *Preliminary studies concerning some natural extracts influence on the dentine*, **Molecular Crystal & Liquid Crystal**, 628:1, ISSN:1542-1406628:1, **pp. 110-114, 2016**, (FI=0.512) (WOS: 000378126400014), (ISI Web of Knowledge, SCOPUS, scholar.google.ro)
- Ris 15.** **Tihan T. G.**, Rău I., Zgârian R. G., Ghica M. V., *Collagen-based biomaterials for ibuprofen delivery*, **Comptes rendus - Chimie**, 19(3), ISSN: 1631-0748, **pp. 390-394, 2016**, (FI=2.223) (WOS:000385784900017). (ISI Web of Knowledge, SCOPUS)
- Ris 16.** Apetroaei M. R., Zgârian R. G., Manea A.M., Rău I., **Tihan G. T.***, Schroder V., *New source of chitosan from Black Sea marine organisms identification*, **Molecular Crystal & Liquid Crystal**, 628:1, ISSN:1542-1406, **pp. 102-108, 2016**, (FI=0.512) (WOS:000378126400013), (ISI Web of Knowledge, SCOPUS, scholar.google.ro)
- Ris 17.** Florea N. M., Lungu A., Balanuca B., Badica P., Craciun L., Damian C.M., Enculescu M., Ionescu C., **Tihan G.**, Iovu H., *Effect of polyhedral oligomeric silsesquioxane nanoreinforcement on the properties of epoxy resin/monoglycidylether-terminated poly(dimethylsiloxane) nanocomposites*, **High Performance Polymers**, 28(6), ISSN: 0954-0083, **pp. 724-734, 2016**, (FI=1,63) (WOS:000382225900011) (ISI Web of Knowledge, SCOPUS)
- Ris 18.** **Tihan G. T.**, Ungureanu C., Barbaresso R. C., Zgârian R. G., Rău I., Meghea A., Albu M. G., Ghica M. V., *Chloramphenicol collagen sponges for local drug delivery in dentistry*, **Comptes rendus - Chimie**, 18, ISSN: 1631-0748, **pp. 986-992, 2015**, (FI=2.223) (WOS:000363820900009) (ISI Web of Knowledge, SCOPUS, ScienceDirect, scholar.google.ro)
- Ris 19.** Mîndroiu M., Zgârian R. G., Kajzar F., Rău I., De Oliveira H. C. L., Pawlicka A., **Tihan G. T.***, *DNA-based membranes for potential applications*, **Ionics**, 21(5), ISSN:0947-7047, **pp. 1381-1390, 2015**, (FI=2.394) (WOS:000352656000017), (ISI Web of Knowledge, SCOPUS, scholar.google.ro)
- Ris 20.** **Tihan T. G.***, Ioniță M. D., Popescu R. G., Iordăchescu D., *Effect of hydrophilic – hydrophobic balance on biocompatibility of poly (methyl methacrylate)(PMMA) – hydroxyapatite (HA) composites*, **Materials Chemistry And Physics**, 118, ISSN: 0254-0584, **pp. 265–269, 2009**, (FI=3.408) (WOS:000271892800001), (ISI Web of Knowledge, SCOPUS, ScienceDirect, scholar.google.ro)
- Ris 21.** **Tihan G.**, Minkovska S., Giurginca M., Tite T., Iovu H., *Demetrescu I., Hydrophilic/hydrophobic balance in relation with structure and biocompatibility of ternary biofilms PVA-HAP-Collagen gel*, **Molecular Crystals and Liquid Crystals**, 486, ISSN: 1542-1406, **pp. 175/[1217] – 182/[1224], 2008**, (FI=0.512), (WOS:000256186000018) (ISI Web of Knowledge, SCOPUS, scholar.google.ro)
- Ris 22.** Sovar M.M., **Tihan G.T.**, Miculescu F., Mitran V, *Effect of saliva pH on electrochemical stability of Co-Cr-Mo bioalloy with a bio-chemically modified surface*, **Revista de chimie**, 58(9), ISSN: 0034-7752, **pp. 886 – 889, 2007**, (FI=1.755), (WOS:000250636800006). (ISI Web of Knowledge, SCOPUS)
- Ris 23.** **Zgârian G.**, Iordăchescu D., Iovu H., Ionescu-Bujor I., Popescu R., Demetrescu I., *Effect of chemical compositions and topographical features of collagen biofilms on cell response*, **Molecular Crystal & Liquid Crystal**, 448, ISSN: 1542-1406, **pp. 83-94, 2006**, (FI=0.512), (WOS:000235404700007). (ISI Web of Knowledge, SCOPUS)
- Ris 24.** **Zgârian G.**, Demetrescu I., Gheorghiu H., Iovu H., Hadăr A., Atanasiu C., *Modelarea unor compozițe polimerice: De la sinteză la proprietăți mecanice și calcule cu elemente finite*, **Revista de Chimie** 56 (7),

ISSN: 0034-7752, pp. 757-761, 2005, (FI=1.755), (WOS:000232629000016). (ISI Web of Knowledge, SCOPUS)

Ris 25. Zgarian G., Bujor I.I., Giurginca M., Rau I., Iovu H., Demetrescu I., *The characterization of bioartificial polymer films based on collagen filled with oligoelements*, **Molecular Crystals and Liquid Crystals** 418, ISSN: 1542-1406, pp. 291/[1019]-298/[1026], 2004, (FI=0.512), (WOS=000224980600024). (ISI Web of Knowledge, SCOPUS) –

(e) **Rns** -Reviste de specialitate de circulație națională recunoscute de CNCSIS.

Rns 26. Apetroaei A., Manea A. M., **Tihan G.***, Zgârian R.*, Schroder V., Rău I., *Improved Method Of Chitosan Extraction From Different Crustacean Species Of Romanian Black Sea Coast*, **U.P.B., Sci. Bull.**, Series B, Vol. 79, Iss. 1, ISSN 1454-2331, pp. 25-36, 2017, (SCOPUS, scholar.google.ro) WOS:000405772200003

Rns 27. Iacob F. **Tihan G. T.***, Zgarian R. G.*, Voicu G., Rău I. *Impact of some essential oils on the collagenic stability of the human dentine*, **U.P.B., Sci. Bull.**, Series B, Vol. 79, Iss. 1, ISSN 1454-2331, pp. 45-50, 2017, WOS:000405772200005, (SCOPUS, scholar.google.ro)

Rns 28. Zgârian R. G., **Tihan G. T.***, Barbaresso R. C., Rău I., *Spectral characterization of some collagen based composite for dental application*, **U.P.B. Sci. Bull.**, Series B, Vol. 78, Iss. 1, ISSN: 1454-2331, pp. 99-110, 2016, WOS: 000417051900010 (SCOPUS, scholar.google.ro)

Rns 29. Florea N. M., Lungu A., Crăciun L., Ionescu C., Zgârian R. G., **Tihan G. T.**, Iovu H., *The effect of epoxy functionalized polydimethylsiloxane on epoxy resins thermomechanical and morphological properties*, **U.P.B., Sci. Bull.**, Series B, Vol. 77, Iss. 4, ISSN: 1454-2331, pp. 29-40, 2015, (SCOPUS, scholar.google.ro) i

Rns 30. Popescu R. G., **Tihan G. T.**, Șulcă N. M., Demetrescu I., *Elaboration and characterization of polymers/ceramic films*, **U.P.B., Sci. Bull.**, Series B, Vol. 72, Iss. 4, ISSN: 1454-2331, pp. 79-90, 2010, (SCOPUS)

Rns 31. **Tihan, G.T.**, Ionescu Bujor, I., Iordăchescu, D., Kostrakievici, I., *Hydroxyapatite effect in enhancing cell growth on new ternary biopolymeric films*, **U.P.B., Sci. Bull.**, Series B, Vol. 67, Iss. 3, ISSN: 1454-2331, 2005, (SCOPUS)

(f) **Vis.** Volumele unor manifestări științifice internaționale recunoscute, organizate în țară și străinătate, indexate ISI Thomson Reuters sau indexate în alte Baze de Date Internaționale - BDI specifice domeniului

Vis 1. Apetroaei M. R., Manea A. M., **Tihan G. T.**, Zgârian R. G., Schroder V., Lilioș G., Apetroaei G. M., Rău I., *Chitosan an eco-friendly biomaterial from marine invertebrates*, **Proceedings of The 5th IEEE International Conference on E-Health and Bioengineering** - EHB 2015, Grigore T. Popa University of Medicine and Pharmacy, Iași, România, ISBN:978-1-4673-7545-0, (WOS:000380397900260), 2015, (ISI Web of Knowledge, scholar.google.ro)

Vis 2. Pawlicka A., Firmino A., Sentanin F., Sabadini R. C., Jimenez D.E.Q., Jayme C.C., Mindroiu M., Zgarian R. G., **Tihan G. T.**, Rau I., Silva M.M., Nogueira A.F., Kanicki J., Kajzar F., *Bio-inspired*

materials for electrochemical devices, *Proceedings of SPIE* vol. 9652, 96520U-1 : 96520U-11, ISBN: 978-1-62841-862-0, ISSN: 0277-786X, (WOS:000369009400022), **2015**, (ISI Web of Knowledge, scholar.google.ro)

Vis 3. Ionita, D., **Tihan, G.**, Marques, A. T., *Water absorption and mechanical properties of cements based on poly (methyl methacrylate) (PMMA) as function of hydroxyapatite (HA) content*, *Key Engineering Materials*, Vol. 396 – 398, ISSN: 1013-9826, **pp. 493-496**, (WOS:000265306300116), **2009** (ISI web of knowledge, scholar.google.ro)

Vis 4. Iovu H., Bujor Ionescu I., **Zgirian G.**, Demetrescu I, *The elaboration and characterization of bioartificial polymer films with collagen content*, *25th International Semiconductor Conference, CAS 2002 International Semiconductor Conference, vol. 1 and 2, Proceedings*, **pp. 295-298**, ISBN: 0-7803-7440-1, (WOS:000181629400063), **2002** (ISI web of knowledge, scholar.google.ro)

(g) **Vi** - Volumele unor manifestări științifice internaționale recunoscute, organizate în țară și străinătate;

Vi 1. S. A. Gârea, **G. Zgârian**, H. Iovu, *Thermal and microwave crosslinking process of diglycidyl ether of bisburnenol A with different diamines*, *Proceedings of 13th Romanian International Conference on Chemistry and Chemical Engineering*, Bucharest, Romania, (RICCCE 13), Vol. 3, **pp. 29-33**, ISBN: 973-652-825-1, **2003**

Vi 2. V. Trandafir, **G. Zgirian**, I.Bujor Ionescu, H. Iovu, G. Conache, I. Demetrescu, *The contribution of biopolymer films doped with different ions*, *Proceedings of 13th Romanian International Conference on Chemistry and Chemical Engineering*, Bucharest, Romania, (RICCCE 13), Vol. 3, **pp. 47-50**, ISBN: 973-652-825-1, **2003**

Vi 3. Daniela Ionescu (Ionita) and **Gratiela Zgirian**, *The corrosion of titanium and titanium alloys in NaCl solution*, *1st International Conference Study and Control of Corrosion in the perspective of sustainable Development of Urban Distribution Gas 2002*, **pp.156-158**, ISBN: 973-95041-3-2, **2002**,

Vi 4. H. Gheorghiu, H. Iovu, I. Demetrescu, **G. Zgirian**, *The elaboration and mechanical characterization of some epoxy-glass fibres composites*, *Romanian Journal of Technical Sciences, Applied Mechanics*, ISSN:0035-4074, vol. 47, **pp.459-463**, **2002**

(h) **Vn**. Conferințe naționale, publicații *in extenso*, apărute în lucrări ale principalelor conferințe naționale de specialitate

Vn 1. Ionescu I. B., Iovu H., **Zgârian G.**, Zgârian R., Demetrescu I., *Filme și Fibre Biopolimerice cu Aplicații Medicale*, *Simpozionul Național de Biomateriale*, București, Ediția a III-a, Ed. Printech, pp. 83–89, ISBN 973-652-808-3, **2002**

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