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10/2021 – ÎN CURS Târgu Mureș, România

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Confirmat prin Ordin MS

Titlul tezei de doctorat: **Dezvoltare de metode enantioselective pentru determinarea purității optice a unor compuși de interes farmaceutic**

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● **COMPETENȚE LINGVISTICE**

Limbă(i) maternă(e): **MAGHIARĂ**

Altă limbă (Alte limbi):

	COMPREHENSIUNE		VORBIT		SCRIS
	Comprehensiune orală	Citit	Exprimare scrisă	Conversație	
ROMÂNĂ	C2	C2	C2	C2	C2
ENGLEZĂ	C2	C2	C2	C2	C2
GERMANĂ	A2	A2	A2	A2	A2

Niveluri: A1 și A2 Utilizator de bază B1 și B2 Utilizator independent C1 și C2 Utilizator experimentat

Lista de publicații

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Teză de doctorat

Titlul: Dezvoltare de metode enantioselective pentru cercetarea purității optice a unor compuși cu interes farmaceutic

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Conducător de doctorat: Prof. Dr. Muntean Daniela-Lucia
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Date sumative – indicatori scientometrici:

Nr. publicații: 53

Factor de impact cumulat: >150

h-index: 18

i10-index: 30

Nr. citări: >750

Lista de publicații

1. Dobó M, Ádám M, Fiser B, Papp LA, Dombi G, Sekkoum K, **Szabó ZI**, Tóth G. *Enantioseparation and molecular docking study of selected chiral pharmaceuticals on a commercialized phenylcarbamate- β -cyclodextrin column using polar organic mode*. Scientific Reports 2023, 13: 14778.
IF: 4.6
2. Bitay E, Gergely AL, **Szabó ZI**. *Optimization and Production of Aceclofenac-Loaded Microfiber Solid Dispersion by Centrifugal Spinning*. Pharmaceutics 2023, 15: 2256.
IF: 5.4
3. Papp LA, Hancu G, **Szabó ZI**. *Simultaneous determination of enantiomeric and organic impurities of vildagliptin on a cellulose tris (3-chloro-4-methylphenylcarbamate) column under reversed-phase conditions*. J Pharm Biomed Anal 2023, 234: 115495
IF: 3.4
4. **Szabó ZI**, Boda F, Fiser B, Dobó M, Szőcs L, Tóth G. *Chiral Separation of Oxazolidinone Analogs by Capillary Electrophoresis Using Anionic Cyclodextrins as Chiral Selectors: Emphasis on Enantiomer Migration Order*. Molecules 2023, 28: 4530
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5. **Szabó ZI**, Benkő BM, Bartalis-Fábián Á, Iványi R, Varga E, Szőcs L, Tóth G. *Chiral Separation of Apremilast by Capillary Electrophoresis Using Succinyl- β -Cyclodextrin—Reversal of Enantiomer Elution Order by Cationic Capillary Coating*. Molecules 2023, 28: 3310
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6. Dombi G, Horváth P, Fiser B, Mirzahassemi A, Dobó M, **Szabó ZI**, Tóth G. *Enantioselective Human Serum Albumin Binding of Apremilast: Liquid Chromatographic, Fluorescence and Molecular Docking Study*. International Journal of Molecular Sciences 2023, 24: 2168.
IF: 6.208
7. Bitay E, Gergely AL, Kántor L, **Szabó ZI**. *Evaluation of Lapatinib-Loaded Microfibers Prepared by Centrifugal Spinning*. Polymers 2022, 14: 5557
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8. **Szabó ZI**, Bartalis-Fábián Á, Tóth G. *Simultaneous Determination of Escitalopram Impurities including the R-enantiomer on a Cellulose tris(3,5-Dimethylphenylcarbamate)-Based Chiral Column in Reversed-Phase Mode*. Molecules 2022, 27: 9022.
IF: 4.927
9. Ferencz E, Zöldhegyi A, Kelemen EK, Obreja M, Urkon M, Sipos E, Tóth G, Molnár I, **Szabó ZI**. *Analytical quality by design-compliant retention modeling for exploring column interchangeabilities in separating ezetimibe and its related substances*. Journal of Chromatography A 2022, 1682: 463494.
IF: 4.601
10. Orlandini S, Hancu G, **Szabó ZI**, Modroiu A, Papp LA, Gotti R, Furlanetto S. *New Trends in the Quality Control of Enantiomeric Drugs: Quality by Design-Compliant Development of Chiral Capillary Electrophoresis Methods*. Molecules 2022, 27: 7058.
IF: 4.927
11. Papp LA, Krizbai S, Dobó M, Hancu G, **Szabó ZI**, Tóth G. *Determination of Chiral Impurity of Naproxen in Different Pharmaceutical Formulations Using Polysaccharide-Based Stationary Phases in Reversed-Phase Mode*. Molecules 2022, 27: 2986.
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12. Benkő BM, Sebe I, **Szabó ZI**. *Insulin for topical use in wound healing: opportunities and limitations*, Acta Pharmaceutica Hungarica 2022, 92: 3-19.
13. Bucur P, Fülöp I, Sipos E, **Szabó ZI**. *Cyclodextrin-based nanofibers obtained by electrospinning*, Bulletin of Medical Sciences (Orvostudományi Értesítő) 2022, 94: 118-129.
14. Foroughbakhshfarsaei M, Dobó M, Boda F, **Szabó ZI**, Tóth G. *Comparative chiral separation of thalidomide class of drugs using polysaccharide-type stationary phases with emphasis on elution order and hysteresis in polar organic mode*, Molecules 2022, 27: 111.
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15. Dobó M, Foroughbakhshfarsaei M, Horváth P, **Szabó ZI***, Tóth G. *Chiral separation of oxazolidinone analogues by liquid chromatography on polysaccharide stationary phases using polar organic mode*, J Chrom A 2022, 1662: 462741
IF: 4.759 ***autor correspondent**
16. Rédei E, Kovács OK, **Szabó ZI**, Gergely AL, Antonoaea P, Todoran N, Vlad A, Ciurba A, Donáth-Nagy G, Sipos E. *Fluoxetine containing PVP-based electrospun nanofibers*. Acta Pol Pharm 2021, 78: 563–571.
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17. Rédei E, Ráduly I, **Szabó ZI**, Ciurba A, Todoran N, Antonoaea P, Vlad RA, Orsolya P, Sipos E. *Preparation and characterization of atorvastatin-loaded polyvinylpyrrolidone-based electrospun microfibrillar mats*, Studia UBB Chemia 2021, 66(2): 287-297. ISSN: (print): 1224-7154 ISSN (online): 2065-9520
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20. Fejős I, Tóth G, Várnai B, **Szabó ZI**, Köteles I, Malanga M, Béni Sz. *Enantioseparation of solriamfetol and its major impurity phenylalaninol by capillary electrophoresis using sulfated gamma cyclodextrin*, Electrophoresis 2021, 40: 2799-2805. ISSN: 1522-2683, DOI: 10.1002/elps.202100076.
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21. Bitay E, **Szabó ZI**, Kántor J, Molnár K, Gergely AL. *Scale-up and optimization of fenofibrate-loaded fibers electrospun by corona-electrospinning*, Express Polymer Letters 2021, 15: 375-387. ISSN: 1788-618X, DOI: 10.3144/expresspolymlett.2021.32
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22. Tóth G, Fogarasi E, Bartalis-Fábián Á, Foroughbakhshfarsaei M, Boldizsár I, Darcsi A, Lohner Sz, Scriba GKE, **Szabó ZI***. *Liquid chromatographic method for the simultaneous determination of achiral and chiral impurities of dapoxetine in approved and counterfeit products*, J Chrom A 2020, 1625: 461388, ISSN: 1873-3778, DOI: 10.1016/j.chroma.2020.461388
FI: 4.759 *corresponding author
23. Sipos E, Csáti T, Kazsoki A, Gergely A, Bitay E, **Szabó ZI***, Zelkó R. *Preparation and Characterization of Fenofibrate-Loaded PVP Electrospun Microfibrillar Sheets*, Pharmaceutics 2020, 12, 612. ISSN: 1999-4923. DOI:10.3390/pharmaceutics12070612
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24. Papp LA, Foroughbakhshfarsaei M, Fiser B, Horváth P, Kiss E, Sekkoum K, Gyéresi Á, Hancu G, Noszá B, **Szabó ZI**, Tóth G. *Reversed-phase HPLC enantioseparation of pantoprazole using a teicoplanin aglycone stationary phase— Determination of the enantiomer elution order using HPLC-CD analyses*, Chirality 2020, 32: 158-167. ISSN: 1520-636X, DOI: 10.1002/chir.23146.
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FI: 3.935 *corresponding author.
26. Köteles I, Foroughbakhshfarsaei M, Dobó M, Ádám M, Boldizsár I, **Szabó ZI***, Tóth G. *Determination of the Enantiomeric Purity of Solriamfetol by High-Performance Liquid Chromatography in Polar Organic Mode Using Polysaccharide-Type Chiral Stationary Phases*, Chromatographia 2020, 83: 909-913. ISSN: 1612-1112, DOI: 10.1007/s10337-020-03911-1.
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27. Papp LA, Hancu G, Gyéresi Á, Kelemen H, **Szabó ZI**, Noszá B, Dubsky P, Tóth G. *Chiral separation of lansoprazole and rabeprazole by capillary electrophoresis using dual cyclodextrin systems*, Electrophoresis 2019, 40: 2799-2805. ISSN: 1522-2683, DOI: 10.1002/elps.201900107.
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29. **Szabó ZI**, Ludmerczki R, Fiser B, Noszá B, Tóth G. *Chiral separation of rasagiline using sulfobutylether- β -cyclodextrin: capillary electrophoresis, NMR and molecular modeling study*, Electrophoresis 2019, 40: 1897-1903. ISSN: 1522-2683. DOI: 10.1002/elps.201800482.
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39. Sipos E, Oltean AR, **Szabó ZI**, Rédei EM, Donáth-Nagy G. *Application of SeDeM expert systems in preformulation studies of pediatric ibuprofen ODT tablets*, *Acta Pharmaceut* 2017, 67: 237-246. ISSN: 1846-9558, DOI: 10.1515/acph-2017-0017
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40. Tóth G, Jánoska Á, Völgyi G, **Szabó ZI**, Orgován G, Mirzahassemi A, Noszá B. *Physicochemical Characterization and Cyclodextrin Complexation of the Anticancer Drug Lapatinib*, *J Chem* 2017, 4537632. ISSN: 2090-9063, DOI: 10.1155/2017/4537632
FI: 1.726
41. **Szabó ZI**, Gál R, Gál Zs, Vancea Sz, Rédei E, Fülöp I, Sipos E, Donáth-Nagy G, Noszá B, Tóth G. *Cyclodextrin complexation improves aqueous solubility of the antiepileptic drug, rufinamide: solution and solid state characterization of compound-cyclodextrin binary systems*, *J Incl Phenom Macrocycl Chem* 2017, 88: 43-52, ISSN: 1388-3127, DOI: 10.1007/s10847-017-0710-z
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42. Sipos E, **Szabó ZI**, Rédei E, Szabó P, Sebe I, Zelkó R. *Preparation and characterization of nanofibrous sheets for enhanced oral dissolution of nebulivol hydrochloride*, *J Pharm Biomed Anal* 2016, 129: 224-228, ISSN 0731-7085
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43. Tóth G, Jánoska Á, **Szabó ZI**, Völgyi G, Orgován G, Sente L, Noszá B *Physicochemical characterization and cyclodextrin complexation of erlotinib*, *Supramol Chem* 2016, 28: 656-664, ISSN,
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44. **Szabó ZI**, Szőcs L, Horváth P, Komjáti B, Nagy J, Jánoska Á, Muntean DL, Noszá B, Tóth G. *Liquid chromatography with mass spectrometry enantioseparation of pomalidomide on cyclodextrin-bonded chiral stationary phases and the elucidation of the chiral recognition mechanisms by NMR spectroscopy and molecular modeling*, *J Sep Sci* 2016, 39: 2941-2949, ISSN
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45. **Szabó ZI**, Foroughbakhshfasaei M, Szőcs L, Nagy J, Komjáti B, Noszá B, Tóth G *Stereoselective interactions and liquid chromatographic enantioseparation of thalidomide on cyclodextrin-bonded chiral stationary phases*, *J Incl Phenom Macrocycl Chem* 2016, 85:227-236, ISSN
FI 1.095
46. **Szabó ZI**, Székely-Szentmiklósi B, Deák B, Székely-Szentmiklósi I, Kovács B, Zöldi K, Sipos E *Study of the effect of formulation variables on combination tablet characteristics containing enalapril maleate and indapamide as active substances using experimental design*, *Acta Pharmaceutica* 2016,66: 191-206, ISSN
FI 1.288
47. **Szabó ZI**, Szőcs L, Muntean DL, Noszá B, Tóth G *Chiral separation of uncharged pomalidomide enantiomers using carboxymethyl-beta-cyclodextrin: a validated capillary electrophoretic method*, *Chirality* 2016, 26: 199-203, ISSN
FI 1.956
48. **Szabó ZI**, Tóth G, Völgyi G, Komjáti B, Hancu G, Sente L, Sohajda T, Béni Sz, Muntean DL, Noszá B. *Chiral separation of asenapine enantiomers by capillary electrophoresis and characterization of cyclodextrin complexes by NMR spectroscopy, mass spectrometry and molecular modeling*. *J Pharm Biomed Anal* 2016, 117: 398-404. ISSN
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49. **Szabó ZI**, Tóth Cs, Hancu G, Muntean DL. *Simultaneous Chiral Separation of Four H1-Antihistamines by Capillary Zone Electrophoresis Using a Dual Cyclodextrin System*. *Chromatographia* 2015, 78: 1377-1384, ISSN
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50. Sipos E, **Szabó ZI***, Lőrinczi L, Ciurba A. *Rheological behaviour and microbial studies of Carbopol hydrogels*. Studia UBB Chemia 2015, 60: 177-185. ISSN (print): 1224-7154 ISSN (online): 2065-9520
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51. **Szabó ZI**, Réti Z, Gagyí L, Kis EL, Sipos E. *Simultaneous quantification of related substances of perindopril tert-butylamine using a novel stability indicating liquid chromatographic method*, J. Chromatogr Sci 2015, 53: 424-430
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52. Hancu G, Cârje A, Iuga I, Fülöp I, **Szabó ZI**. *Cyclodextrine screening for the chiral separation of carvedilol by capillary electrophoresis*. Iran J Pharm Res 2015; 14(2): 425-433, ISSN 1726-6890
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53. **Szabó Z**, Szabó T, Rédei E, Sipos E. *Validated HPLC method for nebivolol determination from dosage form and in vitro dissolution*, Studia UBB Chimia, 2014, LX (4): 195-203, ISSN (print): 1224-7154 ISSN (online): 2065-9520
FI 0.191