

Lista de lucrări în domeniul de știință definit de disciplinele din postul scos la concurs

NUMELE ȘI PRENUMELE: Gergely Attila Levente

I. LISTA PUBLICAȚIILOR RELEVANTE

1. Bitay E, **Gergely A.L.**, Bálint I, Molnar K, Fulop I, Fogarasi E, Szabó ZI. Preparation and characterization of lapatinib-loaded PVP nanofiber amorphous solid dispersion by electrospinning. *eXPRESS Polymer Letters*. 2021;15(11):1041-50. WOS:000691293800004
2. Bitay E, Szabó ZI, Kántor J, Molnar K, **Gergely A.L.** Scale-up and optimization of fenofibrate-loaded fibers electrospun by corona-electrospinning. *eXPRESS Polymer Letters*. 2021;15(4):375-87. WOS:000614836200008
3. Bitay E, Tóth L, Kovács TA, Nyikes Z, **Gergely A.L.** Experimental Study on the Influence of TiN/AlTiN PVD Layer on the Surface Characteristics of Hot Work Tool Steel. *Applied Sciences*. 2021 Jan;11(19):9309. WOS:000710370600001
4. **Gergely A.L.**, Kántor J. Process Optimization of PVDF Piezoelectric Nanofiber Production via Electrospinning, *Acta Universitatis Sapientiae*, 13, 2021, 1-13. ISSN: 2066-8910. DOI: [10.2478/auseme-2021-0001](https://doi.org/10.2478/auseme-2021-0001) EBSCO Discovery Services, Sciendo
5. Sipos, E.; Csatári, T.; Kazsoki, A.; **Gergely, A.L.**; Bitay, E.; Szabó, Z. I.; Zelkó, R. Preparation and Characterization of Fenofibrate-Loaded PVP Electrospun Microfibrous Sheets. *Pharmaceutics*, 12(7), **2020**, 612. WOS:000554157000001
6. **Gergely, A.L.**; Kántor, J.; Bitay, E.; Bíró, D. Electrospinning of Polymer Fibres Using Recycled PET, *Acta Materialia Transylvanica*, 2(1), 2019, 19-26. ISSN:2601-8799 <https://doi.org/10.33924/amt-2019-01-04> EBSCO Discovery Services, Sciendo
7. **Gergely, A.L.**; Puskas, J.E. Synthesis and Characterization of Thermoplastic Elastomers with Polyisobutylene and Polyalloocimene Blocks *J. Polym. Sci. Part A: Polym. Chem.*, 53, **2015**, 1567-1574. WOS:000354727800005
8. Roh, J.H.; Doy, D.; Lee, W.K.; **Gergely, A.L.**; Puskas, J.E.; Roland, C.M. Thermoplastic Elastomers of Alloocimene and Isobutylene Triblock Copolymers, *Polymer*, 56, **2015**, 280-283. WOS:000348555500035
9. **Gergely, A.L.**; Turkarslan, O.; Puskas, J.E.; Kaszas, G. The Role of Electron Pair Donors in the Carbocationic Copolymerization of Isobutylene with Alloocimene, *J. Polym. Sci. Part A: Polym. Chem.*, 51, **2013**, 4717-4721. WOS:000325462600001
10. Puskas, J.E.; **Gergely, A.L.**; Kaszas,G. Controlled/Living Carbocationic Copolymerization of Isobutylene with Alloocimene, *J. Polym. Sci. Part A: Polym. Chem.*, 51, **2013**, 29-33. WOS:000311409400002

II. LISTA COMPLETĂ DE PUBLICAȚII, CREAȚII, INVENTII

A. Teza de doctorat.

Synthesis and characterization of poly(alloocimene-*b*-isobutylene) thermoplastic elastomers, Dr Puskás Judit, Universitatea din Akron, Facultatea Știință și Ingineria Polimerilor, 2014.

B. Cărți

B2. Cărți (manuale, monografii, tratate, îndrumare etc.) publicate în țară, la edituri recunoscute CNCSIS/CNCS.

1. **Gergely Attila Levente**, *Polímer anyagok anyagtudományi és feldolgozástechnikai laboratóriuma*, MTF18, ISSN 2068 – 3081, ISBN 978-606-739-229-6, EME, Cluj-Napoca, 2022. 106 p. <https://eme.ro/publication-hu/mtf/borito+pdf/mtf18.pdf>

B4. Cărți (manuale, monografii, tratate, îndrumare etc.) publicate pe web.

1. **Gergely Attila Levente**, *Bevezetés a polímer anyagok anyagtudományába*, uz intern, electronic: 163p. \gorgenyi\tanaroktoldiakoknak\Gergely Attila\Polimerek tulajdonsaga es tesztelese\Jegyzet

C. Lucrări științifice publicate

C1. Lucrări științifice publicate în reviste cotate ISI

1. Bitay E, **Gergely A.L.***, Kántor J., Szabó ZI, Evaluation of Lapatinib-Loaded Microfibers Prepared by Centrifugal Spinning. *Polymers*. **2022**; 14(24):5557-5570. **IF: 4.967**
2. Rédai E.M., Kovács O., Szabó Z.I., **Gergely A.L.**, Antonoaeal P., Todoran N., Vlad R.A., Ciurba A., Dónáth-Nagy G., Sipos E., Fluoxetin containing PVP-based electrospun nanofibers. *Acta Poloniae Pharmaceutica – Drug Research*, **2021**, 78(4):563–571. **IF: 0.578**. WOS:000715851200012
3. Bitay E, Tóth L, Kovács TA, Nyikes Z, **Gergely A.L.*** Experimental Study on the Influence of TiN/AlTiN PVD Layer on the Surface Characteristics of Hot Work Tool Steel. *Applied Sciences*. **2021**; 11(19):9309. **IF: 2.679** WOS:000710370600001
4. Bitay E, **Gergely A.L.***, Bálint I, Molnar K, Fulop I, Fogarasi E, Szabó ZI. Preparation and characterization of lapatinib-loaded PVP nanofiber amorphous solid dispersion by electrospinning. *eXPRESS Polymer Letters*. **2021**; 15(11):1041-50. **IF: 4.161** WOS:000691293800004
5. Bitay E, Szabó ZI, Kántor J, Molnar K, **Gergely A.L.***. Scale-up and optimization of fenofibrate-loaded fibers electrospun by corona-electrospinning. *eXPRESS Polymer Letters*. **2021**; 15(4):375-87. **IF: 4.161** WOS:000614836200008
6. Sipos, E.; Csatári, T.; Kazsoki, A.; **Gergely, A.L.**; Bitay, E.; Szabó, Z. I.; Zelkó, R. Preparation and Characterization of Fenofibrate-Loaded PVP Electrospun Microfibrous Sheets. *Pharmaceutics*, 12(7), **2020**, 612. **IF: 6.321** WOS:000554157000001
7. Bitay, E.; Pilbat, A-M.; Indreac, E.; Kacsóc, I.; Máté, M.; **Gergely, A.L.**; Veress, E. Influence of the Ball Milling Process and Air Sintering Conditions on the Synthesis of La_{0.7}Sr_{0.3}MnO₃ Ceramics, *STUDIA UBB CHEMIA*, LXIV, 2, Tom II, **2019**, 447-456. **IF: 0.305** WOS:000484542200014
8. Puskas, J. E.; Castano, M.; Gergely, A. L. Green polymer chemistry: enzyme-catalyzed polymer functionalization. In *Green Polymer Chemistry: Biobased Materials and Biocatalysis* Ed(s): H. N. Cheng, Richard A. Gross, Patrick B. Smith, ACS Symposium Series, Vol. 1192, 17-25, American Chemical Societym , ISBN13: 9780841230651 eISBN: 9780841230668, **2015**. WOS:000365936900002

9. **Gergely, A.L.**; Puskas, J.E. Synthesis and Characterization of Thermoplastic Elastomers with Polyisobutylene and Polyalloocimene Blocks *J. Polym. Sci. Part A: Polym. Chem.*, 53, **2015**, 1567-1574. IF: 3.113 WOS:000354727800005
10. Roh, J.H.; Doy, D.; Lee, W.K.; **Gergely, A.L.**; Puskas, J.E.; Roland, C.M. Thermoplastic Elastomers of Alloocimene and Isobutylene Triblock Copolymers, *Polymer*, 56, **2015**, 280-283. IF: 3.562 WOS:000348555500035
11. **Gergely, A.L.**; Puskas, J.E., Synthesis of block copolymers of isobutylene and alloocimene, *ABSTRACTS OF PAPERS OF THE AMERICAN CHEMICAL SOCIETY*, 247, **2014**, 191-POLY. WOS:000348457604591
12. **Gergely, A.L.**; Turkarslan, O.; Puskas, J.E.; Kaszas, G. The Role of Electron Pair Donors in the Carbocationic Copolymerization of Isobutylene with Alloocimene, *J. Polym. Sci. Part A: Polym. Chem.*, 51, **2013**, 4717-4721. IF: 3.113 WOS:000325462600001
13. Puskas, J.E.; **Gergely, A.L.**; Kaszas, G. Controlled/Living Carbocationic Copolymerization of Isobutylene with Alloocimene, *J. Polym. Sci. Part A: Polym. Chem.*, 51, **2013**, 29-33. IF: 3.113 WOS:000311409400002

* Autor corespondent

C2. Lucrări științifice publicate în reviste indexate în baze de date internaționale (indicări și baza de date).

1. Fábián, H., **Gergely A.L.** Design of a High Performance Fiber-producing Machine, *Acta Materialia Transylvanica*, 5(2), **2022**, 62-65. ISSN:2601-8799 <https://doi.org/10.33924/amt-2022-02-03> EBSCO Discovery Services, Sciendo
2. **Gergely A.L.**, Kántor J. Process Optimization of PVDF Piezoelectric Nanofiber Production via Electrospinning, *Acta Universitatis Sapientiae*, 13, **2021**, 1-13. ISSN: 2066-8910. DOI: [10.2478/auseme-2021-0001](https://doi.org/10.2478/auseme-2021-0001) EBSCO Discovery Services, Sciendo
3. Birton B., **Gergely A.L.** Design and Implementation of a Vacuum Forming Machine, *Acta Materialia Transylvanica* 4(2), **2021**, 75–78. ISSN:2601-8799. <https://doi.org/10.33924/amt-2021-02-03> EBSCO Discovery Services, Sciendo
4. **Gergely A.L.** The Production of Polyethylene Terephthalate Nanofibers by Electrospinning with Minimum Amount of Trifluoroacetic Acid. *Biomedical Journal of Scientific & Technical Research*. **2020**;29(3):22399-401. <http://dx.doi.org/10.26717/BJSTR.2020.29.004795> CrossRef WorldCat
5. Fábián, H., **Gergely, A.L.** Design and implementation of a tensile testing machine, Műszaki Tudományos Közlemények vol. 13., **2020**, 50-53. ISBN 2393-1280. <https://doi.org/10.33894/mtk-2020.13.06> EBSCO Discovery Services, Sciendo
6. Hodgyai, N., **Gergely, A.L.**; Farmos, R.L. The design and implementation of a disk electrospinning device, Műszaki Tudományos Közlemények vol. 13., **2020**, 81-85. ISBN 2393-1280. <https://doi.org/10.33894/mtk-2020.13.13> EBSCO Discovery Services, Sciendo
7. **Gergely, A.L.**; Kántor, J.: Bitay, E.; Bíró, D. Electrospinning of Polymer Fibres Using Recycled PET, *Acta Materialia Transylvanica*, 2(1), **2019**, 19-26. ISSN:2601-8799 <https://doi.org/10.33924/amt-2019-01-04> EBSCO Discovery Services, Sciendo
8. Gyárfás, A., **Gergely, A.L.** Laboratóriumi műanyag extruder gép tervezése, FMTÜ XXIV., Március 28-29 **2019**. Cluj-Napoca, Romania. Proceedings 73-77, ISBN 2393-

- 1280 (XXIV. Fiatal Műszakiak Tudományos Ülésszaka (FMTÜ)), **2019**. Cluj-Napoca, Romania. <https://doi.org/10.33894/mtk-2019.11.14> EBSCO Discovery Services, Sciendo
9. Hodgyai, N., **Gergely, A.L.** Ágarító berendezés gép tervezése, FMTÜ XXIV., Március 28-29 **2019**. Cluj-Napoca, Romania. Proceedings 85-89, ISBN 2393-1280 (XXIV. Fiatal Műszakiak Tudományos Ülésszaka (FMTÜ)), **2019**. Cluj-Napoca, Romania. <https://doi.org/10.33894/mtk-2019.11.17> EBSCO Discovery Services, Sciendo
 10. Kedves, B., **Gergely, A.L.** Laboratóriumi műanyag granulátum készítő gép tervezése, FMTÜ XXIV., Március 28-29 **2019**. Cluj-Napoca, Romania. Proceedings 105-109, ISBN 2393-1280 (XXIV. Fiatal Műszakiak Tudományos Ülésszaka (FMTÜ)), **2019**. Cluj-Napoca, Romania. <https://doi.org/10.33894/mtk-2019.11.22> EBSCO Discovery Services, Sciendo

C3. Lucrări științifice publicate în reviste din străinătate (altele decât cele menționate anterior).

1. **Gergely, A.L.**; Puskas, J.E; Altstadt, V. Dynamic Fatigue Properties of Polyisobutylene-based Thermoplastic Elastomers: The Effect of Carbon Black Reinforcement, *TPE Magazin*, **2015**, 2, 121-123.
2. **Gergely, A.L.**; Puskas, J.E. A New Class of Polyisobutylene-based Thermoplastic Elastomers, *TPE Magazin*, **2015**, 1, 37-39.

C4. Lucrări științifice publicate în reviste din țară, recunoscute CNCSIS (altele decât cele din baze de date internaționale).

1. Balika R.M.; **Gergely A.L.** Hőre lágyuló polimerek folyási mutatószámának (MFI) mérésére alkalmas kapilláris plasztométer tervezése és kivitelezése: Design and Implementation of a Laboratory Melt-Flow Indexer. Nemzetközi Gépészeti Konferencia–OGÉT. 2021 Apr 20:97-100. **ISSN: 2068-1267**.
2. Föcze, A.; Sipos, B.; **Gergely, A.L.** Optimization of injection molding parameters based on cavity pressure, XXVIII. Nemzetközi Gépész Találkozó. The XXVIII.-th International Conference of Mechanical Engineering, p.53-56, Odorheiu-Secuiesc, April 25, 2020, Romania. Proceedings of the Conference. **ISSN: 2068-1267**.
3. **Gergely, A.L.** The investigation of polymer-filler interaction, XXV. Nemzetközi Gépész Találkozó. The XXV.-th International Conference of Mechanical Engineering, p.307-310, Cluj-Napoca, April 27-30, 2017, Romania. Proceedings of the Conference. **ISSN: 2068-1267** 2068-1267.
4. **Gergely, A.L.** Korszerű műanyagok mechanikai tulajdonságainak lehetséges javítása (Possible improvement of the mechanical properties of novel thermoplastic elastomers). XXIV. Nemzetközi Gépész Találkozó. The XXIV.-th International Conference of Mechanical Engineering, p.307-310, Deva, April 21-24, 2016. Proceedings of the Conference. **ISSN: 2068-1267**.
5. **Gergely, A.L.** Crosslinking of thermoplastic leastomers, FMTU XXII., March 22-23 **2017**. Cluj-Napoca, Romania. Proceedings 175-179, ISBN 2393-1280 (XXII. Fiatal Műszakiak Tudományos Ülésszaka (FMTU)), **2017**. Cluj-Napoca, Romania.
6. **Gergely A. L.**; Papp, I. Determination the movement equation of the Pétervar-i screw using the method of constraint equations Proceedings 131-136, ISBN 973-8231-50-7 (XI. Fiatal Műszakiak Tudományos Ülésszaka (FMTU)), **2006**. Cluj-Napoca, Romania.

G. Contracte de cercetare (menționăți calitatea de director sau membru)

Nr.	Titlul contractului	Beneficiar/ finanțator	Valoarea totală [RON]	Calitatea persoanei	modul de valorificare
1	Fabricarea fibre polimerice cu metoda ‘centrifugal spinning’	IPC 14/6/12.04.2022	49400	Director	Participare la conferințe și publicare in volume cotate ISI
2	Fabricarea fibre polimerice biocompatibile poli(strol-b-isobutilen-b-stirol) cu metoda ‘centrifugal spinning’	ASMA 459.8.1./2022	2790	Director	Participare la conferințe și publicare in volume cotate ISI
3	Optimizarea fabricatiei unui sistem fibros nanostructurat pe baza cilodextrin.	MTA Domus (Academia Maghiară de Științe). 86/13/2022/H TMT	17250	Membru	Raport scris
4	Fabricarea fibre polimerice poliviniliden-fluorid cu metoda “centrifugal spinning”	ASMA 433.5.1./2021	3330	Director	Participare la conferințe și publicare in volume cotate BDI
5	Elaborarea unui sistem fibros nanostructurat cu conținut lapatinib, purtător de medicamente, dispersie solidă amorfă prin proces centrifugal de fibrare.	MTA Domus (Academia Maghiară de Științe). Contract de cercetare: 1946/17/2021/ HTMT.	13949	Membru	Articole publicate in reviste cotate ISI
6	Fabricarea fibre polimerice poliviniliden-fluorid cu metoda electrospinning	ASMA 220.10.1./2020	3690	Director	Participare la conferințe si raport scris
7	Productia fibre polimerice continand Lapatinib cu metoda electrospinning	MTA Domus (Academia Maghiară de Științe). Contract de cercetare: 1872/19/2020/ HTMT	16436	Membru	Articole publicate in reviste cotate ISI
8	Fabricația (Optimizarea fabricației) de masă a compozitelor medicamentoase fibroase	MTA Domus (Academia Maghiară de Științe)	14632	Membru	Articole publicate in reviste cotate ISI

	nanostructurate cu conținut de fenofibrăti.	Contract de cercetare: 2527/4/2019/ HTMT			
9	Producția fibrelor polimerice la scara nanometrică din sticle PET reciclate,	IPC 13/14/17.05.2 017	19000	Director	Participare la conferințe și articole publicate în reviste cotate BDI
10	Scaling up the Synthesis of Novel Poly(ethylene glycol) Based Dendrimers for Targeted Drug Delivery Applications	Natinal Science Foundation SBIR Phase II, NSF Award Nr.: IIP-1353531	1275715	Director	Participare la conferințe și raport scris

III. RECUNOAȘTEREA

I. Premii, distincții.

2022

1. Gr. Makó Imre emléklap– EME
2. Keresztes Kristof, MTDK2022, Locul I (OTDK nominalizare)
3. Keresztes Kristóf, TDK Sapientia EMTE XXI. Conferinței Cercurilor Studențești din domeniul Științelor Tehnice, locul I
4. Erszény Péter-Tibor, Simon Hunor, TDK Sapientia EMTE XX. Conferinței Cercurilor Studențești din domeniul Științelor Tehnice locul II

2021

1. Zátyi Tibor MTDK2021, Locul III
2. Nagy-Serbán Albert TDK Sapientia EMTE XX. Conferinței Cercurilor Studențești din domeniul Științelor Tehnice, locul II
3. Zátyi Tibor TDK Sapientia EMTE XX. Conferinței Cercurilor Studențești din domeniul Științelor Tehnice locul III
4. Conducator științific: student Főcze Attila, Bursa Klebelsberg Kuno Tehetséggondozó.
5. Conducator științific: student Balika Róbert Márton, Bursa Klebelsberg Kuno Tehetséggondozó.

2020

1. Fábián Hunor Sapientia EMTE, XXI. Conferinței Cercurilor Studențești din domeniul Științelor Tehnice locul II.: Műanyagok szakítószilárdságának mérésére alkalmas berendezés tervezése és kivitelezése. (OTDK nominalizare)
2. Conducator științific: student Fábián Hunor, Bursa Klebelsberg Kuno Tehetséggondozó.

2019

1. Premiu Maros Dezső – EME

2. Bursa Szülőföldi Fiatal Oktatói, Magyaroszág Emberi Erőforrások Minisztériuma, Eötvös Loránd Tudományegyetem
3. Hodgyai Norbert Sapientia EMTE, Facultatea de Științe Tehnice și Umaniste CSS locul II.: Agapító gép tervezése és kivitelezése
4. Gyárfás Attila Sapientia EMTE, Facultatea de Științe Tehnice și Umaniste CSS locul III.: Laboratóriumi extruder gép tervezése és kivitelezése

2018

1. Bursa Szülőföldi Fiatal Oktatói, Magyaroszág Emberi Erőforrások Minisztériuma, Eötvös Loránd Tudományegyetem
2. Boros Albert Sapientia EMTE Facultatea de Științe Tehnice și Umaniste CSS locul III.: Laboratóriumi fröccsöntő berendezés építése és kivitelezése.

2014

1. Cea mai bună prezentare orală: 186th Technical Meeting and Educational Symposium of the Rubber Division Meeting & Educational Symposium, 2014, Nashville, TN, USA.

2012

1. Cea mai bună prezentare de poster: Rubber Expo and 182nd Technical Meeting & Educational Symposium, 2012, Cincinnati, OH, USA.

J. Citări

Puskas, J.E.; Gergely, A.L.; Kaszas,G. Controlled/Living Carbocationic Copolymerization of Isobutylene with Alloocimene, *J. Polym. Sci. Part A: Polym. Chem.*, **51**, 2013, 29-33. FI: 3.113

1. Ke Yang, Hui Niu, Hui Yu, Jinghan Dong, Jing Wang, Jialin Yu, Kaihua Shen and Yang Li, Synthesis of high molecular weight isobutylene- α -methylstyrene copolymers containing alkenyl groups with a half sandwich scandium initiator system under mild conditions, *Polymer Chemistry*, 10.1039/C8PY01749B, (2019).
2. Weiyu Wang, Wei Lu, Andrew Goodwin, Huiqun Wang, Panchao Yin, Nam-Goo Kang, Kunlun Hong and Jimmy W. Mays, Recent Advances in Thermoplastic Elastomers from Living Polymerizations: Macromolecular Architectures and Supramolecular Chemistry, *Progress in Polymer Science*, 10.1016/j.progpolymsci.2019.04.002, (2019).
3. Preetom Sarkar and Anil K. Bhowmick, Sustainable rubbers and rubber additives, *Journal of Applied Polymer Science*, **135**, 24, (2017).
4. C. Garrett Campbell and Robson F. Storey, Carbocationic Copolymerization of Isobutylene and 2,4-Dimethyl-1,3-Pentadiene, *Macromolecules*, 10.1021/acs.macromol.8b01258, **51**, 16, (6430-6439), (2018).
5. Judit E. Puskas, RUBBER CITY GIRL: THE PATH TO THE GOODYEAR MEDAL, *Rubber Chemistry and Technology*, 10.5254/rct.17.82588, **91**, 1, (1-26), (2018).
6. Yi Xie, Jin-jie Chang, Yi-bo Wu, Dan Yang, Hao Wang, Tao Zhang, Shu-xin Li and Wen-li Guo, Synthesis and properties of bromide- functionalized poly(isobutylene-co-p- methylstyrene) random copolymer, *Polymer International*, **66**, 3, (468-476), (2016).
7. Alexei V. Radchenko, Hassen Bouchekif and Frédéric Peruch, Triflate esters as in-situ generated initiating system for carbocationic polymerization of vinyl ethers,

- isoprene, myrcene and ocimene, *European Polymer Journal*, 10.1016/j.eurpolymj.2017.02.001, **89**, (34-41), (2017).
8. Masami Kamigaito and Kotaro Satoh, Sustainable Vinyl Polymers via Controlled Polymerization of Terpenes, *Sustainable Polymers from Biomass*, (55-90), (2017).
 9. Pranabesh Sahu, Preetom Sarkar and Anil K. Bhowmick, Synthesis and Characterization of a Terpene-Based Sustainable Polymer: Poly-alloocimene, *ACS Sustainable Chemistry & Engineering*, 10.1021/acssuschemeng.7b00990, **5**, 9, (7659-7669), (2017).
 10. John F. Trant, Mahmoud M. Abd Rabo Moustafa, Inderpreet Sran and Elizabeth R. Gillies, Polyisobutylene-paclitaxel conjugates with pendant carboxylic acids and polystyrene chains: Towards multifunctional stent coatings with slow drug release, *Journal of Polymer Science Part A: Polymer Chemistry*, **54**, 14, (2209-2219), (2016).
 11. Attila L. Gergely and Judit E. Puskas, Synthesis and characterization of thermoplastic elastomers with polyisobutylene and polyalloocimene blocks, *Journal of Polymer Science Part A: Polymer Chemistry*, **53**, 13, (1567-1574), (2015).
 12. John F. Trant, Inderpreet Sran, John R. de Bruyn, Mark Ingratta, Aneta Borecki and Elizabeth R. Gillies, Synthesis and properties of arborescent polyisobutylene derivatives and a paclitaxel conjugate: Towards stent coatings with prolonged drug release, *European Polymer Journal*, 10.1016/j.eurpolymj.2015.09.012, **72**, (148-162), (2015).
 13. J.H. Roh, D. Roy, W.K. Lee, A.L. Gergely, J.E. Puskas and C.M. Roland, Thermoplastic elastomers of alloocimene and isobutylene triblock copolymers, *Polymer*, 10.1016/j.polymer.2014.11.015, **56**, (280-283), (2015).
 14. Preetom Sarkar and Anil K. Bhowmick, Synthesis, characterization and properties of a bio-based elastomer: polymyrcene, *RSC Adv.*, 10.1039/C4RA09475A, **4**, 106, (61343-61354), (2014).
 15. Attila L. Gergely, Ozlem Turkarslan, Judit E. Puskas and Gabor Kaszas, The role of electron pair donors in the carbocationic copolymerization of isobutylene with alloocimene, *Journal of Polymer Science Part A: Polymer Chemistry*, **51**, 22, (4717-4721), (2013).
 16. Victor A. Rozentsvet, Valery G. Kozlov, Nelly A. Korovina and Sergei V. Kostjuk, A New Insight into the Mechanism of 1,3-Dienes Cationic Polymerization I: Polymerization of 1,3-Pentadiene with BuCl/TiCl₄ Initiating System: Kinetic and Mechanistic Study, *Macromolecular Chemistry and Physics*, **214**, 23, (2694-2704), (2013).
 17. Judit E. Puskas and Gabor Kaszas, Carbocationic Polymerization, *Encyclopedia of Polymer Science and Technology*, (1-43), (2016).
 18. Jozsef Kantor, Judit E Puskas and Gabor Kaszas, The Effect of Reaction Conditions on the Synthesis of Thermoplastic Elastomers Containing Polyalloocimene, Polyisobutylene and Tapered Blocks, *Chinese Journal of Polymer Science*, 10.1007/s10118-019-2254-8, (2019).

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1. Sahu, Pranabesh, Anil K. Bhowmick, and Gergely Kali. "Terpene based elastomers: Synthesis, properties, and applications." *Processes* 8, no. 5 (2020): 553.
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K. Alte realizări semnificative.

Conferinții naționale și internaționale

2022

1. **Gergely, A.L.** Polimer nanoszálas szövedékek előállítása és lehetséges alkalmazásai, Magyar Tudomány Napja Erdélyben, Noiembrie 18, 2022, Cluj-Napoca, Romania. **Prezentare invitate.**
2. **Gergely, A.L.**, Farmos, R.L., Kántor, J., Kántor, A.E., Hodgyai, N. Recycled PET nanofiber membranes for air filtration, Joint CINTI – MACRo 2022, Noiembrie, 21, 2022, Targu-Mures, Romania
3. Kántor, J., **Gergely, A.L.**, Farmos, R.L, Hodgyai, N. Poly(styrene-b-isobutylene-b-styrene) Triblock Copolymer Fiber Generation with Centrifugal Spinning, and its Potential Application in Oil Collection, Joint CINTI – MACRo 2022, Noiembrie, 21, 2022, Targu-Mures, Romania
4. Fábián, H., **Gergely, A.L.** Nagy teljesítményű szálképző berendezés tervezése és kivitelezése, FMTÜ XXVII., Martie 17, 2022. Cluj-Napoca, Romania.

2021

1. Birton B., **Gergely, A.L.** Vákuumformázó berendezés tervezése és kivitelezése, FMTÜ XXVI., Martie 18 2021. Cluj-Napoca, Romania.
2. Balika, R.M.; **Gergely, A.L** Design and Implementation of a Laboratory Melt-Flow Indexer, XXIX. Nemzetközi Gépész Találkozó, Odorheiu-Secuiesc, Aprile 23, 2021, Romania.
3. **Gergely, A.L.** Piezoelectric Nanofiber Production Using Electrospinning, 5th ISCMP, Burdur, Sept 28- Oct. 1, Turkey. **Prezentare invitate.**

2020

1. Fábián, H., **Gergely, A.L.** Műanyagok szakítószilárdságának vizsgálatára alkalmas berendezés tervezése és kivitelezése, FMTÜ XXV., Március 26 **2020**. Cluj-Napoca, Románia.
2. Hodgyai, N., **Gergely, A.L.**; Farmos, R.L. Tárcsás elektrosztatikus berendezés tervezése és kivitelezése, FMTÜ XXV., Március 26 **2020**. Cluj-Napoca, Románia.
3. Főcze, A.; Sipos, B.; **Gergely, A.L.** Optimization of injection molding parameters based on cavity pressure, XXVIII. Nemzetközi Gépész Találkozó, Odorheiu-Secuiesc, Aprile 25, **2020**, Romania.

2019

1. Gyárfás, A., **Gergely, A.L.** Laboratóriumi műanyag extruder gép tervezése, FMTU XXIV., Március 28-29 **2019**. Cluj-Napoca, Romania.
2. Hodgyai, N., **Gergely, A.L.** Ágaprító berendezés gép tervezése, FMTU XXIV., Március 28-29 **2019**. Cluj-Napoca, Romania.
3. Kedves, B., **Gergely, A.L.** Laboratóriumi műanyag granulátum készítő gép tervezése, FMTU XXIV., Március 28-29 **2019**. Cluj-Napoca, Romania.

2018

1. **Gergely, A.L.** Nanométer nagyságrendű polimer szálak előállítása PET palackból. XIX. Műszaki Tudományos Ülésszak, November 24 **2018**. Cluj-Napoca, Romania.
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2017

1. **Gergely, A.L.** A brief introduction of polymeric materials, Sapienita University Student Science Conference, March 31-April 1, 2017, Tg-Mures, Romania. **Prezentare invitată.**
2. **Gergely, A.L.** Crosslinking of thermoplastic leastomers, FMTU XXII., March 22-23 **2017**. Cluj-Napoca, Romania.
3. **Gergely, A.L.** The investigation of polymer-filler interaction, OGÉT XXV, April 27-30, **2017**, Cluj-Napoca, Romania.

2016

1. **Gergely, A.L.** Possible improvement of the mechanical properties of novel thermoplastic elastomers, OGÉT XXIV, Aprile 21-24, **2016**, Deva, Romania.

2015

1. **Gergely, A.L.**; Puskas, J.E.* Polyisobutylene-based Thermoplastic Elastomers by Two-phase Living Cationic Polymerization, International Symposium of Ionic Polymerization. July 5-10, 2015, Bordeaux, France.
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4. Sen, S.; **Gergely, A.L.**; Collister, E.; Shrikhande, G.; Puskas, J.E. Green Fluorescein Compounds for Cancer Diagnosis, Midwest ASB Regional Meeting, February 17-18, 2015, Akron, OH.
5. Jindal, A.; Charif, A.; **Gergely, A.L.**; Puskas, J.E. Drug Eluting Electrospun Rubbery Fiber Mats, Midwest ASB Regional Meeting, February 17-18, 2015, Akron, OH.

2014

1. **Gergely, A.L.***; Puskas, J.E. Novel Filler-interactive Butyl-type Thermoplastic Elastomers: Potential Replacement of Halobutyl Rubber, 186th Technical Meeting and Educational Symposium of the Rubber Division of the American Society, October 14-16, 2014, Nashville, TN, USA. (Best PhD Oral Presentation)
2. **Gergely, A.L.***; Puskas, J.E. Synthesis of block copolymers of isobutylene and alloocimene, 247th ACS Technical Meeting, March 16-20, 2014, Dallas, TX, USA.
3. Jindal, A.; Charif, A.; **Gergely, A.L.**; Puskas, J.E. Drug Eluting Electrospun Rubbery Fiber Mats, ACS Rubber Division, 186th Technical Meeting, October 14-16, 2014, Nashville, TN, USA.
4. **Gergely, A.L.***; Puskas, J.E., Altstädt, V. Dynamic Fatigue Properties of Polyisobutylene-based Thermoplastic Elastomers, PPS-30, Polymer Processing Society, June 8 – 12, 2014, Cleveland, OH, USA.

2013

1. **Gergely, A.L.***; Puskas, J.E.; Kaszas, G. A New Class of Polyisobutylene-Based Thermoplastic Elastomers, PPS-29, July 15-19, 2013, Nuremberg, Germany.
2. Puskas, J.E.*; **Gergely, A.L.**; Kaszas, G. Living Carbocationic Polymerization in a Two-phase System, 10th IUPAC APME, August 18-23, 2013, Durham, United Kingdom.
3. **Gergely, A.L.**; Puskas, J.E.*; Kaszas, G. Novel Two-Phase Living Carbocationic Polymerization, IP'13, 2013, Awaji, Japan.
4. **Gergely, A.L.***; Puskas, J.E.; Kaszas, G. Novel Filler Reinforced Polyisobutylene-based Thermoplastic Elastomers, International Elastomer Conference, October 7 – 11, 2013, Cleveland, OH, USA.
5. Puskas, J.E; **Gergely, A.L.*** Diene-functionalized Polyisobutylene and Butyl Rubber for Improved Filler Interaction, Center for Tire Research Fall 2013 Meeting, 2013, October 15 – 16, Akron, OH, USA.
6. Puskas, J.E; **Gergely, A.L.*** Diene-functionalized Polyisobutylene and Butyl Rubber for Improved Filler Interaction, Center for Tire Research Spring 2012 Meeting, 2013, June 3 – 5, Akron, OH, USA.

2012

1. **Gergely A.L.***; Puskas, J.E., Altstädt, V. Dynamic Fatigue Properties of Polyisobutylene-based Thermoplastic Elastomers: The Effect Of Carbon Black Reinforcement, PPS-29, Polymer Processing Society, July 14 – 19, 2012, Nuremberg, Germany, Europe.

2. Puskas, J.E; **Gergely, A.L.*** Diene-functionalized Polyisobutylene and Butyl Rubber for Improved Filler Interaction, Center for Tire Research Fall 2012 Meeting, 2012, October 15 – 16, Akron, OH, USA.
3. **Gergely, A.L.***; Puskas, J.E.; Kaszas, G. A New Polyisobutylene Based Thermoplastic Elastomer Rubber Expo and 182nd Technical Meeting & Educational Symposium, 2012, October 9 – 12, Cincinnati, OH, USA. (Best poster)
4. **Gergely, A.L.***; Puskas, J.E.; Kaszas, G. Controlled Carbocationic Copolymerization of Isobutylene with Alloocimene, MACRO2012, World Polymer Congress, 2012, June 24 – 29 Blacksburg, VA, USA.

2006

1. **Gergely, A.L.***; Papp, I. Determination the movement equation of the Pétervar-i screw using the method of constraint equations, FMTU, 2006, Cluj-Napoca, Romania.

Recenzii pentru jurnale cu factor de impact

Nr.	Revista	Titlu	Data
1	polymers	<u>Polylactic Acid/Polyaniline Nanofibers Subjected to Pre- and ...</u>	11/25/2022
2	membranes	<u>Preparation and Characterizations of Poly(lactic acid)/Poly(...</u>	11/4/2022
3	polymers	<u>Facile One-step Synthesis of PVDF Bead-on-string Fibers by P ...</u>	9/24/2022
4	materials	<u>DMA analysis of plasma modified PVC films and the nature of ...</u>	6/24/2022
5	polymers	<u>A U-shaped optical fiber temperature sensor coated with elec ...</u>	5/16/2022
6	polymers	<u>Electrospun nanofiber-based membranes (ENMs) for water treat ...</u>	5/9/2022
7	molecules	<u>Propolis Integration Methods into Solutions for Highly Loade ...</u>	3/28/2022
8	polymers	<u>Exquisite Energy Savings at Cold Metal Forming of Threads th ...</u>	2/14/2022
9	polymers	<u>Comprehensive characterization of PVDF nanofibers on a nanom ...</u>	1/27/2022
10	Macedonian Journal of Chemistry and Chemical Engineering	<u>Antibiofilm Activity of Ibuprofen-Na/Paracetamol-Loaded Nanofibers</u>	28/12/2022
11	eXpress Polymer Letters	<u>Norfloxacin-Tenoxicam Dual Drug Delivery System Based on Poly (lactic acid) Microspheres and Electrospun Fibers: Release and In Vivo Study</u>	9/20/2021

Data,

2023.01.05

Semnătura,