

Lista lucrărilor științifice în domeniul disciplinelor din postul didactic

Numele și prenumele: Kántor József

A. Teza de doctorat

Synthesis and Electrospinning of Polyisobutylene-based Thermoplastic Elastomers, Dr. Judit E. Puskas (The University of Akron, USA).

C. Lucrări științifice publicate

C1. Lucrări publicate în reviste indexate ISI

1. Kantor, J.; Gergely, A. L. Oil Sorption and Oil–Water Separation Using 3D Printed Sorbents Manufactured with Fused Filament Fabrication. *Polymers* **2026**, *18*(17), 2138.
2. Egyed-Faluvegi, E.; Kantor, J.; Gergely, A. L. Dimensional Precision of Plastic Gear Tooth Profiles Produced by 3D Printing. *Engineering Proceedings* **2025**, *113*(1), 38.
3. Kantor, J.; Fekete, G.; Gergely, A. L. Oil Sorption Properties of Centrifugally Spun Polyisobutylene-Based Thermoplastic Elastomer Microfibers. *Polymer* **2024**, *16*(18), 2624.
4. Bardocz-Veres, Zs.; Miklós, M. L.; Biró, E.-K.; Kántor, E.-A.; Kántor, J.; Dudás, Cs.; Kerekes-Máthé, B. New Perspectives in Overcoming Bulk-Fill Composite Polymerization Shrinkage: The Impact of Curing Mode and Layering. *Dentistry Journal* **2024**, *12*(6), 171.
5. Kantor, J.; Farnos, R.L.; Gergely, A.L. Optimization of Oil Sorbent Thermoplastic Elastomer Microfiber Production by Centrifugal Spinning. *Polymers* **2023**, *15*, 3368.
6. Kantor, J.; Gergely, A.L.; Farnos, R.L.; Hodgyai, N. Poly(Styrene-*b*-Isobutylene-*b*-Styrene) Triblock Copolymer Fiber Generation with Centrifugal Spinning, and Its Potential Application in Oil Collection. In Proceedings of the 2022 IEEE 22nd International Symposium on Computational Intelligence and Informatics and 8th IEEE International Conference on Recent Achievements in Mechatronics, Automation, Computer Science and Robotics (CINTI-MACRo), Budapest, Hungary, 21–22 November 2022; pp. 000077–000082.
7. Gergely, A.L.; Farnos, R.L.; Kantor, J.; Kantor, E. A.; Hodgyai, N. Recycled PET nanofiber membranes for air filtration. In Proceedings of the 2022 IEEE 22nd International Symposium on Computational Intelligence and Informatics and 8th IEEE International Conference on Recent Achievements in Mechatronics, Automation, Computer Science and Robotics (CINTI-MACRo), Budapest, Hungary, 21–22 November 2022; pp. 000057-000062
8. Bitay, E.; Gergely, A.L.; Kantor, J.; Szabo, Z.-I. Evaluation of Lapatinib-Loaded Microfibers Prepared by Centrifugal Spinning. *Polymers* **2022**, *14*, 5557.

9. Bitay, E.; Szabo, Z. I.; Kantor, J.; Molnar, K.; Gergely, A.-L. Scale-up and optimization of fenofibrate-loaded fibers electrospun by corona-electrospinning. *eXPRESS Polymer Letters*, 2021, 15(4), 375-387.
10. Kantor, J.; Puskas, J. E.; Kaszas, G. The Effect of Reaction Conditions on the Synthesis of Poly(alloocimene-*b*-isobutylene-*b*-alloocimene) Block Copolymers. *Chinese Journal of Polymer Science* **2019**, 37(9), 884-890.
11. Kantor, J.; Collister, E. A.; Puskas, J. E., Mallamaci, M. P.; Comes, V. C. Mechanical Performance of Novel Polyisobutylene-based Elastomeric Polyurethanes Before and After Hydrolysis. *Rubber Chemistry and Technology* **2019**, 92(3), 481-495.
12. Alvarez Albarran, A.; Rosenthal-Kim, E.Q.; Kantor, J.; Liu, L. Nikolov, Z.; Puskas, J.E. Stimuli-responsive Antifouling Polyisobutylene-based Biomaterials via Modular Surface Functionalization. *J. Polym. Sci.: Polym. Chem.* **2017**, 55, 1742–1749. DOI: 10.1002/pola.28540.
13. Puskas, J.E.; Kantor, J.; Shrikhande, G. Reaction Engineering with Enzymes: A Relatively Uncharted Territory. *AIChE J.* **2016**, 63 (1), 266–272. DOI: 10.1002/aic.15544.

C2. Lucrări publicate în reviste indexate BDI

1. Kantor, J.; Gergely, A. L. Oil Sorption Properties of PLA Fiber-Based Sorbents Prepared by Electrospinning, Centrifugal Spinning and 3D Printing. *Acta Universitatis Sapientiae Electrical and Mechanical Engineering* **2025**, 17, 43-56.
2. Kantor, J.; Gergely, A. L. Production of Fibre Mats from Recycled PET Bottles. *Acta Materialia Transylvanica* **2025**, 8(1), 13-16.
3. Egyed-Faluvegi, E.; Gal, K.; Farnos, R.-L.; Kantor, J.; Gergely, A.-L. The investigation of dimensional, form and orientation accuracy of polymer gears prepared by additive manufacturing. *Műszaki Tudományos Közlemények* **2024**, 20, 14-18.
4. Gergely, A.; Kantor, J. Process Optimization of PVDF Piezoelectric Nanofiber Production via Electrospinning. *Acta Universitatis Sapientiae Electrical and Mechanical Engineering* **2021**, 13, 1-3.
5. Gergely, A.; Kantor, J.; Bitay, E.; Biro, D. Electrospinning of Polymer Fibers Using Recycled PET. *Acta Materialia Transylvanica* **2019**, 2(1), 19-26.

C6. Lucrări științifice publicate în reviste conferințelor internaționale

1. Puskas, J.E.; Kantor, J.; Shrikhande, G. Reaction Engineering in Enzyme-catalyzed Reactions, International Symposia on Chemical Reaction Engineering (ISCRE 24), June 12–15, Minneapolis, MN (2016).

G. Contracte de cercetare

- 2019 Membru al echipei de cercetare - Fenofibrát tartalmú polimerszálak előállítása. DOMUS, 1,000,000 HUF.
- 2022 Membru al echipei de cercetare – Polimer nanoszálak szerkezetek létrehozása centrifugális szálképzési eljárással . KPI, 10,000 EUR.
- 2023 Membru al echipei de cercetare – RoNo Cooperation for Virtual Manufacturing, Grant SEE Financial Mechanism 2014-2021, 472,000 RON.
- 2025 Conducător de proiect – Utilizarea deșeurilor de plastic reciclat în tratarea apei. Institutul Programelor de Cercetare al Fundației Sapientia, 10,000 EUR.

J. Citări

1. Kantor, J.; Fekete, G.; Gergely, A. L. Oil Sorption Properties of Centrifugally Spun Polyisobutylene-Based Thermoplastic Elastomer Microfibers. *Polymers* 2024, 16(18), 2624.
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Semnătura