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Research outputs

Thermoreversible Diels-Alder Cross-Linking of BHMF-Based Polyesters: Synthesis, Characterization and Rheology
Post, C., van den Tempel, P., Herrera Sánchez, P., Maniar, D., Bose, R. K., Voet, V. S. D., Folkersma, R., Picchioni, F. & Loos, K., 27-Feb-2025, In: ACS Sustainable Chemistry & Engineering. 13, 9, p. 3543-3553 11 p.

Enzymatic polymerization of furan-based polymers in biobased solvents
Silvianti, F., Maniar, D., de Leeuw, T. C., van Dijken, J. & Loos, K., 1-Nov-2024, In: RSC Sustainability. 2, 11, p. 3436-3450 15 p.

Macromolecular design for biobased polymers
Vasileiadis Vasileiou, A., Korfia, S. T., Sarigiannidou, M., Maniar, D. & Loos, K., 24-Oct-2024, In: Polymer. 312, 20 p., 127652.

Biobased Networks from Lignin/Cellulose via Diels-Alder Click Chemistry
Moreira Grilo, L., Faoro, S., Folkersma, R., Lacerda, T. M., Mazzocchetti, L., Loos, K. & Maniar, D., 22-Oct-2024, In: ACS Applied Polymer Materials. 6, 22, p. 13723–13734 12 p.

Enhancing the CO_2/CH_4 Separation Properties of Cellulose Acetate Membranes Using Polyethylene Glycol Methyl Ether Acrylate Radiation Grafting
Febriasari, A., Suhartini, M., Rahmawati, Hotimah, B., Anggarini, N. H., Yunus, A. L., Hermana, R. F., Deswita, Silvianti, F., Maniar, D., Loos, K., Fahira, A., Permatasari, I. P. & Kartohardjono, S., Oct-2024, In: Journal of Polymers and the Environment. 32, p. 4855-4868 14 p.

Enzymatic synthesis of biobased aliphatic-hetero-aromatic furanic copolyesters: Influence of furan dimethyl ester isomerism
Silvianti, F., Maniar, D., Agostinho, B., de Leeuw, T. C., Lan, X., Woortman, A. J. J., van Dijken, J., Thiyagarajan, S., Sousa, A. F. & Loos, K., 12-Sept-2024, In: Polymer. 309, 10 p., 127441.

Potential of Nanocellulose for Microplastic removal: Perspective and challenges
Burhani, D., Voet, V. S. D., Folkersma, R., Maniar, D. & Loos, K., Jun-2024, In: Tetrahedron Green Chem. 3, 16 p., 100045.

Enzymatic Synthesis of Copolyesters with the Heteroaromatic Diol 3,4-Bis(hydroxymethyl)furan and Isomeric Dimethyl Furandicarboxylate Substitutions
Silvianti, F., Maniar, D., Agostinho, B., Leeuw, T. C. D., Woortman, A. J. J., Dijken, J. V., Thiyagarajan, S., Sousa, A. F. & Loos, K., 13-May-2024, In: Biomacromolecules. 25, 5, p. 2792–2802 11 p.

Unraveling The Impact of Isomerism on Enzymatic Polymerization of Furanic Polyesters
Silvianti, F., Maniar, D., Agostinho, B., de Leeuw, T. C., Pelras, T., Dijkstra, L., Woortman, A. J. J., Dijken, J. V., Thiyagarajan, S., Sousa, A. F. & Loos, K., May-2024, In: Advanced Sustainable Systems. 8, 5, 15 p., 2300542.

Enzymatic bulk synthesis, characterization, rheology, and biodegradability of biobased 2,5-bis(hydroxymethyl)furan polyesters
Post, C., Maniar, D., Jongstra, J. A., Parisi, D., Voet, V. S. D., Folkersma, R. & Loos, K., 2024, In: Green Chemistry. 26, 15, p. 8744-8757 14 p.

Ring-opening polymerization of emulsion-templated deep eutectic system monomer for macroporous polyesters with controlled degradability
Castillo Santillan, M., Quiñonez-Angulo,, P., Maniar, D., Román Torres-Lubian,, J., C. Gutiérrez,, M., Pelras, T., Woortman, A., Chen, I., Guadalupe Pérez-García, M., Loos, K. & D. Mota-Morales , J., 2024, In: RSC Applied Polymer. 2, 3, p. 403–414 12 p.

Lightweight Triboelectric Nanogenerators Based on Hollow Stellate Cellulose Films Derived from Juncus effusus L. Aerenchyma
Chen, Q., Li, W., Yan, F., Maniar, D., van Dijken, J., Rudolf, P., Pei, Y. & Loos, K., 8-Dec-2023, In: Advanced Functional Materials. 33, 50, 15 p., 2304801.

Aerenchyma tissue of Juncus effusus L. a novel resource for sustainable natural cellulose foams
Chen, Q., van Dijken, J., Maniar, D. & Loos, K., Oct-2023, In: Cellulose. 30, p. 9647–9667 21 p.

Low-Temperature and Solventless Ring-Opening Polymerization of Eutectic Mixtures of l-Lactide and Lactones for Biodegradable Polyesters
Castillo-Santillan, M., Maniar, D., Gutiérrez, M. C., Quiñonez-Angulo, P., Torres-Lubian, J. R., Loos, K. & Mota-Morales, J. D., 14-Jul-2023, In: ACS Applied Polymer Materials. 5, 7, p. 5110-5121 12 p.

Biobased 2,5-Bis(hydroxymethyl)furan as a Versatile Building Block for Sustainable Polymeric Materials
Post, C., Maniar, D., Voet, V. S. D., Folkersma, R. & Loos, K., 14-Mar-2023, In: ACS Omega. 8, 10, p. 8991-9003 13 p.

Greener Synthesis Route for Furanic-Aliphatic Polyester: Enzymatic Polymerization in Ionic Liquids and Deep Eutectic Solvents
Silvianti, F., Maniar, D., Boetje, L., Woortman, A. J. J., Dijken, J. V. & Loos, K., 8-Feb-2023, In: ACS Polymers Au. 3, 1, p. 82-95 14 p.

Influence of different ester side groups in polymers on the vapor phase infiltration with trimethyl aluminum
Mai, L., Maniar, D., Zysk, F., Schöbel, J., Kühne, T. D., Loos, K. & Devi, A., 28-Jan-2022, In: Dalton Transactions. 51, 4, p. 1384-1394 11 p.

Enzymatic synthesis of muconic acid-based polymers: Trans, trans-dimethyl muconate and trans, β-dimethyl hydromuconate
Maniar, D., Fodor, C., Adi, I. K., Woortman, A. J. J., van Dijken, J. & Loos, K., Aug-2021, In: Polymers. 13, 15, 14 p., 2498.

Enzymatic synthesis and characterization of muconic acid-based unsaturated polymer systems
Maniar, D., Fodor, C., Adi, I. K., Woortman, A., Dijken, van, J. & Loos, K., May-2021, In: Polymer International. 70, 5, p. 555-563 9 p.

Green Pathways for the Enzymatic Synthesis of Furan-Based Polyesters and Polyamides
Silvianti, F., Maniar, D., Boetje, L. & Loos, K., Jan-2021, *Sustainability & Green Polymer Chemistry Volume 2: Biocatalysis and Biobased Polymers.* Cheng, H. N. & Gross, R. A. (eds.). American Chemical Society, Vol. 2. p. 3-29 27 p. (ACS Symposium Series; vol. 1373).

On the way to greener furanic-aliphatic poly(ester amide)s: Enzymatic polymerization in ionic liquid
Maniar, D., Silvianti, F., Ospina, V. M., Woortman, A. J. J., van Dijken, J. & Loos, K., 28-Sept-2020, In: Polymer. 205, 9 p., 122662.

A Perspective on PEF Synthesis, Properties, and End-Life
Loos, K., Zhang, R., Pereira, I., Agostinho, B., Hu, H., Maniar, D., Sbirrazzuoli, N., Silvestre, A. J. D., Guigo, N. & Sousa, A. F., 31-Jul-2020, In: Frontiers in Chemistry. 8, 18 p., 585.

Enzymatic transesterification of urethane-bond containing ester
Skoczinski, P., Espinoza Cangahuala, M. K., Maniar, D. & Loos, K., 10-Jul-2020, In: Colloid and Polymer Science. 13 p.

Order-disorder transition in supramolecular polymer combs/brushes with polymeric side chains
Golkaram, M., Portale, G., Mulder, P., Maniar, D., Faraji, S. & Loos, K., 21-Apr-2020, In: Polymer Chemistry. 11, 15, p. 2749-2760 12 p.

Lipase-Catalyzed Transamidation of Urethane-Bond-Containing Ester
Skoczinski, P., Cangahuala, M. K. E., Maniar, D. & Loos, K., 28-Jan-2020, In: ACS Omega. 5, 3, p. 1488-1495 8 p.

Biocatalytic Synthesis of Furan-Based Oligomer Diols with Enhanced End-Group Fidelity
Skoczinski, P., Cangahuala, M. K. E., Maniar, D., Albach, R. W., Bittner, N. & Loos, K., 20-Jan-2020, In: ACS Sustainable Chemistry & Engineering . 8, 2, p. 1068-1086 37 p.

Furan-Based Copolyesters from Renewable Resources: Enzymatic Synthesis and Properties
Maniar, D., Jiang, Y., Woortman, A. J. J., van Dijken, J. & Loos, K., 7-Mar-2019, In: Chemsuschem. 12, 5, p. 990-999 10 p.

Enzymatic synthesis of furan-based polymers
Maniar, D., 2019, [Groningen]: Rijksuniversiteit Groningen. 168 p.

Supramolecular Mimic for Bottlebrush Polymers in Bulk
Golkaram, M., Boetje, L., Dong, J., Aguilar Suarez, L., Fodor, C., Maniar, D., van Ruymbeke, E., Faraji, S., Portale, G. & Loos, K., 2019, In: ACS Omega. 4, 15, p. 16481-16492 12 p.

Enzymatic Polymerization of Dimethyl 2,5-Furandicarboxylate and Heteroatom Diamines
Maniar, D., Hohmann, K. F., Jiang, Y., Woortman, A. J. J., van Dijken, J. & Loos, K., Jun-2018, In: ACS Omega. 3, 6, p. 7077-7085 9 p.

Enzymatic synthesis of 2,5-furandicarboxylic acid-based semi-aromatic polyamides: enzymatic polymerization kinetics, effect of diamine chain length and thermal properties
Jiang, Y., Maniar, D., Woortman, A. J. J. & Loos, K., 2016, In: RSC Advances. 6, p. 67941-67953 13 p., 67941.

Enzymatic Polymerization of Furan-2,5-Dicarboxylic Acid-Based Furanic-Aliphatic Polyamides as Sustainable Alternatives to Polyphthalamides
Jiang, Y., Maniar, D., Woortman, A. J. J., van Ekenstein, G. O. R. A. & Loos, K., Sept-2015, In: Biomacromolecules. 16, 11, p. 3674-3685 12 p.