

Journal articles and book contributions of apl. Prof. Heike Lorenz, 2015-2021

2021

- Intaraboonrod, K., Harriehausen, I., Carneiro, T., Seidel-Morgenstern, A., Lorenz, H. & Flood, A.: Temperature cycling induced deracemization of DL-asparagine monohydrate with immobilized amino acid racemase. *Cryst. Growth Des.* 21 (2021) pp. 306–313
- Temmel, E., Lorenz, H.: Advances in Industrial Crystallization (*Editorial*). *Crystals* 10 (2020), 997 (doi:10.3390/cryst10110997)
- Wünsche, S., Yuan, L., Seidel-Morgenstern, A., Lorenz, H.: A contribution to the solid state forms of bis(demethoxy)curcumin: Co-crystal screening and characterization. *Molecules* 26 (2021), 720 (doi.org/10.3390/molecules26030720)
- Gänsch, J., Huskova, N., Kerst, K., Temmel, E., Lorenz, H., Mangold, M., Janiga, G., Seidel-Morgenstern, A.: Continuous enantioselective crystallization of chiral compounds in coupled fluidized beds. *Chem. Eng. J.* 422 (2021) 129627 (pp. 1–18)
- Lorenz, H., Temmel, E. (Eds): Advances in Industrial Crystallization (Printed Edition of the Special Issue Published in *Crystals*), MDPI, Basel, 2021 (ISBN 978-3-0365-0330-1 (Hbk); ISBN 978-3-0365-0331-8 (doi:10.3390/books978-3-0365-0331-8)
- Jin, Y., Xing, Z., Li, Y., Han, J., Lorenz, H., Chen, J.: Synthetic BiOBr/Bi₂S₃/CdS crystalline material and its degradation of dye under visible light. *Crystals* 11 (2021), 899 (doi:10.3390/cryst11080899)
- Sadovnichii, R., Kotelnikova, E., Lorenz, H.: Thermal deformations of crystal structures in the L-aspartic acid/L-glutamic acid system and DL-aspartic acid. *Crystals* 11 (2021), 1102 (doi:10.3390/cryst11091102)
- Sadeghi, M., Tenberg, V., Münzberg, S., Lorenz, H., Seidel-Morgenstern, A.: Phase equilibria of L-Valine/L-Leucine solid solutions. *J. Mol. Liquids* 340 (2021) 117315
- Sadeghi, M., Cascella, F., Tenberg, V., Seidel-Morgenstern, A., Lorenz, H.: Solubility analysis of pharmaceuticals guaifenesin, ketoprofen, and artemisinin in different solvents. *J. Mol. Liquids* 343 (2021) 117503
- Intaraboonrod, K., Seidel-Morgenstern, A., Lorenz, H. & Flood, A.: Efficient conversion of threonine to allo-threonine using immobilized amino acid racemase and temperature cycles. *Cryst. Growth Des.* 21 (2021) pp. 5641–5650
- Saikia, B., Seidel-Morgenstern, A., Lorenz, H.: Role of mechanochemistry in solid form selection and identification of the drug praziquantel. *Cryst. Growth Des.* 21 (2021) pp. 5854–5864

2020

- Kotelnikova, E. N., Isakov, A. I., Kryuchkova, L. Y., Zolotarev, A. A., Bocharov, S. N., Lorenz, H.: Acids with chiral molecules as essential organic compounds of biogenic-abiogenic systems. In: Frank-Kamenetskaya, O. V., Vlasov, D. Y., Panova, E. G., Lessovaia, S. N. (Eds.): Processes and Phenomena on the Boundary Between Biogenic and Abiogenic Nature. Lecture Notes in Earth System Sciences, Springer, 2020 (doi.org/10.1007/978-3-030-21614-6_37), pp. 695–719
- Lorenz, H., Temmel, E., Seidel-Morgenstern, A.: Continuous enantioselective crystallization of chiral compounds. In: Yazdanpanah, N. and Z. K. Nagy (Eds.): The Handbook of Continuous Crystallization, The Royal Society of Chemistry, 2020, pp. 422–468
- Isakov, A. I., Lorenz, H., Zolotarev, A. A., Kotelnikova, E. N.: Heteromolecular compounds in binary systems of amino acids with opposite and same chiralities. *CrystEngComm* 22 (2020), pp. 986–997
- Cascella, F., Seidel-Morgenstern, A., Lorenz, H.: Exploiting ternary solubility phase diagrams for resolution of enantiomers: An instructive example. *Chem. Eng. Technol.* 43 (2020), pp. 329–336
- Cascella, F., Temmel, E., Seidel-Morgenstern, A., Lorenz, H.: Efficient resolution of racemic guaifenesin via batch-preferential crystallization processes. *Org. Process Res. Dev.* 24 (2020), pp. 50–58
- Osmanbegovic, N., Yuan, L., Lorenz, H., Louhi-Kultanen, M.: Freeze concentration of aqueous [DBNH][OAc] ionic liquid solution. *Crystals* 10 (2020), 147 (doi:10.3390/cryst10030147)
- Horosanskaia, E., Yuan, L., Seidel-Morgenstern, A., Lorenz, H.: Purification of Curcumin from Ternary Extract-Similar Mixtures of Curcuminoids in a Single Crystallization Step. *Crystals* 10 (2020), 206 (doi:10.3390/cryst10030206) (Feature Paper & Issue Cover)
- Harriehausen, I., Wrzosek, K., Lorenz, H., Seidel-Morgenstern, A.: Assessment of process configurations to combine enantioselective chromatography with enzymatic racemization. *Adsorption* 26 (2020), pp. 1199–1213
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- Kotelnikova, E., Sadovnichii, R., Kryuchkova, L., Lorenz, H.: The limits of solid solutions and thermal deformations in the L-alanine – L-serine amino acid system. *Crystals* 10 (2020), 618 (doi:10.3390/cryst10070618)

- Henniges, M., Seidel-Morgenstern, A., Lorenz, H.: Influence of an additive on growth and solubility behavior of chiral 2-chloromandelic acid. *J. Crystal Growth* 547 (2020) 125798
- Wirz, D., Hofmann, M., Lorenz, H., Bart, H.-J., Seidel-Morgenstern, A., Temmel, E.: A novel shadowgraphic inline measurement technique for image-based crystal size distribution analysis. *Crystals* 10 (2020), 740 (doi:10.3390/cryst10090740)
- Carneiro, T., Wrzosek, K., Bettenbrock, K., Lorenz, H., Seidel-Morgenstern, A.: Immobilization of an amino acid racemase for application in crystallization-based chiral resolutions of asparagine monohydrate. *Eng Life Sci.* 20 (2020) pp. 550–561 (doi: 10.1002/elsc.202000029)

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- Rekis, T., Berzins, A., Sarcevic, I., Kons, A., Balodis, M., Orola, L., Lorenz, H., Actins, A.: A maze of solid solutions of pimobendan enantiomers: An extraordinary case of polymorph and solvate diversity. *Cryst. Growth Des.* 18 (2018), pp. 264–273
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