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Academic curriculum vitae

Publikationer

Nielsen, MMK, Hughes, SS, Kuntsche, J, Malmendal, A, Jenssen, H, Nielsen, CU & Prabhala, BK 2022, 'Molecular networks and macromolecular molar mass distributions for preliminary characterization of danish craft beers', *Beverages*, bind 8, nr. 2, 35. <https://doi.org/10.3390/beverages8020035>

Tretiakova, D, Le-Deigen, I, Onishchenko, N, Kuntsche, J, Kudryashova, E & Vodovozova, E 2021, 'Phosphatidylinositol stabilizes fluid-phase liposomes loaded with a melphalan lipophilic prodrug', *Pharmaceutics*, bind 13, nr. 4, 473. <https://doi.org/10.3390/pharmaceutics13040473>

Göttel, B, Lucas, H, Syrowatka, F, Knolle, W, Kuntsche, J, Heinzelmann, J, Viestenz, A & Mäder, K 2020, 'In situ gelling Amphotericin B Nanofibers: A new Option for the Treatment of Keratomycosis', *Frontiers in Bioengineering and Biotechnology*, bind 8, 6000384. <https://doi.org/10.3389/fbioe.2020.600384>

Sundermann, J, Zagst, H, Kuntsche, J, Wätzig, H & Bunjes, H 2020, 'Bone morphogenetic protein 2 (BMP-2) aggregates can be solubilized by albumin—investigation of BMP-2 aggregation by light scattering and electrophoresis', *Pharmaceutics*, bind 12, nr. 12, 1143. <https://doi.org/10.3390/pharmaceutics12121143>

Göke, K, Roese, E, Arnold, A, Kuntsche, J & Bunjes, H 2016, 'Control over particle size distribution by autoclaving poloxamer-stabilized trimyristin nanodispersions', *Molecular Pharmaceutics*, bind 13, nr. 9, s. 3187-3195. <https://doi.org/10.1021/acs.molpharmaceut.6b00395>

Hinna, A, Steiniger, F, Hupfeld, S, Stein, PC, Kuntsche, J & Brandl, M 2016, 'Filter-extruded liposomes revisited: a study into size distributions and morphologies in relation to lipid-composition and process parameters', *Journal of Liposome Research*, bind 26, nr. 1, s. 11-20. <https://doi.org/10.3109/08982104.2015.1022556>

Bunjes, H & Kuntsche, J 2016, Light and Electron Microscopy. i A Müllertz, Y Perrie & T Rades (red), *Analytical Techniques in the Pharmaceutical Sciences*. Springer, New York, Advances in Delivery Science and Technology, s. 491-522. https://doi.org/10.1007/978-1-4939-4029-5_16

Hinna, AH, Hupfeld, S, Kuntsche, J, Bauer-Brandl, A & Brandl, M 2016, 'Mechanism and kinetics of the loss of poorly soluble drugs from liposomal carriers studied by a novel flow field-flow fractionation-based drug release-/transfer-assay', *Journal of Controlled Release*, bind 232, s. 228-237. <https://doi.org/10.1016/j.jconrel.2016.04.031>

Hinna, AH, Hupfeld, S, Kuntsche, J & Brandl, M 2016, 'The use of asymmetrical flow field-flow fractionation with on-line detection in the study of drug retention within liposomal nanocarriers and drug transfer kinetics', *Journal of Pharmaceutical and Biomedical Analysis*, bind 124, s. 157-163. <https://doi.org/10.1016/j.jpba.2016.02.037>

Swane, S, Kuntsche, J, Steiniger, F, Eich, A, Duelund, L, McKee, V & McKenzie, C 2015, 'Dimetallic functionalities in liposome bilayers', *Supramolecular Chemistry*, bind 27, nr. 10, s. 642-653. <https://doi.org/10.1080/10610278.2015.1067316>

Hinna, A, Steiniger, F, Hupfeld, S, Brandl, M & Kuntsche, J 2014, 'Asymmetrical flow field-flow fractionation with on-line detection for drug transfer studies: a feasibility study', *Analytical and Bioanalytical Chemistry*, bind 406, nr. 30, s. 7827-7839. <https://doi.org/10.1007/s00216-014-7643-9>

Trauer, S, Richter, H, Kuntsche, J, Buttemeyer, R, Liebsch, M, Linscheid, M, Fahr, A, Schafer-Korting, M, Lademann, J & Patzelt, A 2014, 'Influence of massage and occlusion on the ex vivo skin penetration of rigid liposomes and invasomes', *European Journal of Pharmaceutics and Biopharmaceutics*, bind 86, nr. 2, s. 301-306. <https://doi.org/10.1016/j.ejpb.2013.11.004>

di Cagno, M, Nielsen, TT, Larsen, KL, Kuntsche, J & Bauer-Brandl, A 2014, 'β-Cyclodextrin-dextran polymers for the solubilization of poorly soluble drugs', *International Journal of Pharmaceutics*, bind 468, nr. 1-2, s. 258-263. <https://doi.org/10.1016/j.ijpharm.2014.04.029>

Kuntsche, J & Bouwstra, J 2013, 'Editorial to the special EJPS issue "(Trans)dermal drug delivery: emerging trends to study and overcome the skin barrier"', *European Journal of Pharmaceutical Sciences*, bind 50, nr. 5, s. 545. <https://doi.org/10.1016/j.ejps.2013.08.028>

Hoffmann, S, Caysa, H, Kuntsche, J, Kreideweiss, P, Leimert, A, Müller, T & Mäder, K 2013, 'Carbohydrate plasma expanders for passive tumor targeting: In vitro and in vivo studies', *Carbohydrate Polymers*, bind 95, s. 404-413. <https://doi.org/10.1016/j.carbpol.2013.03.033>

Kuntsche, J, Herre, A, Fahr, A, Funari, SS & Garidel, P 2013, 'Comparative SAXS and DSC study on stratum corneum structural organization in an epidermal cell culture model (ROC): Impact of cultivation time', *European Journal of Pharmaceutical Sciences*, bind 50, nr. 5, s. 577-585. <https://doi.org/10.1016/j.ejps.2013.06.003>

Bode, JC, Kuntsche, J, Funari, SS & Bunjes, H 2013, 'Interaction of dispersed cubic phases with blood components', *International Journal of Applied Pharmaceutics*, bind 448, nr. 1, s. 87-95. <https://doi.org/10.1016/j.ijpharm.2013.03.016>

Wöhl-Bruhn, S, Bertz, A, Kuntsche, J, Menzel, H & Bunjes, H 2013, 'Variations in polyethylene glycol brands and their influence on the preparation process of hydrogel microspheres', *European Journal of Pharmaceutics and Biopharmaceutics*, bind 85, nr. 3, part B, s. 1215-1218. <https://doi.org/10.1016/j.ejpb.2013.02.018>

Schädlich, A, Hoffmann, S, Mueller, T, Caysa, H, Rose, C, Göpferich, A, Li, J, Kuntsche, J & Mäder, K 2012, 'Accumulation of nanocarriers in the ovary: a neglected toxicity risk?', *Journal of Controlled Release*, bind 160, nr. 1, s. 105-112. <https://doi.org/10.1016/j.jconrel.2012.02.012>

Kuntsche, J, Decker, C & Fahr, A 2012, 'Analysis of liposomes using asymmetrical flow field-flow fractionation: separation conditions and drug/lipid recovery', *Journal of Separation Science*, bind 35, nr. 15, s. 1993-2001. <https://doi.org/10.1002/jssc.201200143>

Dutz, S, Kuntsche, J, Eberbeck, D, Müller, R & Zeisberger, M 2012, 'Asymmetric flow field-flow fractionation of superferrimagnetic iron oxide multicore nanoparticles', *Nanotechnology*, bind 23, nr. 35, s. 355701. <https://doi.org/10.1088/0957-4484/23/35/355701>

Kaluđerović, GN, Dietrich, A, Kommera, H, Kuntsche, J, Mäder, K, Mueller, T & Paschke, R 2012, 'Liposomes as vehicles for water insoluble platinum-based potential drug: 2-(4-(tetrahydro-2H-pyran-2-yloxy)-undecyl)-propane-1,3-diamminedichloroplatinum(II)', *European Journal of Medicinal Chemistry*, bind 54, s. 567-572. <https://doi.org/10.1016/j.ejmech.2012.06.004>

Weiss, VM, Naolou, T, Hause, G, Kuntsche, J, Kressler, J & Mäder, K 2012, 'Poly(glycerol adipate)-fatty acid esters as versatile nanocarriers: From nanocubes over ellipsoids to nanospheres', *Journal of controlled release : official journal of the Controlled Release Society*, bind 158, nr. 1, s. 156-164. <https://doi.org/10.1016/j.jconrel.2011.09.077>

Decker, C, Fahr, A, Kuntsche, J & May, S 2012, 'Selective partitioning of cholesterol and a model drug into liposomes of varying size', *Chemistry and Physics of Lipids*, bind 165, nr. 5, s. 520-529. <https://doi.org/10.1016/j.chemphyslip.2012.04.001>

Köwitsch, A, Yang, Y, Ma, N, Kuntsche, J, Mäder, K & Groth, T 2011, 'Bioactivity of immobilized hyaluronic acid derivatives regarding protein adsorption and cell adhesion', *Biotechnology and Applied Biochemistry*, bind 58, nr. 5, s. 376-89. <https://doi.org/10.1002/bab.41>

Kuntsche, J, Horst, JC & Bunjes, H 2011, 'Cryogenic transmission electron microscopy (cryo-TEM) for studying the morphology of colloidal drug delivery systems', *International Journal of Applied Pharmaceutics*, bind 417, nr. 1-2, s. 120-137. <https://doi.org/10.1016/j.ijpharm.2011.02.001>

Schädlich, A, Rose, C, Kuntsche, J, Caysa, H, Mueller, T, Göpferich, A & Mäder, K 2011, 'How stealthy are PEG-PLA nanoparticles? An NIR in vivo study combined with detailed size measurements', *Pharmaceutical Research*, bind 28, nr. 8, s. 1995-2007. <https://doi.org/10.1007/s11095-011-0426-5>

Schädlich, A, Caysa, H, Mueller, T, Tenambergen, F, Rose, C, Göpferich, A, Kuntsche, J & Mäder, K 2011, 'Tumor Accumulation of NIR Fluorescent PEG-PLA Nanoparticles: Impact of Particle Size and Human Xenograft Tumor Model', *ACS Nano*, bind 5, nr. 11, s. 8710-20. <https://doi.org/10.1021/nn2026353>

Kuntsche, J, Koch, MHJ, Steiniger, F & Bunjes, H 2010, 'Influence of stabilizer systems on the properties and phase behavior of supercooled smectic nanoparticles', *Journal of Colloid and Interface Science*, bind 350, nr. 1, s. 229-239. <https://doi.org/10.1016/j.jcis.2010.06.018>

Kuntsche, J, Freisleben, I, Steiniger, F & Fahr, A 2010, 'Temoporfin-loaded liposomes: physicochemical characterization', *European Journal of Pharmaceutical Sciences*, bind 40, nr. 4, s. 305-15. <https://doi.org/10.1016/j.ejps.2010.04.005>

Kuntsche, J, Klaus, K & Steiniger, F 2009, 'Size determinations of colloidal fat emulsions: a comparative study', *Journal of Biomedical Nanotechnology*, bind 5, nr. 4, s. 384-395.

Badran, MM, Kuntsche, J & Fahr, A 2009, 'Skin penetration enhancement by a microneedle device (Dermaroller) in vitro: dependency on needle size and applied formulation', *European Journal of Pharmaceutical Sciences*, bind 36, nr. 4-5, s. 511-523. <https://doi.org/10.1016/j.ejps.2008.12.008>

Kuntsche, J, Koch, MHJ, Fahr, A & Bunjes, H 2009, 'Supercooled smectic nanoparticles: influence of the matrix composition and in vitro cytotoxicity', *European Journal of Pharmaceutical Sciences*, bind 38, nr. 3, s. 238-248. <https://doi.org/10.1016/j.ejps.2009.07.012>

Pappinen, S, Hermansson, M, Kuntsche, J, Somerharju, P, Wertz, P, Urtti, A & Suhonen, M 2008, 'Comparison of rat epidermal keratinocyte organotypic culture (ROC) with intact human skin: lipid composition and thermal phase behavior of the stratum corneum', *BBA General Subjects*, bind 1778, nr. 4, s. 824-34. <https://doi.org/10.1016/j.bbamem.2007.12.019>

Kuntsche, J, Bunjes, H, Fahr, A, Pappinen, S, Rönkkö, S, Suhonen, M & Urtti, A 2008, 'Interaction of lipid nanoparticles with human epidermis and an organotypic cell culture model', *International Journal of Pharmaceutics*, bind 354, nr. 1-2, s. 180-95. <https://doi.org/10.1016/j.ijpharm.2007.08.028>

Kuntsche, J & Bunjes, H 2007, 'Influence of preparation conditions and heat treatment on the properties of supercooled smectic cholesteryl myristate nanoparticles', *European Journal of Pharmaceutics and Biopharmaceutics*, bind 67, nr. 3, s. 612-20. <https://doi.org/10.1016/j.ejpb.2007.04.019>

Fahr, A, van Hoogevest, P, Kuntsche, J & Leigh, MLS 2006, 'Lipophilic drug transfer between liposomal and biological membranes: what does it mean for parenteral and oral drug delivery?', *Journal of Liposome Research*, bind 16, nr. 3, s. 281-301. <https://doi.org/10.1080/08982100600848702>

Kuntsche, J, Koch, M, Drechsler, M & Bunjes, H 2005, 'Crystallization behavior of supercooled smectic cholesteryl myristate nanoparticles containing phospholipids as stabilizers', *Colloids and Surfaces B: Biointerfaces*, bind 44, nr. 1, s. 25-35. <https://doi.org/10.1016/j.colsurfb.2005.05.007>

Kuntsche, J, Westesen, K, Drechsler, M, Koch, M & Bunjes, H 2004, 'Supercooled smectic nanoparticles: a potential novel carrier system for poorly water soluble drugs', *Pharmaceutical Research*, bind 21, nr. 10, s. 1834-43.