

Thiomatrix - Publications

Oral Drug Delivery Systems

1. Lindner S, Keim S, Haddadzadegan S, Fernandez Romero O, Zöller K, Stern G, Cesi I, Kafedjiiski K, Bernkop-Schnürch A. Strategies to Improve the Lipophilicity of Hydrophilic Macromolecular Drugs. *Advanced Healthcare Materials*. 2025, e03721.
2. Sandmeier M, Wong E T, Nykjær Nikolajsen G, Purwanti A, Lindner S, Bernkop-Schnürch A, Xia W, Hoeng J, Kjær K, Ziegler Bruun H, Skov Jensen S. Oral formulations for cannabidiol: Improved absolute oral bioavailability of biodegradable cannabidiol self-emulsifying drug delivery systems. *Colloids and Surfaces B: Biointerfaces*. 2025 Jun 16. 255, 114879.
3. Haddadzadegan S, Summonte S, Ricci F, Sandmeier M, Bernkop-Schnürch A, Intraoral Drug Delivery: Bridging the Gap Between Academic Research and Industrial Innovations. *Adv. Funct. Mater.* 2025 Apr 11. 35, 2500157.
4. Ricci F, Lindner S, Summonte S, Holm R, Sun D, Washburn N, Bohn Michalowski C, Di Pretoro G, Bernkop-Schnürch A. Mixed dry reverse micelles: potential carriers for oral protein delivery via SEDDS. *Drug Deliv. and Transl. Res.* 2025 Feb 18. 15, 3307–3320.
5. Stengel D, Nestl C, Postina A, Veider F, Fernández-Romero O, Sandmeier S, Kwiatkowski M, Kipura T, Braun D, Bernkop-Schnürch A. Evaluation of the dissociation behavior of hydrophobic ion pairs via HPLC analysis. *International Journal of Pharmaceutics*. 2025 Feb 7. 672, 125311.
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9. Sandmeier M, Hoeng J, Skov Jensen S, Nykjær Nikolajsen G, Ziegler Bruun H, To D, Ricci F, Schifferle M, Bernkop-Schnürch A. Oral formulations for highly lipophilic drugs: Impact of surface decoration on the efficacy of self-emulsifying drug delivery systems. *J of Colloid Interface Sci*. 2025 Jan 31; 677: 1108–1119.
10. Claus V, Sandmeier M, Hock N, Spleis H, Lindner S, Kalb M, Bernkop-Schnürch A. Counterion optimization for hydrophobic ion pairing (HIP): Unraveling the key factors. *Int J pharm.* 2023 Nov 25; 647.
11. Zöller K, Laffleur F, Claus V, Knoll P, To D, Bernkop-Schnürch A. Development and in vivo evaluation of nanoemulsions for oral delivery of low molecular weight heparin. *J Drug Deliv Sci Technol.* 2023 Sep; 86.
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Vaginal Drug Delivery

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Nasal Drug Delivery

1. Graf C, Bernkop-Schnürch A, Egyed A, Koller C, Prieschl-Grassauer E, Morokutti-Kunz M. Development of a nasal spray containing xylometazoline hydrochloride and iota-carrageenan for the symptomatic relief of nasal congestion caused by rhinitis and sinusitis. *International Journal of General Medicine*. 2018 Jul, 11, 275-283.
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Pulmonary Drug Delivery

1. Hetényi G, Griesser J, Fontana S, Martinez Gutierrez A, Ellemunter H, Niedermayr K, Szabó P, Bernkop-Schnürch A. Amikacin-Containing Self-Emulsifying Delivery Systems Via Pulmonary Administration for Treatment of Bacterial Infections of Cystic Fibrosis Patients. *Nanomedicine*, 2018 Jan, 13.

Thiolation/Tissue-Engineering/Mucoadhesion

1. Romero-Fernandez O, Asim M H, Arshad S, Kali G, Bernkop-Schnürch A. In Situ 3D Bioprinting: Impact of Cross-Linking on the Adhesive Properties of Hydrogels. *Advanced Functional Materials* 2026 Mar 20, e30372.
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Zeta Potential-Changing Nanocarriers

1. To D, Blanco Massani M, Coraça-Huber D C, Seybold A, Ricci F, Zöller K, Bernkop-Schnürch A. Antibiotic-Polyphosphate Nanocomplexes: A Promising System for Effective Biofilm Eradication. *International Journal of Nanomedicine.* 2024 Sep, 19, 9707-9725.
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