

Publications

Mahler L, Niehs SP, Martin K, Weber T, Scherlach K, Hertweck C, Roth M, Rosenbaum MA (2021) Highly parallelized droplet cultivation and prioritization of antibiotic producers from natural microbial communities. *eLife* 10, e64774.

Svensson C-M*, Shydkiv O*, Dietrich S, Mahler L, Weber T, Choudhary M, Tovar M, Figge MT**, Roth M*; authors contributed equally; *corresponding authors; **authors contributed equally (2019) Coding of experimental conditions in microfluidic droplet assays using colored beads and machine learning supported image analysis. *Small* 15(4), e1802384.

Tovar M, Hengoju S, Weber T, Mahler L, Choudhary M, Becker T, Roth M (2019) One sensor for multiple colors: Fluorescence analysis of microdroplets in microbiological screenings by frequency-division multiplexing. *Anal Chem* 91(4), 3055-3061.

Tovar M, Weber T, Hengoju S, Lovera A, Munser AS, Shvydkiv O, Roth M (2018) 3D-glass molds for facile production of complex droplet microfluidic chips. *Biomicrofluidics* 12(2), 024115.

Mahler L, Tovar M, Weber T, Brandes S, Rudolph MM, Ehgartner J, Mayr T, Figge MT, Roth M, Zang E (2015) Enhanced and homogeneous oxygen availability during incubation of microfluidic droplets. *RSC Advances* 5, 101871-101878.

Cao J, Goldhan J, Martin K, Köhler JM (2013) Investigation of mixture toxicity of widely used drugs caffeine and ampicillin in the presence of an ACE inhibitor on bacterial growth using droplet-based microfluidic technique. *Green Process Synth* 2(6), 591-601.

Zang E*, Brandes S*, Tovar M, Martin K, Mech F, Horbert P, Henkel T, Figge MT, Roth M (2013) Real-time image processing for label-free enrichment of Actinobacteria cultivated in picolitre droplets. *Lab Chip* 13(18), 3707-3713, *authors contributed equally.

Roth M, Martin K, Zang E, Nett M, Henkel T (2012) A microfluidics-based approach to drug discovery. *Biomed Tech (Berl)* 57(SI-1 Track-B), 270.

Köhler JM, Henkel T, Grodrian A, Kirner T, Roth M, Martin K, Metze J (2004) Digital reaction technology by micro segmented flow—components, concepts and applications *Chemical Engineering Journal* 101, 201-216.

Martin K, Henkel T, Baier V, Grodrian A, Schön T, Roth M, Michael Köhler J, Metze J (2003) Generation of larger numbers of separated microbial populations by cultivation in segmented-flow microdevices. *Lab Chip* 3(3), 202-207.

*equal contribution #corresponding author