

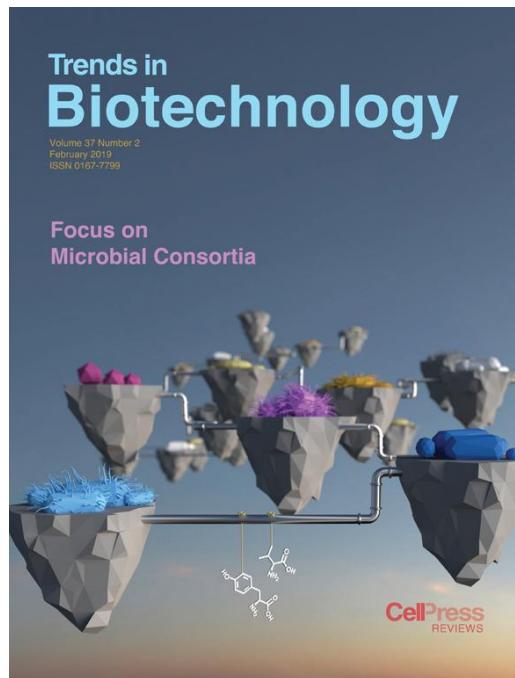
Publications

Dr. Meike Baumgart

Journal Cover



Cover of Baumgart et al., 2016, Impact of LytR-CpsA-Psr proteins on cell wall biosynthesis in *Corynebacterium glutamicum*. J. Bacteriol. 198: 3045-3059.



Cover of Noack S*#. & Baumgart M. **#, (2019) Communities of Niche-Optimized Strains: Small-genome organism consortia in bioproduction. Trends Biotechnol. 37: 126-139.

Peer-reviewed Publications

- Spielmann A., Brack Y., van Beek H., Flachbart L., Sundermeyer L., **Baumgart M.** & Bott M., (2020) NADPH biosensor-based identification of an alcohol dehydrogenase variant with improved catalytic properties caused by a single charge reversal at the protein surface. *AMB Express* 10: 14.
- Wolf N., Bussmann M., Koch-Koerfges A., Katcharava N., Schulte J., Polen T., Hartl J., Vorholt J.A., **Baumgart M.** & Bott M., (2020) Molecular basis of growth inhibition by acetate of an adenylate cyclase-deficient mutant of *Corynebacterium glutamicum*. *Front. Microbiol.* 11.
- Davoudi C.F., Ramp P., **Baumgart M.** & Bott M.*, (2019) Identification of Surf1 as an assembly factor of the cytochrome bc_1-aa_3 supercomplex of Actinobacteria. *Biochim Biophys Acta Bioenerg* 1860: 148033.
- Kortmann M., **Baumgart M.** & Bott M.*, (2019) Pyruvate carboxylase from *Corynebacterium glutamicum*: purification and characterization. *Appl. Microbiol. Biotechnol.* 103: 6571-6580.
- Kortmann M., Mack C., **Baumgart M.** & Bott M.*, (2019) Pyruvate carboxylase variants enabling improved lysine production from glucose identified by biosensor-based high-throughput fluorescence-activated cell sorting screening. *ACS Synth. Biol.* 8: 274-281.
- Kraxner K.J., Polen T., **Baumgart M.*** & Bott M.*, (2019) The conserved actinobacterial transcriptional regulator FtsR controls expression of *ftsZ* and further target genes and influences growth and cell division in *Corynebacterium glutamicum*. *BMC Microbiol.* 19: 179.
- Noack S*#. & **Baumgart M.** **#, (2019) Communities of Niche-Optimized Strains: Small-genome organism consortia in bioproduction. *Trends Biotechnol.* 37: 126-139.
- Cormann K.U., **Baumgart M.** & Bott M.*, (2018) Structure-based design of versatile biosensors for small molecules based on the PAS domain of a thermophilic histidine kinase. *ACS Synth. Biol.* 7: 2888-2897.
- Morosov X., Davoudi C.F., **Baumgart M.**, Brocker M. & Bott M.*, (2018) The copper-deprivation stimulon of *Corynebacterium glutamicum* comprises proteins for biogenesis of the actinobacterial cytochrome bc_1-aa_3 supercomplex. *J. Biol. Chem.* 293: 15628-15640.

Spielmann A., **Baumgart M.** & Bott M.*, (2018) NADPH-related processes studied with a SoxR-based biosensor in *Escherichia coli*. *Microbiologyopen*: e785.

Baumgart M.*, Unthan S., Kloß R., Radek A., Polen T., Tenhaef N., Müller M.F., Kübel A., Siebert D., Brühl N., Marin K., Hans S., Krämer R., Bott M., Kalinowski J., Wiechert W., Seibold G., Frunzke J., Rückert C., Wendisch V.F. & Noack S.*, (2018) *Corynebacterium glutamicum* chassis C1*: building and testing a novel platform host for synthetic biology and industrial biotechnology. *ACS Synth. Biol.* 7: 132-144.

Baumgart M.*, Huber I., Abdollahzadeh I., Gensch T. & Frunzke J.*, (2017) Heterologous expression of the *Halothiobacillus neapolitanus* carboxysomal gene cluster in *Corynebacterium glutamicum*. *J. Biotechnol.* 258: 126-135.

Schulte J., **Baumgart M.** & Bott M.*, (2017) Development of a single-cell GlxR-based cAMP biosensor for *Corynebacterium glutamicum*. *J. Biotechnol.* 258: 33-40.

Schulte J., **Baumgart M.** & Bott M.*, (2017) Identification of the cAMP phosphodiesterase CpdA as novel key player in cAMP-dependent regulation in *Corynebacterium glutamicum*. *Mol. Microbiol.* 103: 534-552.

Limberg M.H., Schulte J., Aryani T., Mahr R., **Baumgart M.**, Bott M., Wiechert W. & Oldiges M.*, (2017) Metabolic profile of 1,5-diaminopentane producing *Corynebacterium glutamicum* under scale-down conditions: Blueprint for robustness to bioreactor inhomogeneities. *Biotechnol. Bioeng.* 114: 560-575.

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Baumgart M. & Frunzke J.*, (2015) The manganese-responsive regulator MntR represses

transcription of a predicted ZIP family metal ion transporter in *Corynebacterium glutamicum*. FEMS Microbiol. Lett. 362: 1-10.

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Garcia-Nafria J., **Baumgart M.**, Bott M., Wilkinson A.J. & Wilson K.S.*, (2010) The *Corynebacterium glutamicum* aconitase repressor: scratching around for crystals. Acta Crystallogr Sect F Struct Biol Cryst Commun 66: 1074-1077.

Bussmann M., **Baumgart M.** & Bott M.*, (2010) RosR (Cg1324), a hydrogen peroxide-sensitive MarR-type transcriptional regulator of *Corynebacterium glutamicum*. J. Biol. Chem. 285: 29305-29318.

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