List of published preliminary research relevant to the research program

Bornscheuer, Uwe T.

Peer-reviewed Publications (selection)

1. **Bornscheuer UT** Hauer B, Jaeger KE, Schwaneberg U. 2019. Directed evolution empowered redesign of natural proteins for the sustainable production of chemicals and pharmaceuticals. *Angew Chem Int Ed* 58:36-40 (Review)
2. van den Bergh T, Tamo G, Nobili A, Tao Y, Tan T, **Bornscheuer UT**, Kuipers RKP, Vroling B, de Jong RM, Subramanian K, Schaap PJ, Desmet T, Nidetzky B, Vriend G, Joosten H-J. 2017. CorNet: assigning function to networks of coevolving residues by automated literature mining. *PLoS One* 12:e0176427/1-e/19
3. Balke K, Schmidt S, Genz M, **Bornscheuer UT***. 2016. Switching the regioselectivity of a cyclohexanone monooxygenase towards (+)-*trans*-dihydrocarvone by rational protein design. *ACS Chem Biol* 11:38-43
4. Dörr M, Fibinger MPC, Last D, Schmidt S, Santos-Aberturas J, Vickers C, Voss M, **Bornscheuer UT***. 2016. Fully automatized high-throughput enzyme library screening using a robotic platform. *Biotechnol Bioeng* 113:1421-1432
5. Santos-Aberturas J, Dörr M, Waldo GS, **Bornscheuer UT**. 2015. In-depth high-throughput screening of protein engineering libraries by split-GFP direct crude cell extract data normalization. *Chem Biol* 22:1406-1414
6. Nobili A, Tao Y, Pavlidis IV, van den Bergh T, Joosten H-J, Tan T, **Bornscheuer UT***. 2015. Simultaneous use of *in silico* design and a correlated mutation network as a tool to efficiently guide enzyme engineering. *Chembiochem* 16:805-810
7. Fernandez-Alvaro E, Snajdrova R, Jochens H, Davids T, Böttcher D, **Bornscheuer UT***. 2011. A combination of *in vivo* selection and cell sorting for the identification of enantioselective biocatalysts. *Angew Chem Int Ed* 50:8584-8587
8. Jochens H, **Bornscheuer UT***. 2010. Natural diversity to guide focused directed evolution. *Chembiochem* 11:1861-1866
9. Kazlauskas RJ, **Bornscheuer UT***. 2009. Finding better protein engineering strategies. *Nat Chem Biol* 5:526-529 (Review)
10. Chaparro-Riggers JF, Breves R, Maurer K-H, **Bornscheuer U***. 2006. Modulation of infectivity in phage display as a tool to determine the substrate specificity of proteases. *Chembiochem* 7:965-970