

# Veröffentlichungen

des Helmholtz-Zentrums für Umweltforschung GmbH – UFZ

Forschungsbereich Energie

Forschen für die Umwelt

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## **Vorbemerkung**

Das vorliegende Veröffentlichungsverzeichnis umfasst die im Jahre 2018 erschienenen Publikationen des Programmes "Erneuerbare Energien" im Forschungsbereich Energie, die von Mitarbeitern der Helmholtz-Zentrum für Umweltforschung GmbH - UFZ verfasst, mitverfasst oder herausgegeben wurden.

Redaktionsschluss für diese Publikationsliste war der 15. Februar 2019.

Im Unterschied zu externen Autoren sind UFZ-Angehörige bei allen Publikationen durch **fette Schrift** hervorgehoben.

Das anschließende alphabetische Register verzeichnet alle UFZ-Autoren mit den jeweiligen laufenden Nummern ihrer Publikationen.

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## Artikel in ISI und SCOPUS gelisteten Zeitschriften

1. Aulenta, F., Puig, S., **Harnisch, F.** (2018):  
Microbial electrochemical technologies: maturing but not mature. Editorial  
*Microb. Biotechnol.* **11** (1), 18 - 19
2. Averesch, N.J.H., **Krömer, J.O.** (2018):  
Metabolic engineering of the shikimate pathway for production of aromatics and derived compounds – present and future strain construction strategies  
*Front. Bioeng. Biotechnol.* **6**, art. 32
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Toward synthetic biology strategies for adipic acid production: An *in silico* tool for combined thermodynamics and stoichiometric analysis of metabolic networks  
*ACS Synth. Biol.* **7** (2), 490 - 509
4. **David, C., Schmid, A., Adrian, L., Wilde, A., Bühler, K.** (2018):  
Production of 1,2-propanediol in photoautotrophic *Synechocystis* is linked to glycogen turn-over  
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Comparative modelling of the coupled thermal–hydraulic-mechanical (THM) processes in a heated bentonite pellet column with hydration  
*Environ. Earth Sci.* **77** (3), art. 84
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*Bioelectrochemistry* **119** , 172 - 179
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Long-term biogas production from glycolate by diverse and highly dynamic communities  
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Identification of the DNA methyltransferases establishing the methylome of the cyanobacterium *Synechocystis* sp. PCC 6803  
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9. **Harnisch, F.**, Urban, C. (2018):  
Electrobiorefineries: Unlocking the synergy of electrochemical and microbial conversions  
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10. **Hegner, R., Rosa, L.F.M., Harnisch, F.** (2018):  
Electrochemical CO<sub>2</sub> reduction to formate at indium electrodes with high efficiency and selectivity in pH neutral electrolytes  
*Appl. Catal. B-Environ.* **238** , 546 - 556
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In situ O<sub>2</sub> generation for biocatalytic oxyfunctionalization reactions  
*ChemCatChem* **10** (23), 5366 - 5371
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13. **Koch, C., Korth, B., Harnisch, F.** (2018):  
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Balancing cellular redox metabolism in microbial electrosynthesis and electrofermentation – A chance for metabolic engineering  
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Microbial electrochemical sensors for anaerobic digestion process control – performance of electroactive biofilms under real conditions  
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*Electrochim. Commun.* **90** , 78 - 82
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31. Varela, C., Schmidt, S.A., Borneman, A.R., Pang, C.N.I., **Krömer, J.O.**, Khan, A., Song,  
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Microbial electrosynthesis of isobutyric, butyric, caproic acids, and corresponding  
alcohols from carbon dioxide  
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35. Yu, S., **Lai, B.**, Plan, M.R., Hodson, M.P., Lestari, E.A., Song, H., **Krömer, J.O.** (2018): Improved performance of *Pseudomonas putida* in a bioelectrochemical system through overexpression of periplasmic glucose dehydrogenase  
*Biotechnol. Bioeng.* **115** (1), 145 - 155
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40. **Lehmann, C., Kolditz, O., Nagel, T.** (2018):  
Models of thermochemical heat storage  
*SpringerBriefs in Energy*  
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## Buchherausgaben

41. Song, Y., Xi, B., Zhang, Y., Lei, K., Williams, R., Zhang, M., Kong, W., **Kolditz, O.** (eds., 2018):  
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42. **Kleinsteuber, S.** (2018):  
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*Chinese water systems. Volume 1: Liaohe and Songhuajiang River Basins*  
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45. Robles, C., Nair, R.B., **Kleinsteuber, S.**, Nikolausz, M., Sárvári Horváth, I. (2018):  
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46. Sun, Y., **Nixdorf, E.**, Su, J., Wang, Q., Wang, T., **Kolditz, O.**, Xi, B. (2018):  
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Terrestrial Environmental Sciences  
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## Berichtartikel

48. Schwarz, S., Zuberbühler, U., Schmidt, M., Kretzschmar, J., Friedrich, A., Schröer, B., Hebling, C., Calnan, S., Peters, R., Dittmeyer, R., **Harnisch, F.**, **Nagel, T.** (2018):  
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*Forschung für die Energiewende : die Gestaltung des Energiesystems ; Jahrestagung 2017 des ForschungsVerbunds Erneuerbare Energien, 8. und 9. November 2017, Umweltforum Berlin ; [Innovationen für die Energiewende, Beiträge zur FVEE-Jahrestagung 2017]*  
Themen / ForschungsVerbund Erneuerbare Energien 2017  
ForschungsVerbund Erneuerbare Energien (FVEE), Berlin, S. 49 - 52

## Tagungsbeiträge

49. **Sträuber, H.** (2018):

Mittelkettige Fettsäuren als Teilstrom des Biogasprozesses

*DBFZ-Jahrestagung 2018: Energie & Stoffe aus Biomasse: Konkurrenten oder Partner?*

*19./20. September 2018*

DBFZ Deutsches Biomasseforschungszentrum gemeinnützige GmbH, Leipzig, S. 156

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