

## LIST of PUBLICATIONS

**Prof. Dr. Bernhard Kräutler**

**2017**

279. S. Moser, G. Scherzer and B. Kräutler  
On the Nature of Isomeric Nonfluorescent Chlorophyll Catabolites in Leaves and Fruit - A Study with a Ubiquitous Phylloleucobilin and its Main Isomerization Product  
*Chemistry and Biodiversity* **2017**, *14*, e1700368  
Dedicated to Prof. Dieter Seebach on the occasion of his 80<sup>th</sup> birthday
278. E. Mutti, M. Hunger, S. Fedosov, E. Nexo and B. Kräutler  
Organometallic DNA-B<sub>12</sub>-Conjugates as Potential Oligonucleotide Vectors - Synthesis, Structural and Binding Studies with Human Cobalamin-Transport Proteins  
*ChemBioChem* **2017**, *18*, 2280-2291
277. J. S. Bloch, M. Ruetz, B. Kräutler and K. P. Locher  
Structure of the human transcobalamin beta domain in four distinct states  
*PloS One* **2017**, *12*(9): e0184932
276. F. J. Widner, F. Gstrein and Bernhard Kräutler  
Partial Synthesis of Coenzyme B<sub>12</sub> from Cobyric Acid  
*Helv. Chim. Acta* **2017**, *100*, e1700170  
Dedicated to Prof. Albert Eschenmoser on the occasion of his 92<sup>nd</sup> birthday
275. S. Banala, S. Fokong, Ch. Brand, Ch. Andreou, B. Kräutler, M. Rueping, and F. Kiessling  
Quinone-Fused Porphyrins as Contrast Agents for Photoacoustic Imaging  
*Chem. Sci.*, **8**, 6176-6181 (2017)
274. C. N. Brenig, M. Ruetz, C. Kieninger, K. Wurst and B. Kräutler,  
Alpha- and beta-Diastereoisomers of Phenylcobalamin from Cobalt-Arylation with Diphenyliodonium Chloride  
*Chemistry – Europ. J.* **23**, 9726-9731 (2017)

273. Z. Li, A. Shanmuganathan, M. Ruetz, K. Yamada, N. A. Lesniak, B. Kräutler, T. C. Brunold, M. Koutmos and R. Banerjee,  
Glutathionyl-Cobalamin is an Intermediate in Thiol Oxidation Catalyzed by the B<sub>12</sub> Trafficking Protein CblC  
*J. Biol. Chem.* **292**, 9733-974 (2017)
272. M. Ruetz, A. Shanmuganathan, C. Gherasim, A. Karasik, R. Salchner, C. Kieninger, K. Wurst, R. Banerjee, M. Koutmos and B. Kräutler\*  
Antivitamin B<sub>12</sub> Inhibition of Human B<sub>12</sub>-Processing Enzyme CblC - Crystal Structure of Abortive Ternary Complex with Cosubstrate Glutathione, *Angew. Chem. Int. Ed.* **56**, 7387-7392 (2017)  
Inhibierung des humanen B<sub>12</sub>-verarbeitenden Enzyms CblC durch Antivitamine B<sub>12</sub> – Kristallstruktur des inaktiven ternären Komplexes mit dem Kosubstrat Glutathion, *Angew. Chem.* **129**, 7493-7498 (2017)  
Dedicated to Professor Ebba Nexø
271. C. Mittelberger, H. Yalcinkaya, C. Pichler, J. Gasser, G. Scherzer, T. Erhart, S. Schumacher, B. Holzner, K. Janik, P. Robatscher, T. Müller, B. Kräutler, and M. Oberhuber  
Pathogen-Induced Leaf Chlorosis: Products of Chlorophyll Breakdown Found in Degreened Leaves of Phytoplasma-Infected Apple (*Malus × domestica* Borkh.) and Apricot (*Prunus armeniaca* L.) Trees Relate to the Pheophorbide a Oxygenase/Phyllobilin Pathway  
*J. Agr. Food Chem.* **65**, 2651-2660 (2017)
270. S.A. Mireku, M. Ruetz M, T. Zhou, V.M. Korkhov, B. Kräutler, K.P. Locher  
Conformational Change of a Tryptophane Residue in BtuF Facilitates Binding and Transport of Cobinamide by the Bacterial Vitamin B<sub>12</sub> Transporter BtuCD-F  
*Scient. Reports* **7**, 41575 (2017)

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269. Nicholas A. Miller, Theodore E. Wiley, Kenneth G. Spears, Markus Ruetz, Christoph Kieninger, Bernhard Kräutler, and Roseanne J. Sension  
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*J. Am. Chem. Soc.*, **138**, 14250-14256 (2016)
268. Chengjie Li, Klaus Wurst, Steffen Jockusch, Karl Gruber, Maren Podewitz, Klaus R. Liedl, and Bernhard Kräutler  
Chlorophyll-Derived Yellow Phyllobilins of Higher Plants are Medium-Responsive, Chiral Photoswitches  
*Angew. Chem. Int. Ed.* **55**, 15760-15765, (2016)  
Von Chlorophyll abstammende gelbe Phyllobiline höherer Pflanzen als umgebungsgesteuerte, chirale Photoschalter  
*Angewandte Chemie* **128**, 15992-15997 (2016)
267. Marissa B. Guzzo, Hoa T. Nguyen, Thanh H. Pham, Monika Wyszczelska-Rokiel, Hieronim Jakubowski, Kerstin A. Wolff, Sam Ogowang, Joseph L. Timpona, Soumya Gogula, Michael R. Jacobs, Markus Ruetz, Bernhard Kräutler, Donald W. Jacobsen, Guo-Fang Zhang, Liem Nguyen  
Methylfolate Trap Promotes Bacterial Thymineless Death by Sulfa Drugs  
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266. T. Erhart, C. Mittelberger, C. Vergeiner, G. Scherzer, B. Holzner, P. Robatscher, M. Oberhuber, B. Kräutler  
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265. F. J. Widner, A. D. Lawrence, E. Deery, D. Heldt, S. Frank, K. Gruber, K. Wurst, M. J. Warren, B. Kräutler  
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*Angew. Chem.* **128**, 11451-11456 (2016)
264. M. Scherl, T. Müller, C. R. Kreutz, R. G. Huber, E. Zass, K. R. Liedl, B. Kräutler  
Chlorophyll Catabolites in Fall Leaves of the Wych Elm Tree Present a Novel Glycosylation Motif  
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263. S. Banala, K. Wurst, B. Kräutler  
Panchromatic  $\pi$ -Extended Porphyrins from Conjugation with Quinones  
*ChemPlusChem*, **81**, 477-488 (2016)
262. C. Li, K. Wurst, Y. Feng, B. Kräutler  
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261. K. E. Helliwell, A. D. Lawrence, A. Holzer, U. J. Kudahl, S. Sasso, B. Kräutler, D. J. Scanlan, M. J. Warren, A. G. Smith  
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*Current Biology*, **26**, 999-1008 (2016)
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258. K. Netsomboon, A. Feßler, L. Erletzt, F. Prüfert, M. Ruetz, C. Kieninger, B. Kräutler, A. Bernkop-Schnürch  
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*Int. J. Pharmaceutics*, **497**, 129-135 (2016)
257. B. Kräutler  
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253. M. Hunger, B. Kräutler  
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