Leibniz-Institut für Pflanzenbiochemie
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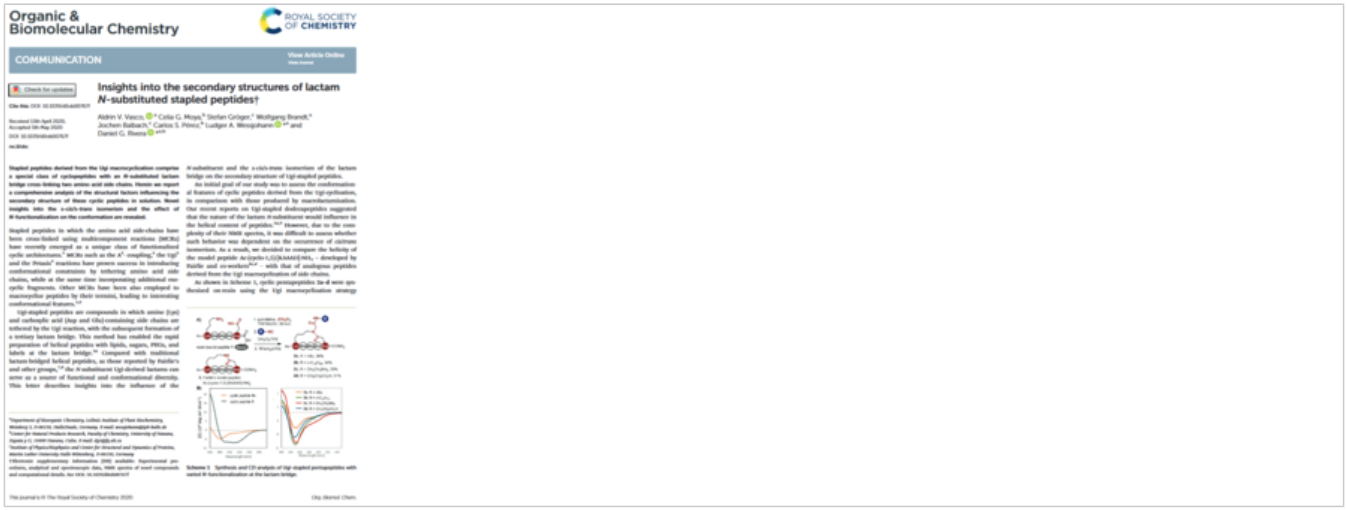
+++ News Ticker Science #40 +++ Cyclic peptides +++



Insights into the secondary structures of lactam *N*-substituted stapled peptides

IPB chemists together with collaborators from the MLU Halle and the University of Havana have taken a closer look at features of a special class of cyclopeptides. Their results were recently published in *Organic & Biomolecular Chemistry*. This special class of cyclopeptides forms when generating stapled peptides through Ugi macrocyclization. They exhibit an *N*-substituted lactam bridge cross-linking two amino acid side chains. The researchers report a comprehensive analysis of the structural factors influencing the secondary structure of these cyclic peptides in solution. Furthermore, the authors reveal novel insights into the s-*cis*/s-*trans* isomerism and the effect of *N*-functionalization on the conformation.

Publication:

A. V. Vasco, C. G. Moya, S. Gröger, W. Brandt, J. Balbach, C. S. Pérez, L. A. Wessjohann and D. G. Rivera. Insights into the secondary structures of lactam *N*-substituted stapled peptides, *Org Biomol Chem*, 2020, Advance Article, DOI: 10.1039/D0OB00767F