

Publications

Hudspeth J, Rogge K, Dörner S, Müll M, Hoffmeister D, Rupp B, Werten S (2024) Methyl transfer in psilocybin biosynthesis. *Nat Commun* 15(1), 2709.

Hudspeth JD, Rogge K, Wagner T, Müll M, Hoffmeister D, Rupp B, Werten S (2024) The second methylation in Psilocybin biosynthesis is enabled by a hydrogen bonding network extending into the secondary sphere surrounding the methyltransferase active site. *ChemBioChem* 25(23), e202400497.

Kries H, Trottmann F, Hertweck C (2024) Novel biocatalysts from specialized metabolism. *Angew Chem Int Ed* 63(4), e202309284. (Review)

Little RF, Trottmann F, Hashizume H, Preissler M, Unger S, Sawa R, Kries H, Pidot S, Igarashi M, Hertweck C (2024) Analysis of the valgamicin biosynthetic pathway reveals a general mechanism for cyclopropanol formation across diverse natural product scaffolds. *ACS Chem Biol* 19(3), 660-668.

Peng H, Schmiederer J, Chen X, Panagiotou G, Kries H[#] (2024) Controlling substrate- and stereospecificity of condensation domains in nonribosomal peptide synthetases. *ACS Chem Biol* 19(3), 599-606.

Müll M, Pourmasoumi F, Wehrhan L, Nosovska O, Stephan P, Zeihe H, Vilotijevic I, Keller BG, Kries H (2023) Biosynthetic incorporation of fluorinated amino acids into the nonribosomal peptide gramicidin S. *RSC Chem Biol* 4(9), 692-697.

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Stanišić A, Svensson CM, Ettelt U, Kries H[#] (2022) Defining a nonribosomal specificity code for design. *bioRxiv* [Preprint]

Trottmann F, Ishida K, Ishida-Ito M, Kries H, Groll M, Hertweck C (2022) Pathogenic bacteria remodel central metabolic enzyme to build a cyclopropanol warhead. *Nat Chem* 14(8), 884-890.

Wurlitzer JM, Stanišić A, Ziethe S, Jordan PM, Günther K, Werz O, Kries H, Gressler M (2022) Macrophage-targeting oligopeptides from *Mortierella alpina*. *Chem Sci* 13(31), 9091-9101.

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Lichman B, O'Connor SE, Kries H (2019) Biocatalytic strategies towards [4+2] cycloadditions. *Chemistry* 25(28), 6864-6877. (Review)

Stanišić A, Hüsken A, Kries H (2019) HAMA: A multiplexed LC-MS/MS assay for specificity profiling of adenylate-forming enzymes. *Chem Sci* 10(44), 10395-10399.

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