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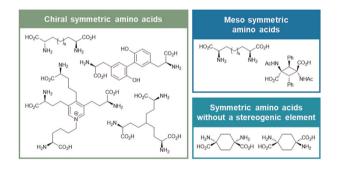
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Synthesis and applications of symmetric amino acid derivatives

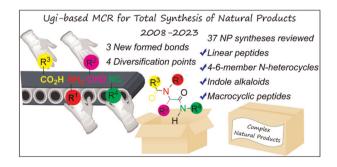
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Recent developments in the total synthesis of natural products using the Ugi multicomponent reactions as the key strategy

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Synthesis of silyl indenes by ruthenium-catalyzed aldehyde- and acylsilane-enabled C-H alkylation/cyclization

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$$R^2$$
 R^3
 R^4
 R^4

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COMMUNICATIONS

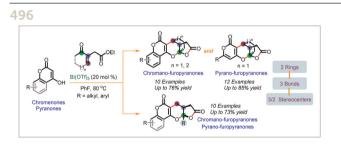
486 Na₂CO₂ MeCN, 0°C Metal free 36 examples ■ S-Arylation VS Intramolecular Aryl Migration 33-95% yields

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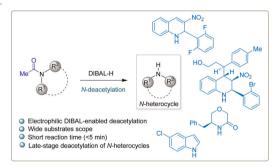
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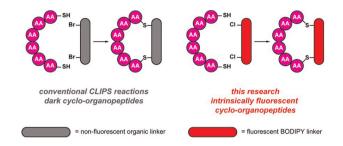
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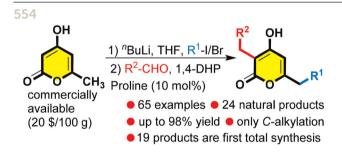
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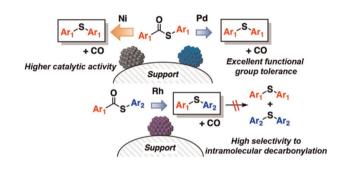
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Iridium-catalysed reductive allylic amination of α , β -unsaturated aldehydes

Liang Liu, Renshi Luo,* Jinghui Tong and Jianhua Liao*

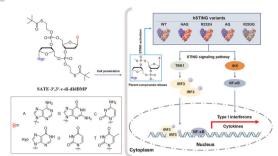
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Increasing the versatility of the biphenyl-fuseddioxacyclodecyne class of strained alkynes

Sam Forshaw, Jeremy S. Parker, William T. Scott, Richard C. Knighton, Neelam Tiwari, Samson M. Oladeji, Andrew C. Stevens, Yean Ming Chew, Jami Reber, Guy J. Clarkson, Mohan K. Balasubramanian and Martin Wills*

Rate increases with 4C bridge on backbone R = pTol; 0.13 mM $X = Ms; 5.0 \text{ mM}^{-1} \text{ s}^{-1}$ $X = H; 0.13 \text{ mM}^{-1} \text{ s}^{-1}$ X=OMe; 0.20 mM⁻¹ s⁻¹ $R = Me; 0.13 \text{ mM}^{-1} \text{ s}^{-1}$ (in d6-DMSO:12.5 mM⁻¹ s⁻¹) X = Ts: 62.1 mM⁻¹ s⁻¹ second order rate constant, k, for reaction with BnN3 shown (in DMSO-d₆:18.3 mM⁻¹ s⁻¹) for each alkyne in CDCl₃ unless otherwise stated.

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Design, synthesis, and cell-based in vitro assay of deoxyinosine-mixed SATE-dCDN prodrugs that activate all common STING variants

Zhigiang Xie, Yuchen Yang, Dejun Ma and Zhen Xi*

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- ♦ formation of two continuous stereocenter → excellent yield and diastereoselctivity
- ♦ formation of hetercyclic dihydroindole ring ♦ one C-N and one C-C bonds formation
- ♦ wide range of functional group tolerance ♦ metal free & mild reacion conditions
- ♦ extended for the synthesis of disubstituted *trans*-dihydrobenzofurans (5 Examples)

Diastereoselective synthesis of trans-2,3-dihydroindoles via formal [4 + 1] annulation reactions of a sulfonium ylide

Anshul Jain, Akanksha Kumari, Ramesh K. Metre and Nirmal K. Rana*