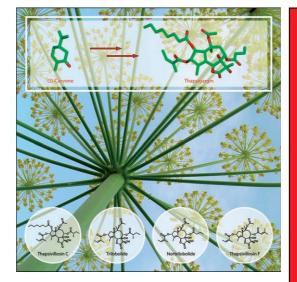
The first total syntheses...

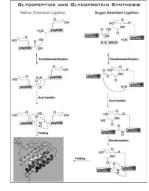
... of five thapsigargins are described by S. V. Ley et al. on page 5688 ff. These natural products are potent and selective inhibitors of sarco/endo-plasmic reticulum ATPases (SERCAs): thapsigarginderived prodrugs have shown selective in vivo cytotoxicity against prostate tumours. So far, 17 related thapsigargin structures have been isolated from Thapsia plants, which are found naturally in parts of northern Africa, the Iberian peninsular, and regions of the Mediterranean. The backdrop of the cover illustration depicts the umbels of Thapsia villosa L. and was photographed and identified by Antonio Conejo (reproduced with permission).



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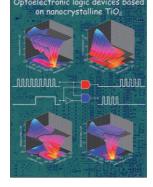


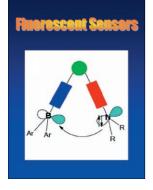
Synthesis of Glycopeptides

In their Concept article on page 5670 ff., C.-H. Wong and A. Brik discuss recent advances in the synthesis of glycopeptides and glycoproteins. As their sugar-assisted ligation approach permits ligation at difficult junctions, this method could be applied to the synthesis of large peptides or glycopeptides through enzymatic removal or addition of the sugar moiety.

Electron Transfer

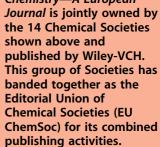
In their Full Paper on page 5676 ff., K. Szaciłowski et al. show the importance of binding mode and resulting electronic interactions between surface species and semiconducting support of a series of titanium dioxide materials with various iron(II) complexes. This information is helpful in understanding the mechanism of photosensitization and photocurrent switching, which can find applications in optoelectronics and photovoltaics.





Fluoride Sensors

In their Full Paper on page 5713 ff., S. Wang et al. have shown, through the investigation of the photophysical properties and the fluorescent response to solvent molecules and fluoride ions of three distinct groups of organoboron compounds, that the geometry of the linker and the separation distance between the donor and the acceptor groups in three-coordinate organoboron compounds have a profound impact on the emission pathway and the emission efficiency.



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