

www.angewandte.org 2012-51/46 Synthetic Erythropoietin (EPO Induced Cell Differentiation and Proliferation **BFU-E** colony Human CD34 cells

Glycosylphosphatidylinositol Anchors Review by P. Seeberger et al.

18 F Labeling of Arenes

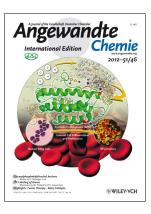
Minireview by M. Tredwell and V. Gouverneur

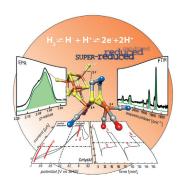
Highlights: Tumor Therapy · Relay Catalysts

## **Cover Picture**

Ping Wang, Suwei Dong, John A. Brailsford, Karthik Iyer, Steven D. Townsend, Qiang Zhang, Ronald C. Hendrickson, JaeHung Shieh, Malcolm A. S. Moore, and Samuel J. Danishefsky\*

A glycoprotein with multiple glycosylations can be prepared by chemical synthesis as a single glycoform. In their Communication on page 11576 ff., S. J. Danishefsky et al. describe the first total synthesis of fully glycosylated erythropoietin. Glycosylation has significantly increased the stability of the protein. The fully glycosylated native protein has demonstrated substantial erythropoietic activity.



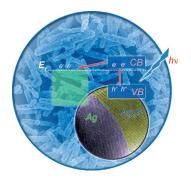


## [FeFe] Hydrogenase Mechanism

A. Silakov, E. Reijerse, W. Lubitz et al. characterize in their Communication on page 11458 ff., a new redox state of the active center of [FeFe] hydrogenase. This form could be an intermediate in the catalytic cycle of all [FeFe] hydrogenases.

## Nanotubes

In their Communication on page 11501 ff., X. W. Lou et al. describe the synthesis of  $Ag_2S$ -Ag hybrid nanotubes and examine their photocatalytic activity under visible-light irradiation.





## Heterogeneous Catalysis

An inexpensive mesoporous graphene catalyst doped with both N and S atoms, which facilitates the oxygen reduction reaction, is reported by S. Z. Qiao et al. in their Communication on page 11496 ff.