A Journal of the Gesellschaft Deutscher Chemiker

D 3461

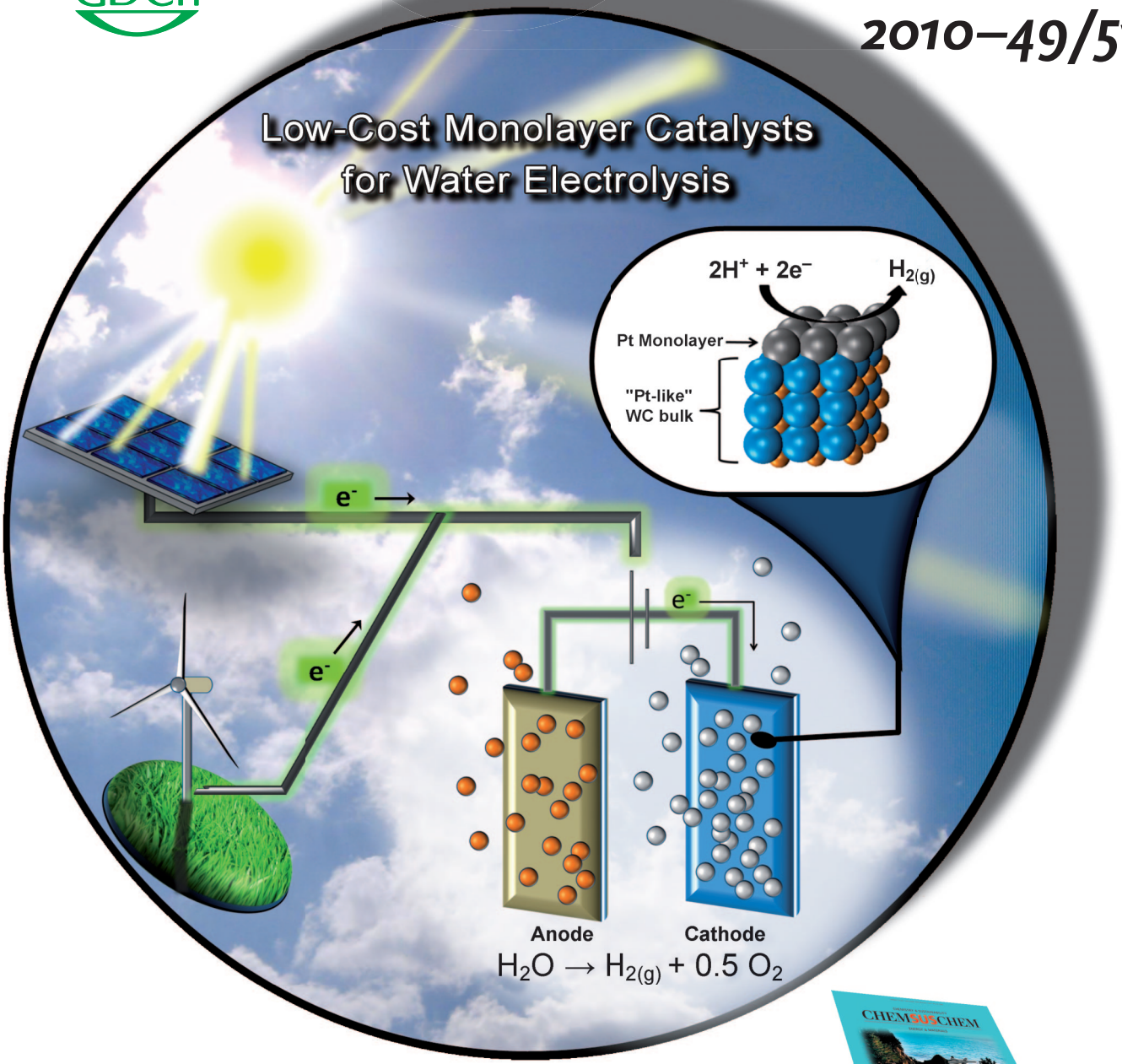
Angewandte Chemie

International Edition

GDCh

www.angewandte.org

2010–49/51



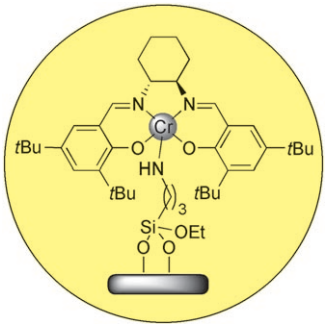
ACIEFS 49 (51) 9787–10014 (2010) · ISSN 1433–7851 · Vol. 49 · No. 51

WILEY-VCH

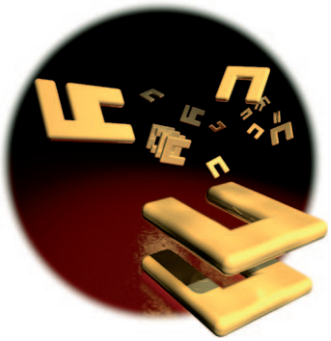
Cover Picture

Daniel V. Esposito, Sean T. Hunt, Alan L. Stottlemyer, Kevin D. Dobson, Brian E. McCandless, Robert W. Birkmire, and Jingguang G. Chen*

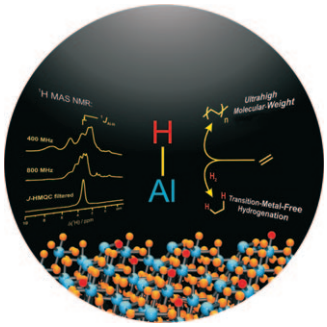
The lower limits of platinum loading have been explored for the hydrogen evolution reaction (HER). In their Communication on page 9859 ff., J. G. Chen and co-workers present a low-cost substrate material, tungsten monocarbide, that is capable of supporting monolayer amounts of platinum to produce an electrocatalyst with the same HER activity as bulk platinum.



Metal–Salen Catalysts
The synthesis of cyclic carbonates from epoxides and CO_2 is one of the typical applications of metal–salen complexes. Current research achievements, which strive towards a rational catalyst design, are presented by A. W. Kleij et al. in their Minireview on page 9822 ff.



Metamaterials
H. Giessen and N. Liu describe in their Review on page 9838 ff. so-called metamaterials that exhibit new properties that are unattainable in naturally occurring materials, for example, a negative refractive index.



Heterogeneous Catalysis
In their Communication on page 9854 ff., R. M. Gauvin, M. Taoufik, L. Delevoye, and co-workers describe how they characterized surface aluminum hydride species on a γ-alumina catalyst and studied its reaction with ethylene.