

Crystal Growth

Review by H.-C. zur Loye and D. E. Bugaris

Minireviews: Arynes and Cyclohexynes · Welwitindolinones

Highlights: Structure Predictions · Protein Modifications

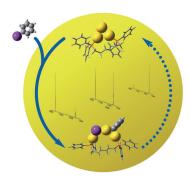


Cover Picture

Koji Oohora, Sabina Burazerovic, Akira Onoda, Yvonne M. Wilson, Thomas R. Ward,* and Takashi Hayashi*

An alternating protein assembly of myoglobin dimer (green) and streptavidin (gray) was made by using a synthesized cofactor dyad, which has a flexible linker between a heme moiety (red) and a bis(biotin) unit (blue). The specific interactions between the three components resulted in formation of a supramolecular submicrometer-sized fibrous assembly, which was characterized by AFM, as reported by T. Hayashi, T. R. Ward, and co-workers in their Communication on page 3818 ff.



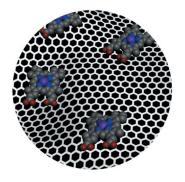


Gas-Phase Reactions

Using a combination of gas-phase ion-molecule reactions and theoretical studies G. N. Khairallah, R. A. J. O'Hair et al. show in their Communication on page 3812 ff. that bisligated Au^I complexes are unable to oxidatively add iodobenzene, but the clusters activate the C–I bond.

Biomimetic Catalysis

In their Communication on page 3822 ff., Y. Huang, X. Duan, et al. report stable hemin–graphene conjugates with excellent catalytic activity that approaches that of natural enzymes.





Nanoreactors

V. Salgueiriño, M A. Correa-Duarte, and co-workers show in their Communication on page 3877 ff. that hydrazine reduces nickel ions in the presence of dendritic Pt nanoparticles inside a porous silica capsule.