

# ADVANCED FUNCTIONAL MATERIALS

## PHOTOLUMINESCENCE

The preparation of luminescent core-shell nanoparticles of porous silicon is reported by M. J. Sailor and co-workers on page 5688. The “shell” in these nanoparticles is a passivating silicon oxide layer, synthesized by partial oxidation of the quantum-confined crystalline silicon skeleton in an aqueous solution of sodium tetraborate (borax). Control of the chemistry of the passivation layer is found to be crucial to maximize the quantum yield and to control the rate of aqueous dissolution of the resulting nanoparticles.

