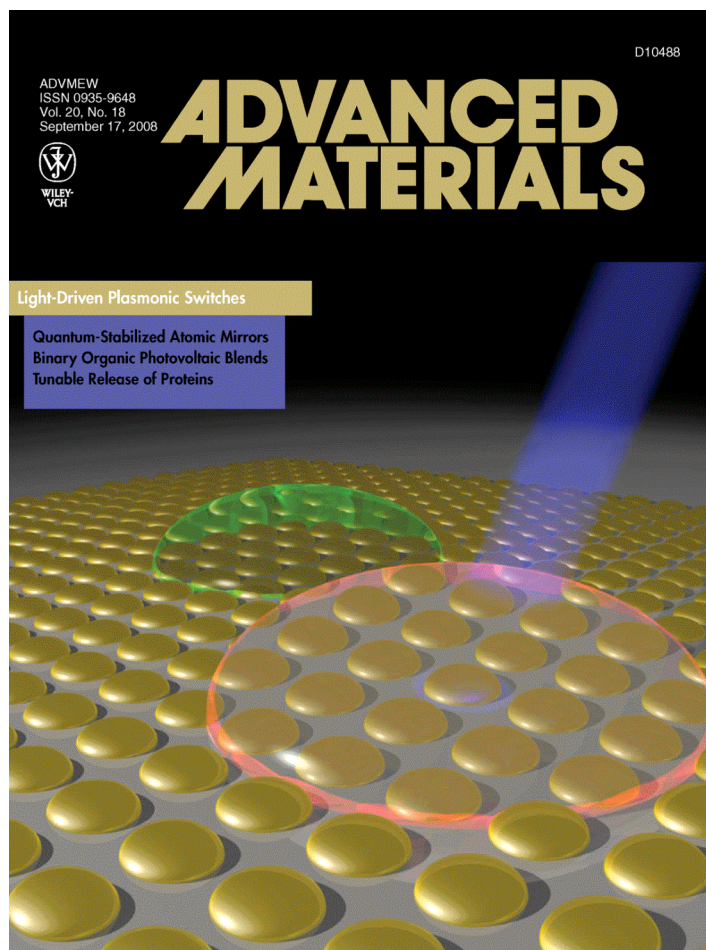


Light-Driven Plasmonic Switches

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An optically controlled nanoplasmonic switch has been developed using Au nanodisk arrays embedded in azobenzene-doped, photoresponsive liquid crystals (LCs). The switch utilizes the photo-induced phase transition of azobenzene-doped LCs. This transition modulates the refractive indices of the LCs, thereby altering the localized surface plasmon resonance (LSPR) of the Au nanodisks. This work represents a significant step towards integrated nanophotonic circuits and future ultra-small, ultra-fast, energy-saving optical computers.

This work was highlighted in *Nature Photonics* and other media (*PhysOrg*, *Nanowerk News*, *AZoNanotechnology*, *ACS Nanotation*).

Cover Image, *Advanced Materials*