

## New progress in Organic FET

Co-funded by NSFC, MOST and CAS, researchers from the Key laboratory of Organic Solids, Institute of Chemistry, CAS, made new progress in organic field-effect transistors (FET). The results of the study were published recently in the journal of *Advanced Materials* (2008, 20, 1286—1290).

In recent years, due to the potential application of active matrix display and radio frequency tag, organic FET with large area, flexibility and low-cost attracted more concerns from R&D and industrial sectors, and made considerable developments. At present, the performance of organic FET almost meets the practical requirements. Compared to inorganic FET, organic ones are unique in low-cost and flexibility. The prospect of organic FET's application and commercialization is largely subject to its low cost.

In previous research reports, the lab's researchers developed a method of copper and silver modification to replace the source and drain electrodes of organic field effect through which high-performance devices were obtained (*J. Am. Chem. Soc.* 2006, 128, 16, 418). Followed by building nano-structure electrodes, the relationship of the device performance with the electrode forms was studied (see the cover paper of *Phys. Chem. Chem. Phys.* 2008, 10, 2302). Recently, the group made new progress in organic FET with low-cost and high-performance. Organic field-effect transistors with the structure of upper electrode were prepared by the use of low work-function copper as the source and drain electrodes. The results have been filed for Chinese patent and published in *Journal of Advanced Materials*.

## 67 NSFC-RFBR Cooperative Projects Approved for 2008

The NSFC-RFBR Cooperative Project is jointly managed and funded by the National Natural Science Foundation of China (NSFC) and the Russian Foundation for Basic Research (RFBR). In 2008, a total of 105 applications were received, of which 67 were approved for funding based on the evaluations by NSFC and RFBR.