

ADVANCED FUNCTIONAL MATERIALS

FIELD EMISSION

On page 5038 J. Q. Xu, T. Y. Zhai and co-workers develop an effective chemical vapor deposition process to fabricate high-quality NdB₆ nanoneedles with an ultra-low work function. These nanoneedles exhibit excellent field-emission performance with a low turn-on/threshold field, a high current density, and good stability. Such a simple synthesized procedure can be readily extended to the synthesis of RB₆ (R = rare earth) and related boride nanostructures.