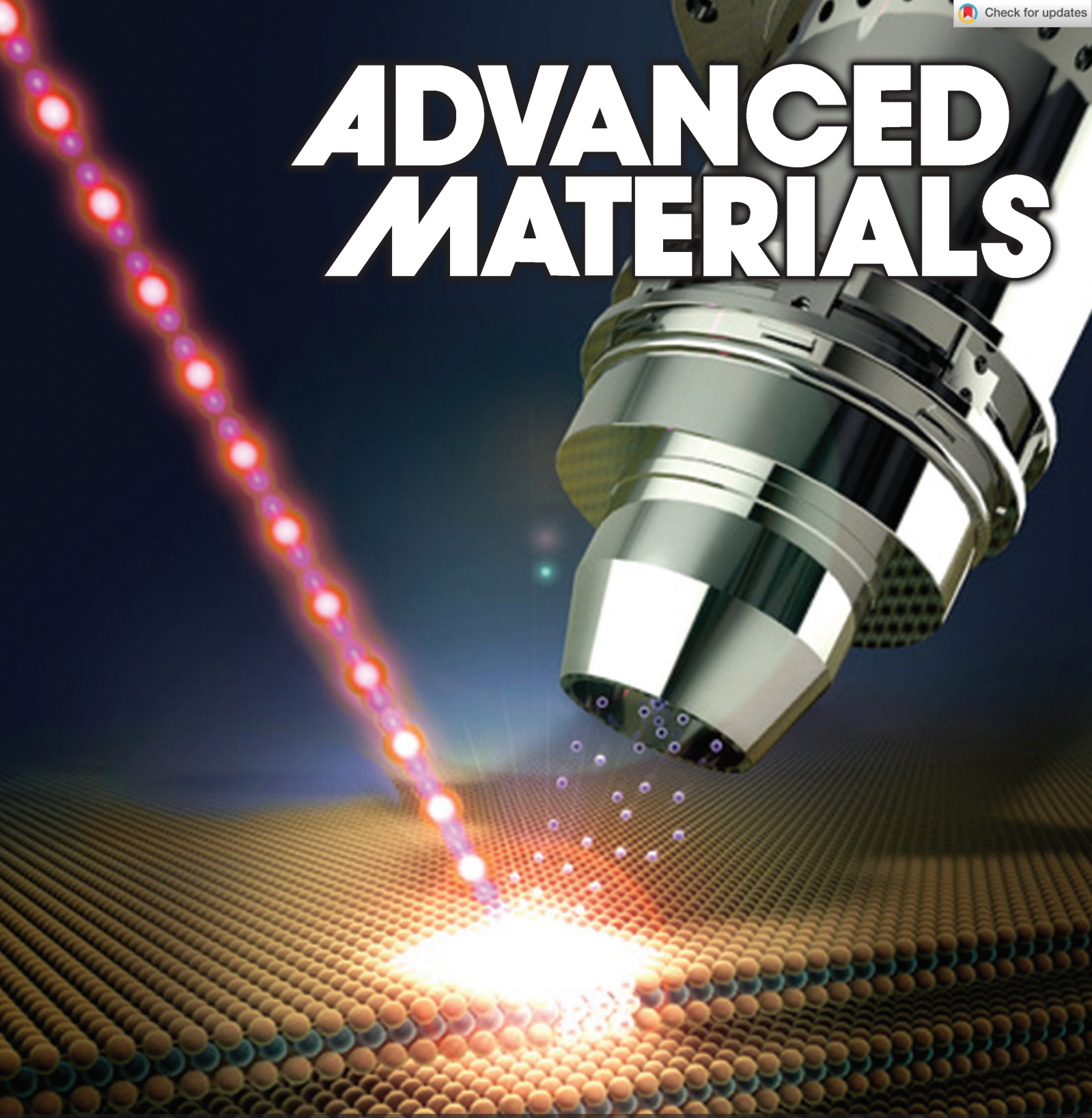


ADVANCED MATERIALS



In article number 2006957, Nomi L. A. N. Sorgenfrei and co-workers demonstrate that a weak optical excitation creates electrons in the conduction band of p-doped semiconducting molybdenum disulfide, which travel toward the surface layer. They accumulate in the top layer and concomitantly drive it from the semiconducting toward the metallic phase. The selectivity of synchrotron time-resolved electron spectroscopy traces this effect. This surface modification influences the properties and functionality of MoS₂. Frontispiece Art: Martin Künsting.