

Deformation processes under the nanoindenter tip

Nanoindentation was developed as an alternative to traditional hardness and microhardness tests based on the penetration of a tip into the material under investigation. Decreasing the penetration depths down to submicrometer range brings many experimental and theoretical challenges. The contribution shows several examples, where the evolution of plastic zone and deformation modes under the indenter must be taken into account for the correct interpretation of the measured data.

Primary author: ČECH, Jaroslav (CTU FNSPE)