Recent Progresses on Exploration and Structural Determination of New Borates

X.L. Chen

Beijing National Laboratory for Condensed Matter Physics, and Institute of Physics,
Chinese Academy of Sciences, P.O.Box 603, Beijing 100080, China

Ternary borate systems have been investigated to search new potential optic materials. Over 30 new compounds were identified and their structures were determined successfully by x-ray powder or single crystal diffraction data during recent years. New structural features were found in some borates that may possess interesting properties. The difficulty and challenges are also presented in structural determination of borates by both powder and single crystal x-ray diffractions.