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**COVER** A computer-simulated field ion microscope image of a yttrium-barium-copper-oxygen high  $T_c$  superconductor, assuming uniform visibility of atoms in the orthorhombic unit cell (c-axis vertical). The dots correspond to the various surface atoms—white: copper and oxygen atoms in the unit cell end planes; green: the other copper atoms; purple: the other oxygen atoms; red: yttrium; and blue: barium atoms. See page 176. [Computer graphics by Richard Freemire and original photography by Bessmarie Young, National Bureau of Standards, Gaithersburg, MD 20899]

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