EDITOR'S CHOICE

Figures appearing in the EDITOR'S CHOICE are those arising from materials research which strike the editor's fancy as being aesthetically appealing and eye-catching. No further criteria are applied and none should be assumed. When taken out of context, such figures often evoke images beyond and unrelated to the original meaning. Submissions of candidate figures are welcome and should include a complete source citation, a photocopy of the report in which it appears (or will appear), and a reproduction-quality original drawing or photograph of the figure in question.



The rectangular parallelepipeds pictured here are crystals of orthorhombic yttrium-barium-copper-oxide, YBa₂Cu₃O_{zx}. This founding member of the group of new ceramic copper-oxide high-temperature superconductors of the T_c = 90 K variety also goes by the names yttrium-123 or YBCO. These crystals were grown from the melt by D.L. Kaiser et al. of NIST (*J. Mater. Res.* **4**, 1989, p. 745) for use in subsequent detwinning experiments in which heat and stress are applied to remove accommodation twins that arise from a tetragonal to orthorhombic structural transition on cooling. The interesting science inherent in the detwinning process and the useful science now accessible from the so-produced crystals is naturally paramount. Nevertheless, knowing that the little boxes in our figure contain twins seems better to fit the sentiments of the holiday season just past. In fact, for the first post-holidays Editor's Choice, it seems appropriate to be reminded of opened gift packages resting on their wrinkled wrapping or of fudge bars delivered on sheets of foil—both symbolic of winter's festive onset.

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