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ON THE COVER: (Middle) Plates of $AgGaS_2$ (yellow) and $AgGaSe_2$ (gray-black) cut from 50-mm-diameter crystals are subsequently fabricated into finished components like the $5 \times 5 \times 40\text{-mm}^3$ bars displayed in the foreground. The ordinary- and extraordinary-ray transmission versus wavelength curves for $AgGaSe_2$ (solid) and the related quaternary $AgGa_xIn_{(1-x)}Se_2$ (dashed) illustrate the clarity of these crystals near the short-wavelength band edge. Adding indium to $AgGaSe_2$ shifts the band edge and allows noncritically phase-matched second-harmonic generation of CO_2 laser emission. Courtesy of Cleveland Crystals, Inc. Photograph by Jeff Bohn and Gary Catella. For more information, see the article by G.C. Catella and D. Burlage on p. 28 of this issue.

(Top Right) Seeded $ZnGeP_2$ crystal in a PBN-coated boat with seed well, along with laser crystals cut from this crystal. For more information, see the article by P.G. Schunemann and T.M. Pollak on p. 23 of this issue.

(Bottom Right) Several MACMOLECULE™ views of the $ZnGeP_2$ chalcopyrite crystal structure. The yellow spheres indicate the anion sublattice, and the red and green spheres indicate the ordered cation sublattice.

(Bottom Left) Photon backscatter scan of a $ZnGeP_2$ surface showing a synthetic color map of the nonspecularly scattered helium-neon laser light from a $ZnGeP_2$ optical surface. The intensity of scatter is a direct measure of the subsurface damage. In this instance, a line scan of the angular dependence is displayed. Each radial position corresponds to a different point on the line scan. The red burst indicates that a linear defect is present in this early sample.

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The Society's interdisciplinary approach differs from that of single-discipline professional societies because it promotes information exchange across the many technical fields touching materials development. MRS sponsors two major international annual meetings encompassing approximately 70 topical symposia, and also sponsors numerous single-topic scientific meetings. The Society recognizes professional and technical excellence and fosters technical interaction in local geographic regions through Sections and University Chapters.

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