

Figures appearing in 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 usual practice of EDITOR'S CHOICE is to find an illustration in a technical publication that not only conveys the essence of an experimental or theoretical result, but also, purely as a byproduct of the figure's general appearance and the built-in biases of a human viewer, gives an impression of one or a few other objects or phenomena. We have been known to follow rather convoluted logic as we reveal a figure's alternative interpretations. This month we depart from tradition and choose a figure from a technical paper that owes its inclusion in that work more to its aesthetics than to its information content. Therefore, our arguments need be less convoluted, although the figure itself seems sufficiently so. This is what happens when two exquisite characterization methods are forced to work together. An atom probe field ion microscopy (APFIM) specimen is here imaged in a scanning electron microscope (SEM), but not because anyone cares about the specimen's image. D.J. Larson, P.P. Camus, and T.F. Kelly report in *Proceedings of Microscopy and Microanalysis 1995* (edited by G.W. Bailey, M.H. Ellisman, R.A. Hennigar, and N.J. Zaluzec [Jones & Begell Publishing, New York, 1995] p. 624) that the real reason was to determine if heating an APFIM tip with a pulse of electrons rather than application of a high-voltage pulse could be used as a time marker for the emission of atoms from the tip for subsequent time-of-flight detection. The sharp image of the tip in the figure, despite its being held at high voltage, shows that one can indeed hit the tip with the electron beam. However, it's the bizarre pinwheel effect that attracts us to this image and that arises from an improbable source. With the electrified tip acting as a highly astigmatic, position-dependent lens element, the simple Cartesian grid of five millimeter squares in an aluminum screen, that prevents the occasional loose nut or screw from falling into the vacuum pump some ten centimeters below the FIM tip, images in the SEM as modern art.

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