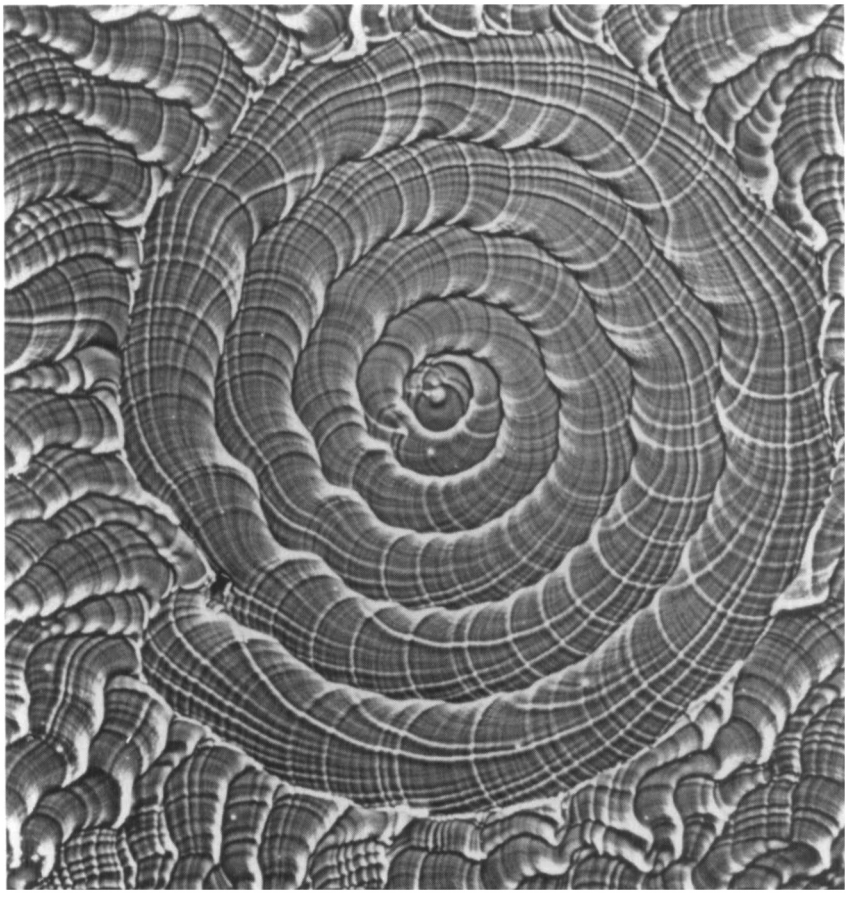
Figures appearing in the EDITOR'S CHOICE are those arising from materials research which strike the editor's fancy as being aesthetically appealing and eye-catching. No further criteria are applied and none should be assumed. When taken out of context, such figures often evoke images beyond and unrelated 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 object pictured in this month's EDITOR'S CHOICE photo may look like something to be found at the beach. Indeed the familiar pattern here has origins related to those seen in sea shells and other naturally occurring objects. The common element is, of course, the rate equation which governs the multiparameter-coupled nonlinear growth process of their formation. Although your average shell-fish or mollusk may be oblivious to the so-called reaction-diffusion mechanism and even less aware that solutions of equations derived for such phenomena include the logarithmic spiral pictured here, it nevertheless seems to be the case. We can induce such pattern formation in the laboratory on time scales many orders of magnitude shorter than found on a choral reef. R.R. Petkie (in *Selected Topics in Electronic Materials*, MRS Extended Abstracts, edited by B.R. Appleton et al., 1988, p. 251-254) rf sputter-deposited films of noncrystalline indium antimonide in the one to two micron thickness range and used sparks from a Tesla coil to initiate their "explosive" crystallization. The exothermic crystallization reaction propagates subject to thermal diffusion of the released latent heat and the fraction of noncrystalline material at the wave front. Unlike many of its shellfish analogues, this spiral measures only 250 microns across and required a scanning electron microscope to produce our image.

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