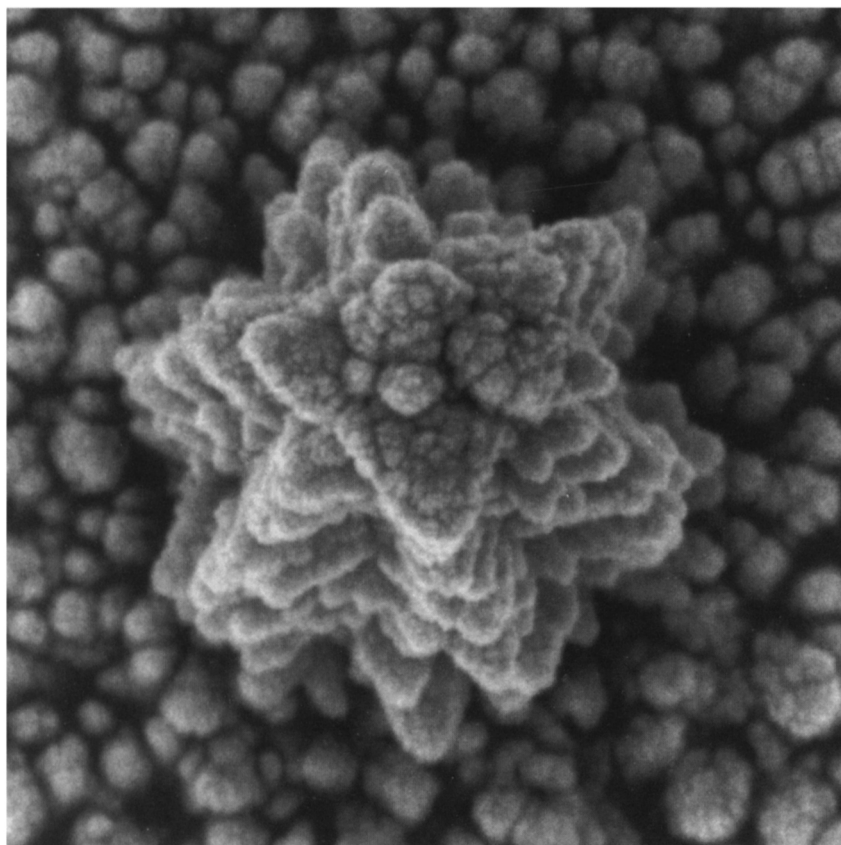


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The crinkled appearance of this stack of stars leaves an organic impression. Of course, it could be a six-fold fungus of sorts. A more romantic interpretation would put it on a coral reef, an unnatural barnacle if you will. It could even be a well-balanced pile of successively smaller oatmeal cookies that inherit their self-similarity from a nested set of star-shaped cookie cutters. However, our favorite organic interpretation is the target's eye view of the ground-to-air launch of a pine tree from its forested silo below. Readers may suggest additional analyses and be assured that this structure does indeed result from growth, but, in fact, from the decidedly inorganic variety. This end-on view is a scanning electron microscope image of an aluminum nitride spire about 5 micrometers tall and 350 nanometers wide at the base. P.G. Kotula, M.G. Norton, and C.B. Carter suggest in *J. Mater. Sci. Lett.* **13** (1994) 1275–1277 that the starlike shapes may reflect dendritic growth. As attractive as it is, this *c*-axis oriented protrusion typifies unwanted defects on otherwise smooth *a*-axis oriented films grown on *R*-plane single-crystal sapphire substrates by pulsed-laser deposition. The laser target, while pummeled by tens of thousands of two Joule per square centimeter krypton-fluoride excimer laser pulses under 400 milli Torr of nitrogen gas, apparently spews some particles as well as vapor onto the 670°C substrate on which particles these outcroppings can nucleate. Yet, such growths are not seen under all conditions. The many parameters of the deposition process such as those already mentioned as well as target-to-substrate distance, ablation plume characteristics, and supersaturation of the vapor at the growth site must all conspire to coax the appearance of this appealing, albeit fickle, interloper. Come to think of it, fickleness is a rather highly developed organic trait.

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