

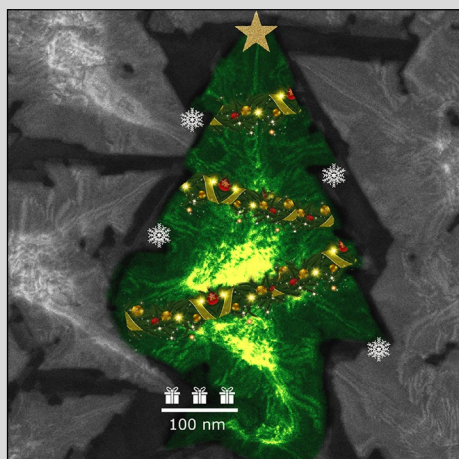



# Science AS ART

**Congratulations to the 2022 MRS Fall Meeting & Exhibit “Science as Art” Winners!** By popular vote, the following images were chosen as **2nd Place Winners**.

As a special feature of the MRS Spring and Fall Meetings, the Materials Research Society offers the popular “Science as Art” competition with entry open to all registered meeting attendees.

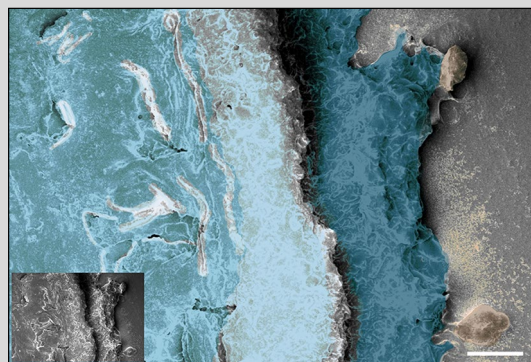
Visualization methods provide an important tool in materials science for the analysis and presentation of scientific work. Images can often convey information in a way that tables of data or equations cannot match. Occasionally, scientific images transcend their role as a medium for transmitting information and display the aesthetic qualities that transform them into objects of beauty and art.



### O Christmas Ti, O Christmas Ti, How Lovely Are Thy Defects

**Kate Reidy**, Massachusetts Institute of Technology

This tree-mendous transmission electron microscope image shows titanium (Ti) dislocation networks on graphene. Imaged by Themis Z microscope at MIT.nano in high-angle annular dark-field mode. Scale bar 100 nm. Image credits: Kate Reidy, George Varnavides, and Aubrey Penn.



### On the Beach of the Lithium Sea

**Yue Deng**, Cornell University

A scanning electron microscope image showing the edge of a lithium deposit. The tides and sea as seen in this image are electrochemically deposited lithium, and the beach is a polished copper current collector. This image reveals the low-density structure at the edge of electrochemically deposited lithium. Scale bar is 100  $\mu\text{m}$ .



### Walking in a Wolfram Wonderland

**Alexander Sredenschek**, The Pennsylvania State University

This scanning electron microscope image was taken with the electron beam tilted at an angle of  $45^\circ$  with respect to the sample stage normal. The image shows a perspective view of dendritic growth and step edges in tungsten carbide crystals, transferred onto  $\text{SiO}_2/\text{Si}$ , that resemble snowflakes with fractal-like patterns and quasi-sixfold symmetry.