# LOOK AGAIN...

*Just for Fun!*

See if you can find the 8 differences in each set of images.

## Edge of the world

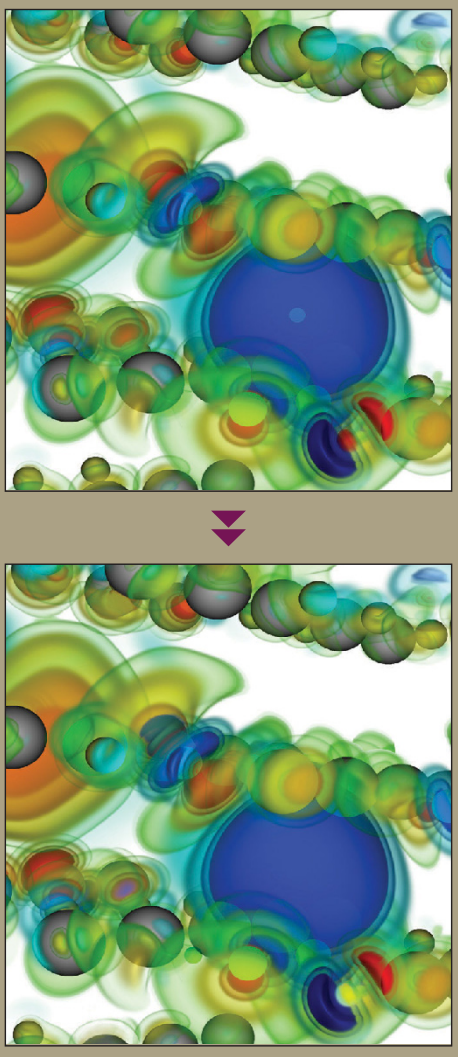
At one point, humans believed that the earth was flat and that an "edge of the world" existed, where the ocean fell off into darkness. This image shows a fabricated film of carbon nanotube bundles and its chaotic, ocean-like waves obtained via scanning electron microscopy (SEM) with nanoscale resolution. This uncoated SEM cross section shows a film of entangled single-walled carbon nanotubes falling off the edge of a glass substrate, fabricated for novel nanomaterials in biosensing and disease diagnostics. Image is taken on an FEI Magellan 400 XHR SEM at the University of California, Irvine.

**Alana Ogata,** Harvard University, USA.

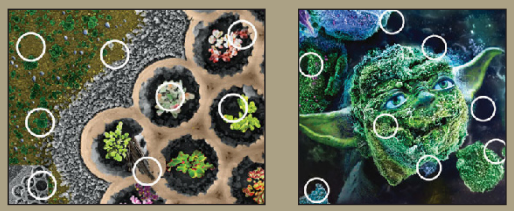
## Electron splashes in a semiconductor

Real-time time-dependent density functional theory simulation of nonequilibrium electron dynamics near an oxygen vacancy in MgO caused by proton irradiation.

**Cheng-Wei Lee,** University of Illinois at Urbana-Champaign, USA.



December 2019 answer key



Answers will be published in the April 2020 issue.

Images on the top were submitted to the Materials Research Society "Science as Art" competition. Images on the bottom were modified in Adobe Photoshop for this "Look Again" activity.