



LOOK AGAIN...

Just for Fun!

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

Organic crystal mountain

The scientist sits atop,
Mountains of organic crystal snow,
Yonder the electrons flow?

This visual pattern of high-performance organic semiconductor crystals 6,13-Bis(triisopropylsilylethynyl)pentacene was obtained using cross-polarized optical microscopy at 10 times magnification. The nucleating point shows a pattern that resembles a lone man wearing a curious hat on top of a snowy mountain of the organic crystals. The cross-polarizer modulates the brightness of the different mountain tops, providing an interesting perspective of depth.

Benjamin Tee, Stanford University, USA



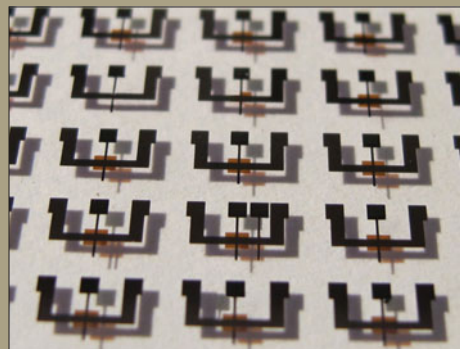
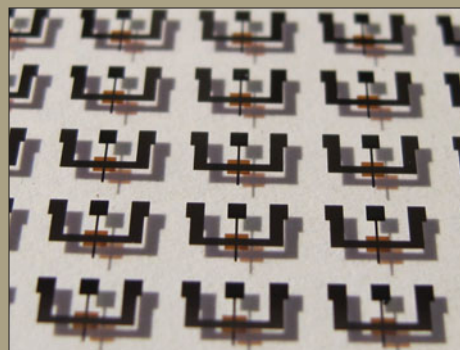
The answers will be in the June 2013 issue.

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.

Thin-film space invaders

In this army of hydrogenated amorphous-silicon thin-film transistors (TFTs) on a 1-mm thick glass substrate, the black areas are the chrome transistor source/drain/gate contacts, while the brown areas are comprised of a 150-nm thick amorphous-silicon channel. The gate dielectric, 300-nm transparent silicon nitride, is not visible. The field of view is 2 cm x 3 cm.

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February 2013 answer key

