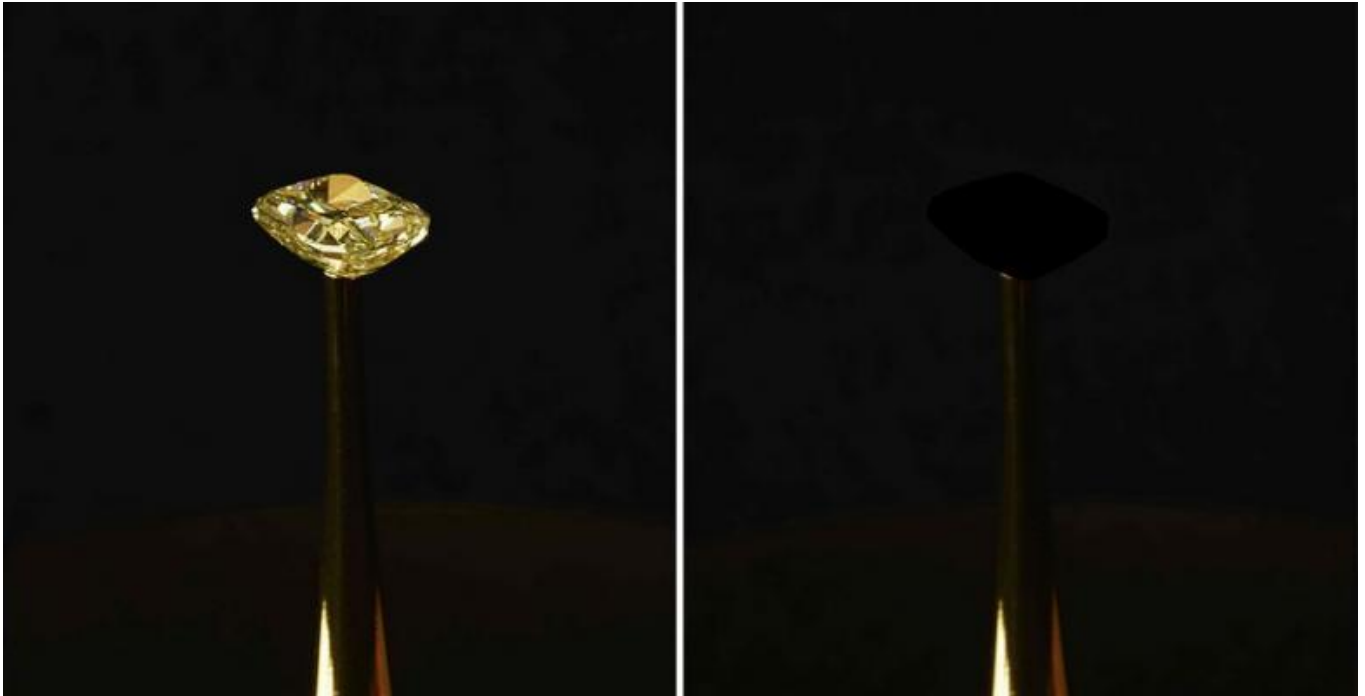

Black is the new black: Scientists create darkest-ever material by accident

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Scientists have stumbled across the blackest material ever seen, which absorbs 99.995 percent of light and makes the previously known blackest black pale in comparison.

The ultra-black material is made from vertically aligned microscopic carbon strings called carbon nanotubes (CNTs). Researchers have no idea why it is so dark, but they are excited about its potential.

Before now, the blackest known material was Vantablack, which absorbs 99.96 percent of light, meaning the new, unnamed material “reflected 10 times less light than all other superblack materials, including Vantablack,” Massachusetts Institute of Technology (MIT) explains.

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The dark discovery was made when MIT engineers were looking for ways to grow CNTs on electrically conductive materials. They noticed how black the CNTs were when they were growing on aluminium foil and decided to measure their “optical reflectance,” and soon found that the material soaked up almost all light directed at it.

The amazing new material could be used in telescopes and cameras to remove glare, and there has already been interest from the aerospace community. Nobel laureate astrophysicist John Mather is considering using it to make a massive black shade to shield a space telescope.

The dark matter is currently being shown as part of an art exhibition in New York. MIT artist-in-residence Diemut Strebe worked with the researchers to coat a \$2 million 16.78-carat natural yellow diamond in the black material, turning the sparkling stone utterly black.

“Because of the extremely high light absorptive qualities of the CNTs, any object, in this case a large diamond coated with CNTs, becomes a kind of black hole absent of shadows,” Strebe said.

