

Is it really black?

Thanks to nanotechnology, we might nowadays wonder how black the blackest colour is! Researchers from Rice University and Rensselaer Polytechnic Institute (USA) have produced the darkest material ever made using carbon nanotubes. According to Pulickel Ajayan, who led the research team at Rice University in Houston, this material reflects only 0.045% of the light that strikes it (or by other words, 99.955% of the light that hits it gets absorbed). The previous record holder for darkness, a nickel-phosphorus alloy, reflects four times as much light. Fashion apart, this material can be used to build advanced solar cells which trap sunlight and convert it to energy. Additionally, it might be used to block radiations in several defence applications. Interested? Dig into

Photograph showing the comparison of the blackest material with the current standard for black: the National Institute of Standards and Technology's reflectance standard is at the top of this image, taken with flash illumination. The newly developed nanotube material is in the middle, and a piece of glassy carbon is at the bottom of the image.

Carla Joana Silva