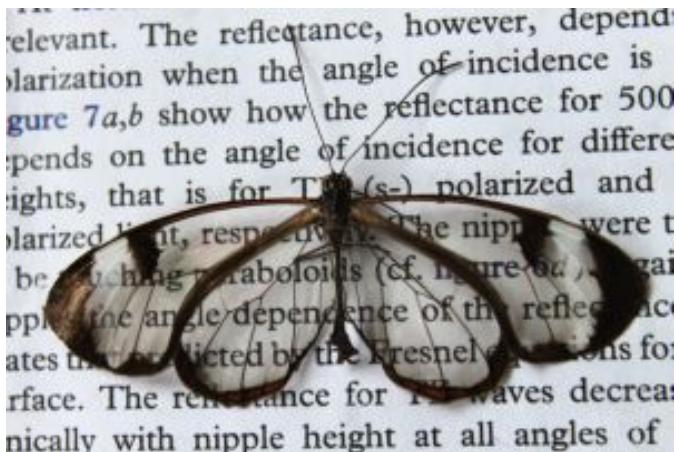


Butterfly Wings: The Key to Glare-Free Displays?

Written by Marco Attard
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They say the flap of a butterfly's wings can cause a hurricane on the other side of the world, but the wings of a particular species of butterfly might actually be key to the glare-free displays of the future.



The butterfly in question is the glasswing butterfly, a Central American species famous for having transparent, glass-like (thus the name) wings. Karlsruhe Institute of Technology (KIT) researchers say these wings have very low reflection (around 2-5%) of visible, infrared and ultraviolet light-- a survival adaptation for the insect, but an inspiration for the creation of low-reflection surfaces.

For the curious, a flat glass plane has a reflection of anything from 8% to 100%.

How do the butterfly wings manage to be so free of reflection? According to KIT it is due to the random arrangement of the pillar-like nanostructures (or "nanopillars") making the wings.

The KIT's Institute of Microstructure Technology is currently working on practical implementations of the idea-- and initial prototype display surface coatings are water-repellent and self-cleaning as well as glare-free. Goes to show how much of an effect a butterfly's wings can have, right?

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