



Gold nanofilm can stop glasses fogging up

Slide by Neil Goalby. Available from rsc.li/3JVdxqa

Fogging on glasses occurs when warm, moist air meets a cold surface, causing water vapour to condense. Most antifogging coatings work by causing the water droplets that form on a surface to spread out into a thin film (known as a superhydrophilic surface). Unfortunately, such coatings also attract contaminants.

In a new approach, scientists have coated lenses with a 5 nm nanolayer of gold. The gold absorbs infrared wavelengths in sunlight and uses the energy to heat the surface to prevent condensation. The coating is readily scalable and durable.



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Not quite thick enough to see, the gold prevents water from condensing

Questions

1. Explain why glasses fog up.
2. What size are nanoparticles?
3. Suggest why people can see through the glasses with the gold coating.