

Encrypted fabric

Your clothes may soon carry a helpful secret. A new type of thread woven into patterns invisible to the naked eye could put an end to fake designer clothes — and dull outfits.

Concealed patterns visible only under polarised light are used in some nations' bank notes to deter counterfeiting. To extend the method to other valuables, Christian Müller at Chalmers University of Technology in Gothenburg, Sweden, made a semi-transparent thread from polyethylene and a polymer used in clothes dye. This thread has unique optical properties that allow only certain polarisations to pass through.

Weaving the threads together makes a fabric that looks solid purple to the eye but reveals pink and purple patterns when lit with polarised light.

Müller says the thread may be used to create unobtrusive logos on designer clothes to thwart knock-offs. He's also looking to make similar threads for use in electronically enhanced textiles that change colour with electric voltage, so you could alter your fashion with the flick of a switch.

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Tekst 11 Encrypted fabric

“Encrypted fabric” (title)

1p 39 Which of the following was the inspiration behind Müller’s invention?

- A bonding dye molecules to natural fibres
- B creating low-profile company logos
- C embedding security elements
- D including a signature pattern in garments
- E manipulating the colour of textiles

“you could alter your fashion with the flick of a switch” (laatste regel)

1p 40 Voor welk eerder in de tekst genoemd probleem biedt dit een oplossing?
Citeer het tekstfragment.

Bronvermelding

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