reconstruct the image.

The authors also wove their smart fibres into a flexible wristband that outperforms similar devices for heart-rate monitoring. The devices that are currently available typically use a rigid sensor that doesn't flex to the shape of the wrist, and can therefore produce inaccurate measurements. The performance of Wang and colleagues' fibres is on a par with these commercial silicon devices, but they can also withstand high compression, such as that experienced at an underwater depth of 3,000 metres. The authors showed that their wristband could be used to detect visible light around a submarine.

Another key advantage of this technology is its industrial readiness. The instrument that fabricates the fibres includes a fibre-drawing device that is used to produce commercial optical fibres in the telecommunication industry. And once the fibres are generated, they can be knitted or woven into fabric using tools that are already used widely in the textile industry.

Wang and colleagues' work takes a leap towards embedding micro-computers into everyday clothing. An exciting future direction would be to equip the fibres with more-complex devices, such as transistors, and to increase the density of these functional components. One limitation of the current approach is that it requires a post-processing step to incorporate exceptionally high-quality (single-crystal) semiconductors into the fibre. Finding a way of embedding these materials during fabrication would broaden the scope of the fibres' electronic and optoelectronic applications.

Finally, because the wires embedded in Wang and colleagues' fibres are easily connected to existing computer hardware, this technology could prove useful in efforts to develop integrated human–machine systems. The work therefore allows us to imagine a generation of smart fibres and fabrics that enable individuals to engage seamlessly with their surroundings — and make their everyday experiences fully immersive.

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Bacterial prey turns the tables on predator

The bacterium *Myxococcus xanthus* is a voracious predator of other microorganisms. *M. xanthus* can form fruiting bodies (black dots, pictured) and swarm through colonies of prey (right-hand circle) by forming ripple-like travelling waves. However, writing in *PLoS Biology*, Vasse *et al*. report that the prey bacterium *Pseudomonas fluorescens* can slaughter *M. xanthus* to extinction under certain conditions (M. Vasse *et al*. *PLoS Biol.* **22**, e3002454; 2024).

Inspired by earlier observations, Vasse *et al*. investigated how the growth temperature of *P. fluorescens* affects its risk of predation. When this bacterium was grown in culture at 32 °C, the authors observed that it was largely killed by *M. xanthus*, as expected. But remarkably, when cultured at 22 °C, *P. fluorescens* became the predator — killing *M. xanthus* and growing on its remains.

This is a rare example of the reversal of a microbial predator–prey relationship triggered by a specific abiotic environmental factor — in this case, temperature. Intriguingly, the reversal depends on the temperature experienced before, rather than during, the predator–prey interaction. The authors speculate that most microbes might engage in predation to some extent.

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