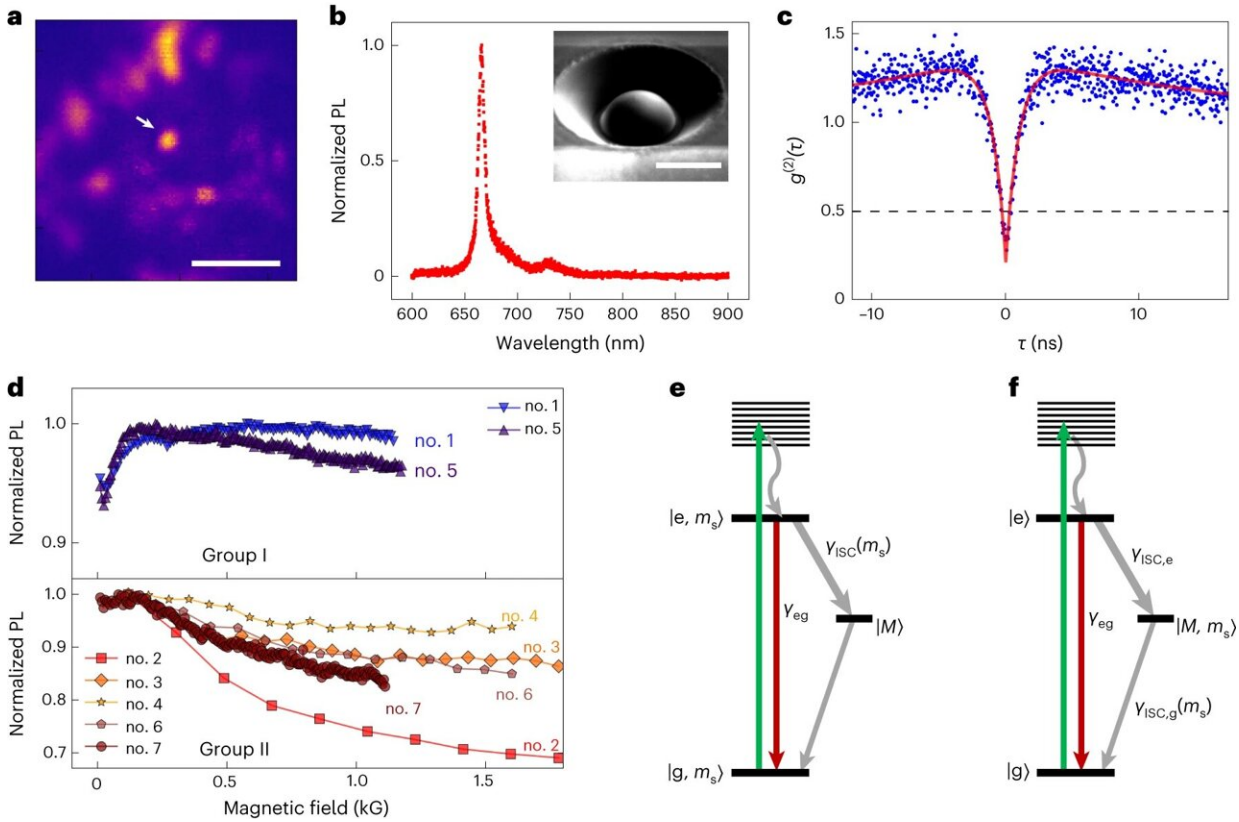
How semiconductor defects could boost quantum technology

February 12 2024, by David Nutt



Optical properties of GaN defects. **a**, PL image of an isolated defect (no. 2), indicated by an arrow, and its surroundings. Scale bar, 2 μm. **b**, Optical spectrum of defect no. 2. The inset shows a scanning electron microscope image of a solid immersion lens carved around the defect. Scale bar, 4 μm. **c**, Second-order photon autocorrelation $g^{(2)}(\tau)$ of defect no. 2, where τ is the delay. The zero-delay autocorrelation $g^{(2)}(0) = 0.3$