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**Researchers design colour-changing semiconductor materials**



NTU researchers have used a novel approach to create the new perovskites by incorporating dimethyl carbonate – a non-toxic solvent – into methylammonium-based perovskite crystals. By analysing the new crystal structures, the scientists discovered that the structures' band gap could be tuned by adjusting the ratio of methylammonium to dimethyl carbonate in them. The band gap, which determines the colour of the material, is the energy required for an electron to break free from its bound state and become conductive.

<https://www.inceptivemind.com/blurb/colour-changing-semiconductor-materials/>