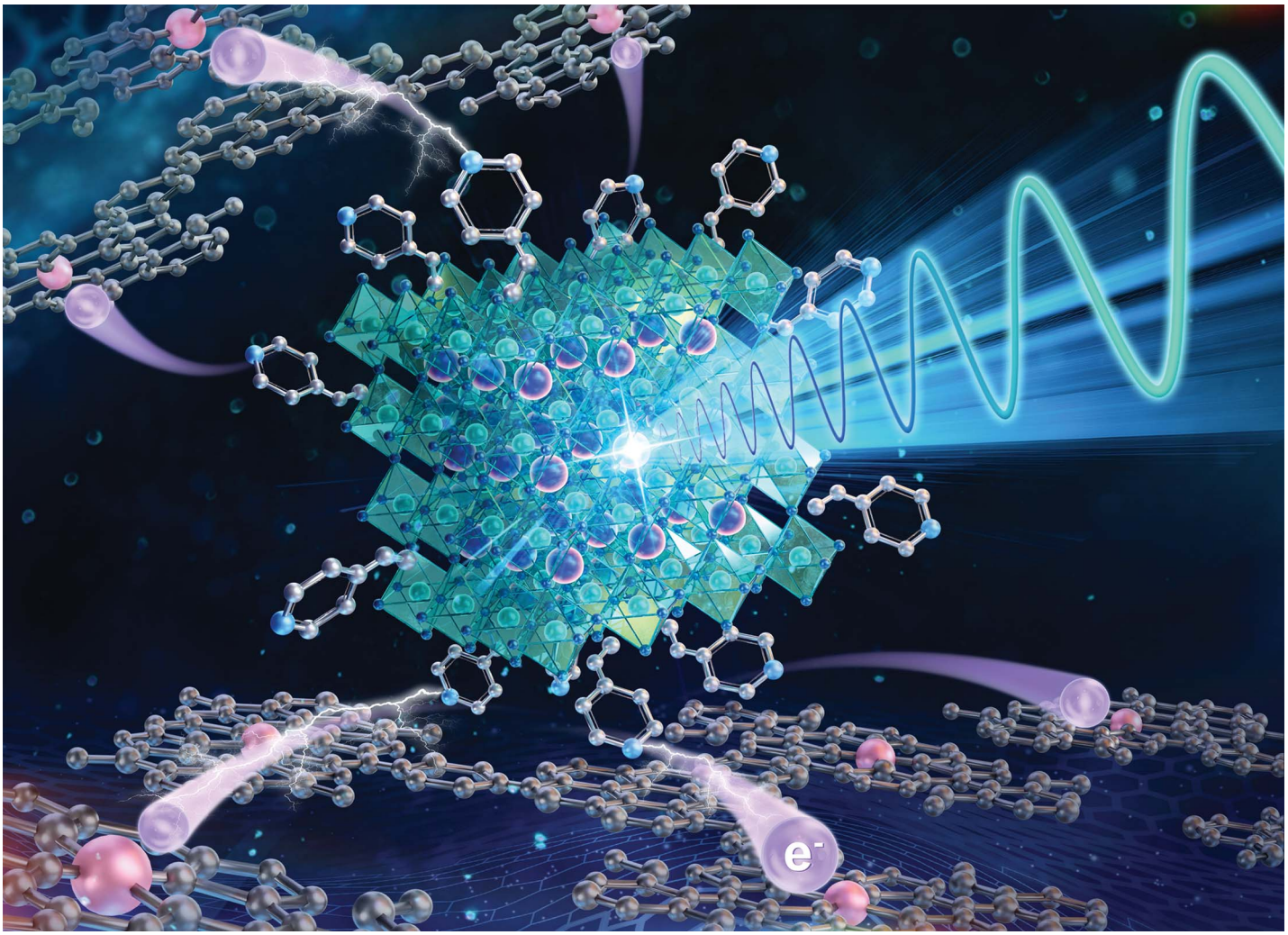


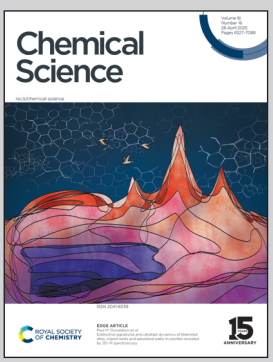
Showcasing research from Professor Chi Zhang's laboratory, School of Chemical Science and Engineering, Tongji University, Shanghai, China.

Greatly enhanced ultrafast optical absorption nonlinearities of pyridyl perovskite nanocrystals axially modified by star-shaped porphyrins

This image highlights a pyridyl $CsPbBr_3$ perovskite nanocrystal with a regular lattice structure in the center of dark-blue background. Its terminal light-blue N atom forms a unique axial coordination interaction with the light-red Zn atom of the star-shaped porphyrin located in the upper left and lower parts of the image. The two communicate with each other in the perovskite-porphyrin binary system through purple comet-shaped ribbons, optimizing the nonlinear optical absorption properties of the hybrid material. The ultrashort laser irradiates the sample, vividly demonstrating the light-matter interaction between laser and nanocrystal.

Image reproduced by Chi Zhang *et al.* from *Chem. Sci.*, 2025, **16**, 6720.

As featured in:



See Chi Zhang *et al.*, *Chem. Sci.*, 2025, **16**, 6720.

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