

SC-SC Transformation of 2D MOFs to 3D by [2+2] Photodimerization

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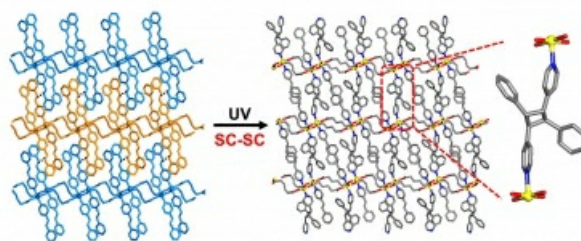
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A 2D interdigitated [Ni₂(adipate)₂(spy)₄(H₂O)₂] (spy = 4-styrylpyridine) was transformed to a 3D coordination polymer through [2 + 2] photodimerization between the olefin bonds in spy upon UV-irradiation in a single-crystal-to-single-crystal (SC-SC) manner. During this transformation, a coexisting flexible adipate ligand changes its conformation, and helps in withstanding the conversion strain and retaining the single crystallinity.

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