

## Control over catenation in pillared paddlewheel metal-organic framework materials via solvent-assisted linker exchange.

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### Streszczenie

Control over catenation in a pillared paddlewheel metal–organic framework was achieved via solvent-assisted linker exchange. The linker exchange was demonstrated on the noncatenated structure of DO-MOF, by using 4,4'-bipyridine (L4) and 4,4'-azobis(pyridine) (L5) as linkers, leading to noncatenated materials SALEM-3 and SALEM-4. The de novo synthesized analogues of SALEM-3 and SALEM-4 can only be obtained as 2-fold interpenetrated frameworks. The reaction progress of the linker exchange was monitored by NMR spectroscopy, and structure and framework catenation were characterized by powder X-ray diffraction and thermogravimetric methods.

### Słowa kluczowe

linker exchange, catenation;, metal organic frameworks, sALE

### Adres publiczny

<http://dx.doi.org/10.1021/cm303749m>

### Strona internetowa wydawcy

<https://www.acs.org/content/acs/en.html>