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Theme issue: Coordination polymers and metal–organic frameworks: materials by design

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### EDITORIAL

Editorial

D Garner

**INTRODUCTION**

Coordination polymers and metal–organic frameworks: materials by design

SR Batten and NR Champness

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### ARTICLES

**Flue-gas and direct-air capture of CO₂ by porous metal–organic materials**

DG Madden, HS Scott, A Kumar, K-J Chen, R Sanii, A Bajpai, M Lusi, T Curtin, JJ Perry and MJ Zaworotko

**A Sr²⁺-metal–organic framework with high chemical stability: synthesis, crystal structure and photoluminescence property**


**The modulator driven polymorphism of Zr(IV) based metal–organic frameworks**

F Drache, V Bon, I Senkovska, J Getzschmann and S Kaskel

**Gas adsorption and structural diversity in a family of Cu(II) pyridyl-isophthalate metal–organic framework materials**

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**Arene guest selectivity and pore flexibility in a metal–organic framework with semi-fluorinated channel walls**

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**X-ray crystallographic insights into post-synthetic metalation products in a metal–organic framework**

MT Huxley, CJ Coghlan, WM Bloch, A Burgun, CJ Doonan and CJ Sumby

**Photochemistry of framework-supported M(diimine)(CO)₃X complexes in three-dimensional lithium carboxylate metal–organic frameworks: monitoring the effect of framework cations**

TJ Reade, TS Murphy, JA Calladine, R Horvath, IP Clark, GM Greetham, M Towrie, W Lewis, MW George and NR Champness