Title:	A Highly Stable Triazole-Functionalized Metal–Organic Framework Integrated with Exposed Metal Sites for Selective CO2 Capture and Conversion
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Abstract:	A new triazole-functionalized tetracarboxylic acid ligand (H4L) has been synthesized and utilized for the fabrication of a 3D ZnII organic framework with a Zn4(−COO)6 cluster as the secondary building unit. The framework exhibits very good thermal stability and consists of dual functionalities of exposed Lewis acidic metal sites and accessible nitrogen-donor Lewis basic sites. The Lewis basic nitrogen sites in the framework serve as CO2 binding sites for highly selective CO2 capture and the presence of exposed Lewis acidic metal sites in the framework make it an efficient heterogeneous catalyst for the chemical fixation of CO2 into value-added cyclic carbonates under ambient conditions.
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