## A polythreading array formed by a (3,5)-connected 3D anion network and 1D cation chains: synthesis, structure, and catalytic properties

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D-H <sup></sup> A	d(D-H)	d(H <sup></sup> A)	D(D <sup></sup> A)	<(DHA)
O(8)-H(1W) <sup></sup> O(7) <sup>i</sup>	0.893(18)	1.970(19)	2.862(3)	178(3)
O(8)-H(2W) <sup></sup> O(11)	0.881(18)	1.88(2)	2.733(6)	162(3)
O(8)-H(2W) <sup></sup> O(12)	0.881(18)	1.84(2)	2.713(10)	171(3)
O(9)-H(3W) <sup></sup> O(4) <sup>ii</sup>	0.867(19)	2.02(2)	2.877(4)	171(4)
O(9)-H(4W) <sup></sup> O(10)	0.885(18)	1.919(19)	2.803(4)	175(4)
O(10)-H(5W) <sup></sup> O(7) <sup>i</sup>	0.893(19)	1.90(2)	2.793(4)	174(4)
O(10)-H(6W) <sup></sup> O(7) <sup>ii</sup>	0.880(19)	2.28(2)	3.123(4)	161(4)
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## **Table S1** Hydrogen bondings for **1** (Å and <sup>o</sup>).

Symmetry transformations used to generate equivalent atoms: i x+1, y, z; ii -x+1, -y+1, -z+1.



Fig. S1 The measured and simulated XPRD of compound 1.



Fig. S2 Changes in UV-visible absorption spectra of MO solution in the presence of compound 1.



Fig. S3 The TG curve of compound 1.