

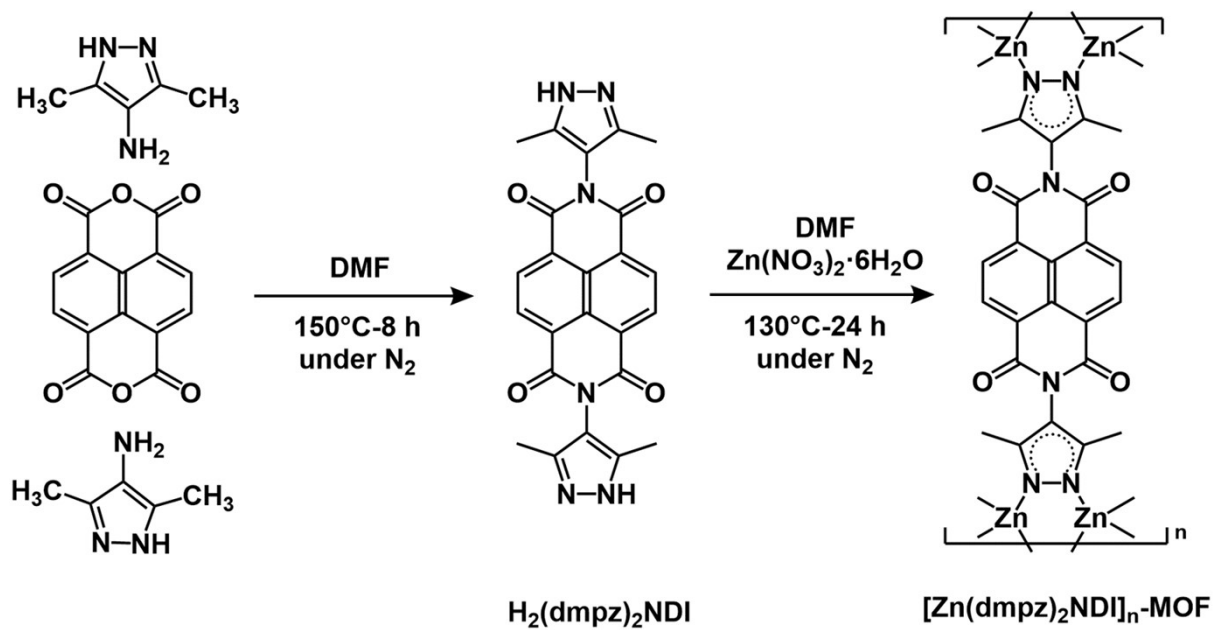
Supporting Information

A New Strategy to Exploit Maximum Rate Performance for Aqueous Battery

Through a Judicious Selection of MOF-type Electrode

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Scheme S1 Preparation of $\text{H}_2(\text{dmpz})_2\text{NDI}$ and $[\text{Zn}(\text{dmpz})_2\text{NDI}]_n\text{-MOF}$.²⁰

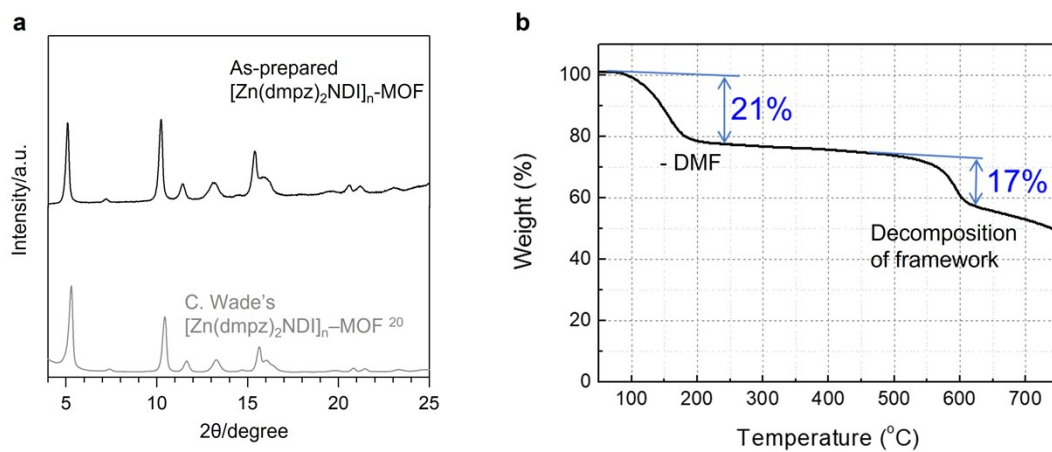


Fig. S1 (a) XRD pattern and (b) TG curve of as-prepared $[\text{Zn}(\text{dmpz})_2\text{NDI}]_n\text{-MOF}$.

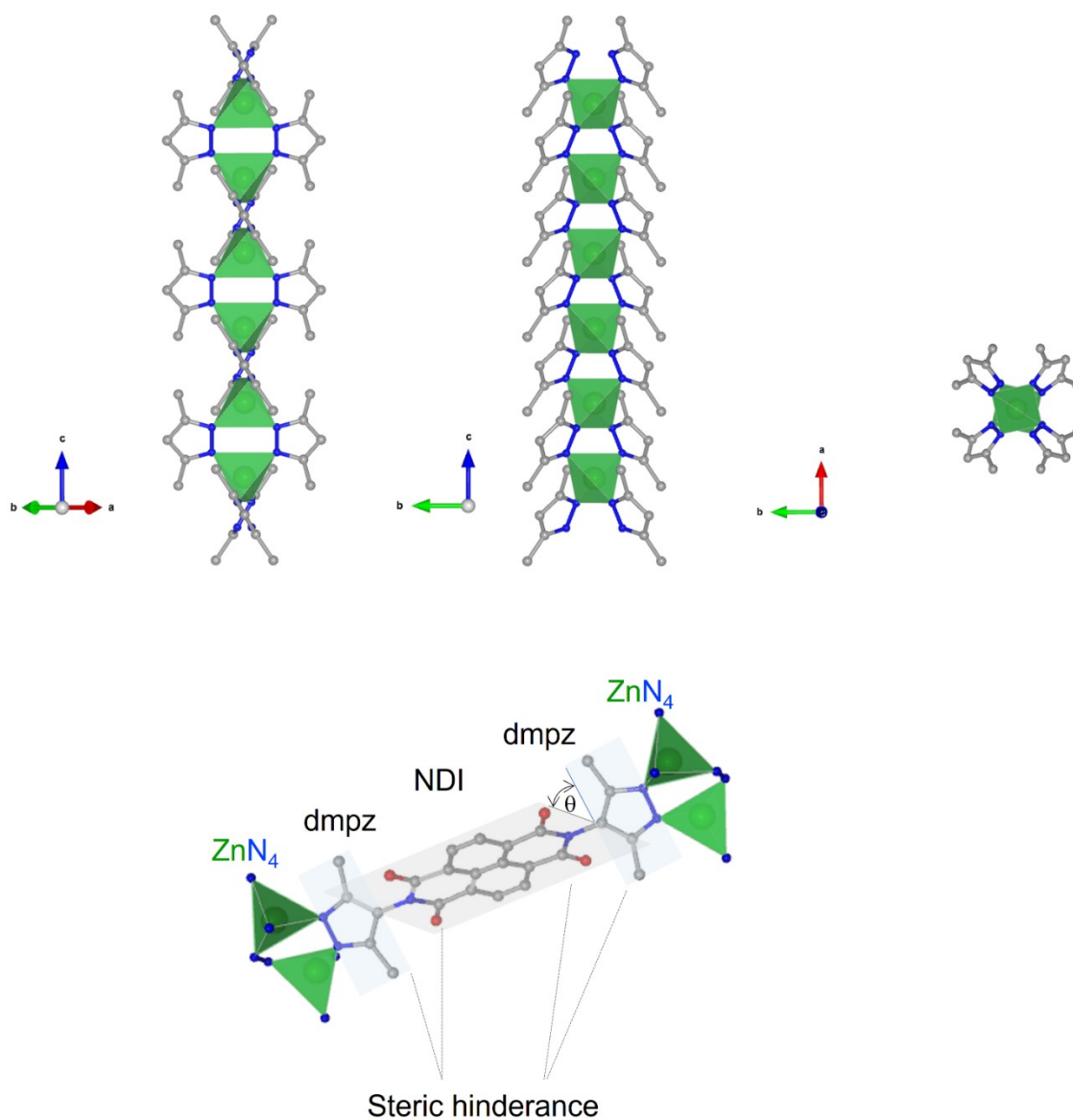


Fig. S2 Clipped local structure for $[\text{Zn}(\mu\text{-pyrazolate})_2]_n$ chain (upper) and orthogonal planes of dmpz and NDI in the $[\text{Zn}(\text{dmpz})_2\text{NDI}]_n$ -MOF (lower).

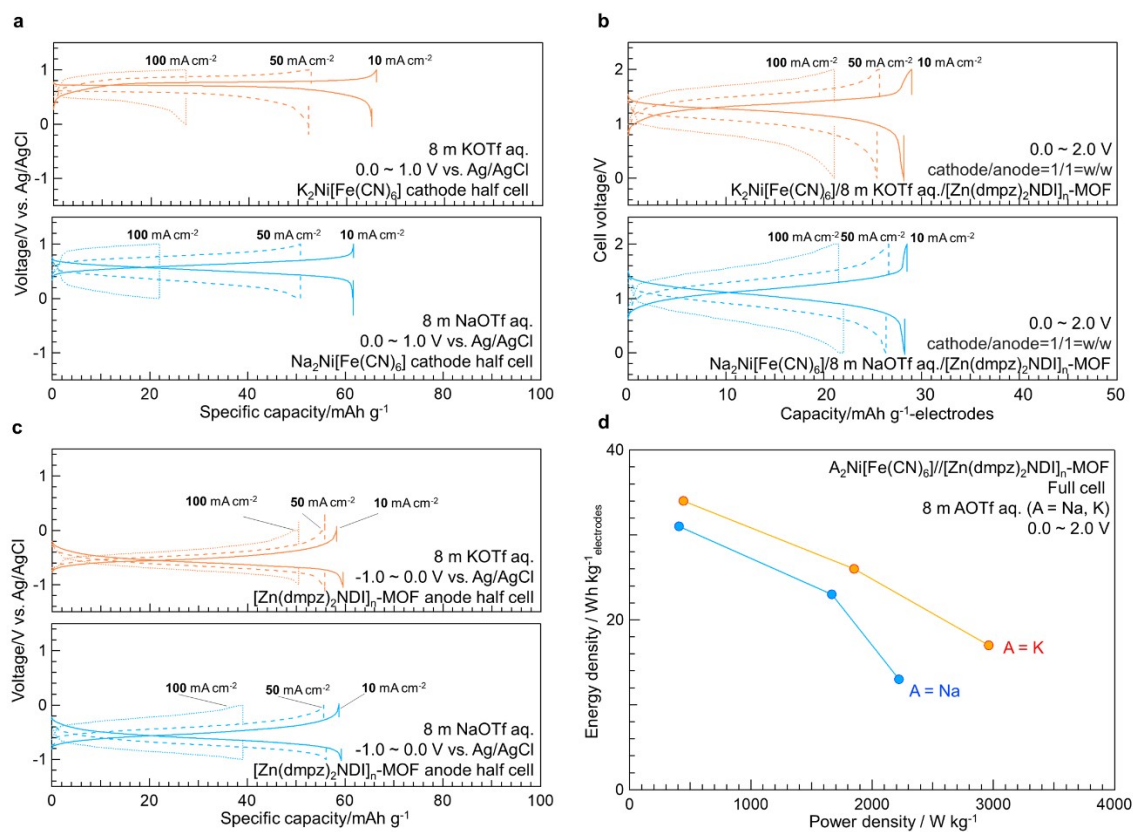


Fig. S3 Charge/discharge profiles of (a) $A_2Ni[Fe(CN)_6]$, (c) $[Zn(dmpz)_2NDI]_n-MOF$, and (b) their full-cell in 8 m AOTf aq. (upper; A = K, lower; A = Na) with varying current density (10, 50, 100 mA cm⁻²), respectively. (d) Ragone plots of full-cell in 8 m AOTf aq.



Fig. S4 Photo image of electrode pellets crimped to mesh current collector and coin-type cell parts.

Author Contributions

K. Nakamoto, M. Ito, and S. Okada designed the project. J. Bai and M. Zhao performed the synthesis and electrochemical measurements. R.

Sakamoto and L. Zhao carried out the structural characterization. K. Nakamoto, M. Ito, and S. Okada prepared the manuscript. All authors

participated in the discussion of experimental results.