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胺和水插层磷酸锰仿生模拟氢键网络用于电催化水氧化

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Biomimicking Hydrogen-Bonding Network by Ammoniated and Hydrated Manganese (II) Phosphate for Electrocatalytic Water Oxidation

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Table S1 A summary of various manganese phosphate-based OER electrocatalysts in neutral aqueous solution.

Catalyst	Substrate	Electrolyte	η (mV) of OER	Ref.
(EDAI)(H_2O)MnPi	GC	0.05 mol·L^{-1} PBS (pH = 7)	520@1 mA·cm^{-2}	this work
(EDAI)MnPi	GC	0.05 mol·L^{-1} PBS (pH = 7)	610@1 mA·cm^{-2}	this work
(H_2O)MnPi	GC	0.05 mol·L^{-1} PBS (pH = 7)	580@1 mA·cm^{-2}	this work
MnPi	GC	0.05 mol·L^{-1} PBS (pH = 7)	563@1 mA·cm^{-2}	1
$Mn_3(PO_4)_2·3H_2O$	FTO	0.5 mol·L^{-1} PBS (pH = 7)	680@0.316 mA·cm^{-2}	2
$LiMnP_2O_7$	FTO	0.5 mol·L^{-1} PBS (pH = 7)	680@0.5 mA·cm^{-2}	3

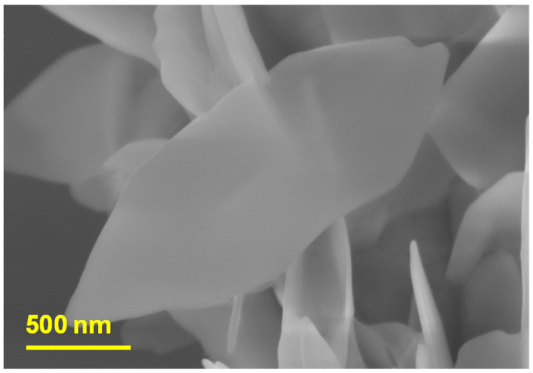

Fig. S1 High-resolution SEM image of (EDAI)MnPi.

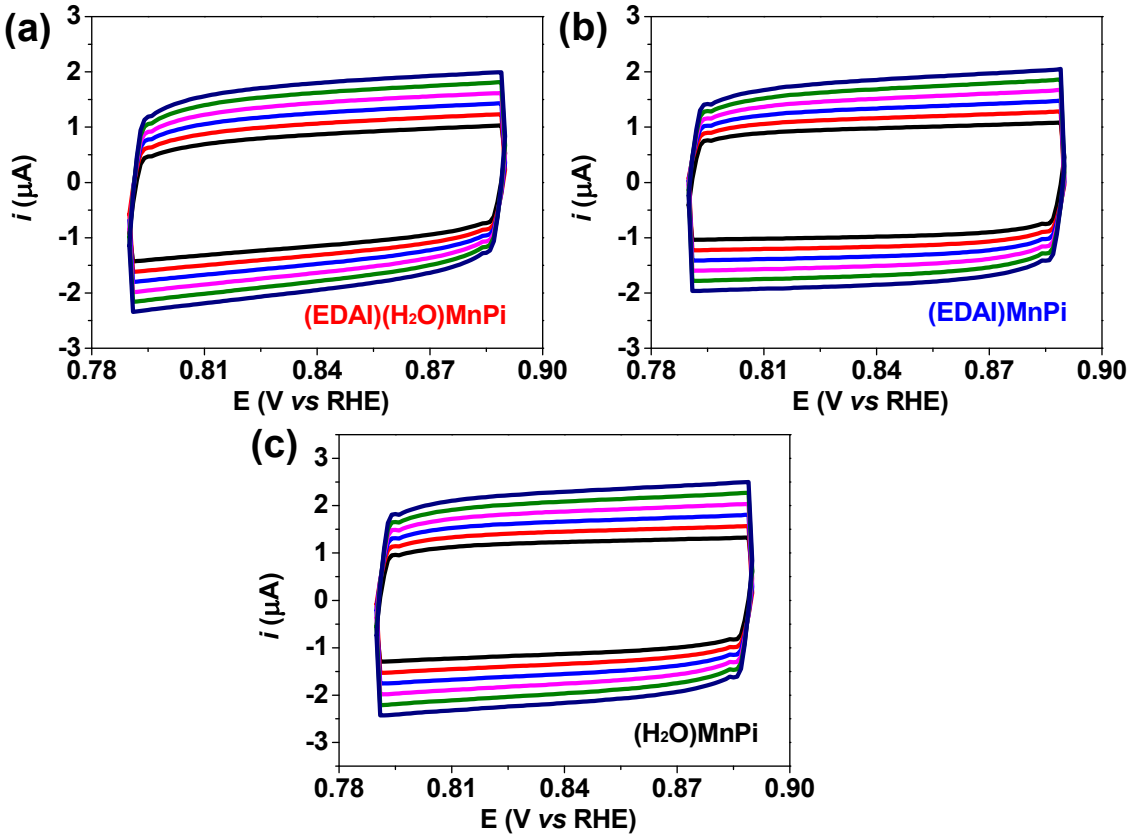

Fig. S2 The charging currents of (EDAI)(H_2O)MnPi, (EDAI)MnPi and (H_2O)MnPi recorded in the non-Faradaic potential region at different scan rates.

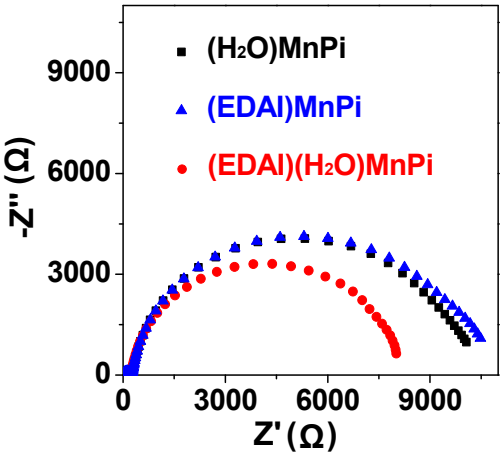

Fig. S3 Nyquist plots of (EDAI)(H_2O)MnPi, (EDAI)MnPi, and (H_2O)MnPi.

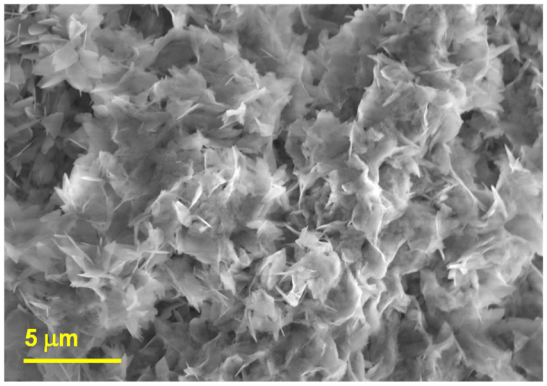

Fig. S4 SEM image of (EDAI)(H_2O)MnPi after OER stability test.

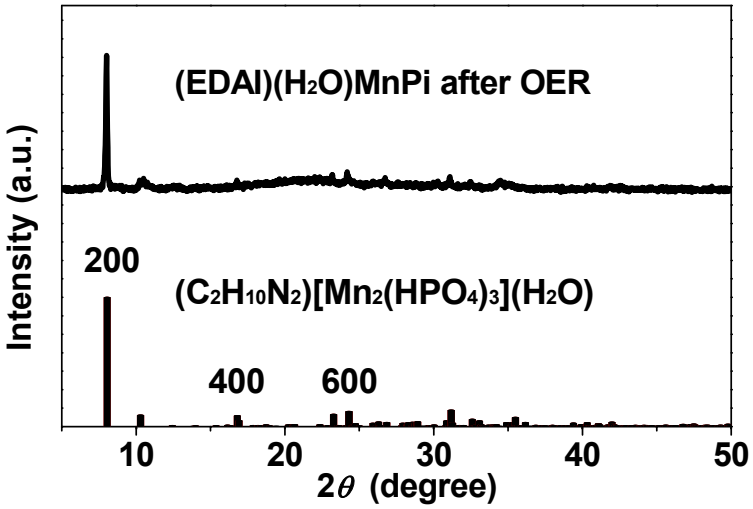

Fig. S5 XRD pattern of (EDAI)(H_2O)MnPi after OER stability test.

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