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## **Supporting Information**

## Ether-based solvent for significantly improved electrochemical performance of Naion batteries with amorphous GeO<sub>x</sub> anodes

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## Supporting information contents

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Table. S1 Calculated HOMO and LUMO energies of various solvents.



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Figure S3. Second charge-discharge curves at a current rate of 0.2 Ag-1 between 0.005

and 1.5 V.

Solvent in electrolyte	HOMO-LUMO energies (eV)	
	НОМО	LUMO
Diethylene glycol dimethyl ether (G2)	-10.499	2.199
Ethylene glycol dimethyl ether (G1)	-10.506	2.521
Ethylene carbonate (EC)	-11.906	1.241
Diethylene carbonate (DEC)	-11.453	1.121

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