

Supporting information:

**Homogeneous Li⁺ flux realized by in-situ-formed Li-B alloy layer
enabling dendrite-free lithium metal anode**

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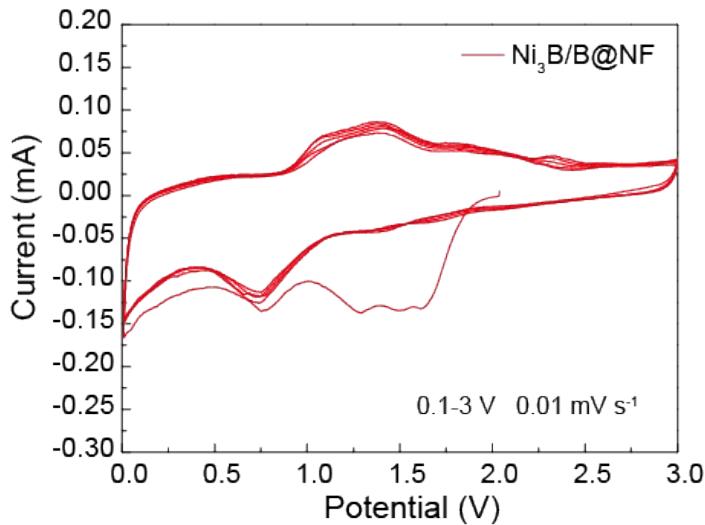


Figure S1. CV curve of $\text{Ni}_3\text{B}/\text{B}@\text{NF}$ electrode.

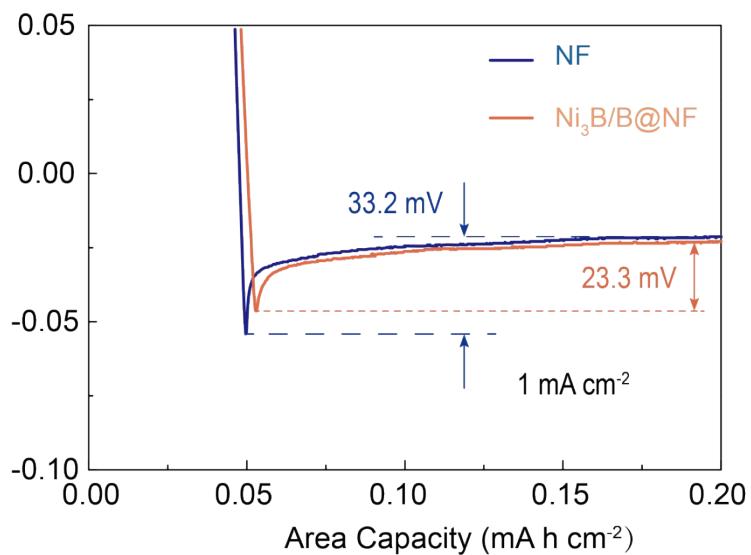


Figure S2. Nucleation overpotential of Li on the $\text{Ni}_3\text{B}/\text{B}@\text{NF}$ and NF electrode.

Table S1. The fitted parameters for Figure 4i.

Sample	$\text{Ni}_3\text{B}/\text{B}@\text{NF}$		NF	
Cycle	$\text{Rs } (\Omega)$	$\text{Rct } (\Omega)$	$\text{Rs } (\Omega)$	$\text{Rct } (\Omega)$
before cycle	1.86	18.4	1.639	14.37
50 th	2.535	5.907	2.161	14.53