



Supporting Information

for *Adv. Energy Mater.*, DOI: 10.1002/aenm.201701963

Universal Soldering of Lithium and Sodium Alloys on Various Substrates for Batteries

*Chengwei Wang, Hua Xie, Lei Zhang, Yunhui Gong, Glenn Pastel, Jiaqi Dai, Boyang Liu, Eric D. Wachsman, and Liangbing Hu**

Supporting Information

Universal Soldering of Lithium and Sodium Alloys on Various Substrates for Batteries

Chengwei Wang,^{1,2,#} Hua Xie,^{1,#} Lei Zhang,^{1,2} Yunhui Gong,^{1,2} Glenn Pastel,¹ Jiaqi Dai,¹ Boyang Liu,^{1,2} Eric D. Wachsman,^{1,2} Liangbing Hu^{1,2,*}

¹Department of Materials Science and Engineering, University of Maryland College Park, College Park, Maryland, 20742

²University of Maryland Energy Research Center, University of Maryland College Park, College Park, Maryland, 20742

[#]C.W. and H.X. contributed equally

*Email: binghu@umd.edu

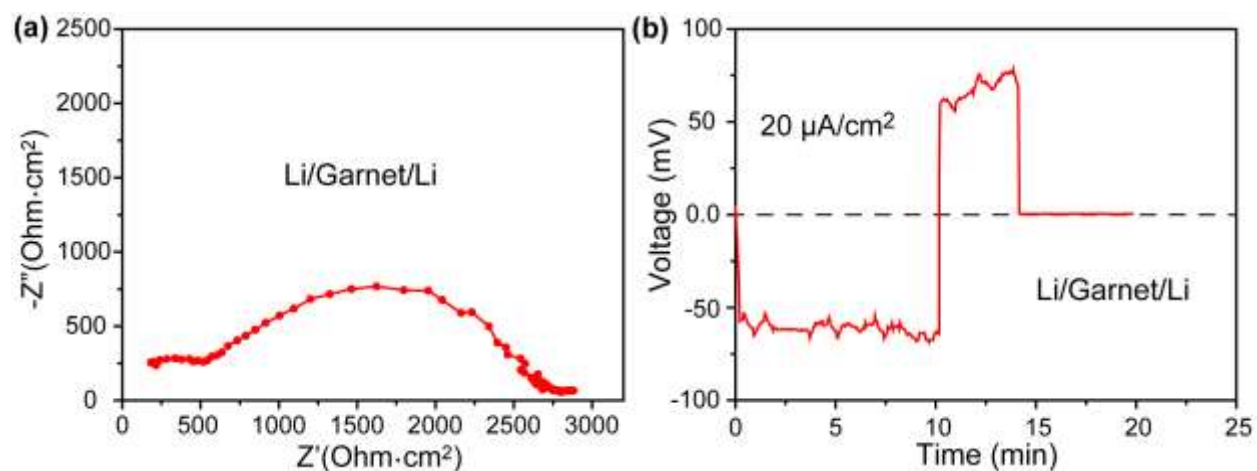


Figure S1. Electrochemical measurements of the Li/garnet/Li control symmetric cell. (a) EIS measurement of the Li/garnet/Li symmetric cell to calculate the interfacial resistance. (b) Voltage profile of the corresponding Li/garnet/Li symmetric cell during plating-stripping cycling at a current density of $20 \mu\text{A}/\text{cm}^2$. A short-circuit happens after about 15 minutes.