Supporting Information

An epidermal alkaline rechargeable Ag-Zn printable tattoo battery for wearable electronics

Sheela Berchmans^{a,b}, Amay J.Bandodkar^a, Wenzhao Jia^a, Julian Ramírez^a, Ying S. Meng^{a*}, Joseph Wang^a*

^a Department of Nanoengineering, University of California San Diego,9500 Gilman Drive, La Jolla, CA 92093 (USA)

^b EEC Division (Biosensors group), CSIR-Central Electrochemical Research Institute, Karaikudi,63006,Tamilnadu,India

*The authors to whom correspondence should be addressed E-mail: josephwang@ucsd.edu, shirleymeng@ucsd.edu

I. Discharging Ag-Zn tattoo cell at higher rate

Discharge at the rate of 2.14mAcm⁻² using the configuration Ag-Zn on the tattoo paper.



Figure S1 Three charge-Discharge cycles of a Ag-Zn tattoo cell subjected to discharge rate of 2.14mAcm⁻²

II. Discharge at the rate of 2.14mAcm⁻² using the configuration Ag-Zn-Ag printed laterally on the tattoo paper.



Figure S2 Charge –Discharge characteristics of the Ag-Zn tattoo cell in the configuration Ag-Zn-Ag

III OCV variation for five days for a typical Ag-Zn tattoo cell



Figure S3 OCV variation of a typical Ag-Zn cell over a period of 5 days.

IV Electrochemical impedance spectrum



Figure S4 Electrochemical impedance spectrum for the Ag-Zn tattoo cell.