

### Nomenclature and Subscripts

SCs	supercapacitors
Fg <sup>-1</sup>	Faraday per gram
PTNGs	Piezo-triboelectric nanogenerators
PEDOT	Poly3,4-ethylenedioxythiophene
TREN	Tris(2-aminoethyl)amine
PDMS	Polydimethylsiloxane
PVDF-PTFE	Polyvinylidene fluoride- poly tetra fluoro ethylene
KMnO <sub>4</sub>	Potassium permanganate
(NH <sub>4</sub> ) <sub>2</sub> S <sub>2</sub> O <sub>8</sub>	Ammonium persulfate
Ni@MnCO <sub>3</sub>	Nickel@manganese carbonates
BMIMBF <sub>4</sub>	1-Butyl-3-methyl imidazolium tetrafluoroborate
DMF	N, N-dimethylformamide
PET	Polyethylene terephthalate
KG <sub>f</sub>	Load Capacity
UTM	Universal Testing Machine (materials stress testing)
R <sub>s</sub>	Sheet resistance or bulk resistance
R <sub>ct</sub>	Charge transfer resistance
W <sub>R</sub>	Warburg element resistance
C <sub>dl</sub>	Double layer capacitance
ITO	Indium tin oxide
CNT	Carbon nanotube
PVA	Poly(vinyl alcohol)
XPS	X-ray photoelectron spectroscopy
EDS	Energy-dispersive X-ray spectroscopy
CV	Cyclic voltammetry
EIS	Electrochemical impedance spectroscopy
GCD	Galvanostatic charge-discharge
IL	Ionic liquid
EG	Ethylene glycol
LiCl	Lithium chloride