

## Supporting Information

### Low-cost high performance sustainable triboelectric nanogenerator based on laboratory waste

Archana PANDA<sup>1</sup>, Kunal Kumar DAS<sup>1</sup>, Kushal Ruthvik KAJA<sup>2,\*</sup>, Venkataramana GANDI<sup>2</sup>, Sunit Gourav MOHANTY<sup>3</sup>, and Basanta Kumar PANIGRAHI<sup>4,\*</sup>

<sup>1</sup> Department of Electronics and Communication Engineering, Siksha O Anusandhan (deemed to be University), Bhubaneswar 751030, India

<sup>2</sup> Department of Physics, Vellore Institute of Technology, Vijayawada 522237, India

<sup>3</sup> Department of Environmental Sciences, Sambalpur University, Burla 768019, India

<sup>4</sup> Department of Electrical Engineering, Siksha O Anusandhan (deemed to be University), Bhubaneswar 751030, India

\*Corresponding author e-mail: ruthvik\_015@dgist.ac.kr, basantapanigrahi@soa.ac.in

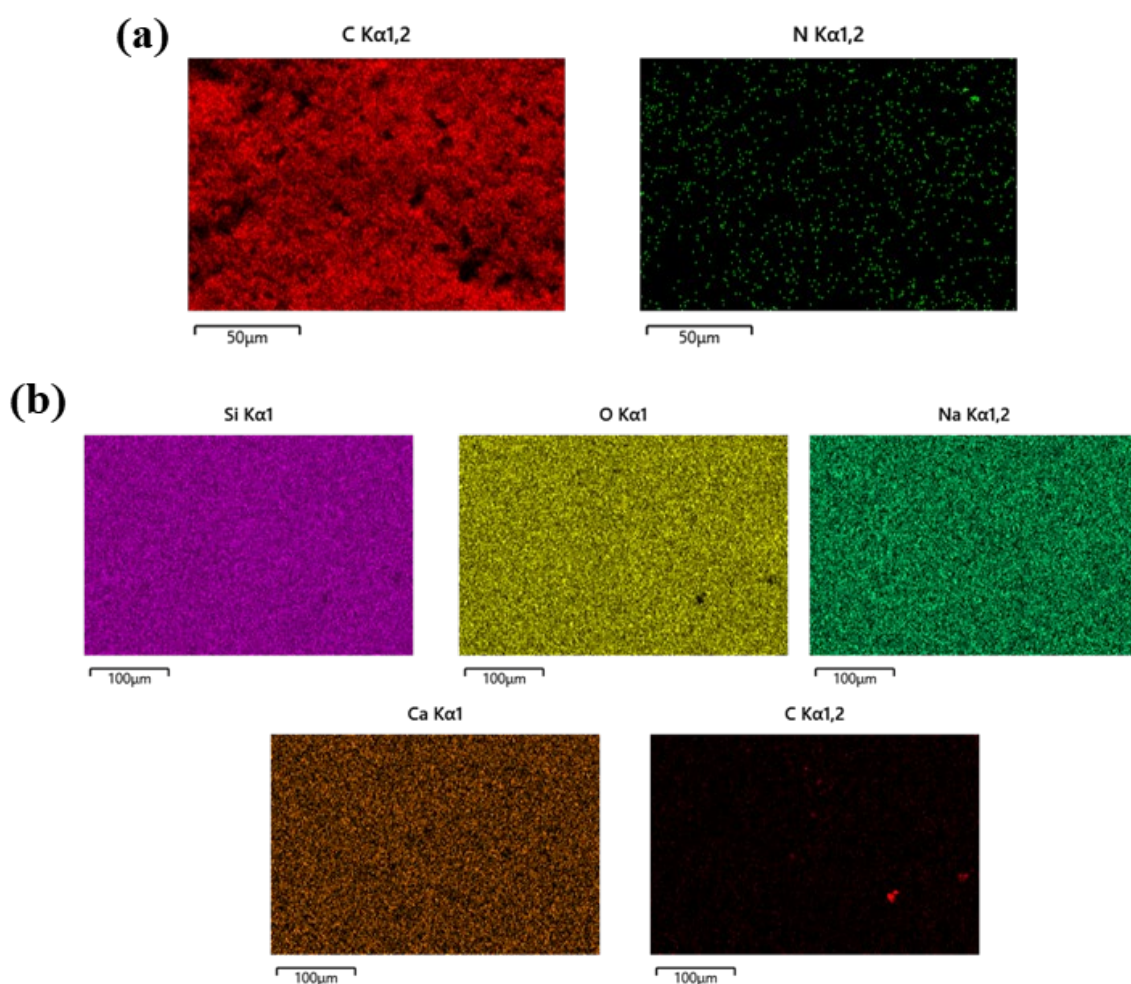
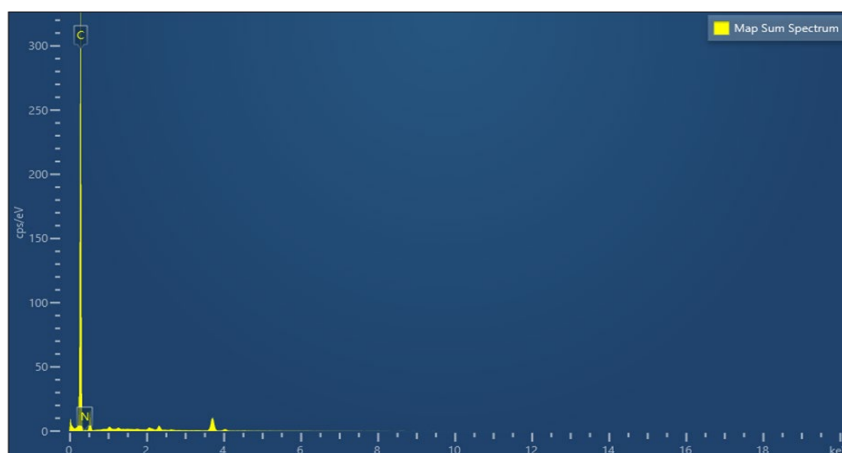


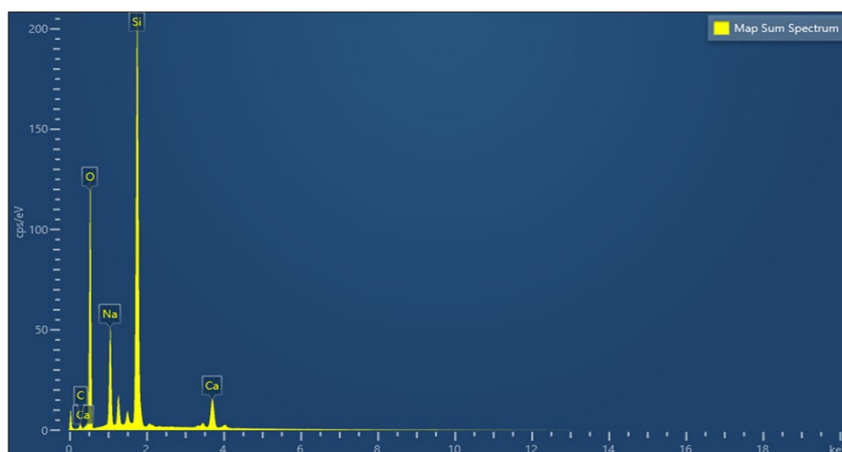
Figure S1. Color mapping of (a) glove, and (b) glass.

**Table S1.** Element percentage of glove.

Element	Atomic %
C	94.73
N	5.27

**Figure S2.** EDS spectra of glove.**Table S2.** Element percentage of glass.

Element	Atomic %
C	7.59
O	55.61
Na	8.49
Si	25.12
Ca	6.36

**Figure S3.** EDS spectra of glass.**Table S3.** Comparison table of waste material based TENG.

Material-1	Material-2	Voltage	Current	Reference
Polypropylene	Wool	4.2 V	2.7 nA	[32]
PVA	Chitosan	20 V	200 nA	[33]
Plastic PET	Glass	185 V	1.25 $\mu$ A	[34]
Glove	Glass	220 V	25 $\mu$ A	This study