

**Supporting Information.**

# Eco-designed conformable Inorganic Electronics to Improve the Smart Object End of Life: sensor's processing and applications.

*Maxime Harnois\*, Fatima Garcia Castro, Gaëtan Herry, Olivier De Sagazan, France Le  
Bihan*

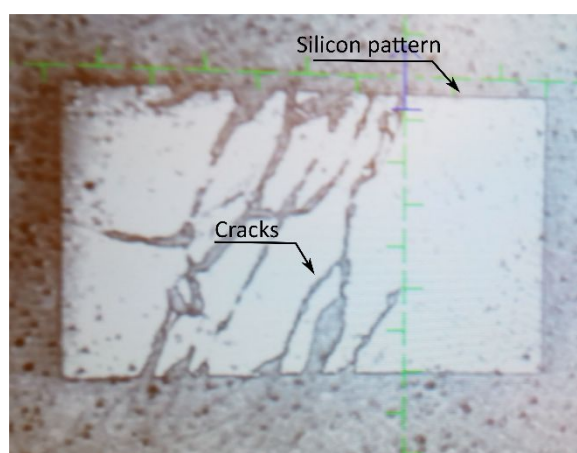
Université Rennes 1, Institut d'Électronique et des Télécommunications de Rennes, UMR  
CNRS 6164, Département Microélectronique & Microcapteurs, Campus de Beaulieu, 35042  
Rennes Cedex, France

Corresponding author's email : [maxime.harnois@univ-rennes1.fr](mailto:maxime.harnois@univ-rennes1.fr)

**Table S1** Mechanical characteristics of inorganic material that constitute the strain sensor

Material	Young modulus	Thickness
Polyimide	5GPa	25 $\mu$ m
PVA	1.9GPa	30 $\mu$ m
Silicon	80GPa	100nm

**Figure S1:** Optical picture of cracks in silicon thin films due to an excess of strain.



**Figure S2:** Setup used to deform and acquire the strain sensor electrical signal.

