**Supporting Information**

**Paper-supported WS2 strain gauges**

*Wenliang Zhang1, Riccardo Frisenda1, Qinghua Zhao1,2,3, Felix Carrascoso1, Abdullah M. Al-Enizi4, Ayman Nafady4, Andres Castellanos-Gomez1,\**

*1Materials Science Factory. Instituto de Ciencia de Materiales de Madrid (ICMM-CSIC), Madrid, E-28049, Spain.*

*2 State Key Laboratory of Solidification Processing. Northwestern Polytechnical University. Xi'an, 710072, P. R. China*

*3 Key Laboratory of Radiation Detection Materials and Devices. Ministry of Industry and Information Technology Xi'an, 710072, P. R. China*

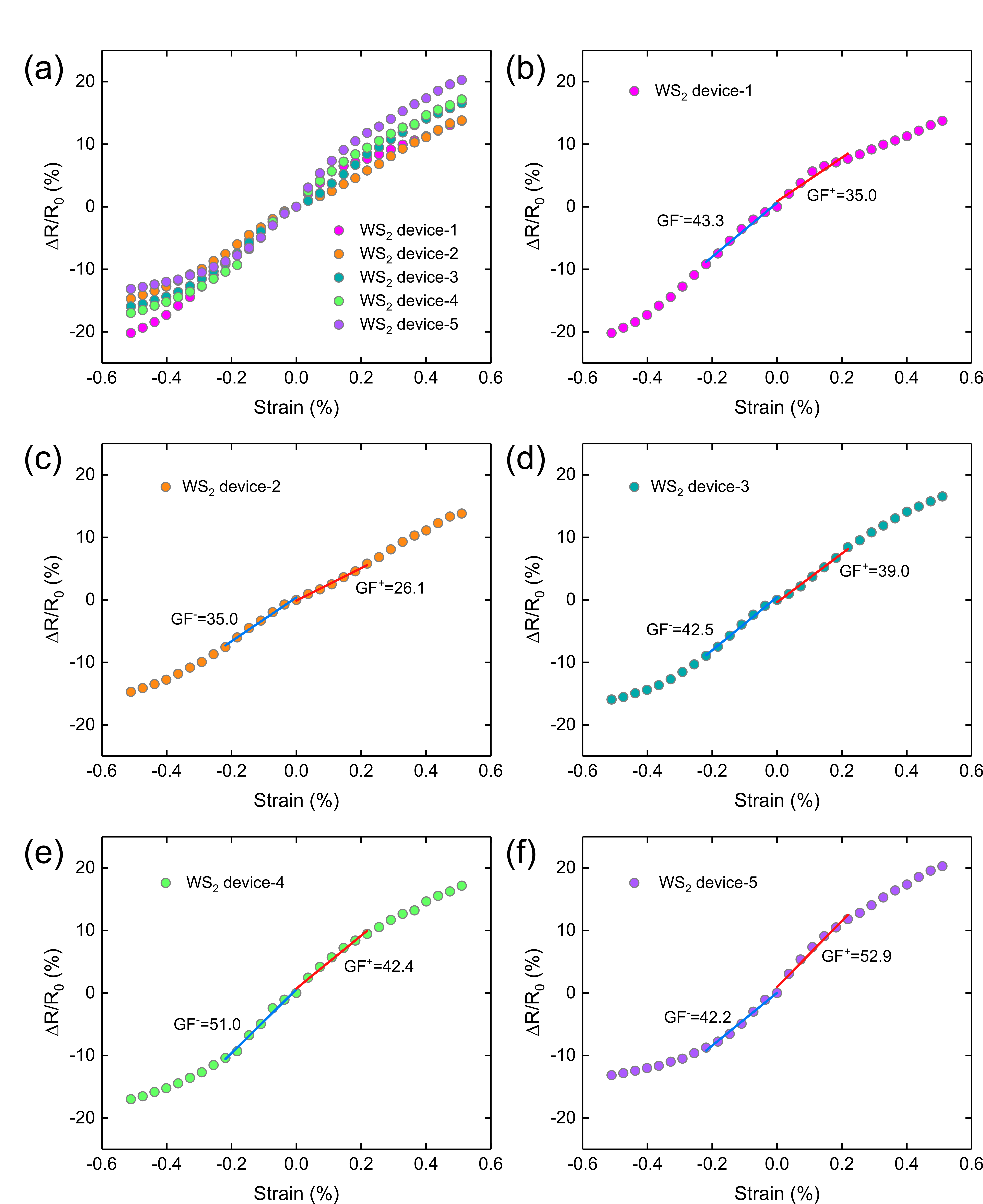
*4 Department of Chemistry, College of Science, King Saud University, Riyadh 11451, Saudi Arabia.*

[Andres.castellanos@csic.es](mailto:Andres.castellanos@csic.es)

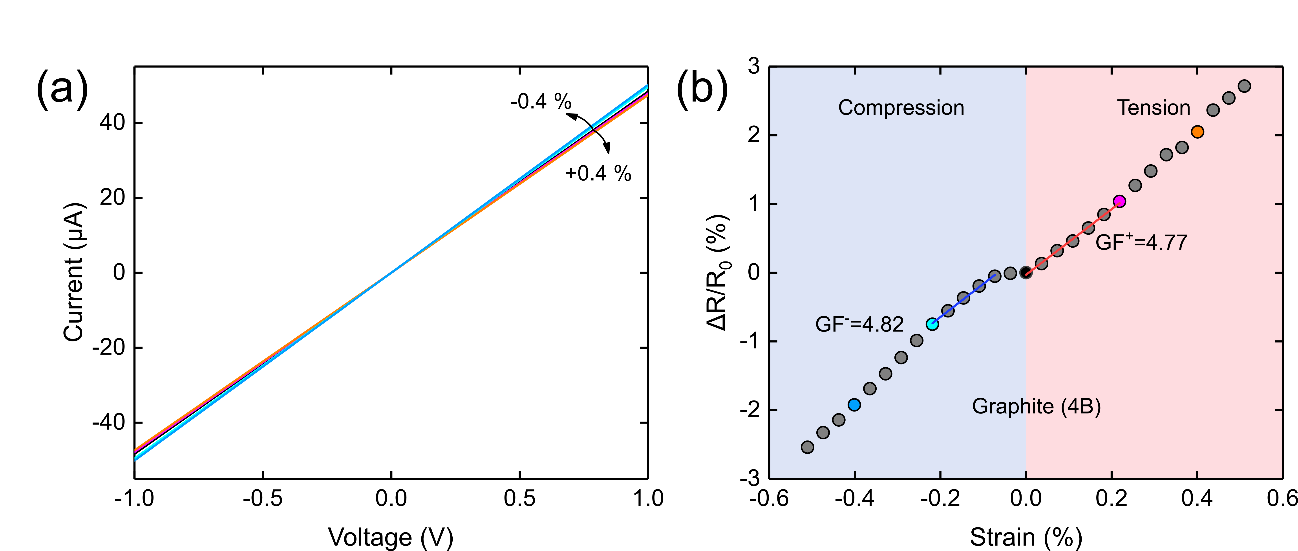
**Extra datasets of some WS2-on-paper strain gauge devices**

**Electrical characteristics of a pencil-on-paper strain gauge upon strain**

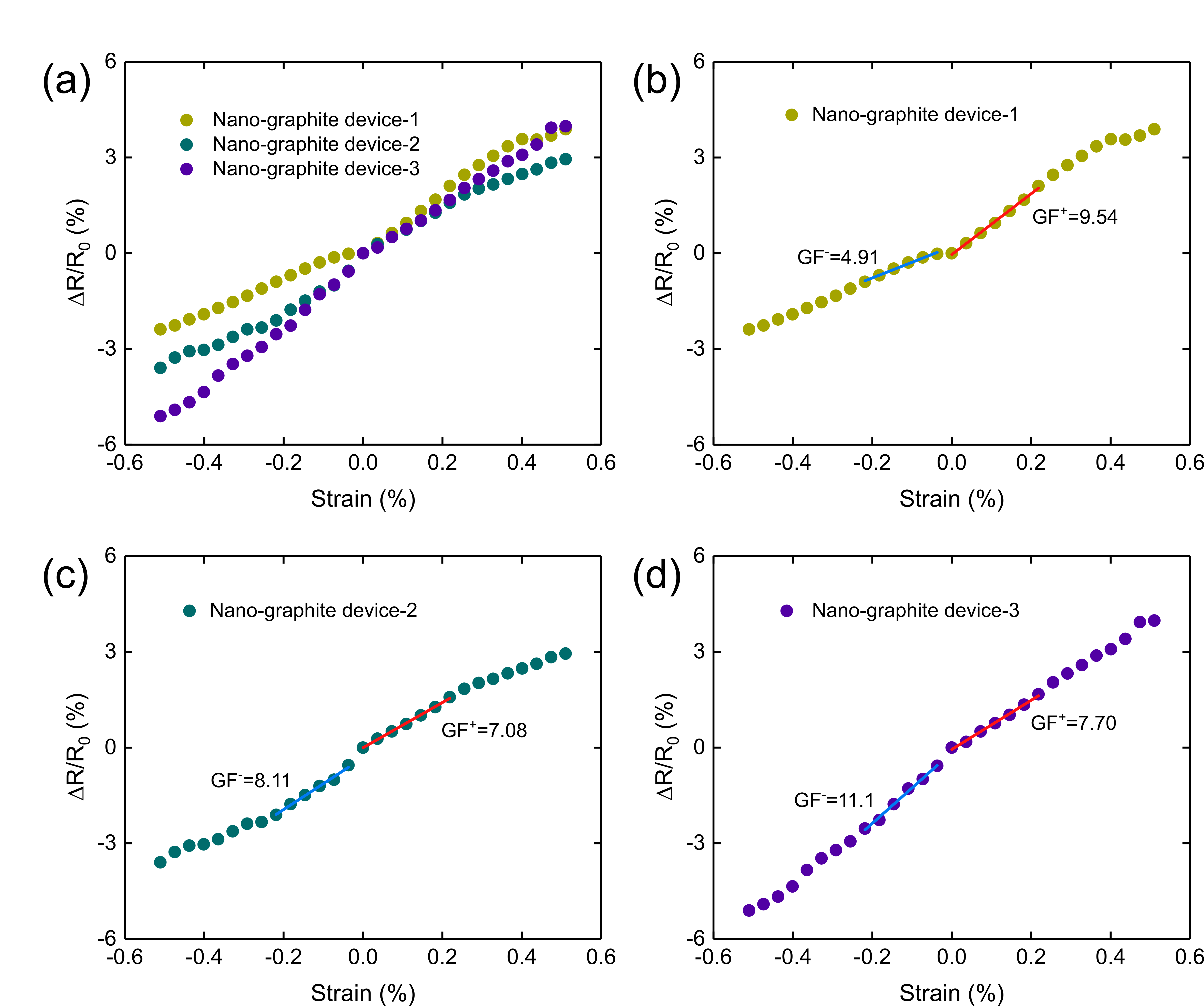
**Electrical characteristics of several nanographite-on-paper strain gauge upon strain**



**Figure S1. Extra datasets of some WS2-on-paper strain gauge devices.** (a) Resistance change vs. strain measured on 5 different devices. (b) to (f) Individual datasets of the different devices. The gauge factor has been obtained from a linear fit.



**Figure S2. Electrical characteristics of a pencil-on-paper strain gauge upon strain.** (a) Current vs. voltage characteristics of a pencil (4B) based strain gauge on paper for different strain values. (b) Extracted resistance change as a function of the applied strain load. The gauge factor has been obtained from a linear fit.



**Figure S3. Electrical characteristics of several nanographite-on-paper strain gauge upon strain.** (a) Summary of the resistance change upon strain of three nanographite based strain gauge on paper. (b) to (d) Individual datasets for each device. The gauge factor has been obtained from a linear fit.