

## Supplementary Information for:

# Quantitative mapping of magnetic properties at the nanoscale with bimodal AFM

*Victor G. Gisbert,<sup>a</sup> Carlos A. Amo,<sup>a</sup> Miriam Jaafar\*,<sup>b</sup> Agustina Asenjo<sup>a</sup> and Ricardo*

*Garcia\**<sup>†a</sup>

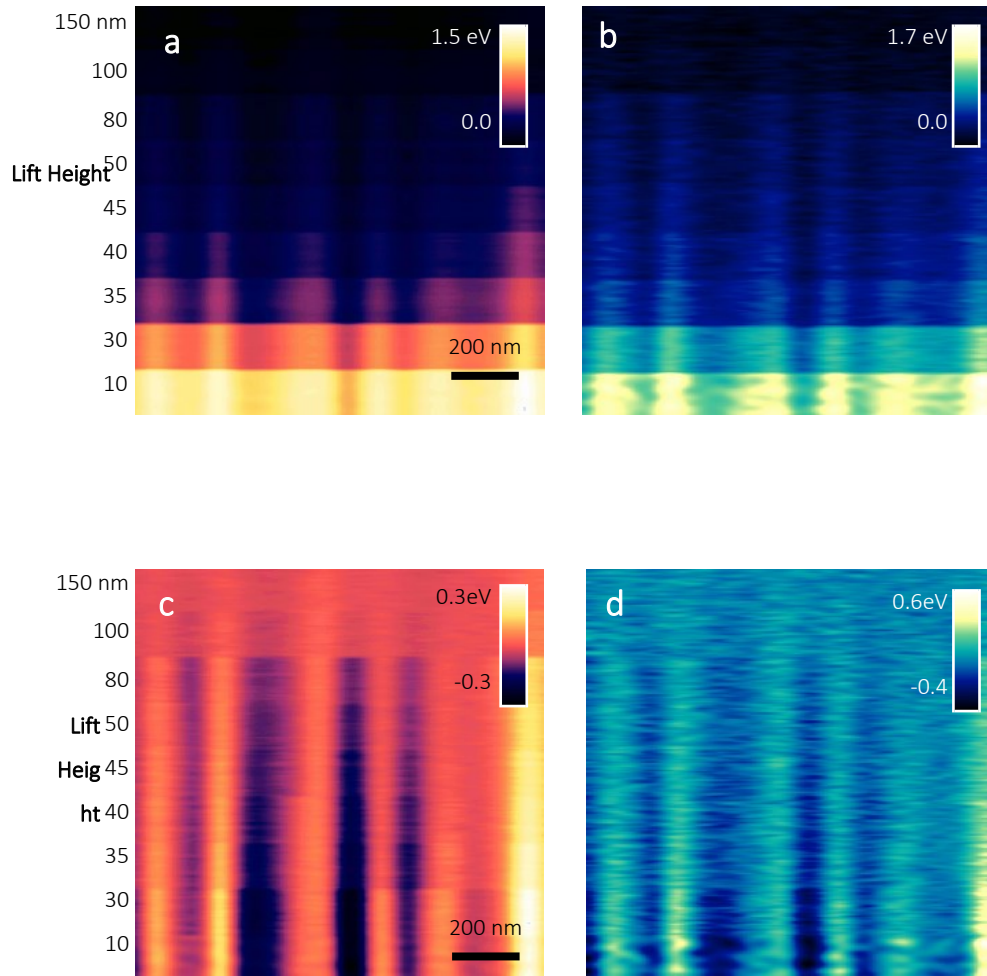
<sup>a</sup>Instituto de Ciencia de Materiales de Madrid, CSIC, c/ Sor Juana Inés de la Cruz 3, 28049 Madrid, Spain

<sup>b</sup>Departamento de Física de la Materia Condensada and Condensed Matter Physics Center (IFIMAC), Universidad Autónoma de Madrid, 28049 Madrid, Spain.

e-mail: r.garcia@csic.es

### List of contents

- **Figure S1**



**Figure S1. Bimodal AFM cross-sections obtained at different lift heights.** (a)  $V_1(x)$  as a function of the lift height. (b)  $V_2(x)$  cross-section as a function of the lift height. (c)  $V_1(x)$  and (d)  $V_2(x)$  after subtracting the non-magnetic contribution. Sample: high-density disk.