

Supporting Information

Regulating oxygen ion transport at the nanoscale to enable highly cyclable magneto-ionic control of magnetism

Zhengwei Tan,[†] Zheng Ma,[†] Laura Fuentes,^{‡, #} Maciej Oskar Liedke,[¥] Maik Butterling,[¥] Ahmed

G. Attallah,[¥] Eric Hirschmann,[¥] Andreas Wagner,[¥] Llibertat Abad,^{‡, #} Nieves Casañ-Pastor,[‡] Aitor

F. Lopeandia,[†] Enric Menéndez,^{, †}, Jordi Sort^{*, †, □}*

[†]Departament de Física, Universitat Autònoma de Barcelona, 08193 Cerdanyola del Vallès,

Spain

[‡]Institut de Ciència de Materials de Barcelona, CSIC, Campus UAB, 08193 Bellaterra,

Barcelona, Spain

[#]Centre Nacional de Microelectrònica, Institut de Microelectrònica de Barcelona-CSIC, Campus

UAB, 08193 Bellaterra, Barcelona, Spain

[¥]Institute of Radiation Physics, Helmholtz-Zentrum Dresden - Rossendorf, Dresden 01328,

Germany

Barcelona, Spain

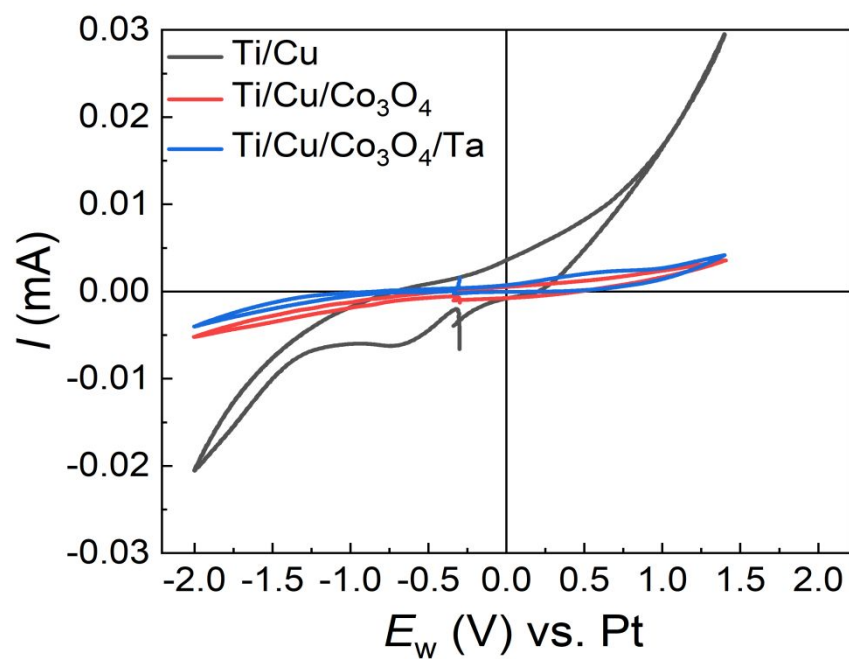


Figure S1: Cyclic voltammetry curves corresponding to the bare Ti/Cu conductive layers, the Ti/Cu/Co₃O₄ system and the Ti/Cu/Co₃O₄/Ta system.