



FIG. 1. (a) PEEM image of the 6-legged Hall cross with schematic representation of the circuit. Bright regions correspond to α -Fe₂O₃ (30 nm thickness) and dark region correspond to Pt (2 nm thickness). The Pt leads are aligned with the 3 easy axes of Fe₂O₃. Plus and minus signs represent the connections to the two pulse generator outputs, where the minus sign indicates a connection to ground. (b) Resistance data showing switching between two states after sequential current pulses applied along both current paths showed at panel a. (c) XMLD-PEEM images (4 μ m field of view) before and after a 4 mA current pulse along the pulse A & B configurations.