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Nota di contenuto	Intro -- EXCHANGE BIASED AND PLAIN SUPERCONDUCTING FERROMAGNETIC LAYERED HYBRIDS -- EXCHANGE BIASED AND PLAIN SUPERCONDUCTING FERROMAGNETIC LAYERED HYBRIDS -- Contents -- Preface -- Chapter 1 -- Introduction -- Chapter 2 -- Preparation of Samples and Experimental Details -- Chapter 3 -- Exchange Biased TLs -- 3.1. Magnetic Characterization of the Samples -- 3.2. Comparison between Transport and Magnetization Data -- 3.3. Magnetization Data on the Transverse Component -- 3.4. FM-SC-F MTLs: Comparison with Current Experiments -- 3.4.1. Considering Only the in-plane Relative Magnetization Configuration -- 3.4.2. Considering Both the In-plane and Out-of-plane Relative Magnetization Configuration -- 3.4.3. Prerequisite for Intense Stray-Fields Magnetoresistance in FM-SC-FM TLs -- 3.4.4. AFM Data for the Exchange Biased Specimens -- 3.5. Dynamic Behavior through I-V Characteristics -- 3.6. Upper-Critical Field of the BFM-SC-PFM TLs -- Chapter 4 -- Exchange Biased BLs -- 4.1. Comparison between Transport and Magnetization Data -- 4.2. Training Effect in the Superconducting State -- Chapter 5 -- Plain TLs and BLs -- 5.1. Magnetoresistance Data -- 5.2. Magnetization Data -- 5.3. Comparison of Low Field Data -- Chapter 6 -- Discussion -- 6.1. Stray-Fields Magnetostatic Coupling -- 6.2. Spin-Dependent Scattering Mechanism -- 6.3. Other Candidate Mechanisms -- 6.4. Upper-Critical

Field of the PFM-SC-PFMTLs and PFM-SC BLs -- Chapter 7 -- Possible Cryogenic Applications of Exchange Biased and Plain TLs -- Chapter 8 -- Conclusion -- 8.1. Corollaries -- 8.2. Perspectives for Future Work -- References -- Untitled.

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Sommario/riassunto

Here, the authors show that under specific circumstances, superconductivity (SC) and ferromagnetism (FM) may become co-operative so that their synergy may promote the transport properties of SC-FM layered hybrids.

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