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Transport Properties of Films of Prussian Blue Analogues and Manganites[1] P.A. QUINTERO, D.M. GRANT, E.S. KNOWLES, M.F. DUMONT, J.H. JEEN, A. BISWAS, M.W. MEISEL, Dept. Phys. and NHMFL, Univ. Florida, D.R. TALHAM, Dept. Chem., Univ. Florida — The CoFe Prussian blue analogue (PBA) is a coordination polymer, $A_jCo_k[Fe(CN)_6]$ (A = K, Rb, Cs), that exhibits a photoinduced charge transfer.[2] The resulting changes in the magnetization and in the lattice parameter have been used to successfully apply stress on other pressure-sensitive materials, achieving photocontrol of the magnetic response.[3] The metal-to-insulator transition (MIT) is a prominent feature of the manganites, whose transition temperature can be tuned by applying various stimuli such as pressure or magnetic field.[4] By coupling a layer of PBA over a thin film of manganite, the temperature for the MIT can be altered by the light-induced changes in the CoFe PBA.

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[2]O. Sato *et al.*, Science **272** (1996) 704.
[3]D.M. Pajerowski *et al.*, J. Am. Chem. Soc. **132** (2010) 4058.
[4]H. J. Jeen and A. Biswas, Phys. Rev. B **83** (2011) 064408.

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