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Superconductivity in $\mathbf{M_{n+1}AX_n}$ compounds MICHAEL OSOFSKY, R. J. SOULEN, JR., S. B. QADRI, Naval Research Laboratory, M. W. BARSOUM, Drexel University, NAVAL RESEARCH LABORATORY COLLABORATION, DREXEL UNIVERSITY COLLABORATION — We present evidence for the presence of bulk superconductivity in several members of the $M_{n+1}AX_n$ (M=early transition metal, A=group A element, and X=carbon and/or nitrogen; n=1-3) family of compounds. Samples were synthesized by using standard ceramic techniques. We will present resistivity, susceptibility and specific heat data for these materials. We will also show detailed x-ray diffraction and microscopy data to demonstrate that impurity phases cannot account for the results.

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