Abstract Submitted
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Magnetism in Clusters of Cobalt and Chromium.[1] LOUIS BLOOMFIELD, FORREST PAYNE, WEI JIANG, University of Virginia — We report on measurements of magnetism in cobalt and chromium clusters of between 10 and 200 atoms. Both elements show magnetic order that exceeds that of the bulk. The low dimensionality of clusters allows them to retain much of their atomic magnetism. While cobalt is already ferromagnetic in the bulk, it shows increasing magnetization per atom as the cluster size decreases. Chromium, however, is antiferromagnetic in the bulk, so the observed magnetization in chromium clusters is more exotic.

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Louis Bloomfield
University of Virginia

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