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Title: Ultralow-Density Nanostructured Metal Foams: Combustion Synthesis, Morphology, and Composition

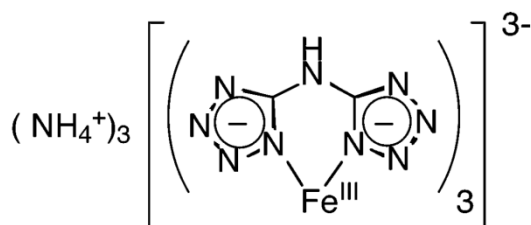
Authors: B. C. Tappan,\* M. H. Huynh, M. A. Hiskey, D. E. Chavez, E. P. Luther, J. T. Mang, and S. F. Son

Citation: *J. Am. Chem. Soc.*, **2006**, *128*(20), pp 6589–6594.

Yours will come from the current year.

DOI: 10.1021/ja056550k

ASAP ACS articles are acceptable, but they must have the date of their web posting.



Including a figure from the article is ok, as long as the citation is clearly provided.

This article deals with the nitrogen-rich compounds like the one in the figure above. The extensive N-N bonding in these complexes makes them thermodynamically unstable with respect to forming very stable  $\text{N}_2$  gas. The stability of  $\text{N}_2$  accounts for its abundance in nature. The N-N bonds of the ligand must become the discrete  $\text{N}\cdot\text{N}$  bonds of the product  $\text{N}_2$  ( $\text{N}_2$  MO's were discussed in Ch. 2). As this gas forms, electrons are given to the iron(III) ions in the solid leading to their reduction to iron metal (Redox reactions like this were discussed in Ch. 5). The escaping  $\text{N}_2$  gas causes the metal that is formed to be highly porous, a metal foam.

Alternatively, this article could have been used to illustrate coordination compounds (Ch 8.).