Now, Philip P. Power at the University of California, Davis, and his coworkers report evidence for the first “quintuple” bond between two metal atoms in the dichromium complex, RCrCrR, where R is a bulky terphenyl ligand (Science, 2005, 310, 844). The chromium dimer exists as air- and moisture-sensitive dark red crystals that are stable up to 200 °C.

Power and his coworkers believe that the two chromium(I) atoms, which have a 3d five.