

The 5d core electrons of Hg ...

... become active and involved in forming chemical bonds under high pressure. In their Communication on page 9280 ff., M.-S. Miao and co-workers show by means of first-principles calculations that Hg can form stable compounds of HgF_4 and HgF_3 under high pressure. The HgF_4 molecular crystal consists of square-planar HgF_4 molecules. HgF_3 is an extended solid and exhibits exotic properties. It is metallic, ferromagnetic, and transparent to visible light.

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