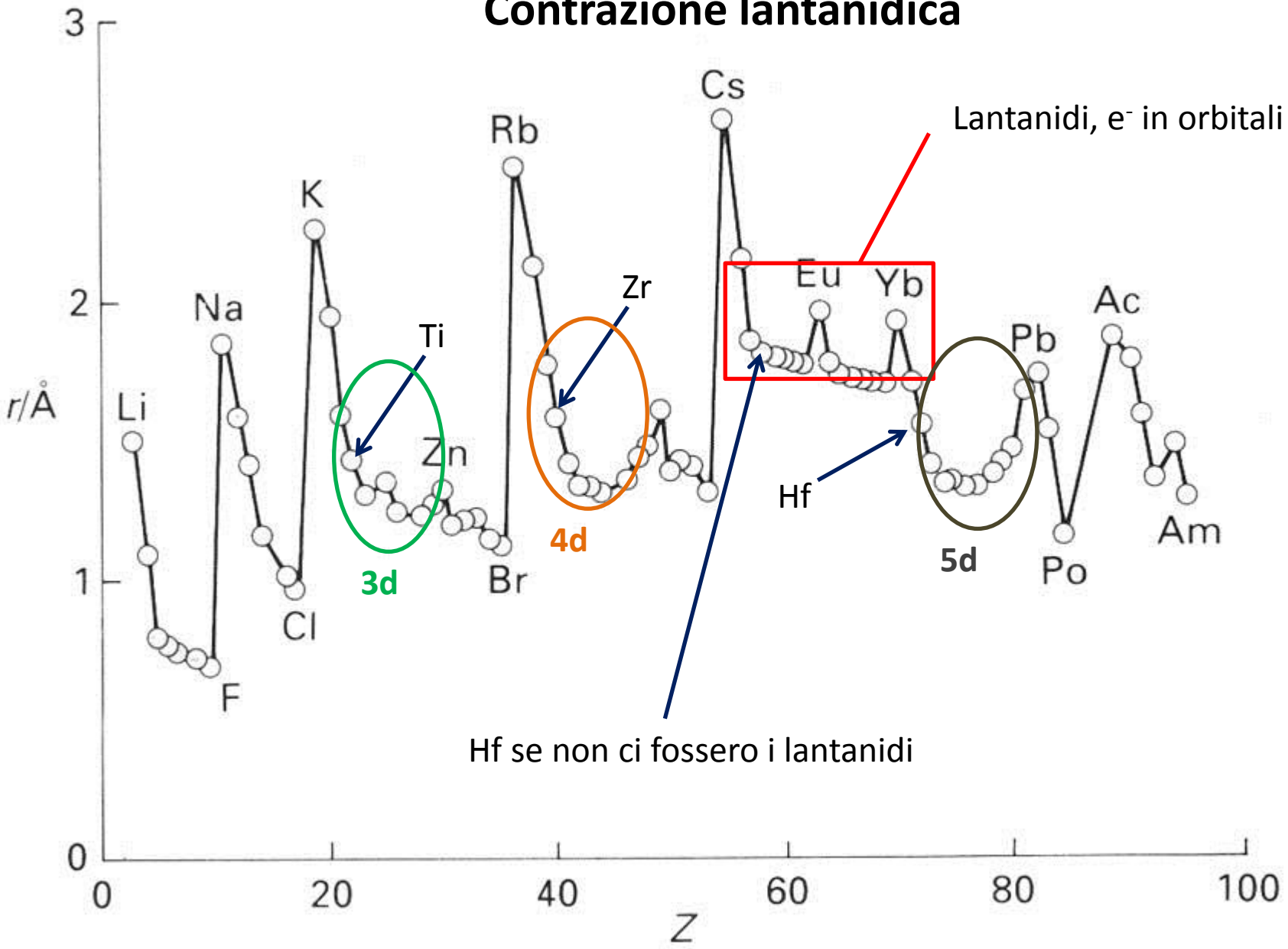
Contrazione lantanidica



Contrazione lantanidica porta con sé delle anomalie:

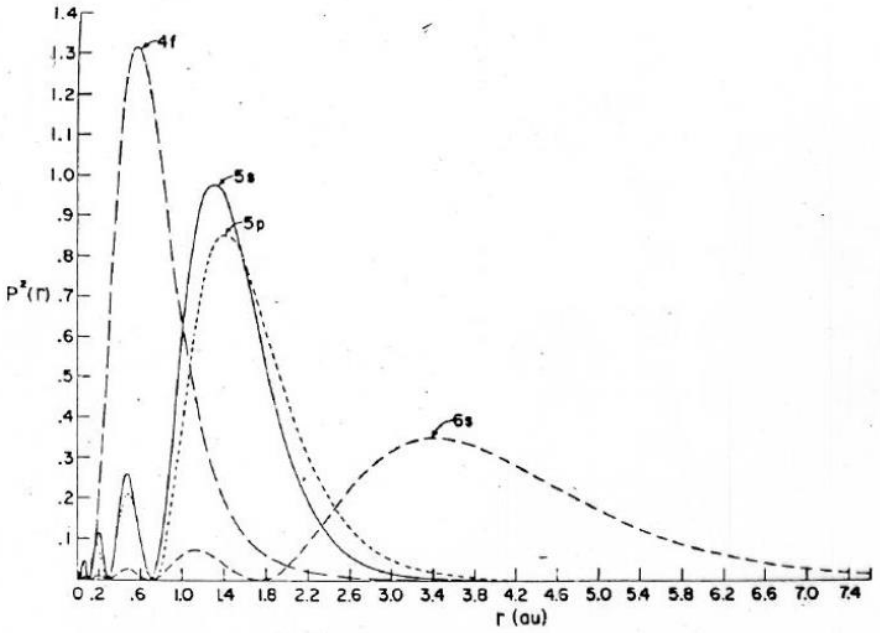
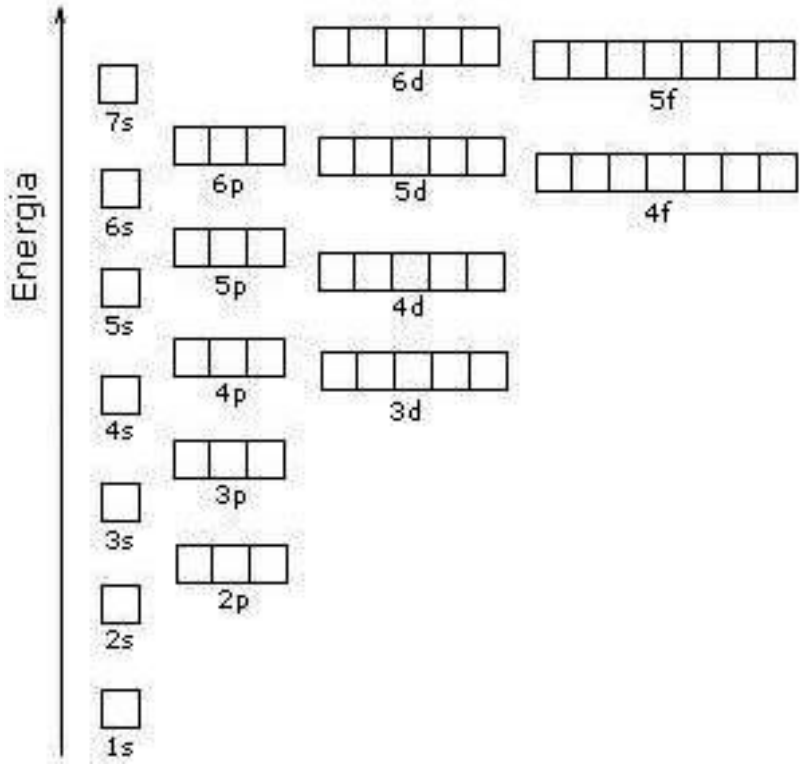


Fig. 7. Square of the radial wavefunction times the squared radius for the 4f, 5s, 5p, and 6s electrons in Gd^+ [FrWa62]. For RE^{3+} ions this picture will be contracted somewhat because of the larger effective nuclear charge.

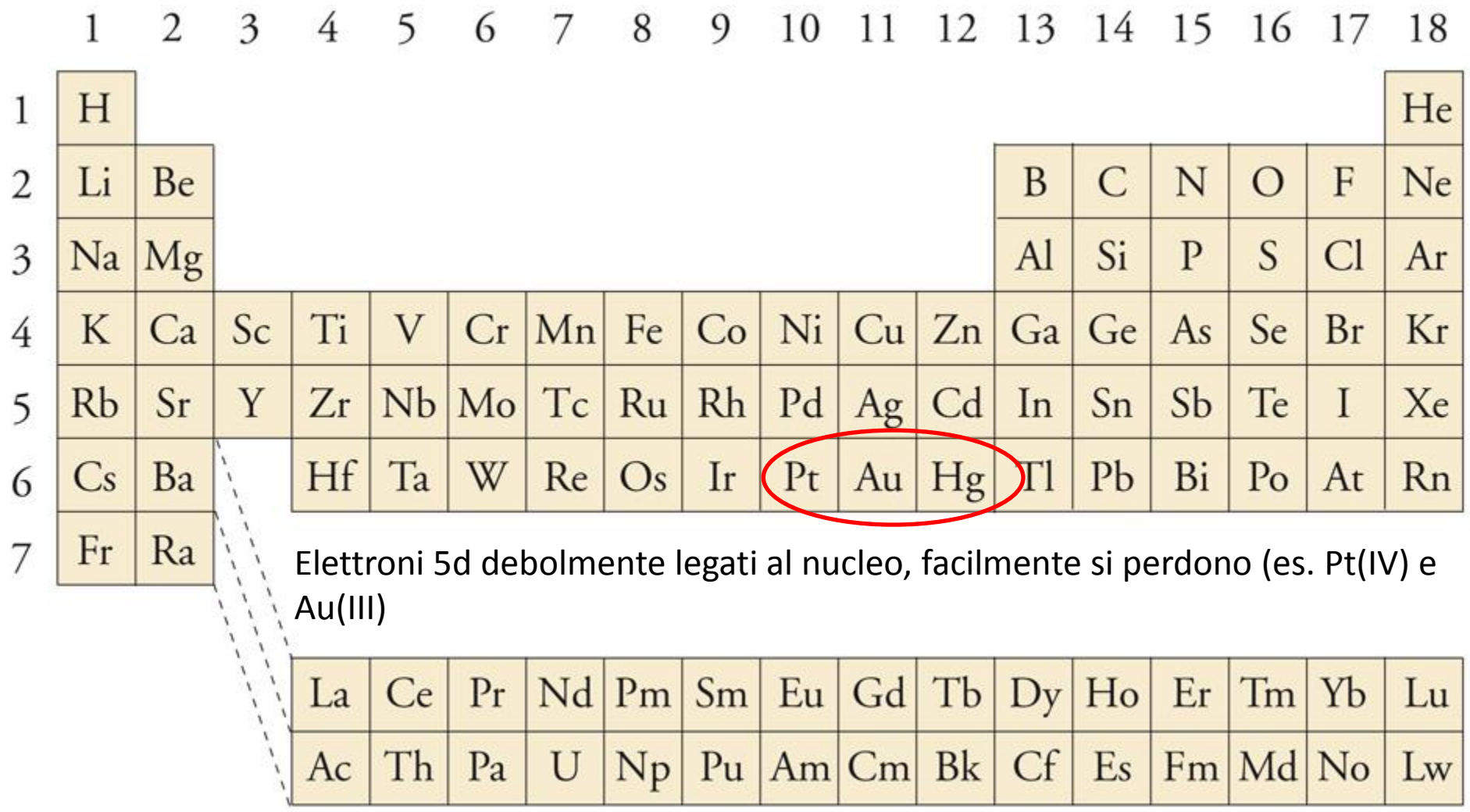


Au: [Xe] $4f^{14}5d^{10}6s^1$

Perdita elettroni 5d nonostante il sottolivello sia pieno!

Au(III) esiste Ag e Cu (III) NO! Quindi stati di ossidazione più alti per gli elementi 5d.

Cu(III) sarebbe un buon ???



Elettroni 5d debolmente legati al nucleo, facilmente si perdono (es. Pt(IV) e Au(III)