| | | $1S_{1/2}$ (in eV) |
|---|---|---|
| **Binding energy $E_B$ for point nucleus:** | | $-132279.96$ |
| **Correction** | **Order** | |
| **finite size** | | $198.82\ (.10)$ |
| **– Uehling** | | $-93.58$ |
| **– WK** | | $4.99$ |
| **total VP** | $m\alpha(\alpha Z)^4$ | $-88.60$ |
| **SE** | $m\alpha(\alpha Z)^4$ | $355.05$ |
| **SESE a,b,c** | $m\alpha^2(\alpha Z)^4$ | **new:** $-0.24\ (.12)$ |
| **VPVP a** | $m\alpha^2(\alpha Z)^5$ | $-0.22$ |
| **VPVP b** | $m\alpha^2(\alpha Z)^5$ | $-0.15$ |
| **VPVP c** | $m\alpha^2(\alpha Z)^4$ | $-0.60\ (.01)$ |
| **SEVP a,b,c** | $m\alpha^2(\alpha Z)^5$ | $1.12$ |
| **S(VP)E** | $m\alpha^2(\alpha Z)^5$ | $0.13\ (.03)$ |
| **Recoil** | $m\frac{m}{M}(\alpha Z)^2$ | $0.46\ (.01)$ |
| **Nuclear pol.** | $m\frac{m}{M}(\alpha Z)^2$ | $-0.20\ (.10)$ |
| **Total binding energy** | | $-131814.63$ |
| **Lamb Shift (Theory)** | | $465.75\ (.33)$ |
| **Lamb Shift (Exp.)** | | $468 \pm 13$ |