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## Relativistic calculations of critical distances for homonuclear quasi-molecules

The ground-state energies of one-electron homonuclear quasi-molecules for the nuclear charge number in the range  $Z = 1 - 100$  at the “chemical” distances  $R = 2/Z$  (in a.u.) are calculated. The calculations are performed for both point- and extended-charge nucleus cases using the Dirac-Fock-Sturm approach with the basis functions constructed from the one-center Dirac-Sturm orbitals. The critical distances  $R_{cr}$ , at which the ground-state level reaches the edge of the negative-energy Dirac continuum, are calculated for homonuclear quasi-molecules in the range:  $85 \leq Z \leq 100$ .

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