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One and two-electron hydrogenic, helium and helium-hydrogenic molecular chains in a strong magnetic field NICOLAIS GUEVARA LEON, University of Florida, ALEXANDER V. TURBINER, JUAN C. LOPEZ VIEYRA, Instituto Ciencias Nucleares. UNAM. Mexico — A classification for one and two-electron molecular hydrogenic, helium and helium-hydrogenic chains in a strong magnetic field $B \leq 10^{16}\,\mathrm{G}$ is given. At very large magnetic fields the longest hydrogenic chains contain at most five protons indicating the existence of the H_5^{4+} and H_5^{3+} ions, respectively. It was also found that helium and helium-hydrogenic chains can exist at large magnetic fields with up to three and four nuclei for one and two-electrons, respectively.

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