Lande g factors of ground and low-excited states in 113Cd+ for atomic clocks JIZE HAN, Tsinghua University, YANMEI YU, Chinese Academy of Sciences, BIJAYA SAHOO, Physical Research Laboratory, JIANWEI ZHANG, LIJUN WANG, Tsinghua University — We give a relativistic coupled-cluster (RCC) and multi-configuration Dirac-Hartree-Fork (MCDHF) analysis to determine the 113Cd+ g_j factors of the n = 5 – 7, 5d \textsuperscript{2}D_{3/2,5/2}, and 4f \textsuperscript{2}F_{5/2,7/2} states, this is the first reported calculation of this quantity which could be very important in the evaluation of second order Zeeman frequency shift for atomic clocks. We also do the 198Hg\textsuperscript{+} calculation and compared to the experimental results to test the calculation accuracy as there is no experimental results on 113Cd+. Electron correlation effects, contributions through nonlinear term and higher-level excitations such as triple excitations are also investigate in this article.