Relativistic many-body calculation of energies, multipole transition rates, and lifetimes of tungsten ions U. I. SAFRONOVA, University of Nevada, Reno, M. S. SAFRONOVA, University of Delaware and JQI, NIST and the University of Maryland, N. NAKAMURA, The University of Electro-Communications, Japan — Atomic properties of Cd-like W$^{26+}$, In-like W$^{25+}$, and Sn-like W$^{24+}$ ions are evaluated using a relativistic CI+all-order approach that combines configuration interaction and the coupled-cluster methods. The energies, transition rates, and lifetimes of low-lying levels are calculated and compared with available theoretical and experimental values. The magnetic-dipole transition rates are calculated to determine the branching ratios and lifetimes for the 4$f^3$ states in W$^{25+}$ and for the 4$f^4$ in W$^{24+}$ ions. We also evaluated the atomic properties of these ions using the Hebrew University Lawrence Livermore Atomic (HULLAC) code and demonstrated higher accuracy of the wavelength values obtained using the CI+all-order approach.