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## Nuclear magnetic dipole moments of As and Sb isotopes from ab initio NMR shielding calculations and NMR experiments

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Accurate NMR shielding constants for arsenic (As) and antimony (Sb) in the  $\text{AsF}_6^-$ ,  $\text{AsO}_4^{3-}$ ,  $\text{SbCl}_6^-$ , and  $\text{SbF}_6^-$  complexes were calculated using both non-relativistic coupled cluster methods and relativistic four-component density functional theory (DFT). The magnetic dipole moments of the  $^{75}\text{As}$ ,  $^{121}\text{Sb}$ , and  $^{123}\text{Sb}$  nuclei were redetermined, leading to revised recommended reference values. The updated nuclear magnetic dipole moments are  $\mu(^{75}\text{As}) = 1.43711(4) \mu_N$ ,  $\mu(^{121}\text{Sb}) = 3.35540(33) \mu_N$ , and  $\mu(^{123}\text{Sb}) = 2.54389(25) \mu_N$ , correcting previous systematic errors of up to  $0.008 \mu_N$  in earlier reference data. These magnetic dipole moments provide reliable references in nuclear physics, becoming the reference for magnetic moments in isotopic series of radioactive/exotic nuclei.

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