Erratum: Light-narrowed optically pumped M_x magnetometer with a miniaturized Cs cell [Phys. Rev. A 84, 043416 (2011)]

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We have noticed that some of the cell volumes listed in Table II were erroneously cited. Consequently, the corresponding figures of merit $B_{\text{noise}}\sqrt{V}$ were calculated incorrectly. The revised version of the table is presented below. All conclusions in the paper are unaffected by these corrections.

TABLE II. Comparison of achieved cell-volume-weighted sensitivity with other selected published data using different alkali metals (AMs) and sensor operation modes [nonlinear magneto-optical rotation (NMOR), spin-exchange-relaxation-free (SERF), single-beam (SB), stretched-state (SS), and light-narrowed (LN) operations]. The table separates paraffin-coated vacuum cells (upper part) and buffer gas cells (lower part).

AM	Mode	V (mm^3)	B_0 (μT)	B_{noise} ($\frac{\text{fT}}{\sqrt{\text{Hz}}}$)	$B_{\text{noise}}\sqrt{V}$ ($\frac{\text{fT cm}^{3/2}}{\sqrt{\text{Hz}}}$)	Ref.
K	M_x	1767000	50	1.8[a]	75.7[a]	[1]
Cs	M_x	11494	9	15[c]	50.9[c]	[2]
Rb	NMOR	65450	0.05	2[c]	16.2[c]	[3]
Rb	M_x	2	>10	5000[a]	224[a]	[4]
Rb	SERF	6	$\approx$0	5[a]/2.5[c]	0.39[a]/0.19[c]	[5]
K	SERF	450	$\approx$0	0.8[a]/0.16[b]	0.54[a]/0.11[b]	[6]
Rb	SERF SB	125	$\approx$0	7[a]	2.5[a]	[7]
K	SS	1500	10	100[a]/10[b,c]	122[a]/12.2[b,c]	[8]
Cs	LN M_x	9.3	5	42[c]	4.0[c]	This paper

[a]Measured magnetometer noise floor.
[b]Extrapolated from the $\sqrt{2}$ times larger measured gradiometer noise floor.
[c]Projected shot-noise-limited sensitivity B_{sn}.

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