Erratum: Theoretical charge-exchange Galilean invariant cross sections for the $B^{3+} + He$ collision [Phys. Rev. A 51, 381 (1995)]

Alejandro López-Castillo* and Fernando R. Ornellas

PACS number(s): 34.70.+e, 34.10.+x, 3.65.Sq, 99.10.+g

The number 2 dividing the argument of the G function in Eqs. (11) and (12) must be suppressed.

---

*Present address: Instituto de Fisica "Gleb Wataghin," Universidade Estadual de Campinas, Caixa Postal 6165, Campinas, SP, 13081-970, Brazil. Electronic address: alcastil@ifi.unicamp.br

---

Erratum: Effective core polarizabilities in Ba high-l $Nsnl$ double Rydberg atoms [Phys. Rev. A 51, 1985 (1995)]

P. Camus and S. Cohen

PACS number(s): 31.25.Jf, 32.10.Dk, 31.50.+w, 99.10.+g

For the hydrogenic value of the $\langle r^{-6} \rangle$ radial matrix element, we have forgotten a factor $(l-1)$ in the denominator of our calculated formula. Consequently the x axis of the Y vs X graphs is contracted. The magnitude of the effective α'_d dipole polarizabilities remains unchanged within the errors given in the paper. However, we report the new fitted values with their uncertainties in Table III. On the contrary, the slope of the fitted straight line representing the α'_q quadrupole polarizabilities is largely affected, and the new fitted values are reported in Table IV.

We can notice a general increase of the magnitude of the quadrupole polarizabilities, however, without any change in their sign, particularly the negative sign of the 9s and 10s values. Consequently we emphasize that the analysis, discussion, and final conclusion of the paper remain unchanged and valid.

TABLE III. Effective α'_d dipole polarizabilities for Ba^+ Ns states (units of a_0^3).

n \ N	7	8	9	10
12	$1.27(2) \times 10^3$		$2.900(2) \times 10^4$	
13	$1.28(2) \times 10^3$	$7.12(5) \times 10^3$	$2.87(4) \times 10^4$	$9.40(4) \times 10^4$
14	$1.25(6) \times 10^3$	$7.10(4) \times 10^3$	$2.99(2) \times 10^4$	$9.17(13) \times 10^4$
15	$1.32(4) \times 10^3$	$6.61(9) \times 10^{3}$ [a]	$2.94(4) \times 10^4$	$9.16(14) \times 10^4$
		n-averaged value		
α'_d	$1.28(3) \times 10^3$	$7.11(5) \times 10^3$	$2.93(3) \times 10^4$	$9.24(10) \times 10^4$

[a]Value not taken in account for the average determination.

TABLE IV. Effective α'_q quadrupole polarizabilities for Ba^+ Ns states (units of a_0^5).

n \ N	7	8	9	10
12	$4.8(6) \times 10^4$		$-6.32(30) \times 10^6$	
13	$5.0(7) \times 10^4$	$1.11(18) \times 10^6$	$-3.7(22) \times 10^6$ [a]	$-8.99(31) \times 10^7$
14	$7.1(42) \times 10^4$ [a]	$1.24(14) \times 10^6$	$-8.11(96) \times 10^6$	$-8.57(15) \times 10^7$
15	$3.9(8) \times 10^4$	$1.85(30) \times 10^6$ [a]	$-7.6(18) \times 10^6$	$-8.24(16) \times 10^7$
		n-averaged value		
α'_q	$4.6(7) \times 10^4$	$1.18(16) \times 10^6$	$-7.3(10) \times 10^6$	$-8.60(21) \times 10^7$

[a]Values not taken in account for the average determination.