Erratum: Doping and disorder in the Co_2MnAl and Co_2MnGa half-metallic Heusler alloys [Phys. Rev. B 74, 172412 (2006)]

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In the last paragraph of the article just before the paragraph with the conclusions the numbers corresponding to the decrease of the total number of valence electrons are not correct. The correct sentence is: "Substituting 5%, 10%, 15%, or 20% of the Mn atoms by the Al or Ga ones, corresponding to the negative values of x in the table, results in a decrease of 0.20, 0.40, 0.60, and 0.80 of the total number of valence electrons in the cell, while the inverse procedure results in a similar increase of the mean value of the number of valence electrons."

The second column in Table III with the ideal spin magnetic moments is not correct. The correct table is as follows:

TABLE III. Total and atom-resolved spin magnetic moments for the case of excess of Mn (x positive) or sp atoms (x negative) atoms. In the second column the ideal total spin moment if the compound was half-metallic. Details as in Table I.

		$Co_2Mn_{1+x}Al_{1-x}$				$Co_2Mn_{1+x}Ga_{1-x}$			
x	Ideal	Total	Co	Mn	Al	Total	Co	Mn	Ga
−0.20	3.20	3.26	1.09	2.89	−0.12	3.40	1.11	3.00	−0.09
−0.10	3.60	3.64	1.22	2.84	−0.13	3.74	1.21	2.94	−0.10
−0.05	3.80	3.83	1.29	2.83	−0.13	3.92	1.25	2.93	−0.10
0.00	4.00	4.04	1.36	2.82	−0.14	4.09	1.31	2.88	−0.10
0.05	4.20	4.22	1.40	2.81	−0.14	4.29	1.36	2.89	−0.11
0.10	4.40	4.40	1.44	2.81	−0.14	4.48	1.40	2.88	−0.11
0.20	4.80	4.80	1.54	2.81	−0.15	4.85	1.50	2.87	−0.11

The final conclusions of the paper are not affected.

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