Author Correction: Origin of large plasticity and multiscale effects in iron-based metallic glasses

Baran Sarac [1], Yurii P. Ivanov [1,2], Andrey Chuvilin [3,4], Thomas Schöberl[1], Mihai Stoica[5,6], Zaoli Zhang[1] & Jürgen Eckert[1,7]

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The authors became aware of a mistake in the original version of this Article. Specifically, where discussing the Curie temperature of the amorphous phase, T_c, in the 'Thermal characterization' section of the Results and in Fig. 2, the authors should have been discussing the Curie temperature of the magnetic crystalline phases T'_c.

As a result of this, the following changes have been made to the originally published version of this Article:

The third sentence of the 'Thermal characterization' section of the Results originally incorrectly read 'Enthalpy of crystallization and melting are measured as $\Delta H_x = -108.4$ J/g and $\Delta H_m = 83.7$ J/g, respectively (Fig. 2b).'. The correct version states 'The Curie temperature of the amorphous phase T_c is measured as 605 K, while the enthalpy of crystallization and melting are measured as $\Delta H_x = -108.4$ J/g (Fig. 2a) and $\Delta H_m = 83.7$ J/g (Fig. 2b), respectively.'

The last sentence of the same paragraph originally incorrectly read 'A clear curie temperature T_c is also observed at 945 K (Fig. 2c).'. The correct version states 'A clear Curie temperature of the magnetic crystalline phases T'_c is also observed at 945 K (Fig. 2c)'.

The original version of Fig. 2a initially omitted the label '$T_c = 605$ K' and the corresponding arrow. In Fig. 2c, the label '$T°_c = 945$ K' initially incorrectly read '$T_c = 945$ K'.

The second sentence of the legend of Fig. 2 originally incorrectly read 'The glass transition T_g, crystallization temperature T_x, and heat of crystallization ΔH_x are provided in (**a**).' The correct version states 'The glass transition T_g, crystallization temperature T_x, Curie temperature T_c, and heat of crystallization ΔH_x are provided in (**a**)'.

The fourth sentence of the legend of Fig. 2 originally incorrectly read 'In (**c**), Curie temperature T_c of the BMG is shown.' The correct version states 'In (**c**), Curie temperature T'_c of the magnetic crystalline phases formed during the quenching and/or heating step is shown'.

In addition to this, there were errors in some of the equations in the main text, and the glass composition:

The original version of this Article contained an error in the third sentence of the third paragraph of the Introduction, which incorrectly read 'Besides, it has been reported that a newly developed 1 mm diameter $Fe_{50}Ni_{50}P_{13}C_7$ BMG possesses extensive plasticity (up to 22% plasticity) together with a fracture toughness of $K_C \approx 50$ MPa m$^{-1/2}$ with a yield strength of $\sigma_y = 2250$ MPa[5], where the yield strength and plastic strain with 2 mm diameter samples are 2800 MPa (measured from the deviation point of linearity) and 3% [29].'. The correct version states '$Fe_{50}Ni_{30}P_{13}C_7$' in place of '$Fe_{50}Ni_{50}P_{13}C_7$'.

[1] Erich Schmid Institute of Materials Science, Austrian Academy of Sciences, 8700 Leoben, Austria. [2] School of Natural Sciences, Far Eastern Federal University, Vladivostok 690950, Russia. [3] CIC nanoGUNE Consolider, 20018 San Sebastian, Spain. [4] IKERBASQUE, Basque Foundation for Science, 48013 Bilbao, Spain. [5] Laboratory of Metal Physics and Technology, Department of Materials, ETH Zurich, 8093 Zurich, Switzerland. [6] Politehnica University of Timisoara, 300006 Timisoara, Romania. [7] Department of Materials Physics, Montanuniversität Leoben, 8700 Leoben, Austria. Correspondence and requests for materials should be addressed to B.S.(email: baran.sarac@oeaw.ac.at)

The second sentence of the 'Thermal characterization' section of the Results originally incorrectly read 'The extent of the supercooled liquid region (Fig. 2a), $\Delta T = T_g - T_x$, is 24 K confirming the previous findings[5,34].'. The correct version states '$\Delta T = T_x - T_g$' instead of '$\Delta T = T_g - T_x$'.

The second sentence of the first paragraph of the Discussion originally incorrectly read 'The enthalpy of mixing of Fe−Ni, ΔH_{Fe-C}^{mix}, is very small (−2 kJ/mol) as compared to $\Delta H_{Fe-Ni}^{mix} = -39.5$ kJ/mol and $\Delta H_{Fe-C}^{mix} = -50$ kJ/mol[46], rendering a low atomic bond force between Fe and Ni atoms.'. The correct version states 'ΔH_{Fe-Ni}^{mix}, is very small' instead of 'ΔH_{Fe-C}^{mix}, is very small' and '$\Delta H_{Ni-C}^{mix} = -39.5$ kJ/mol' rather than '$\Delta H_{Fe-Ni}^{mix} = -39.5$ kJ/mol'. The final corrected sentence therefore reads 'The enthalpy of mixing of Fe−Ni, ΔH_{Fe-Ni}^{mix}, is very small (−2 kJ/mol) as compared to $\Delta H_{Ni-C}^{mix} = -39.5$ kJ/mol and $\Delta H_{Fe-C}^{mix} = -50$ kJ/mol[46], rendering a low atomic bond force between Fe and Ni atoms.'

The seventh sentence of the same paragraph originally incorrectly read 'Recent observations for the same composition have postulated that the thermal parameters such as the width of the supercooled liquid region $\Delta T_x (= T_x - T_g)$, the reduced glass transition temperature $T_{rg} (= (T_g)/(T_x))$ and the γ parameter $(= (T_x)/(T_g + T_l))$ defining the glass-forming ability (GFA) of the BMG decrease for more than 5 at.% Ni addition[34].' The correct version states '$T_{rg} (= (T_g)/(T_l))$' instead of '$T_{rg} (= (T_g)/(T_x))$'.

The 12th sentence of the same paragraph originally incorrectly read 'This finding also highlight the fact that the critical casting thickness is only size-dependent and independent of the glassy alloy composition used.' The correct version states 'critical casting rate' instead of 'critical casting thickness'.

The 14th sentence of the same paragraph originally incorrectly read 'However, the critical casting thickness for these Fe-based alloy systems can be estimated to be between 10,000 and 20,000 K/s (according to ref. [50]), which means the nanocrystallization might occur upon quenching of the glassy melt.' The correct version states 'critical casting rate' instead of 'critical casting thickness'.

This has been corrected in both the PDF and HTML versions of the Article. While the Curie temperature of the glass is lower than previously reported, this error does not affect the original discussion or conclusions of the Article. The authors apologize for the confusion caused by this mistake.

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