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Corrigendum: Crystallization characteristics and chemical bonding properties of nickel carbide thin film nanocomposites (J. Phys.: Condens. Matter 26 415501)

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The titled paper contains a preliminary figure 3 for curvefitting of Ni-C and C-C peaks, with corresponding two errors in the text and table 1, respectively.

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The correct figure 3 is the following:

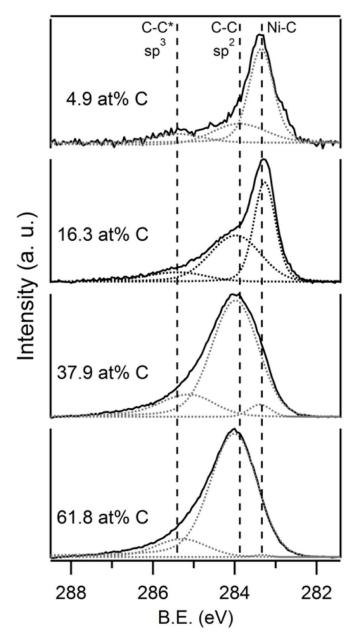


Figure 3. C 1s XPS spectra of the Ni_{1-x}C_x films with carbon content ranging from 5 at.% to 62 at.%. The main peaks are due to sp^2 -hybridized free carbon (\sim 283.9 eV) and C–Ni bonds (\sim 283.3 eV). In addition, a contribution from sp^3 -hybridized C–C* is present (\sim 285.3 eV). The shifts of the C–C and C–Ni peaks with changing x indicate different bonding environments and charge-transfer.

The sentence on page 5 of the original published paper 'The analysis shows that the carbon content of the carbide phase strongly increases with the total carbon content from 15.7 at% (0.16 at% total), 36 at% (0.38 at% total) to 60 at% (0.62 at% total).' should read:

The analysis shows that the carbon content of the NiC_y phase is low and decrease with the total carbon content from \sim 6.99 at% (16 at% total), \sim 1.44 at% (38 at% total) to \sim 0.31 at% (62 at% total).

The correct table 1 and caption for carbon contents are the following:

Table 1. Composition of the Ni–C films for x = 0.05, 0.16, 0.38, and 0.62. The amount of carbon in the carbide phase and the sp^2 fractions were determined by integrating the areas under the corresponding peak structures in C 1s XPS spectra. The sp^2 fractions in Raman were estimated from [27].

Total composition	Ni _{0.95} C _{0.05}	Ni _{0.84} C _{0.16}	Ni _{0.62} C _{0.38}	Ni _{0.38} C _{0.62}	a-C
at% C in NiCy phase	3.36	6.99	1.44	0.31	0
XPS sp^2 fraction	0.64	0.80	0.81	0.86	
Raman sp^2 fraction	_	0.77	0.79	0.89	0.71
C 1s SXA: $\pi^*/[\pi^* + \sigma^*]$	0.42	0.53	0.60	0.56	0.72