

Anisotropic diffraction peak broadening and dislocation substructure in hydrogen-cycled LaNi_5 and substitutional derivatives. Erratum

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An erroneous equation and some consequently underestimated values of dislocation densities in the paper by Černý *et al.* [*J. Appl. Cryst.* (2000), **33**, 997–1005] are corrected.

In the paper by Černý *et al.* (2000), equation (4) on page 998 was erroneously interpreted and used in the calculations. The correct equation is

$$A = [1 - \ln(\ln P)/(4 \ln P)]^{-1}.$$

The only consequence of this error is that some values of the dislocation densities as given in Table 2 and Fig. 3 of that paper are slightly underestimated. Correct values of the dislocation densities

addenda and errata

Table 1
Corrected dislocation densities.

Compound	ρ (10^{11} cm^{-2})
LaNi_5	3.8 (4)
$\text{LaNi}_{4.25}\text{Co}_{0.75}$	3.9 (3)
LaNi_3Co_2	0.52 (4)
$\text{LaNi}_{4.6}\text{Mn}_{0.4}$	2.7 (3), $P = 3$
LaNi_4Mn	3.8 (3), $P = 3$
$\text{LaNi}_{4.9}\text{Al}_{0.1}$	1.6 (1)
$\text{LaNi}_{4.7}\text{Al}_{0.3}$	0.29 (5), $P = 3$
$\text{LaNi}_{3.85}\text{Co}_{0.75}\text{Mn}_{0.4}$	0.62 (9), $P = 3$
$\text{LaNi}_{3.95}\text{Co}_{0.75}\text{Al}_{0.3}$	0.045 (7), $P = 3$
$\text{LaNi}_{4.3}\text{Mn}_{0.4}\text{Al}_{0.3}$	1.1 (1), $P = 3$
$\text{LaNi}_{3.94}\text{Co}_{0.36}\text{Mn}_{0.4}\text{Al}_{0.3}$	1.7 (3), $P = 3$
$\text{LaNi}_{3.55}\text{Co}_{0.75}\text{Mn}_{0.4}\text{Al}_{0.3}$	0.17 (1), $P = 3$
LaNi_4Fe	1.7 (1)
LaNi_4Cu	0.35 (4), $P = 3$
$\text{LaNi}_{4.5}\text{Sn}_{0.5}$	0.06 (1), $P = 3$
$\text{La}_{0.5}\text{Ce}_{0.5}\text{Ni}_5$	5.1 (6)
$\text{LaNi}_{5.2}$	3.0 (1)

for all studied compounds are given in Table 1 herein. The value for LaNi_5 is, however, still lower by one order of magnitude than the value determined for the same compound by Wu *et al.* (1998).

References

- Černý, R., Joubert, J.-M., Latroche, M., Percheron-Guégan, A. & Yvon, K. (2000). *J. Appl. Cryst.* **33**, 997–1005.
Wu, E., Kisi, E. H. & Gray, E. MacA. (1998). *J. Appl. Cryst.* **31**, 363–368.