Erratum

U. Stuhr et al., Hydrogen diffusion in f.c.c. TiH_x , J. Less-Common Met., 172–174 (1991) 678–684.

page 679, eqn. 2 should appear as:

$$\Gamma(\boldsymbol{Q}, \omega) = \frac{6D(c \to 0)}{a^2} (1 - c) f(c) \left(1 - \frac{1}{3} \sum_{i=1}^{3} \cos(\boldsymbol{Q} \cdot \boldsymbol{a}_i) \right)$$

page 680, line 14: the ratio should appear as:

 $\Gamma(Q/D(c))$

page 681, the relation should appear as:

$$D(c) = D_0 \exp(-E/k_BT)$$

page 682, Figures 3 and 4 should appear as follows (the correct figure captions appear below the figures):

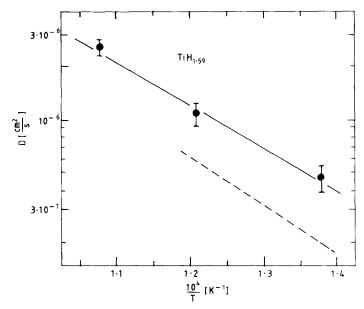


Fig. 3. Self-diffusion coefficient D(c) measured from the TiH_{1.59} sample in a semilogarithmic plot vs. reciprocal temperature T. The solid line shows an Arrhenius relation $D(c) = D_0 \exp(-Ek_{\rm B}T)$ with $E = (0.49 \pm 0.08)$ eV and $D_0 = (1.3^{+2.9}_{-0.9})$ 10^{-3} cm² s⁻¹. The broken line describes NMR (pulsed field gradient) results for D(c) of a TiH_{1.55} sample [13, 14].

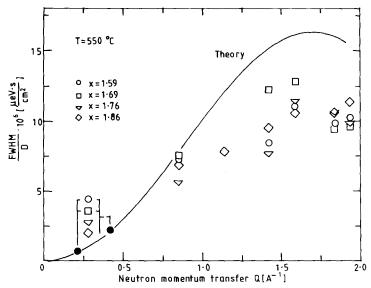


Fig. 4. The ratio $2\hbar\Gamma(Q)/D(c)$ between linewidth $2\hbar\Gamma(Q)$ and self-diffusion coefficient D(c) in a plot $vs.\ Q$. The data points result from measurements carried out at 550 °C on four TiH_x samples (1.59 \leq $x \leq$ 1.86). The experimental accuracy of the data points ranges from 20 to 35% (except for the two lowest Q values where it is extremely small; see the text). The quoted accuracies follow as the sum of the errors for D(c) (10–20%) and $\Gamma(Q)$ (10–15%). The solid line shows the ratio $2\hbar\Gamma(Q/D(c))$ as theoretically given by (5).