

公開文献2010Zhaには下記の説明がある。

The tracer diffusivity D_B is related to the atomic mobility M_B for an element B,
 $^{mg}\Gamma$ is a factor taking into account the ferromagnetic contribution to the diffusion coefficient.

$$D_B = RTM_B$$

$$M_B = \exp\left(\frac{RT\ln M_B^0}{RT}\right) \exp\left(-\frac{Q_B}{RT}\right) \frac{1}{RT} ^{mg}\Gamma$$

$$^{mg}\Gamma = \exp(6\alpha\xi) \exp\left(\frac{\alpha\xi Q_B}{RT}\right)$$

このように「磁気効果の係数」を考慮すると、わかりやすい。

2010Zha

Atomic mobilities and diffusivities in the fcc, $L1_2$ and B2 phases of the Ni-Al system.
L.Zhang, Y.Du, Q.Chen, I.Steinbach, B.Huang,
International Journal of Materials Research, 101 (2010), 1461-1475.

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