



**Fig. 12.26** The volume fraction of porosity in 1-D Al-7%Si-0.37%Mg castings as a function of the local cooling rate for two initial hydrogen concentrations: 0.13 (open symbols) and 0.26 (filled symbols) cc<sub>STP</sub>/100 g. The circles and squares correspond to two sets of experimental data. The continuous and dashed curves were calculated with and without consideration of the limited hydrogen diffusion, respectively.  $D_{\ell H} = 3.8 \times 10^{-6} \exp(-2315/T) \text{ m}^2\text{s}^{-1}$ . (After Carlson et al. [2].) Copyright 2016 EPFL Press. This figure has been reproduced from *Solidification*, by J.A. Dantzig and M. Rappaz, for instructional purposes. For other uses, please contact the authors and the EPFL Press for written permission.