
ERRATA

Erratum: Short-time scaling behavior of growing interfaces
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The transformation Eq. (1.10) of this paper, first established in Ref. [1], was generally believed to constitute an invariance transformation for the continuum model of ideal molecular-beam epitaxy (MBE) [2] given by Eq. (1.9) (see also Ref. [3] and references therein). In a recent Letter [4], however, it has been shown that this transformation is mathematically ill-defined and does *not* lead to the quoted invariance of Eq. (1.9). Therefore, several equations in the paper must be modified, but these modifications do not affect the short-time behavior of ideal MBE discussed in the paper.

The scaling relation $\alpha + z = 4$ [1] quoted in the text between Eq. (1.10) and Eq. (1.11) is entirely based on Eq. (1.10) and therefore does not hold. As a consequence, the exponents α and z do *not* obey Eq. (1.11). However, as demonstrated in Ref. [4], Eq. (1.11) still yields a very good approximation for α and z as functions of the spatial dimension d . As a further consequence, Eq. (3.3), which is an extension of Eq. (1.10) in Fourier representation, also does not constitute an invariance of Eq. (1.9) and should be disregarded. Moreover, one has $\lambda_1^R = Z_{\lambda_1} \lambda_1 \neq \lambda_1$ contrary to the statement made in the text between Eq. (3.3) and Eq. (3.4) and in Ref. [1]. Therefore, Eq. (3.6) has to be replaced by

$$Z_{v_1} = 1 + \frac{d-6}{d} \frac{u}{\varepsilon} + O(u^2), \quad Z_D = 1,$$

$$Z_h = \tilde{Z}_h = 1, \quad Z_{g_1} = Z_{\lambda_1}^2 Z_{v_1}^{-3},$$

and accordingly Eq. (3.7) has to be written in the form

$$\zeta_{v_1}(u) = \frac{d-6}{d} u + O(u^2), \quad \zeta_{\lambda_1}(u) = O(u^2),$$

$$\beta(u) = [d - 4 + 2\zeta_{\lambda_1}(u) - 3\zeta_{v_1}(u)]u.$$

The response functions given by Eqs. (C5) and (C14) are only correct to one-loop order. Due to scaling arguments, the leading finite-time correction in Eq. (C5) is given by the scaling argument $\mathbf{q}^2(t-t')^{2/z+1}/t$ rather than $\mathbf{q}^2(t-t')^2/t^{d/2}$ as quoted in the text following Eq. (C5) and in Sec. V. Likewise, the finite-time correction in Eq. (C14) is governed by the scaling argument $\mathbf{q}^4(t-t')^{4/z+1}/t$ rather than $\mathbf{q}^4(t-t')^2/t^{d/4}$ as quoted in the text following Eq. (C14) and Sec. V. Finally, the relation $(\partial/\partial t')C^R(\mathbf{0}, t, t'=0) = 2D^R$ quoted in the text following Eq. (C9) does not hold, so that Eq. (C9) gives a quite realistic (rather than only a rough) idea of the true scaling form of C^R for $\mathbf{q} = \mathbf{0}$.

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