

Erratum to: Dry jet-wet spinning of strong cellulose filaments from ionic liquid solution

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For the spinning system, the manufacturer’s software reported an incorrect extrusion flow rate v_e (ml min^{-1}). The correct values for v_e may be obtained by multiplying the reported v_e with $1/0.6$. As D_R is determined from v_e , it is also affected: To obtain correct D_R , multiply the reported D_R with 0.6. The figures are modified as follows:

v_e reported	v_e	D_R reported	D_R
0.01	0.017	1	0.6
0.02	0.033	2	1.2
0.03	0.050	3	1.8
0.04	0.067	4	2.4
0.045	0.075	5	3.0
0.05	0.083	6	3.6
		7	4.2
		7.5	4.5
		8	4.8

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v_e reported	v_e	D_R reported	D_R
		9	5.4
		10	6.0
		11	6.6
		12	7.2
		12.5	7.5
		13	7.8

Thus, the maximum D_R is 7.5 at $0.033 \text{ ml min}^{-1}$ rather than 12.5 at 0.02 ml min^{-1} . Conclusions remain otherwise intact.

In section “Linear density (titer)” in Eq. 2, referring to Fig. 2, the constant factor is $13.88 \pm 0.14 \text{ dtex}$ and the factor $s = 1.236 \pm 0.013$, instead of $22.4 \pm 0.4 \text{ dtex}$ and 1.994 ± 0.004 . Referring to Fig. 3 with both variable v_e and D_R , the constant factor is $13.9 \pm 0.01 \text{ dtex}$ and $s = 1.238 \pm 0.001$ instead of $23.1 \pm 0.02 \text{ dtex}$ and 2.063 ± 0.02 . This result implies less shrinking of the fiber volume than reported.

In section “Tenacity and modulus,” for the relation between tenacity and draw ratio, the equation $\sigma = \sigma_{\max}(1 - a/D_R)$ has the factor $a = 0.31 \pm 0.02$ instead of 0.51 ± 0.04 .

In section “Orientation,” the draw ratio dependency of orientation is $\Delta n = (0.044 \pm 0.001) - (0.0080 \pm 0.0023)/D_R$ instead of $\Delta n = (0.044 \pm$

$0.001)-(0.0048 \pm 0.0014)/D_R$. Orientation increases up to D_R 3; however, the claim that orientation increases up to D_R 5 remains consistent with the data within statistical significance. The deformation remains consistent with the Kratky II limiting case due to the gradual nonlinear nature of the change of orientation and there is no need to modify this conclusion.

In section “Effects of the aspect ratio of the spinneret and guide-to-godet stress,” the new $s = 1.17 \pm 0.05$ instead of 1.95 ± 0.08 . The conclusions remain intact.

The correct D_{RS} in Table 1 are:

D_R reported	D_R
1	0.6
3	1.8
7.5	4.5

In section “**Conclusions**,” the claim that Kong and Eichhorn claim a dependency on $D_R^{-0.5}$ is incorrect: They claim a dependency $d_s^{-0.5}$ on the fiber diameter d_s , which is equivalent to our claim of D_R^{-1} .