Soft Matter



CORRECTION

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Correction: Controllable biomolecule release from self-assembled organic nanotubes with asymmetric surfaces: pH and temperature dependence

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Correction for 'Controllable biomolecule release from self-assembled organic nanotubes with asymmetric surfaces: pH and temperature dependence' by Naohiro Kameta et al., Soft Matter, 2008, 4, 1681-1687, https://doi.org/10.1039/B803742F

The authors posted wrong scale bars in the TEM image of Fig. 1 and the scanning TEM image of Fig. S1 (ESI†) by erroneous calculation of the scales.

The scale bars in the left and right TEM images of Fig. 1 were approximately 0.74 times shorter and 1.26 times longer than the actual ones, respectively. The inner diameter, the thickness and the length of the organic nanotube estimated from the corrected scale bars are confirmed to be within the size ranges of those of the organic nanotube as described in this article (Results and discussion, the first line): "The asymmetric bolaamphiphile, N-{11-[(β-p-glucopyranosyl)carbamoyl]undecanyl}glycylglycine amide 1, self-assembles into an organic nanotube with 7-9 nm inner diameters, 3-4 nm thickness and several tens of micrometers in length (Fig. 1, see Experimental section)." A new figure with corrected scale bars is presented herein:

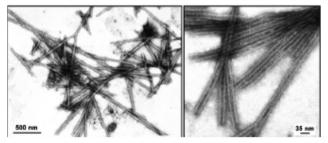


Fig. 1 (Bottom) TEM image of the organic nanotubes negatively stained with phosphotungstate. The hollow cylinder nanospace of the organic nanotubes can be visualized as it is relatively darker compared to its surrounding

The scale bar in the scanning TEM image of Fig. S1 (ESI) was approximately 2.46 times larger than the actual one. Upon the correction of the scale bar, the sentence on page 1685 "Scanning transmission electron microscopic observation revealed the formation of liposomes with 80-210 nm diameters (ESI†)." should be corrected to "Scanning transmission electron microscopic observation revealed the formation of liposomes with 190-520 nm diameters (ESI†)." Although the results for the diameter sizes of the liposomes encapsulating guest molecules, which were a well-known system and were used in the control experiments for comparing with the organic nanotube encapsulating the guest molecules, will change, this will not affect the main statement of

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this paper that the release of the guest molecules from the organic nanotubes is controllable by pH/temperature and differs significantly from the liposome system.

In addition, reference 18 in the original work has now been retracted, so the sentence on page 1682 "In our previous study on thermal phase transition behavior of asymmetric bolaamphiphiles, we have also demonstrated that the hydrogen bonding between the amide groups in the bolaamphiphiles still remain even in a fluid mesophase." should be removed.

The authors strongly insist that the correction never influences the discussion and conclusion in this article.

The Royal Society of Chemistry apologises for these errors and any consequent inconvenience to authors and readers.

References

1 N. Kameta, M. Masuda, H. Minamikawa and T. Shimizu, Langmuir, 2024, DOI: 10.1021/acs.langmuir.4c04133.