Nematic Ordering Pattern Formation in the Process of Self-Organization of Microtubules in a Gravitational Field

Hu Jian · Qiu Xijun · Li Ruxin

Published online: 9 September 2007
© Springer Science + Business Media B.V. 2007

**Erratum to: J Biol Phys (2006) 32: 497–506
DOI 10.1007/s10867-006-9032-x**

The authors of this paper wish to retract the article as they have carelessly (although unintentionally) copied parts of the following papers:

S. Portet, J.A. Tuszynski, J.M. Dixon and M.V. Sataric, Models of spatial and orientational self-organization of microtubules under the influence of gravitational fields, *Physical Review E* 68, 021903-1-9 (2003)

J.A. Tuszynski, M.V. Sataric, S. Portet and J.M. Dixon, Gravitational symmetry breaking leads to a polar liquid crystal phase of microtubules in vitro, *Journal of Biological Physics* 31(3–4), pp. 477–486 (2005)

V.A. Baulin, Self-assembled aggregates in the gravitational field: growth and nematic order, *Journal of Chemical Physics* 119(5), pp. 2874–2885 (2003)

V.A. Baulin and A. R. Khokhlov, Nematic ordering of rigid rods in a gravitational field, *Physical Review E* 60(3), pp. 2973–2977 (1999)

J.A. Tuszynski, M.V. Sataric, S. Portet and J.M. Dixon, Physical interpretation of microtubule self-organization in gravitational fields, *Physics Letters A* 340, pp. 175–180 (2005)

The authors deeply regret the publication of the article and are hereby withdrawing it.

The online version of the original article can be found at <http://dx.doi.org/10.1007/s10867-006-9032-x>

H. Jian (✉) · Q. Xijun
Department of Physics, Shanghai University, Shanghai 200444, China
e-mail: shhujian2005@yahoo.com.cn

L. Ruxin
Shanghai Institute of Optics and Fine Mechanics, Chinese Academy of Science,
Shanghai 201800, China