

# Correction: Drops and fibers - how biomolecular condensates and cytoskeletal filaments influence each other

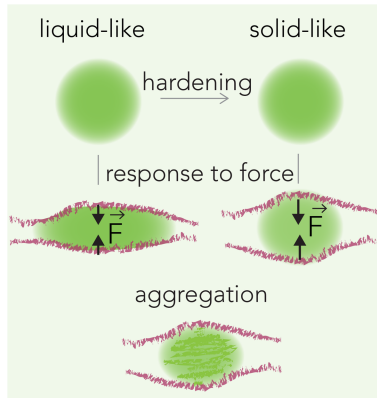


The authors of the original article “Drops and fibers – how biomolecular condensates and cytoskeletal filaments influence each other” (*Emerg Top Life Sci* (2020), DOI: 10.1042/ETLS20190174) would like to correct [Figure 2](#). In the original [Figure 2\(d\)](#) of their article, they had inadvertently assigned “prewetting” to the wrong area in the phase diagram. In this correction article, the figure has been revised, and the shadings of the pictograms have been adjusted, since the bulk concentrations implied can vary in the referred areas.

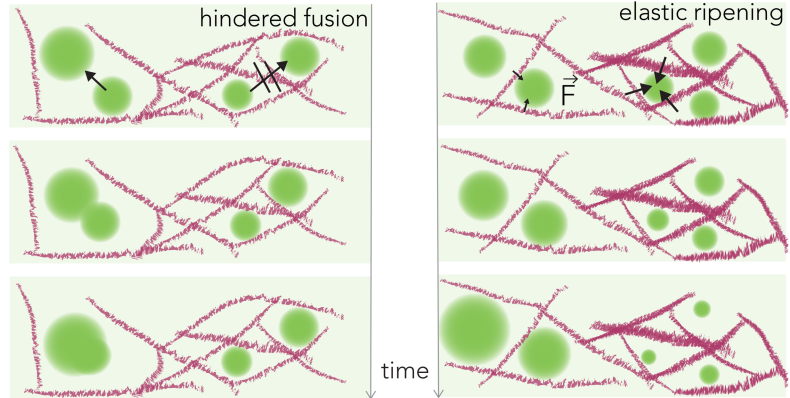
The authors apologise for any inconvenience that this error has caused to the readers of the original article.

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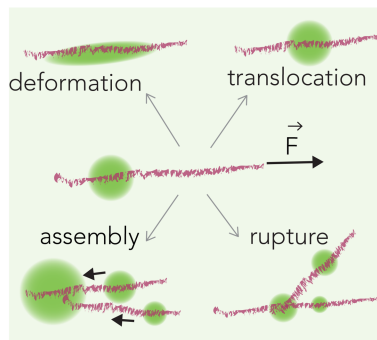
(a) Material properties



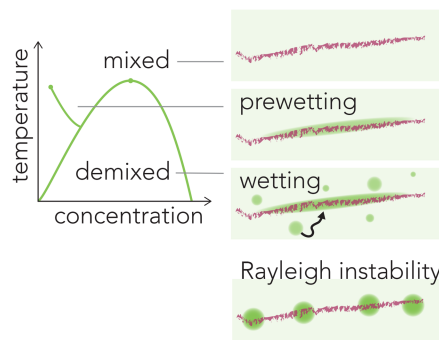
(b) Network embedding



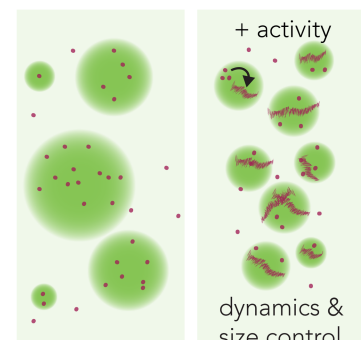
(c) Filament forces



(d) Wetting



(e) Active condensates



**Figure 2. Biophysical interactions of condensates and cytoskeletal filaments.**

(a) The material properties of condensates influence their physical interactions with cytoskeletal filaments. While liquid-like condensates can be easily deformed and dragged by filaments [34,71,72], more solid-like condensates withstand higher forces ( $F \rightarrow$ ) [73]. Such forces exerted by the cytoskeleton could further lead to internal rearrangements and promote the aggregation of proteins [74]. (b) A dense cytoskeletal network can restrict the movement of embedded condensates and thereby hindering their fusion [27,75]. Furthermore, the growth of condensates can be controlled via elastic ripening, which is the growth of condensates in a soft environment on the expense of condensates in stiff networks [76–78]. (c) Directed polymerization and contraction of filaments can deform [71], drag [79,80], assemble [81,82] or disrupt interacting condensates [72] and thereby control their spatiotemporal dynamics. (d) Wetting phenomena can arise when proteins condense at a filament, which can occur below the saturation concentration of bulk phase separation (prewetting) or above (wetting) [14,15,83–85]. Surface tension can further drive pearling of a viscous fluid bound to a filament as described by the Rayleigh–Plateau instability. The resulting droplets, e.g. bound to microtubules [86], appear like water dewdrops on a spider web. (e) Polymerization of actin and microtubule filaments is a chemical reaction consuming ATP/GTP. This drives the system out of equilibrium, which could impact the dynamic assembly and disassembly of condensates, e.g. limiting their size [87–89]. See original article for the reference list.