Emulsion templated vesicles with symmetric or asymmetric membranes

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Emulsion Templated Vesicles with Symmetric or Asymmetric Membranes

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Abstract

Emulsion droplets with well-controlled topologies are used as templates for forming vesicles with either symmetric or asymmetric membranes. This review summarizes the available technology to produce these templates, the strategies and critical parameters involved in the transformation of emulsion droplets into vesicles, and the properties of the generated vesicles, with a special focus on the composition and material distribution of the vesicle membrane. Here, we also address limitations in the field and point to future fundamental and applied research in the area.

Keywords

Vesicles; emulsion drops; microfluidics; asymmetric membranes; liposomes; polymersomes