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Title:	Colloid-in-liquid crystal gels formed via spinodal decomposition
Authors:	Pal, S.K. (/jspui/browse?type=author&value=Pal%2C+S.K.)
Keywords:	Colloid-in-liquid crystal Spinodal decomposition Isotropic phase
Issue Date:	2014
Publisher:	The Royal Society of Chemistry
Citation:	Soft Matter, 10(10), pp.1602-1610 .
Abstract:	We report that colloid-in-liquid crystal (CLC) gels can be formed via a two-step process that involves spinodal decomposition of a dispersion of colloidal particles in an isotropic phase of mesogens followed by nucleation of nematic domains within the colloidal network defined by the spinodal process. This pathway contrasts to previously reported routes leading to the formation of CLC gels, which have involved entanglement of defects or exclusion of particles from growing nematic domains. The new route provides the basis of simple design rules that enable control of the microstructure and dynamic mechanical properties of the gels.
Description:	Only IISERM authors are available in the record.
URI:	<a href="https://pubs.rsc.org/en/content/articlelanding/2014/SM/c3sm51877a#!divAbstract">https://pubs.rsc.org/en/content/articlelanding/2014/SM/c3sm51877a#!divAbstract</a> ( <a href="https://pubs.rsc.org/en/content/articlelanding/2014/SM/c3sm51877a#!divAbstract">https://pubs.rsc.org/en/content/articlelanding/2014/SM/c3sm51877a#!divAbstract</a> ) <a href="http://hdl.handle.net/123456789/2990">http://hdl.handle.net/123456789/2990</a> ( <a href="http://hdl.handle.net/123456789/2990">http://hdl.handle.net/123456789/2990</a> )
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