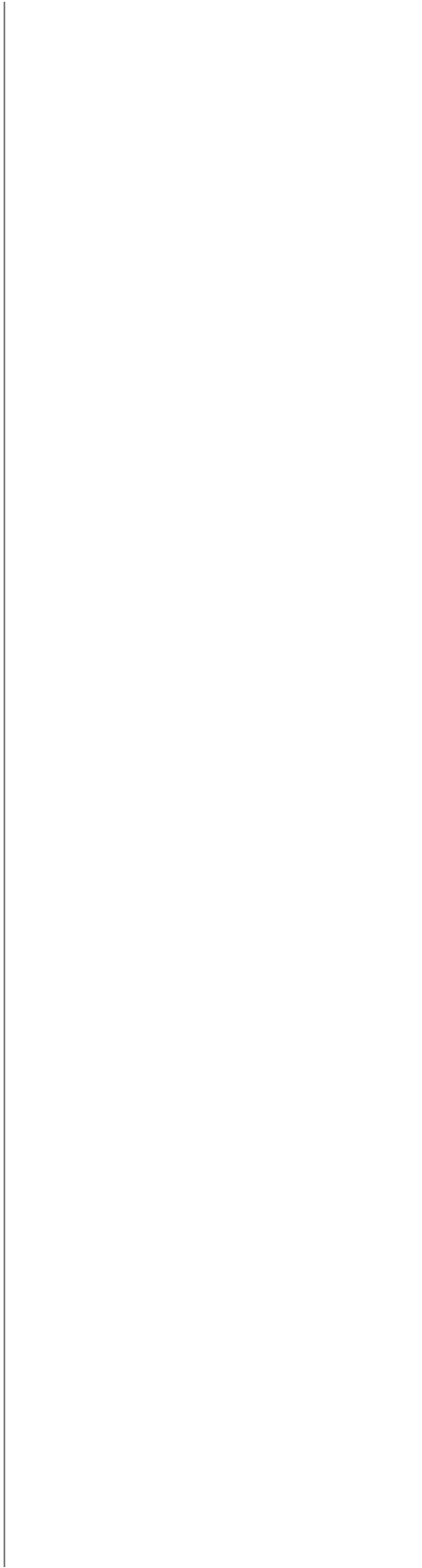
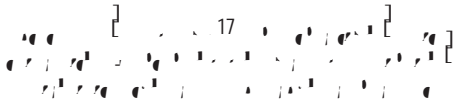


17





Triclinic nematic colloidal crystals from competing elastic and electrostatic interactions

Haridas Mundoor, Bohdan Senyuk and Ivan I. Smalyukh

Science **352** (6281), 69-73.

DOI: 10.1126/science.aaf0801

Competing forces drive ordering

The power and beauty of liquid crystals come from their tendency to order loosely over long length scales. This ordering can be tweaked using external fields, or via tailored boundary conditions, or embedded objects. Mundoor *et al.* deposited luminescent nanorods into a liquid crystal solvent (see the Perspective by Blanc). This caused a competition between local electrostatic interactions and the elastic ordering of the liquid crystal. The nanorods ordered into a triclinic structure not otherwise attainable. The authors further adjusted the structure using external fields.

Science, this issue p. 69; see also p. 40

ARTICLE TOOLS

<http://science.sciencemag.org/content/352/6281/69>

SUPPLEMENTARY MATERIALS

<http://science.sciencemag.org/content/suppl/2016/03/30/352.6281.69.DC1>

RELATED CONTENT

<http://science.sciencemag.org/content/sci/352/6281/40.full>

REFERENCES

This article cites 33 articles, 7 of which you can access for free
<http://science.sciencemag.org/content/352/6281/69#BIBL>

PERMISSIONS

<http://www.sciencemag.org/help/reprints-and-permissions>

Use of this article is subject to the [Terms of Service](#)

Science (print ISSN 0036-8075; online ISSN 1095-9203) is published by the American Association for the Advancement of Science, 1200 New York Avenue NW, Washington, DC 20005. The title *Science* is a registered trademark of AAAS.

Copyright © 2016, American Association for the Advancement of Science