

Reading list for Supercompatibility and the Design of Materials

1. Xiangxin Dang, Fan Feng, Paul Plucinsky, Richard D. James, Huiling Duan, and Jianxiang Wang. Inverse design of surfaces by deployable origami. *arXiv preprint arXiv:2008.02349* (2020).
2. Octavio Albarrán, Desislava V. Todorova, Eleni Katifori, and Lucas Goehring. Curvature controlled pattern formation in floating shells. *arXiv preprint arXiv:1806.03718* (2018).
3. Ian Tobasco. Curvature-driven wrinkling of thin elastic shells. *arXiv preprint arXiv:1906.02153* (2019), to appear in the Archive for Rational Mechanics and Analysis.
4. Robert V. Kohn. Energy-driven pattern formation. *Proceedings of the International Congress of Mathematicians*, 1:359–383, 2006.
5. Richard D. James, Materials from mathematics. *Bulletin (New Series) of the American Mathematical Society* 56, no. 1 (2019).
6. Proposition 4 of J. M. Ball and R. D. James. Fine phase mixtures as minimizers of energy. *Archive for Rational Mechanics and Analysis* 100, no. 1 (1987): 13-52.
7. Christoph Chluba, Wenwei Ge, Rodrigo Lima de Miranda, Julian Strobel, Lorenz Kienle, Eckhard Quandt, and Manfred Wuttig. Ultralow-fatigue shape memory alloy films. *Science* 348, no. 6238 (2015): 1004-1007. See also p. 968.
8. Robert V. Kohn and Stefan Müller. Branching of twins near an austenite-twinned-martensite interface. *Philosophical Magazine A* 66, no. 5 (1992): 697-715.
9. Yintao Song, Xian Chen, Vivekanand Dabade, Thomas W. Shield, and Richard D. James. Enhanced reversibility and unusual microstructure of a phase transforming material. *Nature* 502, no. 7469 (2013): 85-88.
10. Stefan Müller. Variational models for microstructure and phase transitions. In *Calculus of variations and geometric evolution problems*, pp. 85-210. Springer, Berlin, Heidelberg, 1999.
11. J. M. Ball, Defects in Crystals and Liquid Crystals, <https://people.maths.ox.ac.uk/ball/Teaching/parisox.pdf>
12. Xian Chen, Vijay Srivastava, Vivekanand Dabade, and Richard D. James. Study of the cofactor conditions: conditions of supercompatibility between phases. *Journal of the Mechanics and Physics of Solids* 61, no. 12 (2013): 2566-2587.
13. Robert V. Kohn, [Non-uniform \(Zig-Zag\) Microstructures Mixing Two Variants of Martensite](https://www.math.nyu.edu/faculty/kohn/recent-plenaries.html), <https://www.math.nyu.edu/faculty/kohn/recent-plenaries.html>
14. Richard James, Supercompatibility and the direct conversion of heat to electricity, <https://www.newton.ac.uk/event/dnmw05/timetable>
15. Robert V. Kohn, [A Variational Perspective on Wrinkling due to Geometric Incompatibility](https://www.math.nyu.edu/faculty/kohn/papers/uconn-sept2019.pdf) <https://www.math.nyu.edu/faculty/kohn/papers/uconn-sept2019.pdf>