Review articles
A comparative analysis of synthetic genetic oscillators
O. Purcell, N. J. Savery, C. S. Grierson & M. di Bernardo

Research articles
Cellular automata and integrodifferential equation models for cell renewal in mosaic tissues
J. M. Bloomingdale, J. A. Sherratt, K. J. Painter & C. Landini

Estimation of measles vaccine efficacy and critical vaccination coverage in a highly vaccinated population
M. van Boven, M. Kreidichmar, J. Wallinga, P. D. O’Neill, O. Wichmann & S. Hahné

Coordination of multiple appendages in drag-based swimming
S. Alben, K. Spears, S. Garth, D. Murphy & J. Yen

Health in financial crises: economic recession and tuberculosis in Central and Eastern Europe
N. Arinaminpathy & C. Dye

Slippery pores: anti-adhesive effect of nanoporous substrates on the beetle attachment system
E. V. Gorb, N. Hosoda, C. Milisch & S. N. Gorb

Buckling of sheared and compressed microfibrils
N. Nadermann, A. Kumar, S. Goyal & C.-Y. Hui

Unsteady motion: escape jumps in planktonic copepods, their kinematics and energetics
T. Kienow, A. Andersen, V. J. Langlois & H. H. Jacobsen

Differential effects of magnetic pulses on the orientation of naturally migrating birds
R. A. Holland

Spatial dynamics of bar-headed goose migration in the context of H5N1

Reports
A novel route for processing cobalt–chromium–molybdenum orthopaedic alloys
B. Patel, F. Inam, M. Reece, M. Edirisinghe, W. Bonfield, J. Huang & A. Angadji