Review. Random walk models in biology
E. A. Codling, M. J. Plank & S. Benhamou

Sliding-induced adhesion of stiff polymer microfibre arrays. I. Macroscale behaviour
J. Lee, C. Majidi, B. Schubert & R. S. Fearing

Sliding-induced adhesion of stiff polymer microfibre arrays. II. Microscale behaviour
B. Schubert, J. Lee, C. Majidi & R. S. Fearing

Selective activation of mechanosensitive ion channels using magnetic particles
S. Hughes, S. McBain, J. Dobson & A. J. El Haj

Boltzmann, Lotka and Volterra and spatial structural evolution: an integrated methodology for some dynamical systems
A. Wilson

Design principles for phase-splitting behaviour of coupled cellular oscillators: clues from hamsters with 'split' circadian rhythms
F. Indic, W. J. Schwartz & D. Paydarfar

Likelihood-based estimation of continuous-time epidemic models from time-series data: application to measles transmission in London
S. Cauchemez & N. M. Ferguson

Correlating cell morphology and osteoid mineralization relative to strain profile for bone tissue engineering applications

Site-specific gene transfer with high efficiency onto a carbon nanotube-loaded electrode
Y. Inoue, H. Fujimoto, T. Ogino & H. Iwata

To delay once or twice: the effect of hypobiosis and free-living stages on the stability of host-parasite interactions
S. Gaba & S. Gourbière

Effects of chondrogenic and osteogenic regulatory factors on composite constructs grown using human mesenchymal stem cells, silk scaffolds and bioreactors

Hard prey, soft jaws and the ontogeny of feeding mechanics in the spotted ratfish Hydrolagus colliei
D. R. Huber, M. N. Dean & A. P. Summers

Report. How much of protein sequence space has been explored by life on Earth?