Review articles
Suspension biomechanics of swimming microbes 815
T. Ishikawa

Research articles
Effect of the initial dose of foot-and-mouth disease virus on the early viral dynamics within pigs 835
R. Howey, M. Quan, N. J. Sanik, L. Mathiowetz, S. Alexandersen & M. Woolhouse

Modelling the effectiveness and risks of vaccination strategies to control classical swine fever epidemics 849
J. A. Bäcker, T. J. Hagemann, H. J. W. van Roermund & M. C. M. de Jong

Maturation of high-density lipoproteins 863
A. Y. Steh, S. G. Sigur & K. Schulten

Hydroxyapatite coating of cellulose sponges attracts bone-marrow-derived stem cells in rat subcutaneous tissue 873
M. Tornola, A. Jokilammi, P. Pihlho, T. Wilson, R. Penttinen & E. Ekholm

Polar Mimes: a computational tool for integrated visualization of protein interaction networks and mRNA expression data 881
J. P. Gonçalves, M. Gräss & A. X. C. N. Valente

Sick and edgy: walk-counting as a metric of epidemic spreading on networks 897
D. C. Wylie & W. M. Getz

A finite dissipative theory of temporary interfibrillar bridges in the extracellular matrix of ligaments and tendons 909
P. Carletta & M. Ben Amar

Stochastic dynamics and nonequilibrium thermodynamics of a bistable chemical system: the Schlögl model revisited 925
M. Vellela & H. Qian

Modelling control of epidemics spreading by long-range interactions 941
B. Dybiec, A. Kleczkowski & C. A. Gilligan

Reports
Hygromorphs: from pine cones to biomimetic bilayers 951
E. Reyes & L. Mahadevan