

Biophysical Journal

Best of 2023

Computational Tool

★Track: Inferred counting and tracking of replicating DNA loci

Robin Köhler, Ismath Sadhir, and Seán M. Murray

Articles

Cell size and actin architecture determine force generation in optogenetically activated cells

T. Andersen, D. Wörthmüller, D. Probst, I. Wang, P. Moreau, V. Fitzpatrick, T. Boudou, U.S. Schwarz, and M. Balland

mRNA lipid nanoparticle phase transition

Marius F. W. Trollmann and Rainer A. Böckmann

Mechanical memory stored through epigenetic remodeling reduces cell therapeutic potential

Adrienne K. Scott, Eduard Casas, Stephanie E. Schneider, Alison R. Swearingen, Courtney L. Van Den Elzen, Benjamin Seelbinder, Jeanne E. Barthold, Jennifer F. Kugel, Josh Lewis Stern, Kyla J. Foster, Nancy C. Emery, Justin Brumbaugh, and Corey P. Neu

Integrin $\alpha_{\text{IIb}}\beta_3$ intermediates: From molecular dynamics to adhesion assembly

Dudu Tong, Nidhi Soley, Reza Kolasangiani, Martin A. Schwartz, and Tamara C. Bidone

Inner pore hydration free energy controls the activation of big potassium channels

Erik B. Nordquist, Zhiguang Jia, and Jianhan Chen

Influence of the extracellular domain size on the dynamic behavior of membrane proteins

Cenk Onur Gurdap, Linda Wedemann, Taras Sych, and Erdinc Sezgin

Vast heterogeneity in cytoplasmic diffusion rates revealed by nanorheology and Doppelgänger simulations

Rikki M. Garner, Arthur T. Molines, Julie A. Theriot, and Fred Chang