Alexander B Verkhovsky

List of Publications by Year
in descending order

27 papers	2,936 citations	394421 19 h-index	526287 27 g-index
28 all docs	28 docs citations	28 times ranked	2543 citing authors

#	Article	IF	Citations
1	Analysis of the Actinâ€“Myosin II System in Fish Epidermal Keratocytes: Mechanism of Cell Body Translocation. Journal of Cell Biology, 1997, 139, 397-415.	5.2	640
2	Self-polarization and directional motility of cytoplasm. Current Biology, 1999, 9, 11-S1.	3.9	470
3	Comparative Dynamics of Retrograde Actin Flow and Focal Adhesions: Formation of Nascent Adhesions Triggers Transition from Fast to Slow Flow. PLoS ONE, 2008, 3, e3234.	2.5	223
4	Force transmission in migrating cells. Journal of Cell Biology, 2010, 188, 287-297.	5.2	207
5	Assembly and mechanosensory function of focal adhesions: experiments and models. European Journal of Cell Biology, 2006, 85, 165-173.	3.6	202
6	Actin-Myosin Viscoelastic Flow in the Keratocyte Lamellipod. Biophysical Journal, 2009, 97, 1853-1863.	0.5	164
7	Gradient of Rigidity in the Lamellipodia of Migrating Cells Revealed by Atomic Force Microscopy. Biophysical Journal, 2005, 89, 667-675.	0.5	158
8	Improved Procedures for Electron Microscopic Visualization of the Cytoskeleton of Cultured Cells. Journal of Structural Biology, 1995, 115, 290-303.	2.8	137
9	Tracking Retrograde Flow in Keratocytes: News from the Front. Molecular Biology of the Cell, 2005, 16, 1223-1231.	2.1	132
10	Orientational Order of the Lamellipodial Actin Network as Demonstrated in Living Motile Cells. Molecular Biology of the Cell, 2003, 14, 4667-4675.	2.1	91
11	Comparative Maps of Motion and Assembly of Filamentous Actin and Myosin II in Migrating Cells. Molecular Biology of the Cell, 2007, 18, 3723-3732.	2.1	89
12	Role of Focal Adhesions and Mechanical Stresses in the Formation and Progression of the Lamellum Interface. Biophysical Journal, 2009, 97, 1254-1264.	0.5	69
13	Weak Force Stalls Protrusion at the Leading Edge of the Lamellipodium. Biophysical Journal, 2006, 90, 1810-1820.	0.5	57
14	Analysis of actin filament network organization in lamellipodia by comparing experimental and simulated images. Journal of Cell Science, 2007, 120, 1491-1500.	2.0	46
15	Direct visualization of bipolar myosin filaments in stress fibers of cultured fibroblasts. Cytoskeleton, 1989, 12, 150-156.	4.4	42
16	Dynamic measurement of the height and volume of migrating cells by a novel fluorescence microscopy technique. Lab on A Chip, 2011, 11, 3855.	6.0	42
17	Cell Shape Dynamics Reveal Balance of Elasticity and Contractility in Peripheral Arcs. Biophysical Journal, 2015, 108, 2437-2447.	0.5	40
18	Contact Angle at the Leading Edge Controls Cell Protrusion Rate. Current Biology, 2014, 24, 1126-1132.	3.9	33

#	Article	IF	Citations
19	Minimal model for spontaneous cell polarization and edge activity in oscillating, rotating and migrating cells. Nature Physics, 2016, 12, 367-373.	16.7	30
20	The mechanisms of spatial and temporal patterning of cell-edge dynamics. Current Opinion in Cell Biology, 2015, 36, 113-121.	5.4	19
21	Microsurgery-aided in-situ force probing reveals extensibility and viscoelastic properties of individual stress fibers. Scientific Reports, 2016, 6, 23722.	3.3	15
22	Traction Forces Control Cell-Edge Dynamics and Mediate Distance Sensitivity during Cell Polarization. Current Biology, 2020, 30, 1762-1769.e5.	3.9	11
23	Ultra-soft cantilevers and 3-D micro-patterned substrates for contractile bundle tension measurement in living cells. Lab on A Chip, 2014, 14, 2539-2547.	6.0	9
24	Cell Polarization: Mechanical Switch for a Chemical Reaction. Current Biology, 2012, 22, R58-R61.	3.9	5
25	Ultra-High Resolution Cryo-SEM and Specimen Preparation for Cytoskeleton.. Acta Histochemica Et Cytochemica, 1994, 27, 507-509.	1.6	2
26	Cellâ€"Matrix Adhesion: Slip and Immobilization under Force. Current Biology, 2010, 20, R669-R671.	3.9	2
27	Three-Dimensional Forces for Two-Dimensional Motion. Biophysical Journal, 2015, 108, 781-782.	0.5	1