Alexander B Verkhovsky

List of Publications by Year in descending order

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27 papers 2,936 citations

394421 19 h-index 27 g-index

28 all docs 28 docs citations

28 times ranked

2543 citing authors

#	Article	IF	CITATIONS
1	Traction Forces Control Cell-Edge Dynamics and Mediate Distance Sensitivity during Cell Polarization. Current Biology, 2020, 30, 1762-1769.e5.	3.9	11
2	Microsurgery-aided in-situ force probing reveals extensibility and viscoelastic properties of individual stress fibers. Scientific Reports, 2016, 6, 23722.	3.3	15
3	Minimal model for spontaneous cell polarization and edge activity in oscillating, rotating and migrating cells. Nature Physics, 2016, 12, 367-373.	16.7	30
4	Cell Shape Dynamics Reveal Balance of Elasticity and Contractility in Peripheral Arcs. Biophysical Journal, 2015, 108, 2437-2447.	0.5	40
5	Three-Dimensional Forces for Two-Dimensional Motion. Biophysical Journal, 2015, 108, 781-782.	0.5	1
6	The mechanisms of spatial and temporal patterning of cell-edge dynamics. Current Opinion in Cell Biology, 2015, 36, 113-121.	5.4	19
7	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
8	Contact Angle at the Leading Edge Controls Cell Protrusion Rate. Current Biology, 2014, 24, 1126-1132.	3.9	33
9	Cell Polarization: Mechanical Switch for a Chemical Reaction. Current Biology, 2012, 22, R58-R61.	3.9	5
10	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
11	Cell–Matrix Adhesion: Slip and Immobilization under Force. Current Biology, 2010, 20, R669-R671.	3.9	2
12	Force transmission in migrating cells. Journal of Cell Biology, 2010, 188, 287-297.	5.2	207
13	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
14	Actin-Myosin Viscoelastic Flow in the Keratocyte Lamellipod. Biophysical Journal, 2009, 97, 1853-1863.	0.5	164
15	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
16	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
17	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
18	Weak Force Stalls Protrusion at the Leading Edge of the Lamellipodium. Biophysical Journal, 2006, 90, 1810-1820.	0.5	57

#	Article	IF	CITATIONS
19	Assembly and mechanosensory function of focal adhesions: experiments and models. European Journal of Cell Biology, 2006, 85, 165-173.	3.6	202
20	Tracking Retrograde Flow in Keratocytes: News from the Front. Molecular Biology of the Cell, 2005, 16, 1223-1231.	2.1	132
21	Gradient of Rigidity in the Lamellipodia of Migrating Cells Revealed by Atomic Force Microscopy. Biophysical Journal, 2005, 89, 667-675.	0.5	158
22	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
23	Self-polarization and directional motility of cytoplasm. Current Biology, 1999, 9, 11-S1.	3.9	470
24	Analysis of the Actin–Myosin II System in Fish Epidermal Keratocytes: Mechanism of Cell Body Translocation. Journal of Cell Biology, 1997, 139, 397-415.	5.2	640
25	Improved Procedures for Electron Microscopic Visualization of the Cytoskeleton of Cultured Cells. Journal of Structural Biology, 1995, 115, 290-303.	2.8	137
26	Ultra-High Resolution Cryo-SEM and Specimen Preparation for Cytoskeleton Acta Histochemica Et Cytochemica, 1994, 27, 507-509.	1.6	2
27	Direct visualization of bipolar myosin filaments in stress fibers of cultured fibroblasts. Cytoskeleton, 1989, 12, 150-156.	4.4	42