Kheya Sengupta

List of Publications by Year
in descending order

59 papers	2,968 citations	257450 24 h-index	168389 53 g-index
64 all docs	64 docs citations	64 times ranked	3983 citing authors

#	Article	IF	Citations
1	Fibroblast Adaptation and Stiffness Matching to Soft Elastic Substrates. Biophysical Journal, 2007, 93, 4453-4461.	0.5	885
2	Quantitative Reflection Interference Contrast Microscopy (RICM) in Soft Matter and Cell Adhesion. ChemPhysChem, 2009, 10, 2752-2768.	2.1	220
3	Adaptive Amphiphilic Dendrimerâ€Based Nanoassemblies as Robust and Versatile siRNA Delivery Systems. Angewandte Chemie - International Edition, 2014, 53, 11822-11827.	13.8	181
4	Giant vesicles as cell models. Integrative Biology (United Kingdom), 2012, 4, 982.	1.3	160
5	Force-induced growth of adhesion domains is controlled by receptor mobility. Proceedings of the National Academy of Sciences of the United States of America, 2008, 105, 6906-6911.	7.1	124
6	Cell Blebbing and Membrane Area Homeostasis in Spreading andÂRetracting Cells. Biophysical Journal, 2010, 99, 1726-1733.	0.5	89
7	Membrane fluctuations mediate lateral interaction between cadherin bonds. Nature Physics, 2017, 13, 906-913.	16.7	84
8	Absolute interfacial distance measurements by dual-wavelength reflection interference contrast microscopy. Physical Review E, 2004, 69, 021901.	2.1	70
9	Spreading of Neutrophils: From Activation to Migration. Biophysical Journal, 2006, 91, 4638-4648.	0.5	62
10	Structure of the ripple phase of phospholipid multibilayers. Physical Review E, 2003, 68, 031710.	2.1	60
11	Dynamics of Specific Vesicle-Substrate Adhesion: From Local Events to Global Dynamics. Physical Review Letters, 2008, 101, 208103.	7.8	60
12	Diffusion and Intermembrane Distance: Case Study of Avidin and E-Cadherin Mediated Adhesion. Langmuir, 2009, 25, 1074-1085.	3.5	59
13	Biphasic mechanosensitivity of T cell receptor-mediated spreading of lymphocytes. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 5908-5913.	7.1	55
14	Topographical Pattern Dynamics in Passive Adhesion of Cell Membranes. Biophysical Journal, 2004, 87, 3547-3560.	0.5	53
15	Measuring mechanical properties of polyelectrolyte multilayer thin films: Novel methods based on AFM and optical techniques. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2007, 303, 30-36.	4.7	53
16	Adhesion of Soft Membranes Controlled by Tension and Interfacial Polymers. Physical Review Letters, 2010, 104, 088101.	7.8	47
17	Modulation of Vesicle Adhesion and Spreading Kinetics by Hyaluronan Cushions. Biophysical Journal, 2007, 93, 3300-3313.	0.5	45
18	Inter-membrane adhesion mediated by mobile linkers: Effect of receptor shortage. Soft Matter, 2011, 7, 952-962.	2.7	41

#	Article	IF	Citations
19	Mimicking Tissue Surfaces by Supported Membrane Coupled Ultrathin Layer of Hyaluronic Acidâ€. Langmuir, 2003, 19, 1775-1781.	3.5	39
20	Probing Biomembrane Dynamics by Dualâ€Wavelength Reflection Interference Contrast Microscopy. ChemPhysChem, 2009, 10, 2828-2838.	2.1	39
21	Microinterferometric Study of the Structure, Interfacial Potential, and Viscoelastic Properties of Polyelectrolyte Multilayer Films on a Planar Substrate. Journal of Physical Chemistry B, 2004, 108, 7196-7205.	2.6	38
22	Blebbing dynamics during endothelial cell spreading. European Journal of Cell Biology, 2011, 90, 37-48.	3.6	35
23	Ligand-Mediated Friction Determines Morphodynamics of Spreading TÂCells. Biophysical Journal, 2014, 107, 2629-2638.	0.5	34
24	Tuning the Formation and Rupture of Single Ligand-Receptor Bonds by Hyaluronan-Induced Repulsion. Biophysical Journal, 2008, 95, 3999-4012.	0.5	28
25	Inferring spatial organization of bonds within adhesion clusters by exploiting fluctuations of soft interfaces. Europhysics Letters, 2010, 89, 28003.	2.0	28
26	Novel structural features of the ripple phase of phospholipids. Europhysics Letters, 2000, 49, 722-728.	2.0	25
27	Switching from Ultraweak to Strong Adhesion. Advanced Materials, 2011, 23, 2622-2626.	21.0	24
28	Largeâ€Scale Ordered Plastic Nanopillars for Quantitative Liveâ€Cell Imaging. Small, 2009, 5, 449-453.	10.0	23
29	Nanometric thermal fluctuations of weakly confined biomembranes measured with microsecond time-resolution. Soft Matter, 2016, 12, 4755-4768.	2.7	21
30	Mapping fluctuations in biomembranes adhered to micropatterns. Soft Matter, 2012, 8, 6128.	2.7	20
31	Association Rates of Membrane-Coupled Cell Adhesion Molecules. Biophysical Journal, 2014, 107, L33-L36.	0.5	19
32	Nanometric Protein-Patch Arrays on Glass and Polydimethylsiloxane for Cell Adhesion Studies. Nano Letters, 2013, 13, 3372-3378.	9.1	18
33	Size-Tunable Organic Nanodot Arrays: A Versatile Platform for Manipulating and Imaging Cells. Nano Letters, 2015, 15, 5178-5184.	9.1	17
34	Crowding of receptors induces ring-like adhesions in model membranes. Biochimica Et Biophysica Acta - Molecular Cell Research, 2015, 1853, 2984-2991.	4.1	16
35	Nano-clustering of ligands on surrogate antigen presenting cells modulates T cell membrane adhesion and organization. Integrative Biology (United Kingdom), 2016, 8, 287-301.	1.3	16
36	Role of Tilt Order in the Asymmetric Ripple Phase of Phospholipid Bilayers. Physical Review Letters, 2001, 87, 055705.	7.8	15

#	Article	IF	Citations
37	Structure of the ripple phase in chiral and racemic dimyristoylphosphatidylcholine multibilayers. Physical Review E, 1999, 59, 2455-2457.	2.1	14
38	Lamellipod Reconstruction by Three-Dimensional Reflection Interference Contrast Nanoscopy (3D-RICN). Nano Letters, 2018, 18, 6544-6550.	9.1	14
39	Coupling Artificial Actin Cortices to Biofunctionalized Lipid Monolayers. Langmuir, 2006, 22, 5776-5785.	3.5	13
40	T Cells on Engineered Substrates: The Impact of TCR Clustering Is Enhanced by LFA-1 Engagement. Frontiers in Immunology, 2018, 9, 2085.	4.8	13
41	Depth matters: cells grown on nano-porous anodic alumina respond to pore depth. Nanotechnology, 2012, 23, 255101.	2.6	12
42	Frequency-Dependent Shape Changes of Colloidal Clusters under Transverse Electric Field. Langmuir, 2005, 21, 11623-11627.	3.5	11
43	Large scale ordered topographical and chemical nano-features from anodic alumina templates. Applied Surface Science, 2009, 256, 395-398.	6.1	10
44	Photoactivatable Phospholipids Bearing Tetrafluorophenylazido Chromophores Exhibit Unprecedented Protonation-State-Dependent ¹⁹F NMR Signals. Organic Letters, 2011, 13, 4248-4251.	4.6	10
45	Signature of a Nonharmonic Potential as Revealed from a Consistent Shape and Fluctuation Analysis of an Adherent Membrane. Physical Review X, 2014, 4, .	8.9	10
46	A bola-phospholipid bearing tetrafluorophenylazido chromophore as a promising lipid probe for biomembrane photolabeling studies. Organic and Biomolecular Chemistry, 2013, 11, 5000.	2.8	9
47	Ligand Nanocluster Array Enables Artificial-Intelligence-Based Detection of Hidden Features in T-Cell Architecture. Nano Letters, 2021, 21, 5606-5613.	9.1	9
48	Integrin-Functionalised Giant Unilamellar Vesicles via Gel-Assisted Formation: Good Practices and Pitfalls. International Journal of Molecular Sciences, 2021, 22, 6335.	4.1	9
49	Printing Functional Protein Nanodots on Soft Elastomers: From Transfer Mechanism to Cell Mechanosensing. Nano Letters, 2017, 17, 4284-4290.	9.1	8
50	Adhesion of Biological Membranes. , 2018, , 499-535.		8
51	Novel anodic aluminum oxideâ€based nanofabrication: applications in physics and biology. Surface and Interface Analysis, 2010, 42, 1556-1560.	1.8	5
52	Ligand Nano-cluster Arrays in a Supported Lipid Bilayer. Journal of Visualized Experiments, 2017, , .	0.3	3
53	On the control of dispersion interactions between biological membranes and protein coated biointerfaces. Journal of Colloid and Interface Science, 2021, 598, 464-473.	9.4	3
54	Biomechanics as driver of aggregation of tethers in adherent membranes. Soft Matter, 2021, 17, 10101-10107.	2.7	1

#	Article	IF	Citations
55	Fascinating shapes and structures due to entropic forces. Resonance, 1999, 4, 68-72.	0.3	0
56	Selective functionalization of substrates through assembled nanostructures: From physics to biology. Applied Surface Science, 2009, 256, 414-418.	6.1	0
57	Dynamic Optical Displacement Spectroscopy to Quantify Biomembrane Bending Fluctuations. Biophysical Journal, 2016, 110, 487a.	0.5	0
58	Membrane Mediated Cooperativity Facilitates Cadherin Clustering in Model Membranes. Biophysical Journal, 2016, 110, 190a.	0.5	0
59	Physics of Organelle Membrane Bridging via Cytosolic Tethers is Distinct From Cell Adhesion. Frontiers in Physics, 2022, 9, .	2.1	0