Pierre FranÃ§ois LennÃ©

List of Publications by Year
in descending order

78 papers	7,593 citations	126907 33 h-index	85541 71 g-index
91 all docs	91 docs citations	91 times ranked	6991 citing authors

#	Article	IF	Citations
1	Sculpting tissues by phase transitions. Nature Communications, 2022, 13, 664.	12.8	37
2	Cell-state transitions and collective cell movement generate an endoderm-like region in gastruloids. ELife, 2022, 11, .	6.0	32
3	Cell Junction Mechanics beyond the Bounds of Adhesion and Tension. Developmental Cell, 2021, 56, 202-212.	7.0	33
4	Roadmap for the multiscale coupling of biochemical and mechanical signals during development. Physical Biology, 2021, 18, 041501.	1.8	29
5	Sculpting with stem cells: how models of embryo development take shape. Development (Cambridge), 2021, 148, .	2.5	28
6	Wnt ligands regulate the asymmetric divisions of neuronal progenitors in C. elegans embryos. Development (Cambridge), 2020, 147, .	2.5	12
7	Genetic induction and mechanochemical propagation of a morphogenetic wave. Nature, 2019, 572, 467-473.	27.8	124
8	Experimental validation of force inference in epithelia from cell to tissue scale. Scientific Reports, 2019, 9, 14647.	3.3	28
9	The elmo-mbc complex and rhogap19d couple Rho family GTPases during mesenchymal-to-epithelial-like transitions. Development (Cambridge), 2018, , .	2.5	9
10	Distinct contributions of tensile and shear stress on E-cadherin levels during morphogenesis. Nature Communications, 2018, 9, 5021.	12.8	100
11	Probing Cell Mechanics with Bead-Free Optical Tweezers in the Drosophila Embryo. Journal of Visualized Experiments, 2018, , .	0.3	3
12	Tissue â€˜meltingâ€™ sculpts embryo. Nature, 2018, 561, 315-316.	27.8	6
13	Polarization-resolved microscopy reveals a muscle myosin motor-independent mechanism of molecular actin ordering during sarcomere maturation. PLoS Biology, 2018, 16, e2004718.	5.6	42
14	Viscoelastic Dissipation Stabilizes Cell Shape Changes during Tissue Morphogenesis. Current Biology, 2017, 27, 3132-3142.e4.	3.9	120
15	Patterned cortical tension mediated by N-cadherin controls cell geometric order in the Drosophila eye. ELife, 2017, 6, .	6.0	46
16	Boron Difluoride Curcuminoid Fluorophores with Enhanced Twoâ€Photon Excited Fluorescence Emission and Versatile Livingâ€Cell Imaging Properties. Chemistry - A European Journal, 2016, 22, 5219-5232.	3.3	77
17	Laser Ablation to Probe the Epithelial Mechanics in Drosophila. Methods in Molecular Biology, 2016, 1478, 241-251.	0.9	15
18	Measuring forces and stressesin situin living tissues. Development (Cambridge), 2016, 143, 186-196.	2.5	163

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19	Borondifluoride complexes of hemicurcuminoids as bio-inspired pushâ€“pull dyes for bioimaging. Organic and Biomolecular Chemistry, 2016, 14, 1311-1324.	2.8	40
20	Molecular clustering in the cell: from weak interactions to optimized functional architectures. Current Opinion in Cell Biology, 2016, 38, 18-23.	5.4	18
21	Calcium Spikes in Epithelium: study on Drosophila early embryos. Scientific Reports, 2015, 5, 11379.	3.3	16
22	Superresolution measurements in vivo: Imaging Drosophila embryo by photoactivated localization microscopy. Methods in Cell Biology, 2015, 125, 119-142.	1.1	4
23	Direct laser manipulation reveals the mechanics of cell contacts in vivo. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 1416-1421.	7.1	199
24	Local and tissue-scale forces drive oriented junction growth during tissue extension. Nature Cell Biology, 2015, 17, 1247-1258.	10.3	249
25	Membrane microdomains: from seeing to understanding. Frontiers in Plant Science, 2014, 5, 18.	3.6	31
26	Clustering of low-valence particles: Structure and kinetics. Physical Review E, 2014, 90, 022301.	2.1	6
27	Setting Up a Simple Light Sheet Microscope for In Toto Imaging of C. elegans Development. Journal of Visualized Experiments, 2014, , .	0.3	13
28	Principles of E-Cadherin Supramolecular Organization InÂVivo. Current Biology, 2013, 23, 2197-2207.	3.9	165
29	Bond Flexibility and Low Valence Promote Finite Clusters of Self-Aggregating Particles. Physical Review Letters, 2012, 109, 078101.	7.8	12
30	Calcium signaling in developing embryos: Focus on the regulation of cell shape changes and collective movements. Seminars in Cell and Developmental Biology, 2012, 23, 298-307.	5.0	33
31	FCS Diffusion Laws in Two-Phase Lipid Membranes: Determination ofÂDomain Mean Size by Experiments and Monte Carlo Simulations. Biophysical Journal, 2011, 100, 1242-1251.	0.5	40
32	Cortical Forces in Cell Shape Changes and Tissue Morphogenesis. Current Topics in Developmental Biology, 2011, 95, 93-144.	2.2	80
33	Force Generation, Transmission, and Integration during Cell and Tissue Morphogenesis. Annual Review of Cell and Developmental Biology, 2011, 27, 157-184.	9.4	483
34	Planar polarized actomyosin contractile flows control epithelial junction remodelling. Nature, 2010, 468, 1110-1114.	27.8	577
35	Probing the mechanical properties of Drosophila embryo ephitelial cells in vivo by laser nanodissection. , 2009, , .		0
36	Probing cell-surface dynamics and mechanics at different scales. Histochemistry and Cell Biology, 2009, 132, 247-252.	1.7	2

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37	Physics puzzles on membrane domains posed by cell biology. Soft Matter, 2009, 5, 2841.	2.7	45
38	Biophotonics applications of nanometric apertures. International Journal of Materials and Product Technology, 2009, 34, 488.	0.2	5
39	Fluorescence fluctuations analysis in nanoapertures: physical concepts and biological applications. Histochemistry and Cell Biology, 2008, 130, 795-805.	1.7	17
40	A two-tiered mechanism for stabilization and immobilization of E-cadherin. Nature, 2008, 453, 751-756.	27.8	365
41	Nature and anisotropy of cortical forces orienting Drosophila tissue morphogenesis. Nature Cell Biology, 2008, 10, 1401-1410.	10.3	535
42	Raft nanodomains contribute to Akt/PKB plasma membrane recruitment and activation. Nature Chemical Biology, 2008, 4, 538-547.	8.0	270
43	Polysialylation Increases Lateral Diffusion of Neural Cell Adhesion Molecule in the Cell Membrane. Journal of Biological Chemistry, 2007, 282, 26266-26274.	3.4	23
44	Single-scattering theory of light diffraction by a circular subwavelength aperture in a finitely conducting screen. Journal of the Optical Society of America A: Optics and Image Science, and Vision, 2007, 24, 339.	1.5	19
45	Diffusion Analysis within Single Nanometric Apertures Reveals the Ultrafine Cell Membrane Organization. Biophysical Journal, 2007, 92, 913-919.	0.5	154
46	Radiative and Nonradiative Photokinetics Alteration Inside a Single Metallic Nanometric Aperture. Journal of Physical Chemistry C, 2007, 111, 11469-11474.	3.1	23
47	Cell surface mechanics and the control of cell shape, tissue patterns and morphogenesis. Nature Reviews Molecular Cell Biology, 2007, 8, 633-644.	37.0	1,054
48	Coherent anti-Stokes Raman scattering microscopy (CARS): Instrumentation and applications. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2007, 571, 177-181.	1.6	27
49	Field enhancement in single subwavelength apertures. Journal of the Optical Society of America A: Optics and Image Science, and Vision, 2006, 23, 2342.	1.5	49
50	Dual-color fluorescence cross-correlation spectroscopy in a single nanoaperture : towards rapid multicomponent screening at high concentrations. Optics Express, 2006, 14, 12206.	3.4	47
51	Confined diffusion in tubular structures analyzed by fluorescence correlation spectroscopy on a mirror. Applied Optics, 2006, 45, 4497.	2.1	9
52	Refractive effects in coherent anti-Stokes Raman scattering microscopy. Applied Optics, 2006, 45, 7005.	2.1	32
53	Dynamics in the plasma membrane: how to combine fluidity and order. EMBO Journal, 2006, 25, 3446-3457.	7.8	259
54	Dynamic molecular confinement in the plasma membrane by microdomains and the cytoskeleton meshwork. EMBO Journal, 2006, 25, 3245-3256.	7.8	443

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55	Raman scattering and fluorescence emission in a single nanoaperture: Optimizing the local intensity enhancement. Optics Communications, 2006, 267, 224-228.	2.1	24
56	Single-Fluorophore Diffusion in a Lipid Membrane over a Subwavelength Aperture. Journal of Biological Physics, 2006, 32, SN1-SN4.	1.5	37
57	Enhanced Raman Scattering in a 10 Attoliter Nanohole. , 2006, , .		0
58	Observation of the interferences between the emitted beams in a 4Pi microscope by partial coherence interferometry. Applied Physics Letters, 2005, 87, 181103.	3.3	0
59	Enhancement of Single-Molecule Fluorescence Detection in Subwavelength Apertures. Physical Review Letters, 2005, 95, 117401.	7.8	211
60	Surface plasmon excitation on a single subwavelength hole in a metallic sheet. Applied Optics, 2005, 44, 2332.	2.1	80
61	Single molecule fluorescence in rectangular nano-apertures. Optics Express, 2005, 13, 7035.	3.4	68
62	Fluorescence Correlation Spectroscopy Diffusion Laws to Probe the Submicron Cell Membrane Organization. Biophysical Journal, 2005, 89, 4029-4042.	0.5	407
63	Vibrational imaging by coherent anti-stokes Raman scattering (CARS) microscopy. , 2004, 5463, 133.		4
64	Reducing and shaping the fluorescence detection volume for single bio-molecules analysis: the assets of nanophotonic structures. , 2004, , .		0
65	Axial localization of luminophores by partial coherence interferometry. , 2004, , .		1
66	Fluorescence correlation spectroscopy to determine diffusion laws: application to live cell membranes. , 2004, , .		19
67	Subwavelength patterns and high detection efficiency in fluorescence correlation spectroscopy using photonic structures. Applied Physics Letters, 2002, 80, 4106-4108.	3.3	26
68	Two-Dimensional Crystallization of a Histidine-Tagged Protein on Monolayers of Fluidity-Enhanced Ni2+-Chelating Lipids. Langmuir, 2002, 18, 9502-9512.	3.5	27
69	Pathways and Intermediates in Forced Unfolding of Spectrin Repeats. Structure, 2002, 10, 1085-1096.	3.3	75
70	Flow Profiles and Directionality in Microcapillaries Measured by Fluorescence Correlation Spectroscopy. Single Molecules, 2002, 3, 194-200.	0.9	32
71	Multiple sensor stabilization system for local probe microscopes. Review of Scientific Instruments, 2001, 72, 142-149.	1.3	18
72	Synchrotron Radiation Diffraction from Two-Dimensional Protein Crystals at the Air/Water Interface. Biophysical Journal, 2000, 79, 496-500.	0.5	35

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73	States and transitions during forced unfolding of a single spectrin repeat. FEBS Letters, 2000, 476, 124-128.	2.8	107
74	Growth of Two-Dimensional Solids in Alcohol Monolayers in the Presence of Soluble Amphiphilic Molecules. Langmuir, 2000, 16, 2306-2310.	3.5	5
75	Surface-Induced Polymerization of Actin. Biophysical Journal, 1999, 76, 1580-1590.	0.5	43
76	X-ray grazing incidence diffraction on monolayers at the surface of water. Current Opinion in Colloid and Interface Science, 1998, 3, 321-326.	7.4	19
77	Characterization of the Growth of 2D Protein Crystals on a Lipid Monolayer by Ellipsometry and Rigidity Measurements Coupled to Electron Microscopy. Biophysical Journal, 1998, 74, 2649-2657.	0.5	76
78	Growth morphologies during 2D solidification of Langmuir monolayers limited by both surface and bulk diffusion. Europhysics Letters, 1997, 38, 301-306.	2.0	3