

Micropatterned mammalian cells exhibit phenotype-sp

Proceedings of the National Academy of Sciences of the United States of America  
108, 12295-12300

DOI: [10.1073/pnas.1103834108](https://doi.org/10.1073/pnas.1103834108)

Citation Report

#	ARTICLE	IF	CITATIONS
1	Examining the establishment of cellular axes using intrinsic chirality. Proceedings of the National Academy of Sciences of the United States of America, 2011, 108, 12191-12192.	3.3	4
2	Micropatterning chiral morphogenesis. Communicative and Integrative Biology, 2011, 4, 745-748.	0.6	20
3	Configurable 2D and 3D spheroid tissue cultures on bioengineered surfaces with acquisition of epithelialâ€“mesenchymal transition characteristics. NPG Asia Materials, 2012, 4, e27-e27.	3.8	41
4	Early, nonciliary role for microtubule proteins in leftâ€“right patterning is conserved across kingdoms. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, 12586-12591.	3.3	64
5	Neurally Derived Tissues in <i>Xenopus laevis</i> Embryos Exhibit a Consistent Bioelectrical Left-Right Asymmetry. Stem Cells International, 2012, 2012, 1-16.	1.2	24
6	Left-right patterning: conserved and divergent mechanisms. Development (Cambridge), 2012, 139, 3257-3262.	1.2	118
7	Directed cytoskeleton self-organization. Trends in Cell Biology, 2012, 22, 671-682.	3.6	111
8	Interdigitated array of Pt electrodes for electrical stimulation and engineering of aligned muscle tissue. Lab on A Chip, 2012, 12, 3491.	3.1	96
9	Mechanical waves during tissue expansion. Nature Physics, 2012, 8, 628-634.	6.5	418
10	Possible Origins of Macroscopic Left-Right Asymmetry in Organisms. Journal of Statistical Physics, 2012, 148, 741-775.	0.5	21
11	Left-Right Symmetry Breaking in Tissue Morphogenesis via Cytoskeletal Mechanics. Circulation Research, 2012, 110, 551-559.	2.0	109
12	Switchable adhesive substrates: Revealing geometry dependence in collective cell behavior. Biomaterials, 2012, 33, 2409-2418.	5.7	128
13	Mimicking normal tissue architecture and perturbation in cancer with engineered micro-epidermis. Biomaterials, 2012, 33, 5221-5229.	5.7	44
14	Polarity proteins are required for leftâ€“right axis orientation and twinâ€“twin instruction. Genesis, 2012, 50, 219-234.	0.8	19
15	Inversion of leftâ€“right asymmetry alters performance of <i>Xenopus</i> tadpoles in nonlateralized cognitive tasks. Animal Behaviour, 2013, 86, 459-466.	0.8	18
16	Guidance of collective cell migration by substrate geometry. Integrative Biology (United Kingdom), 2013, 5, 1026.	0.6	241
17	A microchip electrophoresis-mass spectrometric platform for fast separation and identification of enantiomers employing the partial filling technique. Journal of Chromatography A, 2013, 1318, 251-256.	1.8	37
18	Cell Patterning with Mucin Biopolymers. Biomacromolecules, 2013, 14, 3010-3016.	2.6	33

#	ARTICLE	IF	CITATIONS
19	Collective Cell Migration: A Mechanistic Perspective. <i>Physiology</i> , 2013, 28, 370-379.	1.6	114
20	Rab GTPases are required for early orientation of the left-right axis in <i>Xenopus</i> . <i>Mechanisms of Development</i> , 2013, 130, 254-271.	1.7	11
21	Cell Organelle Positioning of Micropatterned Single C2C12 Mouse Myoblasts. , 2013, , .		0
22	Cell Elongation and Migration on Asymmetric Grooved Topography. , 2013, , .		0
23	Micropatterning of cells reveals chiral morphogenesis. <i>Stem Cell Research and Therapy</i> , 2013, 4, 24.	2.4	28
24	Reduced cell number in the hindgut epithelium disrupts hindgut left-right asymmetry in a mutant of pebble, encoding a RhoGEF, in <i>Drosophila</i> embryos. <i>Mechanisms of Development</i> , 2013, 130, 169-180.	1.7	18
25	When Stemness Meets Engineering: Towards "Niche" Control of Stem Cell Functions for Enhanced Cardiovascular Regeneration. , 2013, , 457-473.		0
26	A unified model for left-right asymmetry? Comparison and synthesis of molecular models of embryonic laterality. <i>Developmental Biology</i> , 2013, 379, 1-15.	0.9	141
27	A Nodal-independent and tissue-intrinsic mechanism controls heart-looping chirality. <i>Nature Communications</i> , 2013, 4, 2754.	5.8	102
28	It's never too early to get it Right. <i>Communicative and Integrative Biology</i> , 2013, 6, e27155.	0.6	30
29	Stem Cells and Ion Channels. <i>Stem Cells International</i> , 2013, 2013, 1-3.	1.2	9
30	Emergence of collective modes and tri-dimensional structures from epithelial confinement. <i>Nature Communications</i> , 2014, 5, 3747.	5.8	133
31	Magnetically Responsive Microflaps Reveal Cell Membrane Boundaries from Multiple Angles. <i>Advanced Materials</i> , 2014, 26, 2850-2856.	11.1	13
32	Characterization of cellular mechanical torque by rotation of ferromagnetic nanowire. , 2014, , .		0
33	Phospho-NHE3 forms membrane patches and interacts with beta-actin to sense and maintain constant direction during cell migration. <i>Experimental Cell Research</i> , 2014, 324, 13-29.	1.2	14
34	Hierarchically Ordered Nanopatterns for Spatial Control of Biomolecules. <i>ACS Nano</i> , 2014, 8, 11846-11853.	7.3	23
35	Polarity mechanisms such as contact inhibition of locomotion regulate persistent rotational motion of mammalian cells on micropatterns. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2014, 111, 14770-14775.	3.3	131
36	Diversity and convergence in the mechanisms establishing <sc>L</sc>/<sc>R</sc> asymmetry in metazoa. <i>EMBO Reports</i> , 2014, 15, 926-937.	2.0	56

#	ARTICLE	IF	CITATIONS
37	Carbon Nanotube-Induced Loss of Multicellular Chirality on Micropatterned Substrate Is Mediated by Oxidative Stress. <i>ACS Nano</i> , 2014, 8, 2196-2205.	7.3	56
38	Spatio-temporal dynamics of an active, polar, viscoelastic ring. <i>European Physical Journal E</i> , 2014, 37, 29.	0.7	13
39	Left-right asymmetry is formed in individual cells by intrinsic cell chirality. <i>Mechanisms of Development</i> , 2014, 133, 146-162.	1.7	35
40	Rotating pigment cells exhibit an intrinsic chirality. <i>Genes To Cells</i> , 2015, 20, 29-35.	0.5	46
41	Cell Chirality Induces Collective Cell Migration in Epithelial Sheets. <i>Physical Review Letters</i> , 2015, 115, 188102.	2.9	41
42	Astrocytes Increase ATP Exocytosis Mediated Calcium Signaling in Response to Microgroove Structures. <i>Scientific Reports</i> , 2015, 5, 7847.	1.6	45
43	Cytoskeletal Symmetry Breaking and Chirality: From Reconstituted Systems to Animal Development. <i>Symmetry</i> , 2015, 7, 2062-2107.	1.1	36
44	Micropatterning strategies to engineer controlled cell and tissue architecture in vitro. <i>BioTechniques</i> , 2015, 58, 13-23.	0.8	70
45	Cytoskeletal Chirality: Swirling Cells Tell Left from Right. <i>Current Biology</i> , 2015, 25, R501-R503.	1.8	18
46	Palaeontology: In a Flap About Flaps. <i>Current Biology</i> , 2015, 25, R503-R506.	1.8	3
47	Dissecting Collective Cell Behavior in Polarization and Alignment on Micropatterned Substrates. <i>Biophysical Journal</i> , 2015, 109, 489-500.	0.2	70
48	Emergence and Persistence of Collective Cell Migration on Small Circular Micropatterns. <i>Physical Review Letters</i> , 2015, 114, 228102.	2.9	101
49	Long-range gap junctional signaling controls oncogene-mediated tumorigenesis in <i>Xenopus laevis</i> embryos. <i>Frontiers in Physiology</i> , 2014, 5, 519.	1.3	63
50	Inhibition of cell-cell adhesion impairs directional epithelial migration on micropatterned surfaces. <i>Integrative Biology (United Kingdom)</i> , 2015, 7, 580-590.	0.6	39
51	Cellular chirality arising from the self-organization of the actin cytoskeleton. <i>Nature Cell Biology</i> , 2015, 17, 445-457.	4.6	350
52	Regulation of epithelial cell organization by tuning cell-substrate adhesion. <i>Integrative Biology (United Kingdom)</i> , 2015, 7, 1228-1241.	0.6	52
53	Current Perspectives in Cardiac Laterality. <i>Journal of Cardiovascular Development and Disease</i> , 2016, 3, 34.	0.8	15
54	Nanowire Magnetoscope Reveals a Cellular Torque with Left-Right Bias. <i>ACS Nano</i> , 2016, 10, 7409-7417.	7.3	29

#	ARTICLE	IF	CITATIONS
55	Substrate Stiffness Regulates the Development of Left-Right Asymmetry in Cell Orientation. ACS Applied Materials & Interfaces, 2016, 8, 17976-17986.	4.0	11
56	Facile Preparation of Photoactivatable Surfaces with Tuned Substrate Adhesiveness. Analytical Sciences, 2016, 32, 1183-1188.	0.8	9
57	Cell chirality: its origin and roles in left-right asymmetric development. Philosophical Transactions of the Royal Society B: Biological Sciences, 2016, 371, 20150403.	1.8	118
58	Introduction to provocative questions in left-right asymmetry. Philosophical Transactions of the Royal Society B: Biological Sciences, 2016, 371, 20150399.	1.8	21
59	Dynamic control of cell adhesion on a stiffness-tunable substrate for analyzing the mechanobiology of collective cell migration. Biomaterials Science, 2016, 4, 933-937.	2.6	31
60	Mechanics of Cell Mechanosensing on Patterned Substrate. Journal of Applied Mechanics, Transactions ASME, 2016, 83, .	1.1	18
61	Direct cellular organization with ring-shaped composite polymers and glass substrates for urethral sphincter tissue engineering. Journal of Materials Chemistry B, 2016, 4, 3998-4008.	2.9	5
62	From cytoskeletal dynamics to organ asymmetry: a nonlinear, regulative pathway underlies left-right patterning. Philosophical Transactions of the Royal Society B: Biological Sciences, 2016, 371, 20150409.	1.8	27
63	Multiscale View of Cytoskeletal Mechanoregulation of Cell and Tissue Polarity. Handbook of Experimental Pharmacology, 2016, 235, 263-284.	0.9	8
64	Cell chirality: emergence of asymmetry from cell culture. Philosophical Transactions of the Royal Society B: Biological Sciences, 2016, 371, 20150413.	1.8	46
65	Diaphanous gene mutation affects spiral cleavage and chirality in snails. Scientific Reports, 2016, 6, 34809.	1.6	35
66	Functional protein micropatterning for drug design and discovery. Expert Opinion on Drug Discovery, 2016, 11, 105-119.	2.5	16
67	Actomyosin-driven left-right asymmetry: from molecular torques to chiral self organization. Current Opinion in Cell Biology, 2016, 38, 24-30.	2.6	61
68	Conserved roles for cytoskeletal components in determining laterality. Integrative Biology (United Kingdom), 2016, 8, 116-124.	0.6	16
69	On chirality of slime mould. BioSystems, 2016, 140, 23-27.	0.9	11
70	Cellular and Nuclear Alignment Analysis for Determining Epithelial Cell Chirality. Annals of Biomedical Engineering, 2016, 44, 1475-1486.	1.3	35
71	Emergence of collective dynamical chirality for achiral active particles. Soft Matter, 2017, 13, 836-841.	1.2	19
72	Reversals of Bodies, Brains, and Behavior. Neuromethods, 2017, , 667-694.	0.2	1

#	ARTICLE	IF	CITATIONS
73	Collective cell migration: a physics perspective. Reports on Progress in Physics, 2017, 80, 076601.	8.1	158
74	ParaStamp and Its Applications to Cell Patterning, Drug Synergy Screening, and Rewritable Devices for Droplet Storage. Advanced Biology, 2017, 1, 1700048.	3.0	13
75	Direction-dependent contraction forces on cell boundaries induce collective migration of epithelial cells within their sheet. Development Growth and Differentiation, 2017, 59, 317-328.	0.6	6
76	Chirality in microbial biofilms is mediated by close interactions between the cell surface and the substratum. ISME Journal, 2017, 11, 1688-1701.	4.4	25
77	Stem Cell Spheroids and Ex Vivo Niche Modeling: Rationalization and Scaling-Up. Journal of Cardiovascular Translational Research, 2017, 10, 150-166.	1.1	30
78	Photoactivatable Substrates: A Material-Based Approach for Dissecting Cell Migration. Chemical Record, 2017, 17, 611-621.	2.9	11
79	The Actin Cytoskeleton. Handbook of Experimental Pharmacology, 2017, , .	0.9	2
80	HCN4 ion channel function is required for early events that regulate anatomical left-right patterning in a Nodal- and Lefty asymmetric gene expression-independent manner. Biology Open, 2017, 6, 1445-1457.	0.6	22
81	Tuning the interactions between chiral plasmonic films and living cells. Nature Communications, 2017, 8, 2007.	5.8	102
82	Convergence of microengineering and cellular self-organization towards functional tissue manufacturing. Nature Biomedical Engineering, 2017, 1, 939-956.	11.6	90
83	Curvature-controlled defect dynamics in active systems. Physical Review E, 2017, 95, 062609.	0.8	12
84	Multiaxial Polarity Determines Individual Cellular and Nuclear Chirality. Cellular and Molecular Bioengineering, 2017, 10, 63-74.	1.0	15
85	Revealing chiral cell motility by 3D Riesz transform-differential interference contrast microscopy and computational kinematic analysis. Nature Communications, 2017, 8, 2194.	5.8	30
86	Chiral Orientation of Skeletal Muscle Cells Requires Rigid Substrate. Micromachines, 2017, 8, 181.	1.4	9
88	Spontaneous shear flow in confined cellular nematics. Nature Physics, 2018, 14, 728-732.	6.5	148
89	Effect of pharmacological modulation of actin and myosin on collective cell electrotaxis. Bioelectromagnetics, 2018, 39, 289-298.	0.9	9
90	Methods for Screening Live Cells. Biochemistry (Moscow), 2018, 83, S81-S102.	0.7	3
91	Left-Right Symmetry or Asymmetry of Cells on Stripe-Like Micropatterned Material Surfaces. Chinese Journal of Chemistry, 2018, 36, 605-611.	2.6	13

#	ARTICLE	IF	CITATIONS
92	Epithelial vertex models with active biochemical regulation of contractility can explain organized collective cell motility. <i>APL Bioengineering</i> , 2018, 2, 031906.	3.3	35
93	Intrinsic cellular chirality regulates left-right symmetry breaking during cardiac looping. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2018, 115, E11568-E11577.	3.3	54
94	Lineage-Specific Chiral Biases of Human Embryonic Stem Cells during Differentiation. <i>Stem Cells International</i> , 2018, 2018, 1-10.	1.2	9
95	Reconstitution of Inherent Left-Right Asymmetry in Skeletal Myogenesis. , 2018, , .		0
96	Chiral Cilia Orientation in the Left-Right Organizer. <i>Cell Reports</i> , 2018, 25, 2008-2016.e4.	2.9	14
97	Epithelial Cell Chirality Revealed by Three-Dimensional Spontaneous Rotation. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2018, 115, 12188-12193.	3.3	52
98	Influence of multiscale and curved structures on the migration of stem cells. <i>Biointerphases</i> , 2018, 13, 06D408.	0.6	7
99	Chirality provides a direct fitness advantage and facilitates intermixing in cellular aggregates. <i>PLoS Computational Biology</i> , 2018, 14, e1006645.	1.5	11
100	Cell chirality regulates intercellular junctions and endothelial permeability. <i>Science Advances</i> , 2018, 4, eaat2111.	4.7	45
101	Collective cell polarization and alignment on curved surfaces. <i>Journal of the Mechanical Behavior of Biomedical Materials</i> , 2018, 88, 330-339.	1.5	17
102	Regulating Fibroblast Shape and Mechanics through Photoresponsive Surfaces with Concentric Circular Topographic Patterns. <i>Advanced Materials Interfaces</i> , 2018, 5, 1800890.	1.9	12
103	Outline-etching image segmentation reveals enhanced cell chirality through intercellular alignment. <i>Biotechnology and Bioengineering</i> , 2018, 115, 2595-2603.	1.7	8
104	Controlled Shear Flow Directs Osteogenesis on UHMWPE-Based Hybrid Nanobiocomposites in a Custom-Designed PMMA Microfluidic Device. <i>ACS Applied Bio Materials</i> , 2018, 1, 414-435.	2.3	12
105	Chiral cell sliding drives left-right asymmetric organ twisting. <i>ELife</i> , 2018, 7, .	2.8	34
106	Cell Chirality Drives Left-Right Asymmetric Morphogenesis. <i>Frontiers in Cell and Developmental Biology</i> , 2018, 6, 34.	1.8	47
107	In Vitro Microscale Models for Embryogenesis. <i>Advanced Biology</i> , 2018, 2, 1700235.	3.0	6
108	Techniques for studying mechanobiology. , 2018, , 1-53.		2
109	Cell organelle-based analysis of cell chirality. <i>Communicative and Integrative Biology</i> , 2019, 12, 78-81.	0.6	15

#	ARTICLE	IF	CITATIONS
110	The Interplay Between Cell-Cell and Cell-Matrix Forces Regulates Cell Migration Dynamics. <i>Biophysical Journal</i> , 2019, 117, 1795-1804.	0.2	15
111	E and ID proteins regulate cell chirality and left-right asymmetric development in <i>Drosophila</i> . <i>Genes To Cells</i> , 2019, 24, 214-230.	0.5	12
112	Chiral geometry regulates stem cell fate and activity. <i>Biomaterials</i> , 2019, 222, 119456.	5.7	26
113	Here, there, and everywhere: How pathogenic <i>Escherichia coli</i> sense and respond to gastrointestinal biogeography. <i>Cellular Microbiology</i> , 2019, 21, e13107.	1.1	26
114	Surface tension determines tissue shape and growth kinetics. <i>Science Advances</i> , 2019, 5, eaav9394.	4.7	80
115	Chiral Neuronal Motility: The Missing Link between Molecular Chirality and Brain Asymmetry. <i>Symmetry</i> , 2019, 11, 102.	1.1	11
116	Remnant Effects of Culture Density on Cell Chirality After Re seeding. <i>ACS Biomaterials Science and Engineering</i> , 2019, 5, 3944-3953.	2.6	5
117	Cells with Broken Left-Right Symmetry: Roles of Intrinsic Cell Chirality in Left-Right Asymmetric Epithelial Morphogenesis. <i>Symmetry</i> , 2019, 11, 505.	1.1	13
118	The development of CRISPR for a mollusc establishes the formin <i>Lsdia1</i> as the long-sought gene for snail dextral/sinistral coiling. <i>Development (Cambridge)</i> , 2019, 146, .	1.2	70
119	Mechanical force drives the polarization and orientation of cells. <i>Acta Mechanica Sinica/Lixue Xuebao</i> , 2019, 35, 275-288.	1.5	19
120	Directed Collective Cell Migration Using Three-Dimensional Bioprinted Micropatterns on Thermoresponsive Surfaces for Myotube Formation. <i>ACS Biomaterials Science and Engineering</i> , 2019, 5, 3935-3943.	2.6	23
121	Spontaneous rotation can stabilise ordered chiral active fluids. <i>Nature Communications</i> , 2019, 10, 920.	5.8	23
122	Emergence of a Bilaterally Symmetric Pattern from Chiral Components in the Planarian Epidermis. <i>Developmental Cell</i> , 2019, 51, 516-525.e5.	3.1	16
123	Morphological analysis of chiral rod clusters from a coarse-grained single-site chiral potential. <i>Soft Matter</i> , 2019, 15, 8147-8155.	1.2	2
124	Photoactivatable Hydrogel Interfaces for Resolving the Interplay of Chemical, Mechanical, and Geometrical Regulation of Collective Cell Migration. <i>Langmuir</i> , 2019, 35, 7459-7468.	1.6	10
125	Micropatterning and Alignment of Skeletal Muscle Myoblasts Using Microflowed Plasma Process. <i>Irbm</i> , 2020, 41, 48-57.	3.7	4
126	Chiral stresses in nematic cell monolayers. <i>Soft Matter</i> , 2020, 16, 764-774.	1.2	15
127	A theoretical model of collective cell polarization and alignment. <i>Journal of the Mechanics and Physics of Solids</i> , 2020, 137, 103860.	2.3	25



#	ARTICLE	IF	CITATIONS
128	Mechanical Forces Regulate Asymmetric Vascular Cell Alignment. <i>Biophysical Journal</i> , 2020, 119, 1771-1780.	0.2	3
129	Effect of design geometry, exposure energy, cytophilic molecules, cell type and load in fabrication of single-cell arrays using micro-contact printing. <i>Scientific Reports</i> , 2020, 10, 15213.	1.6	6
130	Pattern Formation and Defect Ordering in Active Chiral Nematics. <i>Physical Review Letters</i> , 2020, 125, 098002.	2.9	11
131	Early Committed Clockwise Cell Chirality Upregulates Adipogenic Differentiation of Mesenchymal Stem Cells. <i>Advanced Biology</i> , 2020, 4, 2000161.	3.0	6
132	Cell chirality in cardiovascular development and disease. <i>APL Bioengineering</i> , 2020, 4, 031503.	3.3	14
133	Cx43 and the Actin Cytoskeleton: Novel Roles and Implications for Cell-Cell Junction-Based Barrier Function Regulation. <i>Biomolecules</i> , 2020, 10, 1656.	1.8	18
134	Statistical Validation Verifies That Enantiomorphic States of Chiral Cells Are Determinant Dictating the Left- or Right-Handed Direction of the Hindgut Rotation in <i>Drosophila</i> . <i>Symmetry</i> , 2020, 12, 1991.	1.1	4
135	Effects of Microstripe Geometry on Guided Cell Migration. <i>ACS Applied Materials &amp; Interfaces</i> , 2020, 12, 27971-27983.	4.0	40
136	Chiral twisting in a bacterial cytoskeletal polymer affects filament size and orientation. <i>Nature Communications</i> , 2020, 11, 1408.	5.8	24
137	Effect of static magnetic field on DNA synthesis: The interplay between DNA chirality and magnetic field left-right asymmetry. <i>FASEB BioAdvances</i> , 2020, 2, 254-263.	1.3	27
138	Zebrafish Melanophores Suggest Novel Functions of Cell Chirality in Tissue Formation. <i>Symmetry</i> , 2021, 13, 130.	1.1	0
139	Why are isolated and collective cells greatly different in stiffness?. <i>Journal of the Mechanics and Physics of Solids</i> , 2021, 147, 104280.	2.3	13
140	Autonomous materials systems from active liquid crystals. <i>Nature Reviews Materials</i> , 2021, 6, 437-453.	23.3	53
141	Mobility of Alpha-Actinin Along Growing Actin Filaments Might Affect the Cellular Chirality. <i>Journal of Applied Mechanics, Transactions ASME</i> , 2021, 88, .	1.1	3
142	Effects of Alzheimer's Disease-Related Proteins on the Chirality of Brain Endothelial Cells. <i>Cellular and Molecular Bioengineering</i> , 2021, 14, 231-240.	1.0	8
143	Substrate-dependent control of the chiral orientation of mesenchymal stem cells: image-based quantitative profiling. <i>Biomedical Materials (Bristol)</i> , 2021, 16, 034102.	1.7	6
145	Collective nuclear behavior shapes bilateral nuclear symmetry for subsequent left-right asymmetric morphogenesis in <i>Drosophila</i> . <i>Development (Cambridge)</i> , 2021, 148, .	1.2	3
146	Synthetic living machines: A new window on life. <i>IScience</i> , 2021, 24, 102505.	1.9	35

#	ARTICLE	IF	CITATIONS
147	Exploration of possible cell chirality using material techniques of surface patterning. <i>Acta Biomaterialia</i> , 2021, 126, 92-108.	4.1	32
148	Identification and elimination of cancer cells by folate-conjugated CdTe/CdS Quantum Dots Chiral Nano-Sensors. <i>Biochemical and Biophysical Research Communications</i> , 2021, 560, 199-204.	1.0	3
149	Photon Upconversion Hydrogels for 3D Optogenetics. <i>Advanced Functional Materials</i> , 2021, 31, 2010907.	7.8	19
150	Twisting of the zebrafish heart tube during cardiac looping is a tbx5-dependent and tissue-intrinsic process. <i>ELife</i> , 2021, 10, .	2.8	10
151	Mirror Symmetry of Life. , 0, , .		0
152	Condensation tendency and planar isotropic actin gradient induce radial alignment in confined monolayers. <i>ELife</i> , 2021, 10, .	2.8	3
153	Machine-Learning-Based Approach to Decode the Influence of Nanomaterial Properties on Their Interaction with Cells. <i>ACS Applied Materials &amp; Interfaces</i> , 2021, 13, 1943-1955.	4.0	101
154	Design of nematic liquid crystals to control microscale dynamics. <i>Liquid Crystals Reviews</i> , 2020, 8, 59-129.	1.1	22
158	Control of microswimmers by spiral nematic vortices: Transition from individual to collective motion and contraction, expansion, and stable circulation of bacterial swirls. <i>Physical Review Research</i> , 2020, 2, .	1.3	15
159	Switching Cellular Swirling Upon One-Way Torsional Drive. <i>Journal of Applied Mechanics, Transactions ASME</i> , 2020, 87, .	1.1	1
160	Diversity of left-right symmetry breaking strategy in animals. <i>F1000Research</i> , 2020, 9, 123.	0.8	28
161	Live Imaging of Cleavage Variability and Vesicle Flow Dynamics in Dextral and Sinistral Spiralian Embryos. <i>Zoological Science</i> , 2019, 36, 5.	0.3	1
162	Active torque generation by the actomyosin cell cortex drives left-right symmetry breaking. <i>ELife</i> , 2014, 3, e04165.	2.8	197
163	Polar pattern formation induced by contact following locomotion in a multicellular system. <i>ELife</i> , 2020, 9, .	2.8	20
171	Cell Chirality as a Novel Measure for Cytotoxicity. <i>Advanced Biology</i> , 2022, 6, e2101088.	1.4	4
172	Controlling Morphology and Functions of Cardiac Organoids by Two-Dimensional Geometrical Templates. <i>Cells Tissues Organs</i> , 2023, 212, 64-73.	1.3	0
173	Cell Jamming Regulates Epithelial Chiral Morphogenesis. <i>SSRN Electronic Journal</i> , 0, , .	0.4	0
174	A Micropatterning Assay for Measuring Cell Chirality. <i>Journal of Visualized Experiments</i> , 2022, , .	0.2	0

#	ARTICLE	IF	CITATIONS
175	Changes in extracellular matrix in failing human non-ischemic and ischemic hearts with mechanical unloading. <i>Journal of Molecular and Cellular Cardiology</i> , 2022, 166, 137-151.	0.9	4
176	Bilaterally Asymmetric Helical Myofibrils in Ascidian Tadpole Larvae. <i>Frontiers in Cell and Developmental Biology</i> , 2021, 9, 800455.	1.8	1
177	Collective migration reveals mechanical flexibility of malaria parasites. <i>Nature Physics</i> , 2022, 18, 586-594.	6.5	13
178	How torque on formins is relaxed strongly affects cellular swirling. <i>Biophysical Journal</i> , 2022, 121, 2952-2961.	0.2	5
179	Static and photoresponsive dynamic materials to dissect physical regulation of cellular functions. <i>Biomaterials Science</i> , 2022, 10, 6116-6134.	2.6	1
180	Recognition of 3D Chiral Microenvironments for Myoblast Differentiation. <i>ACS Biomaterials Science and Engineering</i> , 2022, 8, 4230-4235.	2.6	0
181	Micropatterned Neurovascular Interface to Mimic the Bloodâ€“Brain Barrierâ€™s Neurophysiology and Micromechanical Function: A BBB-on-CHIP Model. <i>Cells</i> , 2022, 11, 2801.	1.8	20
182	Cell chirality exhibition of brain microvascular endothelial cells is dependent on micropattern width. <i>RSC Advances</i> , 2022, 12, 30135-30144.	1.7	4
183	New Biological Rhythm in Cambia of Trees â€“ â€œMusic of Treesâ€•Revisited 50 Years After the Discovery of Cambial Morphogenetic Waves. <i>Acta Societatis Botanicorum Poloniae</i> , 0, 91, .	0.8	0
184	Chiral Edge Current in Nematic Cell Monolayers. <i>Physical Review X</i> , 2022, 12, .	2.8	5
185	Curvature in Biological Systems: Its Quantification, Emergence, and Implications across the Scales. <i>Advanced Materials</i> , 2023, 35, .	11.1	34
186	Interacting with tumor cells weakens the intrinsic clockwise chirality of endothelial cells. <i>APL Bioengineering</i> , 2022, 6, 046107.	3.3	2
187	On shape forming by contractile filaments in the surface of growing tissues. , 2023, 2, .		1
188	Eâ€œadherinâ€dependent coordinated epithelial rotation on a twoâ€dimensional discoidal pattern. <i>Genes To Cells</i> , 0, , .	0.5	1
189	Cell jamming regulates epithelial chiral morphogenesis. <i>Journal of Biomechanics</i> , 2023, 147, 111435.	0.9	2
190	The Actin Crosslinker Fascin Regulates Cell Chirality. <i>Advanced Biology</i> , 2023, 7, .	1.4	2
191	Static and Dynamic: Evolving Biomaterial Mechanical Properties to Control Cellular Mechanotransduction. <i>Advanced Science</i> , 2023, 10, .	5.6	23
192	Actin polymerisation and crosslinking drive left-right asymmetry in single cell and cell collectives. <i>Nature Communications</i> , 2023, 14, .	5.8	19

#	ARTICLE	IF	CITATIONS
193	Scalable pattern formation of skeletal myotubes by synergizing microtopographic cues and chiral nematics of cells. <i>Biofabrication</i> , 2023, 15, 025015.	3.7	2
194	Collective rotational motion of freely expanding T84 epithelial cell colonies. <i>Journal of the Royal Society Interface</i> , 2023, 20, .	1.5	3
195	Appropriate Mechanical Confinement Inhibits Multipolar Cell Division via Pole-Cortex Interaction. <i>Physical Review X</i> , 2023, 13, .	2.8	4
204	Chiral nanomaterials in tissue engineering. <i>Nanoscale</i> , 2024, 16, 5014-5041.	2.8	0