

# Britta Trappmann

## List of Publications by Year in descending order

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Version: 2024-02-01

26  
papers

3,694  
citations

393982

19  
h-index

580395

25  
g-index

30  
all docs

30  
docs citations

30  
times ranked

6210  
citing authors

#	ARTICLE	IF	CITATIONS
1	Extracellular-matrix tethering regulates stem-cell fate. <i>Nature Materials</i> , 2012, 11, 642-649.	13.3	1,346
2	Cell-mediated fibre recruitment drives extracellular matrix mechanosensing in engineered fibrillar microenvironments. <i>Nature Materials</i> , 2015, 14, 1262-1268.	13.3	464
3	Actin and serum response factor transduce physical cues from the microenvironment to regulate epidermal stem cell fate decisions. <i>Nature Cell Biology</i> , 2010, 12, 711-718.	4.6	414
4	Matrix degradability controls multicellularity of 3D cell migration. <i>Nature Communications</i> , 2017, 8, 371.	5.8	192
5	A DNA-based molecular probe for optically reporting cellular traction forces. <i>Nature Methods</i> , 2014, 11, 1229-1232.	9.0	171
6	Remodeling of Fibrous Extracellular Matrices by Contractile Cells: Predictions from Discrete Fiber Network Simulations. <i>Biophysical Journal</i> , 2014, 107, 1829-1840.	0.2	171
7	How cells sense extracellular matrix stiffness: a material's perspective. <i>Current Opinion in Biotechnology</i> , 2013, 24, 948-953.	3.3	165
8	Microfluidics embedded within extracellular matrix to define vascular architectures and pattern diffusive gradients. <i>Lab on A Chip</i> , 2013, 13, 3246.	3.1	145
9	Exploiting the superior protein resistance of polymer brushes to control single cell adhesion and polarisation at the micron scale. <i>Biomaterials</i> , 2010, 31, 5030-5041.	5.7	99
10	A New Family of Nonionic Dendritic Amphiphiles Displaying Unexpected Packing Parameters in Micellar Assemblies. <i>Journal of the American Chemical Society</i> , 2010, 132, 11119-11124.	6.6	83
11	Pulmonary pericytes regulate lung morphogenesis. <i>Nature Communications</i> , 2018, 9, 2448.	5.8	72
12	Mechanically Induced Generation of Counterions Inside Surface-Grafted Charged Macromolecular Films: Towards Enhanced Mechanotransduction in Artificial Systems. <i>Angewandte Chemie - International Edition</i> , 2006, 45, 7440-7443.	7.2	57
13	Mimicking normal tissue architecture and perturbation in cancer with engineered micro-epidermis. <i>Biomaterials</i> , 2012, 33, 5221-5229.	5.7	44
14	Polyglycerol-derived amphiphiles for single walled carbon nanotube suspension. <i>Chemical Physics Letters</i> , 2010, 493, 147-150.	1.2	32
15	Synthetic extracellular matrices with tailored adhesiveness and degradability support lumen formation during angiogenic sprouting. <i>Nature Communications</i> , 2021, 12, 3402.	5.8	31
16	Micropatterned Multicolor Dynamically Adhesive Substrates to Control Cell Adhesion and Multicellular Organization. <i>Langmuir</i> , 2014, 30, 1327-1335.	1.6	30
17	Polyglycerol-Derived Amphiphiles for the Solubilization of Single-Walled Carbon Nanotubes in Water: A Structure-Property Study. <i>ChemPhysChem</i> , 2012, 13, 203-211.	1.0	27
18	3D biomimetic platform reveals the first interactions of the embryo and the maternal blood vessels. <i>Developmental Cell</i> , 2021, 56, 3276-3287.e8.	3.1	27

#	ARTICLE	IF	CITATIONS
19	PECAM-1 supports leukocyte diapedesis by tension-dependent dephosphorylation of VE-cadherin. EMBO Journal, 2021, 40, e106113.	3.5	22
20	Nonswelling and Hydrolytically Stable Hydrogels Uncover Cellular Mechanosensing in 3D. Advanced Science, 2022, 9, e2105325.	5.6	11
21	Interaction between single-walled carbon nanotubes and alkyl-polyglycerol derivatives. Physica Status Solidi (B): Basic Research, 2010, 247, 2758-2761.	0.7	10
22	Amphiphile replacement on carbon nanotube surfaces: Effect of aromatic groups on the interaction strength. Physica Status Solidi (B): Basic Research, 2011, 248, 2532-2535.	0.7	9
23	Force-induced changes of $\beta$ -catenin conformation stabilize vascular junctions independently of vinculin. Journal of Cell Science, 2021, 134, .	1.2	9
24	Engineered Fibrillar Extracellular Matrices for the Study of Directed Cell Migration. , 2012, , .		0
25	Engineered Fibrillar Microenvironments With Controllable Architecture and Mechanics for Studying Cellular Stiffness Sensing. , 2013, , .		0
26	Mesenchymal stem cell mechanosensing in engineered fibrillar microenvironments. , 2014, , .		0