

# Joachim Pius Spatz

## List of Publications by Citations

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368  
papers

24,687  
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80  
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147  
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387  
ext. papers

27,709  
ext. citations

9  
avg, IF

6.97  
L-index

#	Paper	IF	Citations
368	Environmental sensing through focal adhesions. <i>Nature Reviews Molecular Cell Biology</i> , <b>2009</b> , 10, 21-33	48.7	1868
367	Extracellular-matrix tethering regulates stem-cell fate. <i>Nature Materials</i> , <b>2012</b> , 11, 642-9	27	1156
366	Activation of integrin function by nanopatterned adhesive interfaces. <i>ChemPhysChem</i> , <b>2004</b> , 5, 383-8	3.2	978
365	Cell spreading and focal adhesion dynamics are regulated by spacing of integrin ligands. <i>Biophysical Journal</i> , <b>2007</b> , 92, 2964-74	2.9	746
364	Connections between single-cell biomechanics and human disease states: gastrointestinal cancer and malaria. <i>Acta Biomaterialia</i> , <b>2005</b> , 1, 15-30	10.8	619
363	Ordered Deposition of Inorganic Clusters from Micellar Block Copolymer Films. <i>Langmuir</i> , <b>2000</b> , 16, 407-415	4.15	532
362	Block copolymer micelle nanolithography. <i>Nanotechnology</i> , <b>2003</b> , 14, 1153-1160	3.4	454
361	Impact of order and disorder in RGD nanopatterns on cell adhesion. <i>Nano Letters</i> , <b>2009</b> , 9, 1111-6	11.5	447
360	Oxidation-resistant gold-55 clusters. <i>Science</i> , <b>2002</b> , 297, 1533-6	33.3	434
359	Substrate-induced lateral micro-phase separation of a diblock copolymer. <i>Advanced Materials</i> , <b>1996</b> , 8, 513-517	24	358
358	Spectroscopy of single metallic nanoparticles using total internal reflection microscopy. <i>Applied Physics Letters</i> , <b>2000</b> , 77, 2949-2951	3.4	320
357	Lateral spacing of integrin ligands influences cell spreading and focal adhesion assembly. <i>European Journal of Cell Biology</i> , <b>2006</b> , 85, 219-24	6.1	305
356	A Comprehensive Evaluation of the Activity and Selectivity Profile of Ligands for RGD-binding Integrins. <i>Scientific Reports</i> , <b>2017</b> , 7, 39805	4.9	279
355	Induction of cell polarization and migration by a gradient of nanoscale variations in adhesive ligand spacing. <i>Nano Letters</i> , <b>2008</b> , 8, 2063-9	11.5	265
354	Vinculin regulates the recruitment and release of core focal adhesion proteins in a force-dependent manner. <i>Current Biology</i> , <b>2013</b> , 23, 271-81	6.3	258
353	Stem cell migration and mechanotransduction on linear stiffness gradient hydrogels. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2017</b> , 114, 5647-5652	11.5	257
352	A molecular mechanotransduction pathway regulates collective migration of epithelial cells. <i>Nature Cell Biology</i> , <b>2015</b> , 17, 276-87	23.4	245

351	Immobilized chemokine fields and soluble chemokine gradients cooperatively shape migration patterns of dendritic cells. <i>Immunity</i> , <b>2010</b> , 32, 703-13	32.3	232
350	Different sensitivity of human endothelial cells, smooth muscle cells and fibroblasts to topography in the nano-micro range. <i>Acta Biomaterialia</i> , <b>2009</b> , 5, 2460-6	10.8	226
349	Exploiting Noncovalent Interactions in an Imine-Based Covalent Organic Framework for Quercetin Delivery. <i>Advanced Materials</i> , <b>2016</b> , 28, 8749-8754	24	224
348	Gold Polypyrrole Core-Shell Particles in Diblock Copolymer Micelles. <i>Advanced Materials</i> , <b>1998</b> , 10, 132-134	24	222
347	Sphingosylphosphorylcholine regulates keratin network architecture and visco-elastic properties of human cancer cells. <i>Nature Cell Biology</i> , <b>2003</b> , 5, 803-11	23.4	216
346	Sequential bottom-up assembly of mechanically stabilized synthetic cells by microfluidics. <i>Nature Materials</i> , <b>2018</b> , 17, 89-96	27	211
345	Adaptive force transmission in amoeboid cell migration. <i>Nature Cell Biology</i> , <b>2009</b> , 11, 1438-43	23.4	208
344	Micellar Nanoreactors: Preparation and Characterization of Hexagonally Ordered Arrays of Metallic Nanodots. <i>Advanced Functional Materials</i> , <b>2003</b> , 13, 853-861	15.6	203
343	Micellar Inorganic-Polymer Hybrid Systems: A Tool for Nanolithography. <i>Advanced Materials</i> , <b>1999</b> , 11, 149-153	24	202
342	Syndecan-4-dependent Rac1 regulation determines directional migration in response to the extracellular matrix. <i>Journal of Cell Biology</i> , <b>2007</b> , 177, 527-38	7.3	192
341	Two characteristic regimes in frequency-dependent dynamic reorientation of fibroblasts on cyclically stretched substrates. <i>Biophysical Journal</i> , <b>2008</b> , 95, 3470-8	2.9	191
340	Ion-Stabilized Block Copolymer Micelles: Film Formation and Intermicellar Interaction. <i>Macromolecules</i> , <b>1996</b> , 29, 3220-3226	5.5	189
339	Dissecting the molecular architecture of integrin adhesion sites by cryo-electron tomography. <i>Nature Cell Biology</i> , <b>2010</b> , 12, 909-15	23.4	186
338	Free fatty acid binding pocket in the locked structure of SARS-CoV-2 spike protein. <i>Science</i> , <b>2020</b> , 370, 725-730	33.3	182
337	Protein repellent properties of covalently attached PEG coatings on nanostructured SiO <sub>2</sub> -based interfaces. <i>Biomaterials</i> , <b>2007</b> , 28, 4739-47	15.6	181
336	Solution Behavior of Poly(styrene)-block-poly(2-vinylpyridine) Micelles Containing Gold Nanoparticles. <i>Macromolecules</i> , <b>2000</b> , 33, 4791-4798	5.5	177
335	Controlled Arrangement of Supramolecular Metal Coordination Arrays on Surfaces. <i>Angewandte Chemie - International Edition</i> , <b>1999</b> , 38, 2547-2550	16.4	159
334	Cell interactions with hierarchically structured nano-patterned adhesive surfaces. <i>Soft Matter</i> , <b>2009</b> , 5, 72-77	3.6	156

333	MaxSynBio: Avenues Towards Creating Cells from the Bottom Up. <i>Angewandte Chemie - International Edition</i> , <b>2018</b> , 57, 13382-13392	16.4	155
332	Cell adhesion strength is controlled by intermolecular spacing of adhesion receptors. <i>Biophysical Journal</i> , <b>2010</b> , 98, 543-51	2.9	155
331	Gold nanoparticles in micellar poly(styrene)-b-poly(ethylene oxide) films: Size and interparticle distance control in monoparticulate films. <i>Advanced Materials</i> , <b>1996</b> , 8, 337-340	24	153
330	Micro-Nanostructured Interfaces Fabricated by the Use of Inorganic Block Copolymer Micellar Monolayers as Negative Resist for Electron-Beam Lithography. <i>Advanced Functional Materials</i> , <b>2003</b> , 13, 569-575	15.6	152
329	Integrin-linked kinase controls microtubule dynamics required for plasma membrane targeting of caveolae. <i>Developmental Cell</i> , <b>2010</b> , 19, 574-88	10.2	142
328	Fabrication of Oriented Nanoscopic Ceramic Lines from Cylindrical Micelles of an Organometallic Polyferrocene Block Copolymer. <i>Journal of the American Chemical Society</i> , <b>2001</b> , 123, 3147-3148	16.4	142
327	A Polystyrene-Dithiophene-Polystyrene Triblock Copolymer. <i>Journal of the American Chemical Society</i> , <b>1998</b> , 120, 2798-2804	16.4	135
326	Mastering Complexity: Towards Bottom-up Construction of Multifunctional Eukaryotic Synthetic Cells. <i>Trends in Biotechnology</i> , <b>2018</b> , 36, 938-951	15.1	131
325	Biomimetic interfaces for high-performance optics in the deep-UV light range. <i>Nano Letters</i> , <b>2008</b> , 8, 1429-33	11.5	131
324	Mineralization of Gold Nanoparticles in a Block Copolymer Microemulsion. <i>Chemistry - A European Journal</i> , <b>1996</b> , 2, 1552-1555	4.8	126
323	In vitro cancer cell-ECM interactions inform in vivo cancer treatment. <i>Advanced Drug Delivery Reviews</i> , <b>2016</b> , 97, 270-9	18.5	124
322	Impact of tumor cell cytoskeleton organization on invasiveness and migration: a microchannel-based approach. <i>PLoS ONE</i> , <b>2010</b> , 5, e8726	3.7	124
321	Plasmodium sporozoite motility is modulated by the turnover of discrete adhesion sites. <i>Cell Host and Microbe</i> , <b>2009</b> , 6, 551-62	23.4	124
320	Forces affecting the substrate in resonant tapping force microscopy. <i>Nanotechnology</i> , <b>1995</b> , 6, 40-44	3.4	124
319	Imaging material properties by resonant tapping-force microscopy: A model investigation. <i>Physical Review B</i> , <b>1996</b> , 54, 8908-8912	3.3	121
318	Impact of local versus global ligand density on cellular adhesion. <i>Nano Letters</i> , <b>2011</b> , 11, 1469-76	11.5	120
317	Switchable adhesive substrates: revealing geometry dependence in collective cell behavior. <i>Biomaterials</i> , <b>2012</b> , 33, 2409-18	15.6	118
316	Mimicking cellular environments by nanostructured soft interfaces. <i>Nano Letters</i> , <b>2007</b> , 7, 1413-8	11.5	117

315	Bax monomers form dimer units in the membrane that further self-assemble into multiple oligomeric species. <i>Nature Communications</i> , <b>2015</b> , 6, 8042	17.4	113
314	Cellular chemomechanics at interfaces: sensing, integration and response. <i>Soft Matter</i> , <b>2007</b> , 3, 307-326	3.6	108
313	Synthesis of Quasi-Hexagonal Ordered Arrays of Metallic Nanoparticles with Tuneable Particle Size. <i>Advanced Materials</i> , <b>2008</b> , 20, 2297-2302	24	108
312	Noble metal loaded block copolymers: micelle organization, adsorption of free chains and formation of thin films**. <i>Advanced Materials</i> , <b>1995</b> , 7, 731-735	24	105
311	Cooperativity in adhesion cluster formation during initial cell adhesion. <i>Biophysical Journal</i> , <b>2008</b> , 95, 5424-31	2.9	103
310	Nanopatterning by block copolymer micelle nanolithography and bioinspired applications. <i>Biointerphases</i> , <b>2011</b> , 6, MR1-12	1.8	102
309	Nanomosaic Surfaces by Lateral Phase Separation of a Diblock Copolymer. <i>Macromolecules</i> , <b>1997</b> , 30, 3874-3880	5.5	102
308	A crucial role for primary cilia in cortical morphogenesis. <i>Journal of Neuroscience</i> , <b>2008</b> , 28, 12887-900	6.6	102
307	Nanoparticle tension probes patterned at the nanoscale: impact of integrin clustering on force transmission. <i>Nano Letters</i> , <b>2014</b> , 14, 5539-46	11.5	101
306	A Micellar Route to Ordered Arrays of Magnetic Nanoparticles: From Size-Selected Pure Cobalt Dots to Cobalt/Cobalt Oxide Core/Shell Systems. <i>Advanced Functional Materials</i> , <b>2003</b> , 13, 359-364	15.6	100
305	Reactive Ion Etching of Cylindrical Polyferrocenylsilane Block Copolymer Micelles: Fabrication of Ceramic Nanolines on Semiconducting Substrates. <i>Advanced Functional Materials</i> , <b>2003</b> , 13, 271-276	15.6	95
304	Cell adhesion and response to synthetic nanopatterned environments by steering receptor clustering and spatial location. <i>HFSP Journal</i> , <b>2008</b> , 2, 276-85		94
303	Force-induced cell polarisation is linked to RhoA-driven microtubule-independent focal-adhesion sliding. <i>Journal of Cell Science</i> , <b>2009</b> , 122, 3644-51	5.3	92
302	Myoblast morphology and organization on biochemically micro-patterned hydrogel coatings under cyclic mechanical strain. <i>Biomaterials</i> , <b>2010</b> , 31, 250-8	15.6	92
301	Self-Assembly of Rodlike Hydrogen-Bonded Nanostructures. <i>Journal of the American Chemical Society</i> , <b>1999</b> , 121, 7154-7155	16.4	92
300	Dynamic-SERS Optophysiology: A Nanosensor for Monitoring Cell Secretion Events. <i>Nano Letters</i> , <b>2016</b> , 16, 3866-71	11.5	91
299	T cell activation is determined by the number of presented antigens. <i>Nano Letters</i> , <b>2013</b> , 13, 5619-26	11.5	90
298	Immune synapse formation determines interaction forces between T cells and antigen-presenting cells measured by atomic force microscopy. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2009</b> , 106, 17852-7	11.5	90

297	Molecular engineering of cellular environments: cell adhesion to nano-digital surfaces. <i>Methods in Cell Biology</i> , <b>2007</b> , 83, 89-111	1.8	90
296	Propagation of mechanical stress through the actin cytoskeleton toward focal adhesions: model and experiment. <i>Biophysical Journal</i> , <b>2008</b> , 94, 1470-82	2.9	85
295	Conjugation of peptides to the passivation shell of gold nanoparticles for targeting of cell-surface receptors. <i>ACS Nano</i> , <b>2010</b> , 4, 6617-28	16.7	84
294	Cellular unbinding forces of initial adhesion processes on nanopatterned surfaces probed with magnetic tweezers. <i>Nano Letters</i> , <b>2006</b> , 6, 398-402	11.5	82
293	TMV nanorods with programmed longitudinal domains of differently addressable coat proteins. <i>Nanoscale</i> , <b>2013</b> , 5, 3808-16	7.7	81
292	Fine tuning and efficient T cell activation with stimulatory aCD3 nanoarrays. <i>Nano Letters</i> , <b>2013</b> , 13, 5090-7.5	7.5	81
291	Impact of substrate elasticity on human hematopoietic stem and progenitor cell adhesion and motility. <i>Journal of Cell Science</i> , <b>2012</b> , 125, 3765-75	5.3	81
290	Feasibility study of wall shear stress imaging using microstructured surfaces with flexible micropillars. <i>Experiments in Fluids</i> , <b>2005</b> , 39, 464-474	2.5	81
289	Mechanical interactions among followers determine the emergence of leaders in migrating epithelial cell collectives. <i>Nature Communications</i> , <b>2018</b> , 9, 3469	17.4	80
288	Nanoporous Gold Films Created Using Templates Formed from Self-Assembled Structures of InorganicBlock Copolymer Micelles. <i>Advanced Materials</i> , <b>2003</b> , 15, 829-831	24	79
287	A Combined TopDown/BottomUp Approach to the Microscopic Localization of Metallic Nanodots. <i>Advanced Materials</i> , <b>2002</b> , 14, 1827-1832	24	76
286	Nanoscale control of surface immobilized BMP-2: toward a quantitative assessment of BMP-mediated signaling events. <i>Nano Letters</i> , <b>2015</b> , 15, 1526-34	11.5	75
285	Tuning the orbital angular momentum in optical vortex beams. <i>Optics Express</i> , <b>2006</b> , 14, 6604-12	3.3	75
284	Metastable Reverse Globular Micelles and Giant Micellar Wires from Block Copolymers. <i>Angewandte Chemie International Edition in English</i> , <b>1996</b> , 35, 1510-1512		74
283	Cyclic tensile strain controls cell shape and directs actin stress fiber formation and focal adhesion alignment in spreading cells. <i>PLoS ONE</i> , <b>2013</b> , 8, e77328	3.7	73
282	Keratin 8 phosphorylation regulates keratin reorganization and migration of epithelial tumor cells. <i>Journal of Cell Science</i> , <b>2012</b> , 125, 2148-59	5.3	71
281	Functionalizing $\alpha 5 \beta 1$ - or $\alpha 5 \beta 1$ -selective integrin antagonists for surface coating: a method to discriminate integrin subtypes in vitro. <i>Angewandte Chemie - International Edition</i> , <b>2013</b> , 52, 1572-5	16.4	70
280	Nanopatterned Adhesive, Stretchable Hydrogel to Control Ligand Spacing and Regulate Cell Spreading and Migration. <i>ACS Nano</i> , <b>2017</b> , 11, 8282-8291	16.7	70

279	Cobalt(III) as a stable and inert mediator ion between NTA and His6-tagged proteins. <i>Angewandte Chemie - International Edition</i> , <b>2013</b> , 52, 7593-6	16.4	70
278	Chromatin shapes the mitotic spindle. <i>Cell</i> , <b>2009</b> , 138, 502-13	56.2	69
277	Mineralization of nanoparticles in block copolymer micelles. <i>Current Opinion in Colloid and Interface Science</i> , <b>1997</b> , 2, 177-187	7.6	68
276	Influence of different ECM mimetic peptide sequences embedded in a nonfouling environment on the specific adhesion of human-skin keratinocytes and fibroblasts on deformable substrates. <i>Small</i> , <b>2007</b> , 3, 1023-31	11	68
275	Nanopattern of Diblock Copolymers Selectively Adsorbed on a Plane Surface. <i>Langmuir</i> , <b>1999</b> , 15, 7290-7298	4.298	67
274	Cell-Extracellular Matrix Mechanobiology: Forceful Tools and Emerging Needs for Basic and Translational Research. <i>Nano Letters</i> , <b>2018</b> , 18, 1-8	11.5	67
273	One-Pot Assembly of Complex Giant Unilamellar Vesicle-Based Synthetic Cells. <i>ACS Synthetic Biology</i> , <b>2019</b> , 8, 937-947	5.7	66
272	Polymeric substrates with tunable elasticity and nanoscopically controlled biomolecule presentation. <i>Langmuir</i> , <b>2010</b> , 26, 15472-80	4	65
271	Cell adhesion and polarisation on molecularly defined spacing gradient surfaces of cyclic RGDfK peptide patches. <i>European Journal of Cell Biology</i> , <b>2008</b> , 87, 743-50	6.1	65
270	Ultraviolet-emitting ZnO nanowhiskers prepared by a vapor transport process on prestructured surfaces with self-assembled polymers. <i>Journal of Applied Physics</i> , <b>2003</b> , 93, 6252-6257	2.5	65
269	Ultrathin Diblock Copolymer/Titanium Laminates: A Tool for Nanolithography. <i>Advanced Materials</i> , <b>1998</b> , 10, 849-852	24	62
268	The significance of integrin ligand nanopatterning on lipid raft clustering in hematopoietic stem cells. <i>Biomaterials</i> , <b>2012</b> , 33, 3107-18	15.6	61
267	The effect of molar mass and degree of hydroxyethylation on the controlled shielding and deshielding of hydroxyethyl starch-coated polyplexes. <i>Biomaterials</i> , <b>2013</b> , 34, 2530-8	15.6	61
266	Biselectivity of isoDGR peptides for fibronectin binding integrin subtypes $\alpha 5 \beta 1$ and $\alpha 5 \beta 3$ : conformational control through flanking amino acids. <i>Journal of Medicinal Chemistry</i> , <b>2013</b> , 56, 1509-19	8.3	61
265	Membrane-grafted hyaluronan films: a well-defined model system of glycoconjugate cell coats. <i>Journal of the American Chemical Society</i> , <b>2007</b> , 129, 5306-7	16.4	60
264	Lessons from nature: biomimetic subwavelength structures for high-performance optics. <i>Laser and Photonics Reviews</i> , <b>2012</b> , 6, 641-659	8.3	58
263	Combined effects of PEG hydrogel elasticity and cell-adhesive coating on fibroblast adhesion and persistent migration. <i>Biomacromolecules</i> , <b>2014</b> , 15, 195-205	6.9	57
262	Benzyl alcohol and block copolymer micellar lithography: a versatile route to assembling gold and in situ generated titania nanoparticles into uniform binary nanoarrays. <i>ACS Nano</i> , <b>2011</b> , 5, 6355-64	16.7	57



261	Ultrathin coatings from isocyanate-terminated star PEG prepolymers: layer formation and characterization. <i>Langmuir</i> , <b>2005</b> , 21, 1991-9	4	57
260	Symmetry dependence of holograms for optical trapping. <i>Optics Letters</i> , <b>2005</b> , 30, 2086-8	3	57
259	Controlled mineralization and assembly of hydrolysis-based nanoparticles in organic solvents combining polymer micelles and microwave techniques. <i>Advanced Materials</i> , <b>1998</b> , 10, 473-5	24	56
258	Genome function and nuclear architecture: from gene expression to nanoscience. <i>Genome Research</i> , <b>2003</b> , 13, 1029-41	9.7	56
257	Site-specific presentation of single recombinant proteins in defined nanoarrays. <i>Biointerphases</i> , <b>2007</b> , 2, 44-8	1.8	55
256	Interface Immobilization Chemistry of RGD-based Peptides Regulates Integrin Mediated Cell Adhesion. <i>Advanced Functional Materials</i> , <b>2014</b> , 24, 943-956	15.6	53
255	Synthesis of nanostructured and biofunctionalized water-in-oil droplets as tools for homing T cells. <i>Journal of the American Chemical Society</i> , <b>2013</b> , 135, 3339-42	16.4	53
254	Polarizing cytoskeletal tension to induce leader cell formation during collective cell migration. <i>Biointerphases</i> , <b>2013</b> , 8, 32	1.8	53
253	Machine-Learning-Driven Surface-Enhanced Raman Scattering Optophysiology Reveals Multiplexed Metabolite Gradients Near Cells. <i>ACS Nano</i> , <b>2019</b> , 13, 1403-1411	16.7	52
252	Integrin reconstituted in GUVs: a biomimetic system to study initial steps of cell spreading. <i>Biochimica Et Biophysica Acta - Biomembranes</i> , <b>2009</b> , 1788, 2291-300	3.8	52
251	Assembly of multilayer arrays of viral nanoparticles via biospecific recognition: a quartz crystal microbalance with dissipation monitoring study. <i>Biomacromolecules</i> , <b>2008</b> , 9, 456-62	6.9	51
250	Quantification and reactivity of functional groups in the ligand shell of PEGylated gold nanoparticles via a fluorescence-based assay. <i>Langmuir</i> , <b>2009</b> , 25, 7910-7	4	50
249	Nanoscale and mechanical properties of the physiological cell-ECM microenvironment. <i>Experimental Cell Research</i> , <b>2016</b> , 343, 3-6	4.2	49
248	Hydrogel micropillars with integrin selective peptidomimetic functionalized nanopatterned tops: a new tool for the measurement of cell traction forces transmitted through $\alpha$ 5 $\beta$ 1- or $\alpha$ 5 $\beta$ 3-integrins. <i>Advanced Materials</i> , <b>2013</b> , 25, 5869-74	24	49
247	Technique of surface modification of a cell-adhesion-resistant hydrogel by a cell-adhesion-available inorganic microarray. <i>Biomacromolecules</i> , <b>2008</b> , 9, 2569-72	6.9	49
246	OrderDisorder Transition in Surface-Induced Nanopattern of Diblock Copolymer Films. <i>Macromolecules</i> , <b>2000</b> , 33, 150-157	5.5	49
245	A molecular toolkit for the functionalization of titanium-based biomaterials that selectively control integrin-mediated cell adhesion. <i>Chemistry - A European Journal</i> , <b>2013</b> , 19, 9218-23	4.8	48
244	Environmental constraints guide migration of malaria parasites during transmission. <i>PLoS Pathogens</i> , <b>2011</b> , 7, e1002080	7.6	48



243	Microtubule gliding and cross-linked microtubule networks on micropillar interfaces. <i>Nano Letters</i> , <b>2005</b> , 5, 2630-4	11.5	48
242	Mechanical response analysis and power generation by single-cell stretching. <i>ChemPhysChem</i> , <b>2005</b> , 6, 663-70	3.2	48
241	Cobalt Cross-Linked Redox-Responsive PEG Hydrogels: From Viscoelastic Liquids to Elastic Solids. <i>Macromolecules</i> , <b>2016</b> , 49, 4229-4235	5.5	47
240	Tapping Scanning Force Microscopy in AirTheory and Experiment. <i>Langmuir</i> , <b>1997</b> , 13, 4699-4703	4	47
239	On the adsorption behavior of biotin-binding proteins on gold and silica. <i>Langmuir</i> , <b>2010</b> , 26, 1029-34	4	46
238	Micro-nanostructured protein arrays: a tool for geometrically controlled ligand presentation. <i>Small</i> , <b>2009</b> , 5, 1014-8	11	46
237	Force-induced fibronectin fibrillogenesis in vitro. <i>Soft Matter</i> , <b>2008</b> , 4, 1998	3.6	46
236	Early keratinocyte differentiation on micropillar interfaces. <i>Nano Letters</i> , <b>2007</b> , 7, 287-94	11.5	46
235	High-precision steering of multiple holographic optical traps. <i>Optics Express</i> , <b>2005</b> , 13, 8678-85	3.3	43
234	Block copolymer micelle nanolithography on non-conductive substrates. <i>New Journal of Physics</i> , <b>2004</b> , 6, 101-101	2.9	43
233	Cancer Cells Invade Confined Microchannels via a Self-Directed Mesenchymal-to-Amoeboid Transition. <i>Nano Letters</i> , <b>2019</b> , 19, 2280-2290	11.5	43
232	Adhesion maturation of neutrophils on nanoscopically presented platelet glycoprotein Ib-ACS <i>Nano</i> , <b>2013</b> , 7, 9984-96	16.7	42
231	Cyclic stretch induces cell reorientation on substrates by destabilizing catch bonds in focal adhesions. <i>PLoS ONE</i> , <b>2012</b> , 7, e48346	3.7	42
230	Au-Ag hybrid nanoparticle patterns of tunable size and density on glass and polymeric supports. <i>Langmuir</i> , <b>2012</b> , 28, 1562-8	4	41
229	Contact line motion on nanorough surfaces: a thermally activated process. <i>Journal of the American Chemical Society</i> , <b>2013</b> , 135, 7159-71	16.4	41
228	Cell shape normalization, dendrite orientation, and melanin production of normal and genetically altered (haploinsufficient NF1)-melanocytes by microstructured substrate interactions. <i>ChemPhysChem</i> , <b>2004</b> , 5, 85-92	3.2	41
227	Substrate engagement of integrins $\alpha 5 \beta 1$ and $\alpha 5 \beta 3$ is necessary, but not sufficient, for high directional persistence in migration on fibronectin. <i>Scientific Reports</i> , <b>2016</b> , 6, 23258	4.9	41
226	Charge-controlled microfluidic formation of lipid-based single- and multicompartement systems. <i>Lab on A Chip</i> , <b>2018</b> , 18, 2665-2674	7.2	40

225	Regulation of integrin and growth factor signaling in biomaterials for osteodifferentiation. <i>Beilstein Journal of Organic Chemistry</i> , <b>2015</b> , 11, 773-83	2.5	39
224	A theoretical description of elastic pillar substrates in biophysical experiments. <i>ChemPhysChem</i> , <b>2005</b> , 6, 1492-8	3.2	39
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