Matthew J Paszek

List of Publications by Year
in descending order

28 papers	5,822 citations	516561 16 h-index	501076 28 g-index
32 all docs	32 docs citations	32 times ranked	8120 citing authors

#	Article	IF	Citations
1	Azimuthal Beam Scanning Microscope Design and Implementation for Axial Localization with Scanning Angle Interference Microscopy. Methods in Molecular Biology, 2022, 2393, 127-152.	0.4	4
2	Nuclear Deformation Causes DNA Damage by Increasing Replication Stress. Current Biology, 2021, 31, 753-765.e6.	1.8	97
3	Investigation of synovial fluid lubricants and inflammatory cytokines in the horse: a comparison of recombinant equine interleukin 1 beta-induced synovitis and joint lavage models. BMC Veterinary Research, 2021, 17, 189.	0.7	10
4	Hyaluronic acid synthesis, degradation, and crosslinking in equine osteoarthritis: TNF-Î±-TSG-6-mediated HC-HA formation. Arthritis Research and Therapy, 2021, 23, 218.	1.6	9
5	Glycocalyx Curving the Membrane: Forces Emerging from the Cell Exterior. Annual Review of Cell and Developmental Biology, 2021, 37, 257-283.	4.0	19
6	The surface stress of biomedical silicones is a stimulant of cellular response. Science Advances, 2020, 6, eaay0076.	4.7	23
7	Litmus-Body: A Molecularly Targeted Sensor for Cell-Surface pH Measurements. ACS Sensors, 2020, 5, 1555-1566.	4.0	2
8	Direct comparison of optical and electron microscopy methods for structural characterization of extracellular vesicles. Journal of Structural Biology, 2020, 210, 107474.	1.3	64
9	High-speed device synchronization in optical microscopy with an open-source hardware control platform. Scientific Reports, 2019, 9, 12188.	1.6	13
10	Sequence-Specific Mucins for Glycocalyx Engineering. ACS Synthetic Biology, 2019, 8, 2315-2326.	1.9	17
11	Stable recombinant production of codonâ€scrambled lubricin and mucin in human cells. Biotechnology and Bioengineering, 2019, 116, 1292-1303.	1.7	9
12	Physical Principles of Membrane Shape Regulation by the Glycocalyx. Cell, 2019, 177, 1757-1770.e21.	13.5	187
13	Equilibrium Modeling of the Mechanics and Structure of the Cancer Glycocalyx. Biophysical Journal, 2019, 116, 694-708.	0.2	27
14	Antibody-Mediated Endocytosis of Polysialic Acid Enables Intracellular Delivery and Cytotoxicity of a Glycan-Directed Antibodyâ€“Drug Conjugate. Cancer Research, 2019, 79, 1810-1821.	0.4	14
15	Mucinâ€coating technologies for protection and reduced aggregation of cellular production systems. Biotechnology and Bioengineering, 2019, 116, 994-1005.	1.7	4
16	Genetically Encoded Toolbox for Glycocalyx Engineering: Tunable Control of Cell Adhesion, Survival, and Cancer Cell Behaviors. ACS Biomaterials Science and Engineering, 2018, 4, 388-399.	2.6	46
17	Physical biology of the cancer cell glycocalyx. Nature Physics, 2018, 14, 658-669.	6.5	104
18	Revealing Mechanisms of Microvesicle Biogenesis in Breast Cancer Cells via in situ Microscopy. Microscopy and Microanalysis, 2018, 24, 1256-1257.	0.2	1

#	Article	IF	Citations
19	Galectin-1 and galectin-3 expression in equine mesenchymal stromal cells (MSCs), synovial fibroblasts and chondrocytes, and the effect of inflammation on MSC motility. Stem Cell Research and Therapy, 2017, 8, 243.	2.4	41
20	Force Engages Vinculin and Promotes Tumor Progression by Enhancing PI3K Activation of Phosphatidylinositol (3,4,5)-Triphosphate. Cancer Research, 2014, 74, 4597-4611.	0.4	168
21	CLASPs link focal-adhesion-associated microtubule capture to localized exocytosis and adhesion site turnover. Nature Cell Biology, 2014, 16, 558-570.	4.6	206
22	Nanoscale cellular imaging with scanning angle interference microscopy. Methods in Cell Biology, 2014, 123, 235-252.	0.5	5
23	The cancer glycocalyx mechanically primes integrin-mediated growth and survival. Nature, 2014, 511, 319-325.	13.7	610
24	Scanning angle interference microscopy reveals cell dynamics at the nanoscale. Nature Methods, 2012, 9, 825-827.	9.0	102
25	Enforcing Order on Signaling. Science, 2010, 327, 1335-1336.	6.0	9
26	Integrin Clustering Is Driven by Mechanical Resistance from the Glycocalyx and the Substrate. PLoS Computational Biology, 2009, 5, e1000604.	1.5	217
27	Tensional homeostasis and the malignant phenotype. Cancer Cell, 2005, 8, 241-254.	7.7	3,397
28	The Tension Mounts: Mechanics Meets Morphogenesis and Malignancy. Journal of Mammary Gland Biology and Neoplasia, 2004, 9, 325-342.	1.0	410