Seamus J Holden

List of Publications by Year
in descending order

		430754	526166
26	2,830	18	27
papers	citations	h-index	g-index
38	38	38	3263
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Treadmilling by FtsZ filaments drives peptidoglycan synthesis and bacterial cell division. Science, 2017, 355, 739-743.	6.0	503
2	DAOSTORM: an algorithm for high- density super-resolution microscopy. Nature Methods, 2011, 8, 279-280.	9.0	411
3	Democratising deep learning for microscopy with ZeroCostDL4Mic. Nature Communications, 2021, 12, 2276.	5.8	295
4	Super-resolution fight club: assessment of 2D and 3D single-molecule localization microscopy software. Nature Methods, 2019, 16, 387-395.	9.0	251
5	High throughput 3D super-resolution microscopy reveals <i>Caulobacter crescentus</i> in vivo Z-ring organization. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, 4566-4571.	3.3	188
6	Defining the Limits of Single-Molecule FRET Resolution in TIRF Microscopy. Biophysical Journal, 2010, 99, 3102-3111.	0.2	171
7	Multiscale Spatial Organization of RNA Polymerase in Escherichia coli. Biophysical Journal, 2013, 105, 172-181.	0.2	166
8	FALCON: fast and unbiased reconstruction of high-density super-resolution microscopy data. Scientific Reports, 2014, 4, 4577.	1.6	125
9	Movement dynamics of divisome proteins and PBP2x:FtsW in cells of <i>Streptococcus pneumoniae</i>. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 3211-3220.	3.3	107
10	Identifying Molecular Dynamics in Single-Molecule FRET Experiments with Burst Variance Analysis. Biophysical Journal, 2011, 100, 1568-1577.	0.2	105
11	Monitoring multiple distances within a single molecule using switchable FRET. Nature Methods, 2010, 7, 831-836.	9.0	99
12	FtsZ treadmilling is essential for Z-ring condensation and septal constriction initiation in Bacillus subtilis cell division. Nature Communications, 2021, 12, 2448.	5.8	53
13	PALMsiever: a tool to turn raw data into results for single-molecule localization microscopy. Bioinformatics, 2015, 31, 797-798.	1.8	37
14	3D high-density localization microscopy using hybrid astigmatic/ biplane imaging and sparse image reconstruction. Biomedical Optics Express, 2014, 5, 3935.	1.5	35
15	Singleâ€Molecule DNA Biosensors for Protein and Ligand Detection. Angewandte Chemie - International Edition, 2010, 49, 1316-1320.	7.2	31
16	Probing the mechanistic principles of bacterial cell division with super-resolution microscopy. Current Opinion in Microbiology, 2018, 43, 84-91.	2.3	30
17	DeepBacs for multi-task bacterial image analysis using open-source deep learning approaches. Communications Biology, 2022, 5, .	2.0	30
18	Correction of a Depth-Dependent Lateral Distortion in 3D Super-Resolution Imaging. PLoS ONE, 2015, 10, e0142949.	1.1	27

#	Article	IF	Citations
19	Modularity and determinants of a (bi-)polarization control system from free-living and obligate intracellular bacteria. ELife, 2016, 5, .	2.8	26
20	Constriction Rate Modulation Can Drive Cell Size Control and Homeostasis in C.Âcrescentus. IScience, 2018, 4, 180-189.	1.9	25
21	Geometric principles underlying the proliferation of a model cell system. Nature Communications, 2020, 11, 4149.	5.8	21
22	Functional dichotomy and distinct nanoscale assemblies of a cell cycle-controlled bipolar zinc-finger regulator. ELife, 2016, 5, .	2.8	16
23	Super-resolution fight club. Nature Photonics, 2016, 10, 152-153.	15.6	11
24	High-resolution imaging of bacterial spatial organization with vertical cell imaging by nanostructured immobilization (VerCINI). Nature Protocols, 2022, 17, 847-869.	5.5	8
25	Single-Molecule DNA Biosensors for Quantitative Transcription Factor Detection. Biophysical Journal, 2010, 98, 611a.	0.2	1
26	Photoactivated Localization Microscopy for Cellular Imaging. Neuromethods, 2014, , 87-111.	0.2	1