

# Adam S Backer

## List of Publications by Year in descending order

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Version: 2024-02-01

24  
papers

1,508  
citations

623734

14  
h-index

940533

16  
g-index

24  
all docs

24  
docs citations

24  
times ranked

1252  
citing authors

#	ARTICLE	IF	CITATIONS
1	Co-Design of Free-Space Metasurface Optical Neuromorphic Classifiers for High Performance. ACS Photonics, 2021, 8, 2103-2111.	6.6	7
2	Elucidating the Role of Topological Constraint on the Structure of Overstretched DNA Using Fluorescence Polarization Microscopy. Journal of Physical Chemistry B, 2021, 125, 8351-8361.	2.6	4
3	Achromatic Varifocal Metalens for the Visible Spectrum. ACS Photonics, 2019, 6, 2432-2440.	6.6	55
4	Single-molecule polarization microscopy of DNA intercalators sheds light on the structure of S-DNA. Science Advances, 2019, 5, eaav1083.	10.3	42
5	Computational inverse design for cascaded systems of metasurface optics. Optics Express, 2019, 27, 30308.	3.4	62
6	Multicolour localization microscopy by point-spread-function engineering. Nature Photonics, 2016, 10, 590-594.	31.4	128
7	Enhanced DNA imaging using super-resolution microscopy and simultaneous single-molecule orientation measurements. Optica, 2016, 3, 659.	9.3	103
8	Precise Three-Dimensional Scan-Free Multiple-Particle Tracking over Large Axial Ranges with Tetrapod Point Spread Functions. Nano Letters, 2015, 15, 4194-4199.	9.1	210
9	Determining the rotational mobility of a single molecule from a single image: a numerical study. Optics Express, 2015, 23, 4255.	3.4	41
10	Optimal Point Spread Function for 3D High-Precision Imaging. , 2015, , .		0
11	Determining the Rotational Mobility of a Single Molecule from a Single Image: A Numerical Study. , 2015, , .		0
12	Maximally Informative Point Spread Functions for 3D Super-Resolution Imaging. , 2015, , .		0
13	A bisected pupil for studying single-molecule orientational dynamics and its application to three-dimensional super-resolution microscopy. Applied Physics Letters, 2014, 104, 193701.	3.3	68
14	The Role of Molecular Dipole Orientation in Single-Molecule Fluorescence Microscopy and Implications for Super-Resolution Imaging. ChemPhysChem, 2014, 15, 587-599.	2.1	121
15	Optimal Point Spread Function Design for 3D Imaging. Physical Review Letters, 2014, 113, 133902.	7.8	277
16	Extending Single-Molecule Microscopy Using Optical Fourier Processing. Journal of Physical Chemistry B, 2014, 118, 8313-8329.	2.6	129
17	Single-molecule orientation measurements with a quadrated pupil. Proceedings of SPIE, 2014, , .	0.8	0
18	The double-helix point spread function enables precise and accurate measurement of 3D single-molecule localization and orientation. Proceedings of SPIE, 2013, 8590, 85900.	0.8	25

#	ARTICLE	IF	CITATIONS
19	Single-molecule orientation measurements with a quadrated pupil. <i>Optics Letters</i> , 2013, 38, 1521.	3.3	60
20	The Double-Helix Microscope Enables Precise and Accurate Measurement of 3D Single-Molecule Orientation and Localization Beyond the Diffraction Limit. , 2013, , .		0
21	Measuring the 3D Position and Orientation of Single Molecules Simultaneously and Accurately with the Double Helix Microscope. , 2013, , .		0
22	Optical Methods for Measuring Single-Molecule Orientation and Position: Implications for Super-Resolution Microscopy. , 2013, , .		0
23	Single-Molecule Orientation Measurements with a Quadrated Pupil. , 2013, , .		0
24	Simultaneous, accurate measurement of the 3D position and orientation of single molecules. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2012, 109, 19087-19092.	7.1	176