Honghui He

List of Publications by Year
in descending order

66 papers	2,763 citations	159585 30 h-index	182427 51 g-index
67 all docs	67 docs citations	67 times ranked	648 citing authors

#	Article	IF	Citations
1	Polarisation optics for biomedical and clinical applications: a review. Light: Science and Applications, 2021, 10, 194.	16.6	222
2	Characterizing the microstructures of biological tissues using Mueller matrix and transformed polarization parameters. Biomedical Optics Express, 2014, 5, 4223.	2.9	167
3	Mueller matrix polarimetry for differentiating characteristic features of cancerous tissues. Journal of Biomedical Optics, 2014, 19, 076013.	2.6	166
4	Mueller matrix microscope: a quantitative tool to facilitate detections and fibrosis scorings of liver cirrhosis and cancer tissues. Journal of Biomedical Optics, 2016, 21, 071112.	2.6	121
5	Mueller Matrix Polarimetry—An Emerging New Tool for Characterizing the Microstructural Feature of Complex Biological Specimen. Journal of Lightwave Technology, 2019, 37, 2534-2548.	4.6	117
6	A possible quantitative Mueller matrix transformation technique for anisotropic scattering media/Eine mögliche quantitative Müller-Matrix-Transformations-Technik für anisotrope streuende Medien. Photonics & Lasers in Medicine, 2013, 2, .	0.2	114
7	Characterizing microstructures of cancerous tissues using multispectral transformed Mueller matrix polarization parameters. Biomedical Optics Express, 2015, 6, 2934.	2.9	104
8	Quantitatively characterizing the microstructural features of breast ductal carcinoma tissues in different progression stages by Mueller matrix microscope. Biomedical Optics Express, 2017, 8, 3643.	2.9	99
9	Differentiating characteristic microstructural features of cancerous tissues using Mueller matrix microscope. Micron, 2015, 79, 8-15.	2.2	95
10	Complex vectorial optics through gradient index lens cascades. Nature Communications, 2019, 10, 4264.	12.8	79
11	Application of sphere-cylinder scattering model to skeletal muscle. Optics Express, 2010, 18, 15104.	3.4	77
12	Mapping local orientation of aligned fibrous scatterers for cancerous tissues using backscattering Mueller matrix imaging. Journal of Biomedical Optics, 2014, 19, 106007.	2.6	73
13	A study on forward scattering Mueller matrix decomposition in anisotropic medium. Optics Express, 2013, 21, 18361.	3.4	63
14	Division of focal plane polarimeter-based 3×4 Mueller matrix microscope: a potential tool for quick diagnosis of human carcinoma tissues. Journal of Biomedical Optics, 2016, 21, 056002.	2.6	62
15	Separating azimuthal orientation dependence in polarization measurements of anisotropic media. Optics Express, 2018, 26, 3791.	3.4	62
16	Monitoring microstructural variations of fresh skeletal muscle tissues by Mueller matrix imaging. Journal of Biophotonics, 2017, 10, 664-673.	2.3	60
17	Comparative study of the imaging contrasts of Mueller matrix derived parameters between transmission and backscattering polarimetry. Biomedical Optics Express, 2018, 9, 4413.	2.9	53
18	Two-dimensional backscattering Mueller matrix of sphere—cylinder birefringence media. Journal of Biomedical Optics, 2012, 17, 126016.	2.6	51

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19	Quantitatively differentiating microstructures of tissues by frequency distributions of Mueller matrix images. Journal of Biomedical Optics, 2015, 20, 105009.	2.6	51
20	A quantitative and non-contact technique to characterise microstructural variations of skin tissues during photo-damaging process based on Mueller matrix polarimetry. Scientific Reports, 2017, 7, 14702.	3.3	50
21	A Polarization-Imaging-Based Machine Learning Framework for Quantitative Pathological Diagnosis of Cervical Precancerous Lesions. IEEE Transactions on Medical Imaging, 2021, 40, 3728-3738.	8.9	49
22	Deriving Polarimetry Feature Parameters to Characterize Microstructural Features in Histological Sections of Breast Tissues. IEEE Transactions on Biomedical Engineering, 2021, 68, 881-892.	4.2	46
23	Probing microstructural information of anisotropic scattering media using rotation-independent polarization parameters. Applied Optics, 2014, 53, 2949.	1.8	44
24	Two-dimensional backscattering Mueller matrix of sphere-cylinder scattering medium. Optics Letters, 2010, 35, 2323.	3.3	42
25	Polaromics: deriving polarization parameters from a Mueller matrix for quantitative characterization of biomedical specimen. Journal Physics D: Applied Physics, 2022, 55, 034002.	2.8	39
26	Comparative study of the influence of imaging resolution on linear retardance parameters derived from the Mueller matrix. Biomedical Optics Express, 2021, 12, 211.	2.9	37
27	Mueller matrix polarimetry for characterizing microstructural variation of nude mouse skin during tissue optical clearing. Biomedical Optics Express, 2017, 8, 3559.	2.9	36
28	Modulus design multiwavelength polarization microscope for transmission Mueller matrix imaging. Journal of Biomedical Optics, 2018, 23, 1.	2.6	35
29	Two-dimensional and surface backscattering Mueller matrices of anisotropic sphere-cylinder scattering media: a quantitative study of influence from fibrous scatterers. Journal of Biomedical Optics, 2013, 18, 046002.	2.6	33
30	Distinguishing structural features between Crohn's disease and gastrointestinal luminal tuberculosis using Mueller matrix derived parameters. Journal of Biophotonics, 2019, 12, e201900151.	2.3	33
31	Single-shot spatially modulated Stokes polarimeter based on a GRIN lens. Optics Letters, 2014, 39, 2656.	3.3	32
32	Quantitative Analysis of 4 Ã— 4 Mueller Matrix Transformation Parameters for Biomedical Imaging. Photonics, 2019, 6, 34.	2.0	28
33	Revealing complex optical phenomena through vectorial metrics. Advanced Photonics, 2022, 4, .	11.8	27
34	Flexible <inline-formula> <tex-math notation="LaTeX">3×3 </tex-math> </inline-formula> Mueller Matrix Endoscope Prototype for Cancer Detection. IEEE Transactions on Instrumentation and Measurement, 2018, 67, 1700-1712.	4.7	25
35	Distinguishing anisotropy orientations originated from scattering and birefringence of turbid media using Mueller matrix derived parameters. Optics Letters, 2018, 43, 4092.	3.3	25
36	Linear polarization optimized Stokes polarimeter based on four-quadrant detector. Applied Optics, 2015, 54, 4458.	1.8	23

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37	Study on polarization scattering applied in aerosol recognition in the air. Optics Express, 2019, 27, A581.	3.4	23
38	Probing variations of fibrous structures during the development of breast ductal carcinoma tissues via Mueller matrix imaging. Biomedical Optics Express, 2020, 11, 4960.	2.9	22
39	Transformation of full 4 Ã— 4 Mueller matrices: a quantitative technique for biomedical diagnosis. , 2016, , .		20
40	Distinguishing tissue structures via polarization staining images based on different combinations of Mueller matrix polar decomposition parameters. Optics and Lasers in Engineering, 2022, 152, 106955.	3.8	20
41	Study on the validity of 3â€‰Ã—â€‰3 Mueller matrix decomposition. Journal of Biomedical Optics, 2015, 20, 065003.	2.6	17
42	Characterizing the Effects of Washing by Different Detergents on the Wavelength-Scale Microstructures of Silk Samples Using Mueller Matrix Polarimetry. International Journal of Molecular Sciences, 2016, 17, 1301.	4.1	17
43	Study of optical clearing in polarization measurements by Monte Carlo simulations with anisotropic tissue-mimicking models. Journal of Biomedical Optics, 2016, 21, 081209.	2.6	17
44	Assessment of tissue polarimetric properties using Stokes polarimetric imaging with circularly polarized illumination. Journal of Biophotonics, 2018, 11, e201700139.	2.3	16
45	Analysis and calibration of linear birefringence orientation parameters derived from Mueller matrix for multi-layered tissues. Optics and Lasers in Engineering, 2021, 146, 106690.	3.8	16
46	Characteristic Mueller matrices for direct assessment of the breaking of symmetries. Optics Letters, 2020, 45, 706.	3.3	16
47	Probing layered structures by multi-color backscattering polarimetry and machine learning. Biomedical Optics Express, 2021, 12, 4324.	2.9	15
48	Extended polar decomposition method of Mueller matrices for turbid media in reflection geometry. Optics Letters, 2017, 42, 4048.	3.3	14
49	CHARACTERISTIC FEATURES OF MUELLER MATRIX PATTERNS FOR POLARIZATION SCATTERING MODEL OF BIOLOGICAL TISSUES. Journal of Innovative Optical Health Sciences, 2014, 07, 1350028.	1.0	12
50	Comparison of different calibration methods for Mueller matrix microscopy of cells. Applied Optics, 2021, 60, 1380.	1.8	12
51	Polarization Aberrations in High-Numerical-Aperture Lens Systems and Their Effects on Vectorial-Information Sensing. Remote Sensing, 2022, 14, 1932.	4.0	12
52	Study on retardance due to well-ordered birefringent cylinders in anisotropic scattering media. Journal of Biomedical Optics, 2014, 19, 065001.	2.6	11
53	Comparative Study of Modified Mueller Matrix Transformation and Polar Decomposition Parameters for Transmission and Backscattering Tissue Polarimetries. Applied Sciences (Switzerland), 2021, 11, 10416.	2.5	11
54	Transmission Mueller matrix imaging with spatial filtering. Optics Letters, 2021, 46, 4009.	3.3	10

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55	Removing the polarization artifacts in Mueller matrix images recorded with a birefringent gradient-index lens. Journal of Biomedical Optics, 2014, 19, 095001.	2.6	9
56	Purity-depolarization relations and the components of purity of a Mueller matrix. Optics Express, 2019, 27, 22645.	3.4	9
57	Retardance of bilayer anisotropic samples consisting of well-aligned cylindrical scatterers and birefringent media. Journal of Biomedical Optics, 2016, 21, 055002.	2.6	8
58	Analyzing the Influence of Imaging Resolution on Polarization Properties of Scattering Media Obtained From Mueller Matrix. Frontiers in Chemistry, 0, 10, .	3.6	6
59	Optical fiber-based handheld polarized photoacoustic computed tomography for detecting anisotropy of tissues. Quantitative Imaging in Medicine and Surgery, 2022, 12, 2238-2246.	2.0	5
60	Deep learning for denoising in a Mueller matrix microscope. Biomedical Optics Express, 2022, 13, 3535.	2.9	4
61	Quantitatively differentiating microstructural variations of skeletal muscle tissues by multispectral Mueller matrix imaging. , 2016, , .		1
62	Quantitative detection and comparison of liver tissues using label-free Mueller matrix microscope. , 2019, , .		0
63	Obtaining anisotropy orientation information of turbid media using Mueller matrix derived parameters. , 2019, , .		0
64	Assessing structural features of tuberculosis using Mueller matrix derived parameters: a quantitative method to distinguish between Crohn€™s disease and gastrointestinal luminal tuberculosis. , 2020, , .		0
65	Quantitative assessment of tissue structures based on Mueller matrix polarimetry and derived parameters imaging. , 2022, , .		0
66	Distinguishing different tissue structures via polarization staining images based on Mueller matrix derived parameters. , 2022, , .		0