## Martin C Fischer

## List of Publications by Year in descending order

Source: https://exaly.com/author-pdf/4022439/publications.pdf

Version: 2024-02-01

80 papers

1,707 citations

304743 22 h-index 289244 40 g-index

84 all docs 84 docs citations

84 times ranked 2203 citing authors

#	Article	IF	Citations
1	Beyond intensity modulation: new approaches to pump-probe microscopy. Optics Letters, 2021, 46, 1474.	3.3	5
2	Structural, Optical, and Electronic Properties of Two Quaternary Chalcogenide Semiconductors: Ag <sub>2</sub> SrSiS <sub>4</sub> and Ag <sub>2</sub> SrGeS <sub>4</sub> . Inorganic Chemistry, 2021, 60, 12206-12217.	4.0	8
3	Low-cost measurement of face mask efficacy for filtering expelled droplets during speech. Science Advances, 2020, 6, .	10.3	252
4	Crossed-beam pump-probe microscopy. Optics Express, 2020, 28, 11259.	3.4	2
5	Probing the Spatial Heterogeneity of Carrier Relaxation Dynamics in CH <sub>3</sub> NH <sub>3</sub> Pbl <sub>3</sub> Perovskite Thin Films with Femtosecond Timeâ€Resolved Nonlinear Optical Microscopy. Advanced Optical Materials, 2019, 7, 1901185.	7.3	12
6	Visualization of vermilion degradation using pump-probe microscopy. Science Advances, 2019, 5, eaaw $3136$ .	10.3	21
7	Visualizing the impact of chloride addition on the microscopic carrier dynamics of MAPbI3 thin films using femtosecond transient absorption microscopy. Journal of Chemical Physics, 2019, 151, 234710.	3.0	3
8	Unraveling the molecular nature of melanin changes in metastatic cancer. Journal of Biomedical Optics, 2019, 24, 1.	2.6	21
9	Design, Manufacture, and Analysis of Photonic Materials for Historical and Modern Visual Art: feature issue introduction. Optical Materials Express, 2019, 9, 2128.	3.0	2
10	Power-Dependent Radiant Flux and Absolute Quantum Yields of Upconversion Nanocrystals under Continuous and Pulsed Excitation. Journal of Physical Chemistry C, 2018, 122, 252-259.	3.1	14
11	Understanding the Role of Aggregation in the Broad Absorption Bands of Eumelanin. ACS Nano, 2018, 12, 12050-12061.	14.6	49
12	Spectroscopic Differentiation and Microscopic Imaging of Red Organic Pigments Using Optical Pump–Probe Contrast. Analytical Chemistry, 2018, 90, 12686-12691.	6.5	5
13	Enhanced Two-Photon Photochromism in Metasurface Perfect Absorbers. Nano Letters, 2018, 18, 6181-6187.	9.1	26
14	Label-Free Imaging of Female Genital Tract Melanocytic Lesions With Pump-Probe Microscopy: A Promising Diagnostic Tool. Journal of Lower Genital Tract Disease, 2017, 21, 137-144.	1.9	12
15	Stimulated Raman scattering spectroscopic optical coherence tomography. Optica, 2017, 4, 243.	9.3	21
16	Comparison of pump-probe and hyperspectral imaging in unstained histology sections of pigmented lesions. Biomedical Optics Express, 2017, 8, 3882.	2.9	4
17	Dispersion-based stimulated Raman scattering spectroscopy, holography, and optical coherence tomography (Conference Presentation). , 2016, , .		0
18	Invited Review Article: Pump-probe microscopy. Review of Scientific Instruments, 2016, 87, 031101.	1.3	178

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19	Dispersion-based stimulated Raman scattering spectroscopy, holography, and optical coherence tomography. Optics Express, 2016, 24, 485.	3.4	9
20	Real-time digital signal processing in multiphoton and time-resolved microscopy. Proceedings of SPIE, 2016, , .	0.8	0
21	High-resolution, three-dimensional imaging of pigments and support in paper and textiles. Journal of Cultural Heritage, 2016, 20, 583-588.	3.3	11
22	Melanin-targeted nonlinear microscopy for label-free molecular diagnosis and staging. , 2016, , .		0
23	Enhancing Pigmented or Transparent Tissue Imaging with Laser Pulse Shaping. , 2015, , .		0
24	Nonlinear Optical Imaging in Art Conservation and Heritage Science. , 2015, , .		1
25	Flexible digital signal processing architecture for narrowband and spread-spectrum lock-in detection in multiphoton microscopy and time-resolved spectroscopy. Review of Scientific Instruments, 2015, 86, 033707.	1.3	10
26	Ultrafast pump-probe dynamics of iron oxide based earth pigments for applications to ancient pottery manufacture. Proceedings of SPIE, 2015, , .	0.8	2
27	Separating higher-order nonlinearities in transient absorption microscopy. , 2015, , .		1
28	Pump-probe imaging of pigmented cutaneous melanoma primary lesions gives insight into metastatic potential. Biomedical Optics Express, 2015, 6, 3631.	2.9	27
29	Femtosecond pulse train shaping improves two-photon excited fluorescence measurements. Optics Letters, 2014, 39, 5606.	3.3	4
30	Femtosecond pulse shaping enables detection of optical Kerr-effect (OKE) dynamics for molecular imaging. Optics Letters, 2014, 39, 4788.	3.3	10
31	Femtosecond pump-probe microscopy generates virtual cross-sections in historic artwork. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, 1708-1713.	7.1	49
32	Femtosecond pulse train shaping for accurate two-photon excited fluorescence measurements. , 2014, , .		0
33	Adapting phasor analysis for nonlinear pump-probe microscopy. , 2013, , .		0
34	Optical clearing of archive-compatible paraffin embedded tissue for multiphoton microscopy: erratum. Biomedical Optics Express, 2013, 4, 219.	2.9	1
35	Shedding new light on old art. Physics World, 2013, 26, 19-23.	0.0	0
36	Optical clearing and multiphoton imaging of paraffin-embedded specimens. Proceedings of SPIE, 2013, , .	0.8	0

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37	Nonlinear Pump-Probe Techniques for Multi-Contrast Microscopy. , 2013, , .		O
38	Cross-phase modulation spectral shifting: nonlinear phase contrast in a pump-probe microscope. Biomedical Optics Express, 2012, 3, 854.	2.9	33
39	Phasor analysis for nonlinear pump-probe microscopy. Optics Express, 2012, 20, 17082.	3.4	44
40	Cross-phase modulation imaging. Optics Letters, 2012, 37, 800.	3.3	34
41	Optical clearing of archive-compatible paraffin embedded tissue for multiphoton microscopy. Biomedical Optics Express, 2012, 3, 2752.	2.9	15
42	Pump-probe imaging of historical pigments used in paintings. Optics Letters, 2012, 37, 1310.	3.3	30
43	Multicontrast nonlinear optical microscopy with a compact and rapid pulse shaper. Optics Letters, 2012, 37, 2763.	3.3	7
44	Direct Optical Imaging of Graphene In Vitro by Nonlinear Femtosecond Laser Spectral Reshaping. Nano Letters, 2012, 12, 5936-5940.	9.1	29
45	Nonlinear Cross-Phase Modulation Microscopy Using Spectral Shifting. , 2012, , .		0
46	Historical Pigments Revealed by Pump-Probe Microscopy. , 2012, , .		0
47	Controllable ultrabroadband slow light in a warm rubidium vapor. Journal of the Optical Society of America B: Optical Physics, 2011, 28, 2578.	2.1	3
48	Accessing nonlinear phase contrast in biological tissue using femtosecond laser pulse shaping. , 2011, , .		0
49	Cross-phase Modulation Microscopy. , 2011, , .		0
50	Femtosecond Pulse Shaping Enables Nonlinear Imaging in Highly Scattering Materials. , 2011, , .		0
51	Optimizing Shape of Femtosecond Laser Pulses for Homodyne Detection of Nonlinear Optical Signals. , 2011, , .		0
52	Nonlinear phase contrast imaging in neuronal tissue. , 2011, , .		0
53	Measurements of nonlinear refractive index in scattering media. Optics Express, 2010, 18, 12727.	3.4	27
54	Phase-cycling coherent anti-Stokes Raman scattering using shaped femtosecond laser pulses. Optics Express, 2010, 18, 25825.	3.4	9

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55	Enhancing Coherent anti-Stokes Raman Scattering Background Suppression with Phase Cycled Structured Femtosecond Laser Pulses. , 2010, , .		О
56	Femtosecond Laser Pulse Shaping Improves Self-phase Modulation Measurements In Scattering Media. , 2010, , .		0
57	Enhancing two-color absorption, self-phase modulation, and Raman microscopy signatures in tissue with femtosecond laser pulse shaping. , 2009, , .		0
58	Experiments on Quantum Transport of Ultra-Cold Atoms in Optical Potentials. Lecture Notes in Physics, 2009, , 205-237.	0.7	0
59	Self-phase modulation signatures of neuronal activity. Optics Letters, 2008, 33, 219.	3.3	33
60	Rapid pulse shaping with homodyne detection for measuring nonlinear optical signals. Optics Letters, 2008, 33, 1482.	3.3	11
61	Simultaneous self-phase modulation and two-photon absorption measurement by a spectral homodyne Z-scan method. Optics Express, 2008, 16, 4192.	3.4	30
62	Early changes of lung function and structure in an elastase model of emphysemaâ€"a hyperpolarized 3He MRI study. Journal of Applied Physiology, 2008, 104, 773-786.	2.5	27
63	Accessing Nonlinear Contrast in Imaging Using Rapid Pulse Shaping Techniques. , 2008, , .		0
64	Intrinsic Nonlinear Optical Signatures of Neuronal Activity., 2008,,.		0
65	New nonlinear signatures in spectroscopy and imaging. , 2008, , .		0
66	Self-phase modulation and two-photon absorption imaging of cells and active neurons. , 2007, , .		2
67	Tissue imaging with shaped femtosecond laser pulses. Springer Series in Chemical Physics, 2007, , 807-809.	0.2	5
68	Imaging melanin by two-photon absorption microscopy. , 2006, , .		8
69	Imaging physiological parameters with hyperpolarized gas MRI. Progress in Nuclear Magnetic Resonance Spectroscopy, 2005, 47, 187-212.	7.5	15
70	Measurements of Regional Alveolar Oxygen Pressure Using Hyperpolarized 3He MRI1. Academic Radiology, 2005, 12, 1430-1439.	2.5	35
71	Hyperpolarized 3He MRI in Asthma. Academic Radiology, 2005, 12, 1362-1370.	2,5	37
72	Two-photon absorption and self-phase modulation measurements with shaped femtosecond laser pulses. Optics Letters, 2005, 30, 1551.	3.3	43

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73	FEC performance under optical power transient conditions. IEEE Photonics Technology Letters, 2003, 15, 1654-1656.	2.5	4
74	DWDM performance of a packaged reconfigurable optical add-drop multiplexer subsystem supporting modular systems growth. IEEE Photonics Technology Letters, 2003, 15, 1600-1602.	2.5	14
75	10-Gb/s transmission over 200-km conventional fiber without dispersion compensation using the bias control technique. IEEE Photonics Technology Letters, 2002, 14, 1746-1748.	2.5	10
76	FM spectroscopy in recoil-induced resonances. Journal of Optics B: Quantum and Semiclassical Optics, 2001, 3, 279-287.	1.4	15
77	Observation of the Wannier-Stark fan and the fractional ladder in an accelerating optical lattice. Physical Review A, 1999, 60, R1767-R1770.	2.5	35
78	Observation of Rabi oscillations between Bloch bands in an optical potential. Physical Review A, 1998, 58, R2648-R2651.	2.5	51
79	Dynamical Bloch Band Suppression in an Optical Lattice. Physical Review Letters, 1998, 81, 5093-5096.	7.8	156
80	Experimental evidence for non-exponential decay in quantum tunnelling. Nature, 1997, 387, 575-577.	27.8	178