Jerome Wenger

List of Publications by Year in Descending Order

119 papers	6,015 citations	41 h-index	76 g-index
131 ext. papers	6,895 ext. citations	7 avg, IF	5.69 L-index

#	Paper	IF	Citations
119	Ultraviolet optical horn antennas for label-free detection of single proteins.. *Nature Communications*, **2022**, 13, 1842	17.4	2
118	Fast interaction dynamics of G-quadruplex and RGG-rich peptides unveiled in zero-mode waveguides. *Nucleic Acids Research*, **2021**, 49, 12348-12357	20.1	0
117	Complete Electromagnetic Dyadic Green Function Characterization in a Complex Environment□Resonant Dipole-Dipole Interaction and Cooperative Effects. *Physical Review X*, **2021**, 11,	9.1	2
116	Preventing Corrosion of Aluminum Metal with Nanometer-Thick Films of Al2O3 Capped with TiO2 for Ultraviolet Plasmonics. *ACS Applied Nano Materials*, **2021**, 4, 7199-7205	5.6	4
115	Plasmonic nano-optical trap stiffness measurements and design optimization. *Nanoscale*, **2021**, 13, 4188-4194	7.7	5
114	Purcell radiative rate enhancement of label-free proteins with ultraviolet aluminum plasmonics. *Journal Physics D: Applied Physics*, **2021**, 54, 425101	3	3
113	Insights into animal septins using recombinant human septin octamers with distinct SEPT9 isoforms. *Journal of Cell Science*, **2021**, 134,	5.3	6
112	Single Photon Source from a Nanoantenna-Trapped Single Quantum Dot. *Nano Letters*, **2021**, 21, 7030-7036	11.5	11
111	Single-molecule Detection of Ultrafast Biomolecular Dynamics with Nanophotonics.. *Journal of the American Chemical Society*, **2021**,	16.4	2
110	Calcium activates purified human TRPA1 with and without its N-terminal ankyrin repeat domain in the absence of calmodulin. *Cell Calcium*, **2020**, 90, 102228	4	7
109	Long-Range Single-Molecule F□ster Resonance Energy Transfer between Alexa Dyes in Zero-Mode Waveguides. *ACS Omega*, **2020**, 5, 6947-6955	3.9	3
108	Ultraviolet Photostability Improvement for Autofluorescence Correlation Spectroscopy on Label-Free Proteins. *Journal of Physical Chemistry Letters*, **2020**, 11, 2027-2035	6.4	10
107	Surface passivation of zero-mode waveguide nanostructures: benchmarking protocols and fluorescent labels. *Scientific Reports*, **2020**, 10, 5235	4.9	7
106	Fabrication of spectrally sharp Si-based dielectric resonators: combining etaloning with Mie resonances. *Optics Express*, **2020**, 28, 37734-37742	3.3	4
105	Nanoscale control of single molecule F□ster resonance energy transfer by a scanning photonic nanoantenna. *Nanophotonics*, **2020**, 9, 4021-4031	6.3	5
104	Adhesion layer influence on controlling the local temperature in plasmonic gold nanoholes. *Nanoscale*, **2020**, 12, 2524-2531	7.7	8
103	Flexible photonic devices based on dielectric antennas. *JPhys Photonics*, **2020**, 2, 015002	2.5	5

102	CMOS-compatible all-dielectric metalens for improving pixel photodetector arrays. *APL Photonics*, **2020**, 5, 116105	5.2	8
101	Quantifying the Role of the Surfactant and the Thermophoretic Force in Plasmonic Nano-optical Trapping. *Nano Letters*, **2020**, 20, 8811-8817	11.5	24
100	Zero-mode waveguides can be made better: fluorescence enhancement with rectangular aluminum nanoapertures from the visible to the deep ultraviolet. *Nanoscale Advances*, **2020**, 2, 4153-4160	5.1	8
99	Hyperuniform Monocrystalline Structures by Spinodal Solid-State Dewetting. *Physical Review Letters*, **2020**, 125, 126101	7.4	5
98	Preventing Aluminum Photocorrosion for Ultraviolet Plasmonics. *Journal of Physical Chemistry Letters*, **2019**, 10, 5700-5707	6.4	12
97	Deep Ultraviolet Plasmonic Enhancement of Single Protein Autofluorescence in Zero-Mode Waveguides. *Nano Letters*, **2019**, 19, 7434-7442	11.5	23
96	Temperature Measurement in Plasmonic Nanoapertures Used for Optical Trapping. *ACS Photonics*, **2019**, 6, 1763-1773	6.3	35
95	Direct Imaging of the Energy-Transfer Enhancement between Two Dipoles in a Photonic Cavity. *Physical Review X*, **2019**, 9,	9.1	12
94	Structural diffusion properties of two atypical Dps from the cyanobacterium Nostoc punctiforme disclose interactions with ferredoxins and DNA. *Biochimica Et Biophysica Acta - Bioenergetics*, **2019**, 1860, 148063	4.6	6
93	Extending Single-Molecule Förster Resonance Energy Transfer (FRET) Range beyond 10 Nanometers in Zero-Mode Waveguides. *ACS Nano*, **2019**, 13, 8469-8480	16.7	30
92	Fluorescence Spectroscopy Enhancement on Photonic Nanoantennas **2019**, 139-158		
91	Compressed perovskite aqueous mixtures near their phase transitions show very high permittivities: New prospects for high-field MRI dielectric shimming. *Magnetic Resonance in Medicine*, **2018**, 79, 1753-1765	4.4	14
90	Laser-induced fluorescence quenching of red fluorescent dyes with green excitation: Avoiding artifacts in PIE-FRET and FCCS analysis. *Chemical Physics Letters*, **2018**, 706, 669-674	2.5	0
89	High-resolution multimodal flexible coherent Raman endoscope. *Light: Science and Applications*, **2018**, 7, 10	16.7	67
88	Optical Antenna-Based Fluorescence Correlation Spectroscopy to Probe the Nanoscale Dynamics of Biological Membranes. *Journal of Physical Chemistry Letters*, **2018**, 9, 110-119	6.4	28
87	Single-Step DNA Detection Assay Monitoring Dual-Color Light Scattering from Individual Metal Nanoparticle Aggregates. *ACS Sensors*, **2017**, 2, 251-256	9.2	11
86	In-Plane Plasmonic Antenna Arrays with Surface Nanogaps for Giant Fluorescence Enhancement. *Nano Letters*, **2017**, 17, 1703-1710	11.5	90
85	Planar Optical Nanoantennas Resolve Cholesterol-Dependent Nanoscale Heterogeneities in the Plasma Membrane of Living Cells. *Nano Letters*, **2017**, 17, 6295-6302	11.5	32

84	Transient Nanoscopic Phase Separation in Biological Lipid Membranes Resolved by Planar Plasmonic Antennas. *ACS Nano*, **2017**, 11, 7241-7250	16.7	28
83	Single-step homogeneous immunoassay for detecting prostate-specific antigen using dual-color light scattering of metal nanoparticles. *Analyst, The*, **2017**, 142, 3484-3491	5	9
82	Plasmonic Nanoantennas Enable Forbidden Förster Dipole-Dipole Energy Transfer and Enhance the FRET Efficiency. *Nano Letters*, **2016**, 16, 6222-6230	11.5	54
81	All-Dielectric Silicon Nanogap Antennas To Enhance the Fluorescence of Single Molecules. *Nano Letters*, **2016**, 16, 5143-51	11.5	147
80	Differential conformational modulations of MreB folding upon interactions with GroEL/ES and TRiC chaperonin components. *Scientific Reports*, **2016**, 6, 28386	4.9	2
79	Coupling Emitters and Silver Nanowires to Achieve Long-Range Plasmon-Mediated Fluorescence Energy Transfer. *ACS Nano*, **2016**, 10, 3968-76	16.7	50
78	Picosecond Lifetimes with High Quantum Yields from Single-Photon-Emitting Colloidal Nanostructures at Room Temperature. *ACS Nano*, **2016**, 10, 4806-15	16.7	42
77	Roadmap on biosensing and photonics with advanced nano-optical methods. *Journal of Optics (United Kingdom)*, **2016**, 18, 063003	1.7	46
76	Competition between Förster Resonance Energy Transfer and Donor Photodynamics in Plasmonic Dimer Nanoantennas. *ACS Photonics*, **2016**, 3, 895-903	6.3	51
75	Optimizing Nanoparticle Designs for Ideal Absorption of Light. *ACS Photonics*, **2015**, 2, 263-270	6.3	53
74	Three-dimensional nanometre localization of nanoparticles to enhance super-resolution microscopy. *Nature Communications*, **2015**, 6, 7764	17.4	46
73	Self-Assembled Nanoparticle Dimer Antennas for Plasmonic-Enhanced Single-Molecule Fluorescence Detection at Micromolar Concentrations. *ACS Photonics*, **2015**, 2, 1099-1107	6.3	91
72	FRET analysis of CP12 structural interplay by GAPDH and PRK. *Biochemical and Biophysical Research Communications*, **2015**, 458, 488-493	3.4	10
71	Matching Nanoantenna Field Confinement to FRET Distances Enhances Förster Energy Transfer Rates. *Nano Letters*, **2015**, 15, 6193-201	11.5	63
70	Nanoscale volume confinement and fluorescence enhancement with double nanohole aperture. *Scientific Reports*, **2015**, 5, 15852	4.9	45
69	FRET enhancement in aluminum zero-mode waveguides. *ChemPhysChem*, **2015**, 16, 782-8	3.2	37
68	Plasmonic antennas and zero-mode waveguides to enhance single molecule fluorescence detection and fluorescence correlation spectroscopy toward physiological concentrations. *Wiley Interdisciplinary Reviews: Nanomedicine and Nanobiotechnology*, **2014**, 6, 268-82	9.2	43
67	Nanophotonic enhancement of the Förster resonance energy-transfer rate with single nanoapertures. *Nano Letters*, **2014**, 14, 4707-14	11.5	69

66	Singular analysis to homogenize planar metamaterials as nonlocal effective media. *Physical Review B*, **2014**, 89,	3.3	5
65	Conformational modulation and hydrodynamic radii of CP12 protein and its complexes probed by fluorescence correlation spectroscopy. *FEBS Journal*, **2014**, 281, 3206-17	5.7	13
64	Multi-focus parallel detection of fluorescent molecules at picomolar concentration with photonic nanojets arrays. *Applied Physics Letters*, **2014**, 105, 131102	3.4	26
63	Optimization of resonant effects in nanostructures via Weierstrass factorization. *Physical Review A*, **2013**, 88,	2.6	42
62	Singular analysis of Fano resonances in plasmonic nanostructures. *Physical Review A*, **2013**, 88,	2.6	24
61	Plasmonic band structure controls single-molecule fluorescence. *ACS Nano*, **2013**, 7, 8840-8	16.7	55
60	A plasmonic "antenna-in-box" platform for enhanced single-molecule analysis at micromolar concentrations. *Nature Nanotechnology*, **2013**, 8, 512-6	28.7	248
59	Gold nanoparticles for enhanced single molecule fluorescence analysis at micromolar concentration. *Optics Express*, **2013**, 21, 27338-43	3.3	33
58	Strong three-dimensional field localization and enhancement on deep sinusoidal gratings with two-dimensional periodicity. *Optics Letters*, **2013**, 38, 4876-9	3	3
57	Photonic Engineering of Hybrid Metal–Organic Chromophores. *Angewandte Chemie*, **2012**, 124, 11245-11249	3.49	2
56	Photonic engineering of hybrid metal-organic chromophores. *Angewandte Chemie - International Edition*, **2012**, 51, 11083-7	16.4	24
55	Photonic nanojet focusing for hollow-core photonic crystal fiber probes. *Applied Optics*, **2012**, 51, 8637-40	1.7	5
54	Fluorescence Enhancement Factors on Optical Antennas: Enlarging the Experimental Values without Changing the Antenna Design. *International Journal of Optics*, **2012**, 2012, 1-7	0.9	14
53	Fluorescence correlation spectroscopy. *BioEssays*, **2012**, 34, 361-8	4.1	172
52	Kagome hollow-core photonic crystal fiber probe for Raman spectroscopy. *Optics Letters*, **2012**, 37, 4371-3	3	44
51	Saturated excitation of fluorescence to quantify excitation enhancement in aperture antennas. *Optics Express*, **2012**, 20, 18085-90	3.3	4
50	Hollow-core photonic crystal fiber probe for remote fluorescence sensing with single molecule sensitivity. *Optics Express*, **2012**, 20, 28379-87	3.3	17
49	Imaging the Gouy phase shift in photonic jets with a wavefront sensor. *Optics Letters*, **2012**, 37, 3531-3	3	10

48	Excitation enhancement of a quantum dot coupled to a plasmonic antenna. *Advanced Materials*, **2012**, 24, OP314-20	24	67
47	FCS diffusion laws in two-phase lipid membranes: determination of domain mean size by experiments and Monte Carlo simulations. *Biophysical Journal*, **2011**, 100, 1242-51	2.9	32
46	Plasmonic antennas for directional sorting of fluorescence emission. *Nano Letters*, **2011**, 11, 2400-6	11.5	150
45	Large molecular fluorescence enhancement by a nanoaperture with plasmonic corrugations. *Optics Express*, **2011**, 19, 13056-62	3.3	22
44	Deciphering fluorescence signals by quantifying separately the excitation intensity from the number of emitters. *Optics Letters*, **2011**, 36, 3317-9	3	1
43	Bright unidirectional fluorescence emission of molecules in a nanoaperture with plasmonic corrugations. *Nano Letters*, **2011**, 11, 637-44	11.5	228
42	Fluorescence correlation spectroscopy. *Methods in Molecular Biology*, **2011**, 783, 181-95	1.4	1
41	Enhancing Fluorescence with Sub-Wavelength Metallic Apertures **2010**, 489-527		1
40	Photonic methods to enhance fluorescence correlation spectroscopy and single molecule fluorescence detection. *International Journal of Molecular Sciences*, **2010**, 11, 206-21	6.3	39
39	Surface Enhanced Raman Scattering on a Single Nanometric Aperture. *Journal of Physical Chemistry C*, **2010**, 114, 16250-16256	3.8	30
38	Colloidal quantum dots as probes of excitation field enhancement in photonic antennas. *ACS Nano*, **2010**, 4, 4571-8	16.7	27
37	Two-photon fluorescence correlation spectroscopy with high count rates and low background using dielectric microspheres. *Biomedical Optics Express*, **2010**, 1, 1075-1083	3.5	13
36	Enhanced second-harmonic generation from individual metallic nanoapertures. *Optics Letters*, **2010** , 35, 4063-5	3	34
35	Enhanced fluorescence from metal nanoapertures: physical characterizations and biophotonic applications **2010**,		8
34	High-efficiency single molecule fluorescence detection and correlation spectroscopy with dielectric microspheres **2010**,		5
33	Transverse and longitudinal confinement of photonic nanojets by compound dielectric microspheres **2009**,		5
32	Crucial role of the adhesion layer on the plasmonic fluorescence enhancement. *ACS Nano*, **2009**, 3, 2043-8	16.7	129
31	Nanoaperture-enhanced signal-to-noise ratio in fluorescence correlation spectroscopy. *Analytical Chemistry*, **2009**, 81, 834-9	7.8	41

30	Efficient excitation and collection of single-molecule fluorescence close to a dielectric microsphere. *Journal of the Optical Society of America B: Optical Physics*, **2009**, 26, 1473	1.7	57
29	Three-dimensional subwavelength confinement of light with dielectric microspheres. *Optics Express* , **2009**, 17, 2089-94	3.3	104
28	Optical-fiber-microsphere for remote fluorescence correlation spectroscopy. *Optics Express*, **2009**, 17, 19085-92	3.3	41
27	Biophotonics applications of nanometric apertures. *International Journal of Materials and Product Technology*, **2009**, 34, 488	1	5
26	Field enhancement in a circular aperture surrounded by a single channel groove. *Optics Express*, **2008**, 16, 2276-87	3.3	25
25	Emission and excitation contributions to enhanced single molecule fluorescence by gold nanometric apertures. *Optics Express*, **2008**, 16, 3008-20	3.3	110
24	Direct imaging of photonic nanojets. *Optics Express*, **2008**, 16, 6930-40	3.3	212
23	Strong electromagnetic confinement near dielectric microspheres to enhance single-molecule fluorescence. *Optics Express*, **2008**, 16, 15297-303	3.3	89
22	Nanoaperture-enhanced fluorescence: Towards higher detection rates with plasmonic metals. *Physical Review B*, **2008**, 77,	3.3	82
21	Disposable microscope objective lenses for fluorescence correlation spectroscopy using latex microspheres. *Analytical Chemistry*, **2008**, 80, 6800-4	7.8	41
20	Fluorescence fluctuations analysis in nanoapertures: physical concepts and biological applications. *Histochemistry and Cell Biology*, **2008**, 130, 795-805	2.4	13
19	Diffusion analysis within single nanometric apertures reveals the ultrafine cell membrane organization. *Biophysical Journal*, **2007**, 92, 913-9	2.9	137
18	Radiative and Nonradiative Photokinetics Alteration Inside a Single Metallic Nanometric Aperture. *Journal of Physical Chemistry C*, **2007**, 111, 11469-11474	3.8	21
17	Single-scattering theory of light diffraction by a circular subwavelength aperture in a finitely conducting screen. *Journal of the Optical Society of America A: Optics and Image Science, and Vision*, **2007**, 24, 339-58	1.8	16
16	Experimental Non-Gaussian Manipulation of Continuous Variables **2007**, 389-408		
15	Field enhancement in single subwavelength apertures. *Journal of the Optical Society of America A: Optics and Image Science, and Vision*, **2006**, 23, 2342-8	1.8	39
14	Dual-color fluorescence cross-correlation spectroscopy in a single nanoaperture : towards rapid multicomponent screening at high concentrations. *Optics Express*, **2006**, 14, 12206-16	3.3	38
13	Raman scattering and fluorescence emission in a single nanoaperture: Optimizing the local intensity enhancement. *Optics Communications*, **2006**, 267, 224-228	2	23

12	Single-fluorophore diffusion in a lipid membrane over a subwavelength aperture. *Journal of Biological Physics*, **2006**, 32, SN1-4	1.6	33
11	Enhancement of single-molecule fluorescence detection in subwavelength apertures. *Physical Review Letters*, **2005**, 95, 117401	7.4	182
10	Single molecule fluorescence in rectangular nano-apertures. *Optics Express*, **2005**, 13, 7035-44	3.3	60
9	Time-resolved homodyne characterization of individual quadrature-entangled pulses. *European Physical Journal D*, **2005**, 32, 391-396	1.3	42
8	Pulsed squeezed vacuum measurements without homodyning. *Physical Review A*, **2004**, 70,	2.6	29
7	Non-Gaussian statistics from individual pulses of squeezed light. *Physical Review Letters*, **2004**, 92, 153601	7.4	297
6	Pulsed homodyne measurements of femtosecond squeezed pulses generated by single-pass parametric deamplification. *Optics Letters*, **2004**, 29, 1267-9	3	50
5	Proposal for a loophole-free Bell test using homodyne detection. *Physical Review Letters*, **2004**, 93, 130409	7.4	204
4	Quantum key distribution using gaussian-modulated coherent states. *Nature*, **2003**, 421, 238-41	50.4	865
3	Maximal violation of Bell inequalities using continuous-variable measurements. *Physical Review A*, **2003**, 67,	2.6	101
2	Virtual entanglement and reconciliation protocols for quantum cryptography with continuous variables. *Quantum Information and Computation*, **2003**, 3, 535-552	0.9	148
1	Calcium activates purified human TRPA1 with and without its N-terminal ankyrin repeat domain in the absence of calmodulin		1