

# Ted A Laurence

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/7886814/publications.pdf>

Version: 2024-02-01

77  
papers

5,392  
citations

147801

31  
h-index

85541

71  
g-index

78  
all docs

78  
docs citations

78  
times ranked

5114  
citing authors

#	ARTICLE	IF	CITATIONS
1	Label-Free Multiphoton Imaging of Microbes in Root, Mineral, and Soil Matrices with Time-Gated Coherent Raman and Fluorescence Lifetime Imaging. <i>Environmental Science &amp; Technology</i> , 2022, 56, 1994-2008.	10.0	14
2	Fluorescence correlation spectroscopy measurements of proteins expressed inside microcapsules. <i>Biophysical Journal</i> , 2022, 121, 413a-414a.	0.5	0
3	Biophysical Characterization of Membrane Proteins Embedded in Nanodiscs Using Fluorescence Correlation Spectroscopy. <i>Membranes</i> , 2022, 12, 392.	3.0	1
4	FRET-based dynamic structural biology: Challenges, perspectives and an appeal for open-science practices. <i>ELife</i> , 2021, 10, .	6.0	152
5	Determination of the Maturation Status of Dendritic Cells by Applying Pattern Recognition to High-Resolution Images. <i>Journal of Physical Chemistry B</i> , 2020, 124, 8540-8548.	2.6	8
6	Mirrors for petawatt lasers: Design principles, limitations, and solutions. <i>Journal of Applied Physics</i> , 2020, 128, .	2.5	9
7	Periodic Arrangement of Lipopolysaccharides Nanostructures Accelerates and Enhances the Maturation Processes of Dendritic Cells. <i>ACS Applied Nano Materials</i> , 2018, 1, 839-850.	5.0	8
8	Measuring Activation and Luminescence Time Scales of Upconverting NaYF <sub>4</sub> :Yb,Er Nanocrystals. <i>Journal of Physical Chemistry C</i> , 2018, 122, 23780-23789.	3.1	6
9	Laser-induced modifications of HfO <sub>2</sub> coatings using picosecond pulses at 1053 nm: Using polarization to isolate surface defects. <i>Journal of Applied Physics</i> , 2018, 124, .	2.5	3
10	Novel etching fluids for potassium dihydrogen phosphate. , 2018, , .		0
11	Initiated chemical vapor deposition polymers for high peak-power laser targets. <i>Thin Solid Films</i> , 2017, 635, 37-41.	1.8	5
12	Applying Pattern Recognition to High-Resolution Images to Determine Cellular Signaling Status. <i>IEEE Transactions on Nanobioscience</i> , 2017, 16, 438-446.	3.3	4
13	The role of defects in laser-induced modifications of silica coatings and fused silica using picosecond pulses at 1053 nm: I Damage morphology. <i>Optics Express</i> , 2017, 25, 15161.	3.4	20
14	Role of defects in laser-induced modifications of silica coatings and fused silica using picosecond pulses at 1053 nm: II Scaling laws and the density of precursors. <i>Optics Express</i> , 2017, 25, 15381.	3.4	21
15	Filament damage formation in fused silica glass as a result of 100 ps near-infrared laser pulses. <i>Applied Optics</i> , 2017, 56, 3666.	2.1	6
16	Energy transfer networks: Quasicontinuum photoluminescence linked to high densities of defects. <i>Physical Review Materials</i> , 2017, 1, .	2.4	3
17	Laser-induced damage of intrinsic and extrinsic defects by picosecond pulses on multilayer dielectric coatings for petawatt-class lasers. <i>Optical Engineering</i> , 2016, 56, 011008.	1.0	25
18	Photon-HDF5: An Open File Format for Timestamp-Based Single-Molecule Fluorescence Experiments. <i>Biophysical Journal</i> , 2016, 110, 26-33.	0.5	45

#	ARTICLE	IF	CITATIONS
19	Photon-HDF5: open data format and computational tools for timestamp-based single-molecule experiments. Proceedings of SPIE, 2016, 9714, .	0.8	10
20	Expression and Association of the Yersinia pestis Translocon Proteins, YopB and YopD, Are Facilitated by Nanolipoprotein Particles. PLoS ONE, 2016, 11, e0150166.	2.5	11
21	Photo-oxidation of Polymers Synthesized by Plasma and Initiated CVD. Chemical Vapor Deposition, 2015, 21, 267-274.	1.3	13
22	Photo-oxidation of polymer-like amorphous hydrogenated carbon under visible light illumination. Polymer Degradation and Stability, 2015, 122, 133-138.	5.8	11
23	Engineered Nanostructures of Haptens Lead to Unexpected Formation of Membrane Nanotubes Connecting Rat Basophilic Leukemia Cells. ACS Nano, 2015, 9, 6738-6746.	14.6	11
24	Gigashot optical degradation in silica optics at 351 nm. Optics Express, 2015, 23, 4074.	3.4	9
25	Characterization of laser-induced damage by picosecond pulses on multi-layer dielectric coatings for petawatt-class lasers. Proceedings of SPIE, 2015, , .	0.8	5
26	Quasi-continuum photoluminescence: Unusual broad spectral and temporal characteristics found in defective surfaces of silica and other materials. Journal of Applied Physics, 2014, 115, .	2.5	20
27	The role of electronic defects and brittle microstructure in laser-driven material failure. Journal Physics D: Applied Physics, 2014, 47, 345304.	2.8	2
28	Fluorescence Correlation Spectroscopy at Micromolar Concentrations without Optical Nanoconfinement. Journal of Physical Chemistry B, 2014, 118, 9662-9667.	2.6	22
29	Quantifying Interactions of a Membrane Protein Embedded in a Lipid Nanodisc using Fluorescence Correlation Spectroscopy. Biophysical Journal, 2014, 106, L05-L08.	0.5	15
30	Fabrication Methodology of Enhanced Stability Room Temperature TlBr Gamma Detectors. IEEE Transactions on Nuclear Science, 2013, 60, 1231-1236.	2.0	21
31	Binding of Apolipoprotein E Inhibits the Oligomer Growth of Amyloid- $\beta^2$ Peptide in Solution as Determined by Fluorescence Cross-correlation Spectroscopy. Journal of Biological Chemistry, 2013, 288, 11628-11635.	3.4	39
32	Blue shift of GaAs micropillars strained with silicon nitride. Applied Physics Letters, 2013, 103, 212104.	3.3	2
33	Advances in superresolution optical fluctuation imaging (SOFI). Quarterly Reviews of Biophysics, 2013, 46, 210-221.	5.7	49
34	Thermal annealing of laser damage precursors on fused silica surfaces. Optical Engineering, 2012, 51, 121817.	1.0	26
35	Extracting the distribution of laser damage precursors on fused silica surfaces for 351 nm, 3 ns laser pulses at high fluences (20-150 J/cm <sup>2</sup> ). Optics Express, 2012, 20, 11561.	3.4	85
36	Four-Color Alternating-Laser Excitation Single-Molecule Fluorescence Spectroscopy for Next-Generation Biodetection Assays. Clinical Chemistry, 2012, 58, 707-716.	3.2	26

#	ARTICLE	IF	CITATIONS
37	Correlation of UV damage threshold with post-annealing in CVD-grown SiO <sub>2</sub> overlayers on etched fused silica substrates. Proceedings of SPIE, 2012, , .	0.8	1
38	Robust SERS Enhancement Factor Statistics Using Rotational Correlation Spectroscopy. Nano Letters, 2012, 12, 2912-2917.	9.1	44
39	Single-Step Nanoplasmonic VEGF <sub>165</sub> Aptasensor for Early Cancer Diagnosis. ACS Nano, 2012, 6, 7607-7614.	14.6	127
40	Stoichiometry of Reconstituted High-Density Lipoproteins in the Hydrated State Determined by Photon Antibunching. Biophysical Journal, 2011, 101, 970-975.	0.5	6
41	Ultra-fast photoluminescence in fused silica surface flaws susceptible to laser damage. Materials Research Society Symposia Proceedings, 2011, 1365, 1.	0.1	3
42	HF-Based Etching Processes for Improving Laser Damage Resistance of Fused Silica Optical Surfaces. Journal of the American Ceramic Society, 2011, 94, 416-428.	3.8	197
43	Characterizing diffusion dynamics of a membrane protein associated with nanolipoproteins using fluorescence correlation spectroscopy. Protein Science, 2011, 20, 437-447.	7.6	27
44	Synthesis and characterization of a nanocrystalline diamond aerogel. Proceedings of the National Academy of Sciences of the United States of America, 2011, 108, 8550-8553.	7.1	52
45	Spectroscopic investigation of (NH <sub>4</sub> ) <sub>2</sub> S treated GaSeTe for radiation detector applications. Materials Letters, 2010, 64, 393-395.	2.6	6
46	Efficient maximum likelihood estimator fitting of histograms. Nature Methods, 2010, 7, 338-339.	19.0	102
47	Fracture-induced subbandgap absorption as a precursor to optical damage on fused silica surfaces. Optics Letters, 2010, 35, 2702.	3.3	150
48	How Proteins Slide on DNA. Biological and Medical Physics Series, 2010, , 39-68.	0.4	4
49	Metallic-like photoluminescence and absorption in fused silica surface flaws. Applied Physics Letters, 2009, 94, .	3.3	100
50	Ultrafast photoluminescence as a diagnostic for laser damage initiation. Proceedings of SPIE, 2009, , .	0.8	6
51	Laser damage precursors in fused silica. Proceedings of SPIE, 2009, , .	0.8	57
52	Generalized Approach to SERS-Active Nanomaterials via Controlled Nanoparticle Linking, Polymer Encapsulation, and Small-Molecule Infusion. Journal of Physical Chemistry C, 2009, 113, 13622-13629.	3.1	160
53	Fluorescence Cross-Correlation Spectroscopy as a Universal Method for Protein Detection with Low False Positives. Analytical Chemistry, 2009, 81, 5614-5622.	6.5	18
54	Rapid, Solution-Based Characterization of Optimized SERS Nanoparticle Substrates. Journal of the American Chemical Society, 2009, 131, 162-169.	13.7	100

#	ARTICLE	IF	CITATIONS
55	Aptamer-Based SERRS Sensor for Thrombin Detection. <i>Nano Letters</i> , 2008, 8, 4386-4390.	9.1	185
56	Motion of a DNA Sliding Clamp Observed by Single Molecule Fluorescence Spectroscopy. <i>Journal of Biological Chemistry</i> , 2008, 283, 22895-22906.	3.4	45
57	Correlation Spectroscopy of Minor Fluorescent Species: Signal Purification and Distribution Analysis. <i>Biophysical Journal</i> , 2007, 92, 2184-2198.	0.5	39
58	Counting Constituents in Molecular Complexes by Fluorescence Photon Antibunching. <i>IEEE Journal of Selected Topics in Quantum Electronics</i> , 2007, 13, 996-1005.	2.9	14
59	Shot-Noise Limited Single-Molecule FRET Histograms: A Comparison between Theory and Experiments. <i>Journal of Physical Chemistry B</i> , 2006, 110, 22103-22124.	2.6	301
60	Fast, flexible algorithm for calculating photon correlations. <i>Optics Letters</i> , 2006, 31, 829.	3.3	61
61	Single-molecule dynamics of phytochrome-bound fluorophores probed by fluorescence correlation spectroscopy. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2006, 103, 11136-11141.	7.1	31
62	Distribution analysis of the photon correlation spectroscopy of discrete numbers of dye molecules conjugated to DNA. <i>IEEE Journal of Selected Topics in Quantum Electronics</i> , 2005, 11, 873-880.	2.9	9
63	Alternating-Laser Excitation of Single Molecules. <i>ChemInform</i> , 2005, 36, no.	0.0	0
64	Probing structural heterogeneities and fluctuations of nucleic acids and denatured proteins. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2005, 102, 17348-17353.	7.1	219
65	Alternating-Laser Excitation of Single Molecules. <i>Accounts of Chemical Research</i> , 2005, 38, 523-533.	15.6	335
66	Retention of Transcription Initiation Factor $\lambda$ 70 in Transcription Elongation: Single-Molecule Analysis. <i>Molecular Cell</i> , 2005, 20, 347-356.	9.7	132
67	Application of SERS nanoparticles for intracellular pH measurements. , 2004, 5512, 80.		0
68	Fluorescence-aided molecule sorting: Analysis of structure and interactions by alternating-laser excitation of single molecules. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2004, 101, 8936-8941.	7.1	597
69	Photon Arrival-Time Interval Distribution (PAID): A Novel Tool for Analyzing Molecular Interactions. <i>Journal of Physical Chemistry B</i> , 2004, 108, 3051-3067.	2.6	65
70	The Power and Prospects of Fluorescence Microscopies and Spectroscopies. <i>Annual Review of Biophysics and Biomolecular Structure</i> , 2003, 32, 161-182.	18.3	198
71	ANALYTICAL CHEMISTRY: How to Detect Weak Pairs. <i>Science</i> , 2003, 299, 667-668.	12.6	54
72	RATIOMETRICSINGLE-MOLECULESTUDIES OFFREELYDIFFUSINGBIOMOLECULES. <i>Annual Review of Physical Chemistry</i> , 2001, 52, 233-253.	10.8	195

#	ARTICLE	IF	CITATIONS
73	Time-gated biological imaging by use of colloidal quantum dots. Optics Letters, 2001, 26, 825.	3.3	332
74	Single-molecule protein folding: Diffusion fluorescence resonance energy transfer studies of the denaturation of chymotrypsin inhibitor 2. Proceedings of the National Academy of Sciences of the United States of America, 2000, 97, 5179-5184.	7.1	440
75	Temporal coherence of individual turbulent patterns in atmospheric seeing. Applied Optics, 2000, 39, 4879.	2.1	18
76	Polarization Spectroscopy of Single Fluorescent Molecules. Journal of Physical Chemistry B, 1999, 103, 6839-6850.	2.6	251
77	Protein Dynamics and Interactions. , 0, , 191-236.		0