Yu-Hwa Lo

List of Publications by Year
in descending order

#	Article	IF	Citations
1	A high-throughput technique to map cell images to cell positions using a 3D imaging flow cytometer. Proceedings of the National Academy of Sciences of the United States of America, 2022, 119, .	7.1	9
2	Athermalized carrier multiplication mechanism for detectors using an amorphous silicon gain medium. Optics Express, 2022, 30, 16947.	3.4	0
3	Multimodal NASH prognosis using 3D imaging flow cytometry and artificial intelligence to characterize liver cells. Scientific Reports, 2022, 12, .	3.3	2
4	A Physics Based Unified Circuit Model for Single Photon and Analog Detector. IEEE Access, 2021, 9, 129571-129581.	4.2	1
5	Label-free image-encoded microfluidic cell sorter with a scanning Bessel beam. APL Photonics, 2021, 6, 076101.	5.7	3
6	A 30.3 fA/âˆšHz Biosensing Current Front-End With 139 dB Cross-Scale Dynamic Range. IEEE Transactions on Biomedical Circuits and Systems, 2021, 15, 1368-1379.	4.0	5
7	A fabrication process for flexible single-crystal perovskite devices. Nature, 2020, 583, 790-795.	27.8	278
8	Image-guided cell sorting using fast scanning lasers. APL Photonics, 2020, 5, 040801.	5.7	12
9	Detecting Proteinâ€"Ligand Interaction from Integrated Transient Induced Molecular Electronic Signal (i-TIMES). Analytical Chemistry, 2020, 92, 3852-3859.	6.5	3
10	Frequency- and Power-Dependent Photoresponse of a Perovskite Photodetector Down to the Single-Photon Level. Nano Letters, 2020, 20, 2144-2151.	9.1	20
11	Defect Assisted Carrier Multiplication in Amorphous Silicon. IEEE Journal of Quantum Electronics, 2020, 56, 1-11.	1.9	4
12	3D side-scattering imaging flow cytometer and convolutional neural network for label-free cell analysis. APL Photonics, 2020, 5, 126105.	5.7	10
13	Differentiating and quantifying exosome secretion from a single cell using quasi-bound states in the continuum. Nanophotonics, 2020, 9, 1081-1086.	6.0	54
14	Modeling Gain Mechanisms in Amorphous Silicon Due to Efficient Carrier Multiplication and Trap-Induced Junction Modulation. Journal of Lightwave Technology, 2019, 37, 5056-5066.	4.6	3
15	Measuring Electric Charge and Molecular Coverage on Electrode Surface from Transient Induced Molecular Electronic Signal (TIMES). Scientific Reports, 2019, 9, 16279.	3.3	2
16	A Sub-pA Current Sensing Front-End for Transient Induced Molecular Spectroscopy. , 2019, , .		9
17	Array atomic force microscopy for real-time multiparametric analysis. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 5872-5877.	7.1	18
18	Machine Learning Based Realâ€Time Imageâ€Guided Cell Sorting and Classification. Cytometry Part A: the Journal of the International Society for Analytical Cytology, 2019, 95, 499-509.	1.5	60

#	Article	IF	Citations
19	Room-temperature long-wave infrared detector with thin double layers of amorphous germanium and amorphous silicon. Optics Express, 2019, 27, 37056.	3.4	10
20	Cameraless high-throughput three-dimensional imaging flow cytometry. Optica, 2019, 6, 1297.	9.3	24
21	Single photon detector with a mesoscopic cycling excitation design of dual gain sections and a transport barrier. Optics Letters, 2019, 44, 1746.	3.3	5
22	Low Noise, High Gain-Bandwidth Photodetectors Using Cycling Exciting Process (CEP) as Amplification Mechanism. , 2018, , .		0
23	A high-efficiency low-noise signal amplification mechanism for photodetectors. , 2017, , .		2
24	An amorphous silicon photodiode with 2 THz gainâ€bandwidth product based on cycling excitation process. Applied Physics Letters, 2017, 111, 101104.	3.3	11
25	Quantum detectors using cycling excitation process in disordered medium. , 2017, , .		0
26	Cycling excitation process for light detection and signal amplification in semiconductors. , 2016, , .		2
27	Microfluidic cytometers with integrated on-chip optical systems for red blood cell and platelet counting. Biomicrofluidics, 2016, 10, 064119.	2.4	28
28	Transient Induced Molecular Electronic Spectroscopy (TIMES) for study of protein-ligand interactions. Scientific Reports, 2016, 6, 35570.	3.3	5
29	Proteinâ€"Ligand Interaction Detection with a Novel Method of Transient Induced Molecular Electronic Spectroscopy (TIMES): Experimental and Theoretical Studies. ACS Central Science, 2016, 2, 834-842.	11.3	27
30	Complementary metalâ€"oxideâ€"semiconductor compatible 1060â€‰â€‰nm photodetector with ultrahigh gain under low bias. Optics Letters, 2015, 40, 4440.	3.3	8
31	Discovery of a photoresponse amplification mechanism in compensated PN junctions. Applied Physics Letters, 2015, 106, 031103.	3.3	13
32	Cycling excitation process: An ultra efficient and quiet signal amplification mechanism in semiconductor. Applied Physics Letters, 2015, 107, 053505.	3.3	13
33	Non-Geiger mode single photon detector with multiple amplification and gain control mechanisms. Journal of Applied Physics, 2014, 115, 173104.	2.5	6
34	High efficiency silicon 1310â€‰nm detector without defect states or heteroepitaxy. Applied Physics Letters, 2013, 103, 041119.	3.3	6
35	Integrated 1550Ânm photoreceiver with built-in amplification and feedback mechanisms. Optics Letters, 2013, 38, 4166.	3.3	9
36	Physics of Single Photon Avalanche Detectors With Built-In Self-Quenching and Self-Recovering Capabilities. IEEE Journal of Quantum Electronics, 2012, 48, 960-967.	1.9	10

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37	Bias Dependence of Sub-Bandgap Light Detection for Coreâ€"Shell Silicon Nanowires. Nano Letters, 2012, 12, 5929-5935.	9.1	20
38	Self-quenching InGaAs/InP single photon avalanche detector utilizing zinc diffusion rings. Optics Express, 2011, 19, 15149.	3.4	19
39	Physics of self-recovering single photon avalanche detectors. , 2011, , .		1
40	Silicon nanowire detectors showing phototransistive gain. Applied Physics Letters, 2008, 93, .	3.3	96
41	Self-quenching and self-recovering InGaAsâˆ•InAlAs single photon avalanche detector. Applied Physics Letters, 2008, 93, .	3.3	34
42	Fluid-filled tunable mold for polymer lenses. , 2008, , .		0