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List of Publications by Year
in descending order

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53 papers	1,067 citations	567281 15 h-index	434195 31 g-index
54 all docs	54 docs citations	54 times ranked	1655 citing authors

#	Article	IF	Citations
1	Malaria Diagnosis Using a Mobile Phone Polarized Microscope. Scientific Reports, 2015, 5, 13368.	3.3	131
2	Sources of Inaccuracy in Photoplethysmography for Continuous Cardiovascular Monitoring. Biosensors, 2021, 11, 126.	4.7	128
3	A review of biosensor technologies for blood biomarkers toward monitoring cardiovascular diseases at the point-of-care. Biosensors and Bioelectronics, 2021, 171, 112621.	10.1	78
4	Measurement of pH and dissolved oxygen within cell culture media using a hydrogel microarray sensor. Sensors and Actuators B: Chemical, 2008, 128, 388-398.	7.8	72
5	Application of Surface-Enhanced Raman Spectroscopy for Detection of Beta Amyloid Using Nanoshells. Plasmonics, 2007, 2, 55-64.	3.4	67
6	Surface enhanced Raman spectroscopy (SERS) for in vitro diagnostic testing at the point of care. Nanophotonics, 2017, 6, 681-701.	6.0	63
7	Optofluidic device for ultra-sensitive detection of proteins using surface-enhanced Raman spectroscopy. Microfluidics and Nanofluidics, 2009, 6, 411-417.	2.2	55
8	Detection of cardiovascular disease associated miR-29a using paper-based microfluidics and surface enhanced Raman scattering. Analyst, The, 2020, 145, 983-991.	3.5	39
9	A SERS aptasensor for sensitive and selective detection of bis(2-ethylhexyl)phthalate. RSC Advances, 2019, 9, 2618-2625.	3.6	33
10	Microporated PEG Spheres for Fluorescent Analyte Detection. Journal of Fluorescence, 2006, 17, 57-63.	2.5	29
11	Selfâ€Cleaning, Thermoresponsive P(NIPAAmâ€coâ€AMPS) Double Network Membranes for Implanted Glucose Biosensors. Macromolecular Materials and Engineering, 2016, 301, 935-943.	3.6	29
12	A Layer-by-Layer Approach To Retain a Fluorescent Glucose Sensing Assay within the Cavity of a Hydrogel Membrane. ACS Applied Bio Materials, 2018, 1, 1319-1327.	4.6	22
13	Foreign Body Reaction to a Subcutaneously Implanted Self-Cleaning, Thermoresponsive Hydrogel Membrane for Glucose Biosensors. ACS Biomaterials Science and Engineering, 2018, 4, 4104-4111.	5.2	20
14	Quantifying tissue mechanical properties using photoplethysmography. Biomedical Optics Express, 2014, 5, 2362.	2.9	16
15	Overcoming the aggregation problem: A new type of fluorescent ligand for ConA-based glucose sensing. Biosensors and Bioelectronics, 2015, 63, 53-60.	10.1	16
16	Aptamer-based surface-enhanced resonance Raman scattering assay on a paper fluidic platform for detection of cardiac troponin I. Journal of Biomedical Optics, 2020, 25, .	2.6	16
17	A self-cleaning, mechanically robust membrane for minimizing the foreign body reaction: towards extending the lifetime of sub-Q glucose biosensors. Journal of Materials Science: Materials in Medicine, 2019, 30, 79.	3.6	15
18	Multidomain-Based Responsive Materials with Dual-Mode Optical Readouts. ACS Applied Materials & Interfaces, 2019, 11, 14286-14295.	8.0	15

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19	Development of a colorimetric paper fluidic dipstick assay for measurement of glycated albumin to monitor gestational diabetes at the point-of-care. Talanta, 2021, 223, 121728.	5.5	15
20	Collection Method of SERS Active Nanoparticles for Sensitive and Precise Measurements. Analytical Chemistry, 2017, 89, 13120-13127.	6.5	14
21	Wireless Monitoring of Liver Hemodynamics In Vivo. PLoS ONE, 2014, 9, e102396.	2.5	13
22	Paper Microfluidic Device with a Horizontal Motion Valve and a Localized Delay for Automatic Control of a Multistep Assay. Analytical Chemistry, 2021, 93, 4497-4505.	6.5	13
23	Portable bright-field, fluorescence, and cross-polarized microscope toward point-of-care imaging diagnostics. Journal of Biomedical Optics, 2019, 24, 1.	2.6	13
24	High Affinity Mannotetraose as an Alternative to Dextran in ConA Based Fluorescent Affinity Glucose Assay Due to Improved FRET Efficiency. ACS Sensors, 2016, 1, 584-590.	7.8	12
25	Pumpless, â€œSelf-Drivenâ€•Microfluidic Channels with Controlled Blood Flow Using an Amphiphilic Silicone. ACS Applied Polymer Materials, 2020, 2, 1731-1738.	4.4	11
26	Surface Functionalization Utilizing Mesoporous Silica Nanoparticles for Enhanced Evanescent-Field Mid-Infrared Waveguide Gas Sensing. Coatings, 2021, 11, 118.	2.6	11
27	Synthesis of SERS-active coreâ€“satellite nanoparticles using heterobifunctional PEG linkers. Nanoscale Advances, 2021, 4, 258-267.	4.6	11
28	Spectrally multiplexed assay using gap enhanced nanoparticle for detection of a myocardial infarction biomarker panel. Analytica Chimica Acta, 2022, 1198, 339562.	5.4	10
29	Dual-modulation, dual-wavelength, optical polarimetry system for glucose monitoring. Journal of Biomedical Optics, 2016, 21, 087001.	2.6	9
30	Nanoparticle-based assay for detection of S100P mRNA using surface-enhanced Raman spectroscopy. Journal of Biomedical Optics, 2019, 24, 1.	2.6	9
31	Surface-enhanced Raman spectroscopy competitive binding biosensor development utilizing surface modification of silver nanocubes and a citrulline aptamer. Journal of Biomedical Optics, 2017, 22, 075002.	2.6	8
32	Development of a miRNA surface-enhanced Raman scattering assay using benchtop and handheld Raman systems. Journal of Biomedical Optics, 2018, 23, 1.	2.6	8
33	Detection of volatile organic compounds using mid-infrared silicon nitride waveguide sensors. Scientific Reports, 2022, 12, 5572.	3.3	8
34	Skin optical properties in the obese and their relation to body mass index: a review. Journal of Biomedical Optics, 2022, 27, .	2.6	6
35	Ferric plasmonic nanoparticles, aptamers, and magnetofluidic chips: toward the development of diagnostic surface-enhanced Raman spectroscopy assays. Journal of Biomedical Optics, 2016, 21, 127005.	2.6	5
36	All-nanoparticle layer-by-layer coatings for Mid-IR on-chip gas sensing. Chemical Communications, 2020, 56, 14283-14286.	4.1	5

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37	Aptamer-switching optical bioassay for citrulline detection at the point-of-care. Journal of Biomedical Optics, 2019, 24, 1.	2.6	5
38	An inductively coupled, doubly tuned resonator for in vivo nuclear magnetic resonance spectroscopy. Review of Scientific Instruments, 1999, 70, 3454-3456.	1.3	4
39	Use of a micro- to nanochannel for the characterization of surface-enhanced Raman spectroscopy signals from unique functionalized nanoparticles. Journal of Biomedical Optics, 2016, 21, 085006.	2.6	3
40	Monte Carlo method for assessment of a multimodal insertable biosensor. Journal of Biomedical Optics, 2022, 27, .	2.6	3
41	Postprandial concentration of circulating branched chain amino acids are able to predict the carbohydrate content of the ingested mixed meal. Clinical Nutrition, 2021, 40, 5020-5029.	5.0	2
42	A portable brightfield and fluorescence microscope toward automated malarial parasitemia quantification in thin blood smears. PLoS ONE, 2022, 17, e0266441.	2.5	2
43	SERS-based hydrogel sensors for pH and enzymatic substrates. , 2015, , .		1
44	In-silico and in-vitro investigation of a photonic monitor for intestinal perfusion and oxygenation. Biomedical Optics Express, 2017, 8, 3714.	2.9	1
45	A thin whole blood smear prepared via pumpless microfluidics. Microfluidics and Nanofluidics, 2021, 25, 1.	2.2	1
46	Diabetes Technology Meeting 2020. Journal of Diabetes Science and Technology, 2021, 15, 916-960.	2.2	1
47	Aptamer-based surface-enhanced resonance Raman scattering assay on a paper fluidic platform for detection of cardiac troponin I. Journal of Biomedical Optics, 2020, 25, .	2.6	1
48	Multi-modal physiological sensing on the upper arm. , 2022, , .		1
49	Optofluidic device for molecular detection via surface enhanced Raman spectroscopy. , 2008, , .		0
50	Brightfield and fluorescence in-channel staining of thin blood smears generated in a pumpless microfluidic. Analytical Methods, 2021, 13, 2238-2247.	2.7	0
51	Signs of agingâ€related inflammation and adaptive reserves of aged mesenteric lymphatic vessels. FASEB Journal, 2011, 25, 1022.5.	0.5	0
52	In vivo performance of a visible wavelength optical sensor for monitoring intestinal perfusion and oxygenation. Journal of Biomedical Optics, 2018, 23, 1.	2.6	0
53	An in vitro testing system for wrist-worn PPG devices. , 2022, , .		0