Isaac J Pence

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/5093457/publications.pdf

Version: 2024-02-01

35 papers	1,298 citations	394421 19 h-index	395702 33 g-index
35 all docs	35 docs citations	35 times ranked	2100 citing authors

#	Article	IF	Citations
1	Clinical instrumentation and applications of Raman spectroscopy. Chemical Society Reviews, 2016, 45, 1958-1979.	38.1	253
2	Surface enhanced Raman scattering artificial nose for high dimensionality fingerprinting. Nature Communications, 2020, 11, 207.	12.8	93
3	Glycosylated superparamagnetic nanoparticle gradients for osteochondral tissue engineering. Biomaterials, 2018, 176, 24-33.	11.4	92
4	Portable all-fiber dual-output widely tunable light source for coherent Raman imaging. Biomedical Optics Express, 2019, 10, 4437.	2.9	64
5	Buoyancyâ€Driven Gradients for Biomaterial Fabrication and Tissue Engineering. Advanced Materials, 2019, 31, e1900291.	21.0	61
6	Raman spectroscopy imaging reveals interplay between atherosclerosis and medial calcification in the human aorta. Science Advances, 2017, 3, e1701156.	10.3	60
7	Duplex-Specific Nuclease-Amplified Detection of MicroRNA Using Compact Quantum Dotâ€“DNA Conjugates. ACS Applied Materials & Interfaces, 2018, 10, 28290-28300.	8.0	59
8	Single Particle Automated Raman Trapping Analysis of Breast Cancer Cell-Derived Extracellular Vesicles as Cancer Biomarkers. ACS Nano, 2021, 15, 18192-18205.	14.6	55
9	Diagnosis of immunomarkersin vivo viamultiplexed surface enhanced Raman spectroscopy with gold nanostars. Nanoscale, 2018, 10, 13092-13105.	5.6	45
10	Clinical characterization of in vivo inflammatory bowel disease with Raman spectroscopy. Biomedical Optics Express, 2017, 8, 524.	2.9	41
11	Imaging and quantifying drug delivery in skin â€“ Part 2: Fluorescence andvibrational spectroscopic imaging methods. Advanced Drug Delivery Reviews, 2020, 153, 147-168.	13.7	39
12	Single Particle Automated Raman Trapping Analysis. Nature Communications, 2018, 9, 4256.	12.8	37
13	1064â€‰â€‰nm dispersive Raman spectroscopy of tissues with strong near-infrared autofluorescence. Optics Letters, 2014, 39, 303.	3.3	36
14	Discrimination of liver malignancies with 1064 nm dispersive Raman spectroscopy. Biomedical Optics Express, 2015, 6, 2724.	2.9	34
15	Discrimination of malignant and normal kidney tissue with short wave infrared dispersive Raman spectroscopy. Journal of Biophotonics, 2018, 11, e201700188.	2.3	33
16	Drug-Resistant Staphylococcus aureus Strains Reveal Distinct Biochemical Features with Raman Microspectroscopy. ACS Infectious Diseases, 2018, 4, 1197-1210.	3.8	31
17	Dual excitation wavelength system for combined fingerprint and high wavenumber Raman spectroscopy. Analyst, The, 2018, 143, 6049-6060.	3.5	30
18	Spatiotemporal quantification of acoustic cell patterning using VoronoÃ¯ tessellation. Lab on A Chip, 2019, 19, 562-573.	6.0	30

#	Article	IF	Citations
19	Nanoscale Molecular Quantification of Stem Cellâ€“Hydrogel Interactions. ACS Nano, 2020, 14, 17321-17332.	14.6	22
20	Intraoperative Raman spectroscopy of soft tissue sarcomas. Lasers in Surgery and Medicine, 2016, 48, 774-781.	2.1	21
21	In vivo Raman spectral analysis of impaired cervical remodeling in a mouse model of delayed parturition. Scientific Reports, 2017, 7, 6835.	3.3	21
22	Imaging and quantifying drug delivery in skin â€“ Part 1: Autoradiography and mass spectrometry imaging. Advanced Drug Delivery Reviews, 2020, 153, 137-146.	13.7	20
23	Assessing Variability of in Vivo Tissue Raman Spectra. Applied Spectroscopy, 2013, 67, 789-800.	2.2	17
24	Feature Selection and Rapid Characterization of Bloodstains on Different Substrates. Applied Spectroscopy, 2020, 74, 1238-1251.	2.2	14
25	Integrated photodynamic Raman theranostic system for cancer diagnosis, treatment, and post-treatment molecular monitoring. Theranostics, 2021, 11, 2006-2019.	10.0	13
26	Polarization in Raman spectroscopy helps explain bone brittleness in genetic mouse models. Journal of Biomedical Optics, 2014, 19, 117008.	2.6	12
27	Multiplexing physical stimulation on single human induced pluripotent stem cell-derived cardiomyocytes for phenotype modulation. Biofabrication, 2021, 13, 025004.	7.1	12
28	Multi-window sparse spectral sampling stimulated Raman scattering microscopy. Biomedical Optics Express, 2021, 12, 6095.	2.9	11
29	Coupling Lipid Nanoparticle Structure and Automated Singleâ€Particle Composition Analysis to Design Phospholipaseâ€Responsive Nanocarriers. Advanced Materials, 2022, 34, e2200839.	21.0	10
30	Visualizing and quantifying antimicrobial drug distribution in tissue. Advanced Drug Delivery Reviews, 2021, 177, 113942.	13.7	9
31	Near-infrared autofluorescence spectroscopy of in vivo soft tissue sarcomas. Optics Letters, 2015, 40, 5498.	3.3	8
32	Translational biophotonics with Raman imaging: clinical applications and beyond. Analyst, The, 2021, 146, 6379-6393.	3.5	8
33	Application driven assessment of probe designs for Raman spectroscopy. Biomedical Optics Express, 2021, 12, 852.	2.9	6
34	Development of a clinical coherent Raman imaging system for in vivo drug monitoring. , 2021, , .		1
35	Visualizing and Quantifying Pharmaceutical Compounds within Skin using Coherent Raman Scattering Imaging. Journal of Visualized Experiments, 2021, , .	0.3	0