

Nicholas I Smith

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

71 papers	2,281 citations	25 h-index	47 g-index
88 ext. papers	2,748 ext. citations	4.6 avg, IF	4.97 L-index

#	Paper	IF	Citations
71	Label-free Raman observation of cytochrome c dynamics during apoptosis. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2012 , 109, 28-32	11.5	306
70	Raman microscopy for dynamic molecular imaging of living cells. <i>Journal of Biomedical Optics</i> , 2008 , 13, 044027	3.5	191
69	Dynamic SERS imaging of cellular transport pathways with endocytosed gold nanoparticles. <i>Nano Letters</i> , 2011 , 11, 5344-8	11.5	185
68	Linear phase imaging using differential interference contrast microscopy. <i>Journal of Microscopy</i> , 2004 , 214, 7-12	1.9	166
67	An evaluation of fixation methods: Spatial and compositional cellular changes observed by Raman imaging. <i>Vibrational Spectroscopy</i> , 2017 , 91, 31-45	2.1	99
66	Introduction to super-resolution microscopy. <i>Microscopy (Oxford, England)</i> , 2014 , 63, 177-92	1.3	75
65	Noninvasive detection of macrophage activation with single-cell resolution through machine learning. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2018 , 115, E2676-E2685	11.5	67
64	Generation of calcium waves in living cells by pulsed-laser-induced photodisruption. <i>Applied Physics Letters</i> , 2001 , 79, 1208-1210	3.4	66
63	Nanoscale heating of laser irradiated single gold nanoparticles in liquid. <i>Optics Express</i> , 2011 , 19, 12375-83	3.3	63
62	Structured line illumination Raman microscopy. <i>Nature Communications</i> , 2015 , 6, 10095	17.4	62
61	Time-resolved observation of surface-enhanced Raman scattering from gold nanoparticles during transport through a living cell. <i>Journal of Biomedical Optics</i> , 2009 , 14, 024038	3.5	62
60	Raman spectroscopic analysis of malaria disease progression via blood and plasma samples. <i>Analyst, The</i> , 2013 , 138, 3927-33	5	56
59	Differential expression of pyloric atresia in junctional epidermolysis bullosa with ITGB4 mutations suggests that pyloric atresia is due to factors other than the mutations and not predictive of a poor outcome: three novel mutations and a review of the literature. <i>Acta Dermato-Venereologica</i> , 2008 , 88, 438-48	2.2	51
58	A femtosecond laser pacemaker for heart muscle cells. <i>Optics Express</i> , 2008 , 16, 8604-16	3.3	49
57	z-Polarization sensitive detection in micro-Raman spectroscopy by radially polarized incident light. <i>Journal of Raman Spectroscopy</i> , 2008 , 39, 1643-1648	2.3	46
56	Raman spectroscopy as a tool for label-free lymphocyte cell line discrimination. <i>Analyst, The</i> , 2016 , 141, 3756-64	5	43
55	Deep ultraviolet resonant Raman imaging of a cell. <i>Journal of Biomedical Optics</i> , 2012 , 17, 076001	3.5	42

54	Optical trapping and surgery of living yeast cells using a single laser. <i>Review of Scientific Instruments</i> , 2008 , 79, 103705	1.7	37
53	3D SERS (surface enhanced Raman scattering) imaging of intracellular pathways. <i>Methods</i> , 2014 , 68, 348-353	4.8	34
52	Quantitative DIC microscopy using a geometric phase shifter 1997 ,		32
51	Location-dependent photogeneration of calcium waves in HeLa cells. <i>Cell Biochemistry and Biophysics</i> , 2006 , 45, 167-76	3.2	32
50	Beyond the diffraction-limit biological imaging by saturated excitation microscopy. <i>Journal of Biomedical Optics</i> , 2008 , 13, 050507	3.5	28
49	Polyamines reverse non-steroidal anti-inflammatory drug-induced toxicity in human colorectal cancer cells. <i>Biochemical Journal</i> , 2003 , 374, 481-8	3.8	27
48	Cell optical density and molecular composition revealed by simultaneous multimodal label-free imaging. <i>Biophysical Journal</i> , 2013 , 105, 1123-32	2.9	26
47	SAX microscopy with fluorescent nanodiamond probes for high-resolution fluorescence imaging. <i>Biomedical Optics Express</i> , 2011 , 2, 1946-54	3.5	26
46	Photogeneration of membrane potential hyperpolarization and depolarization in non-excitable cells. <i>European Biophysics Journal</i> , 2009 , 38, 255-62	1.9	25
45	Comparison of staining selectivity for subcellular structures by carbazole-based cyanine probes in nonlinear optical microscopy. <i>ChemBioChem</i> , 2011 , 12, 52-5	3.8	24
44	Three-dimensional subsurface microprocessing of collagen by ultrashort laser pulses. <i>Applied Physics Letters</i> , 2001 , 78, 999-1001	3.4	23
43	Super-Spatial- and -Spectral-Resolution in Vibrational Imaging via Saturated Coherent Anti-Stokes Raman Scattering. <i>Physical Review Applied</i> , 2015 , 4,	4.3	20
42	Analysis of dynamic SERS spectra measured with a nanoparticle during intracellular transportation in 3D. <i>Journal of Optics (United Kingdom)</i> , 2015 , 17, 114023	1.7	18
41	Effect of Surface-Modified Gold Nanorods on the Inflammatory Cytokine Response in Macrophage Cells. <i>Particle and Particle Systems Characterization</i> , 2013 , 30, 427-433	3.1	18
40	Saturated excitation microscopy for sub-diffraction-limited imaging of cell clusters. <i>Journal of Biomedical Optics</i> , 2013 , 18, 126002	3.5	18
39	Photostimulation of two types of Ca ²⁺ waves in rat pheochromocytoma PC12 cells by ultrashort pulsed near-infrared laser irradiation. <i>Laser Physics Letters</i> , 2006 , 3, 154-161	1.5	18
38	Slow Ca(2+) wave stimulation using low repetition rate femtosecond pulsed irradiation. <i>Optics Express</i> , 2006 , 14, 717-25	3.3	18
37	Saturated two-photon excitation fluorescence microscopy with core-ring illumination. <i>Optics Letters</i> , 2017 , 42, 571-574	3	17

- 36 Visible-wavelength two-photon excitation microscopy for fluorescent protein imaging. *Journal of Biomedical Optics*, **2015**, 20, 101202 3.5 16
- 35 Feature-based recognition of surface-enhanced Raman spectra for biological targets. *Journal of Biophotonics*, **2013**, 6, 587-97 3.1 16
- 34 Deconstructing RNA: optical measurement of composition and structure. *Physical Chemistry Chemical Physics*, **2013**, 15, 13199-208 3.6 16
- 33 Femtosecond laser nano-ablation in fixed and non-fixed cultured cells. *Optics Express*, **2008**, 16, 14476-95.3 3 16
- 32 Label-free Raman imaging of the macrophage response to the malaria pigment hemozoin. *Analyst, The*, **2015**, 140, 2350-9 5 14
- 31 Maximizing throughput in label-free microspectroscopy with hybrid Raman imaging. *Journal of Biomedical Optics*, **2015**, 20, 016007 3.5 14
- 30 Dual-polarization Raman spectral imaging to extract overlapping molecular fingerprints of living cells. *Journal of Biophotonics*, **2015**, 8, 546-54 3.1 14
- 29 Unified theory of monochromatic and broadband modulational and decay instabilities of Langmuir waves. *Physics of Plasmas*, **2002**, 9, 4149-4159 2.1 12
- 28 Laser-targeted photofabrication of gold nanoparticles inside cells. *Nature Communications*, **2014**, 5, 5144 47.4 11
- 27 Determination of the Expanded Optical Transfer Function in Saturated Excitation Imaging and High Harmonic Demodulation. *Applied Physics Express*, **2011**, 4, 042401 2.4 11
- 26 Heparin induces neutrophil elastase-dependent vital and lytic NET formation. *International Immunology*, **2020**, 32, 359-368 4.9 11
- 25 Saturated excitation microscopy with optimized excitation modulation. *ChemPhysChem*, **2014**, 15, 743-9 3.2 10
- 24 Saturated excitation microscopy using differential excitation for efficient detection of nonlinear fluorescence signals. *APL Photonics*, **2018**, 3, 080805 5.2 10
- 23 Saturated excitation of fluorescent proteins for subdiffraction-limited imaging of living cells in three dimensions. *Interface Focus*, **2013**, 3, 20130007 3.9 8
- 22 Single-pulse cell stimulation with a near-infrared picosecond laser. *Applied Physics Letters*, **2005**, 87, 243901 3.4 5
- 21 Photofabrication of a photonic crystal using interference of a UV laser **1999**, 3
- 20 Visible-wavelength two-photon excitation microscopy with multifocus scanning for volumetric live-cell imaging. *Journal of Biomedical Optics*, **2019**, 25, 1-5 3.5 3
- 19 Immune cell type, cell activation, and single cell heterogeneity revealed by label-free optical methods. *Scientific Reports*, **2019**, 9, 17054 4.9 3

18	Dynamic SERS imaging with gold nanoparticles transported in a living cell 2013 ,		2
17	1N1312 Time-resolved Raman imaging of malarial hemozoin(Bioimaging 1,The 49th Annual Meeting of the Biophysical Society of Japan). <i>Seibutsu Butsuri</i> , 2011 , 51, S66	0	2
16	Automated processing of label-free Raman microscope images of macrophage cells with standardized regression for high-throughput analysis. <i>Immunome Research</i> , 2010 , 6, 11		2
15	Alkyne-tag SERS imaging for visualizing small molecule drugs in live cells 2020 ,		2
14	Hyperspectral two-photon excitation microscopy using visible wavelength. <i>Optics Letters</i> , 2021 , 46, 37-40		2
13	Observation of living cells with gold nanoparticles by using surface-enhanced Raman scattering 2009 ,		1
12	Stimulation of living cells by femtosecond near-infrared laser pulses 2003 ,		1
11	Spectral focusing in picosecond pulsed stimulated Raman scattering microscopy.. <i>Biomedical Optics Express</i> , 2022 , 13, 995-1004	3.5	1
10	Hyperspectral fluorescence imaging by using visible-wavelength two-photon excitation 2020 ,		1
9	Deriving accurate molecular indicators of protein synthesis through Raman-based sparse classification. <i>Analyst, The</i> , 2021 , 146, 3633-3641	5	1
8	Vibrational spectroscopic imaging of pathogens, microorganisms, and their interactions with host systems. <i>Optics Communications</i> , 2018 , 422, 75-84	2	0
7	Nonlinear Fluorescence Imaging by Saturated Excitation 2010 , 2-1-2-16		0
6	Label-free Raman mapping of saturated and unsaturated fatty acid uptake, storage, and return toward baseline levels in macrophages. <i>Analyst, The</i> , 2021 , 146, 1268-1280	5	0
5	Detecting nitrile-containing small molecules by infrared photothermal microscopy. <i>Analyst, The</i> , 2021 , 146, 2307-2312	5	0
4	Label-Free Raman Imaging 2018 , 277-331		
3	1P-335 An optical pacemaker for heart muscle cells(The 46th Annual Meeting of the Biophysical Society of Japan). <i>Seibutsu Butsuri</i> , 2008 , 48, S74	0	
2	1P-340 An optical pacemaker for heart muscle cells : the laser irradiation power, phase, frequency dependencies(The 46th Annual Meeting of the Biophysical Society of Japan). <i>Seibutsu Butsuri</i> , 2008 , 48, S74-S75	0	
1	Cellular Adhesion Is a Controlling Factor in Neutrophil Extracellular Trap Formation Induced by Anti-Neutrophil Cytoplasmic Antibodies.. <i>ImmunoHorizons</i> , 2022 , 6, 170-183	2.7	

