Katsumasa Fujita

List of Publications by Year
in descending order

152	5,433	87888	88630
papers	citations	38 h-index	70 g-index

157	157	157	6004
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Wavefrontâ€sensorless adaptive optics with a laserâ€free spinning disk confocal microscope. Journal of Microscopy, 2022, 288, 106-116.	1.8	12
2	Spontaneous Raman and SERS microscopy for Raman tag imaging. , 2022, , 275-287.		0
3	Spectral focusing in picosecond pulsed stimulated Raman scattering microscopy. Biomedical Optics Express, 2022, 13, 995.	2.9	9
4	Stimulated Raman scattering microscopy with spectral focusing of 2-ps laser pulses for higher spectral resolution and signal-to-background ratio. , 2022, , .		0
5	Saturated-excitation image scanning microscopy. Optics Express, 2022, 30, 13825.	3.4	1
6	Bessel-beam illumination Raman microscopy. Biomedical Optics Express, 2022, 13, 3161.	2.9	11
7	Photoinitiatorâ€Free Twoâ€Photon Polymerization of Biocompatible Materials for 3D Micro/Nanofabrication. Advanced Optical Materials, 2022, 10, .	7.3	7
8	Label-Free Monitoring of Drug-Induced Cytotoxicity and Its Molecular Fingerprint by Live-Cell Raman and Autofluorescence Imaging. Analytical Chemistry, 2022, 94, 10019-10026.	6.5	9
9	Label-free monitoring of crystalline chitin hydrolysis by chitinase based on Raman spectroscopy. Analyst, The, 2021, 146, 4087-4094.	3.5	4
10	Detecting nitrile-containing small molecules by infrared photothermal microscopy. Analyst, The, 2021, 146, 2307-2312.	3.5	6
11	Using saturated absorption for superâ€resolution laser scanning transmission microscopy. Journal of Microscopy, 2021, , .	1.8	0
12	Multiwell Raman plate reader for high-throughput biochemical screening. Scientific Reports, 2021, 11, 15742.	3.3	13
13	Visible-Wavelength Multiphoton Activation Confocal Microscopy. ACS Photonics, 2021, 8, 2666-2673.	6.6	3
14	Mie-enhanced photothermal/thermo-optical nonlinearity and applications on all-optical switch and super-resolution imaging [Invited]. Optical Materials Express, 2021, 11, 3608.	3.0	13
15	Hyperspectral two-photon excitation microscopy using visible wavelength. Optics Letters, 2021, 46, 37.	3.3	6
16	Super-resolved Raman microscopy using random structured light illumination: Concept and feasibility. Journal of Chemical Physics, 2021, 155, 144202.	3.0	15
17	Plasmon-enhanced Raman microscopy of cell membrane molecules. , 2021, , .		0
18	High-Speed and High-Resolution Raman Imaging of Biological Molecule Using Line Illumination. , 2021, , .		0

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19	Multiphoton-Excited Deep-Ultraviolet Photolithography for 3D Nanofabrication. ACS Applied Nano Materials, 2020, 3, 11434-11441.	5.0	16
20	Quantitative Drug Dynamics Visualized by Alkyne-Tagged Plasmonic-Enhanced Raman Microscopy. ACS Nano, 2020, 14, 15032-15041.	14.6	39
21	Dynamic pH measurements of intracellular pathways using nano-plasmonic assemblies. Analyst, The, 2020, 145, 5768-5775.	3.5	14
22	Nonlinear Scattering of Near-Infrared Light for Imaging Plasmonic Nanoparticles in Deep Tissue. ACS Photonics, 2020, 7, 2139-2146.	6.6	8
23	Surface Plasmon Localization-Based Super-resolved Raman Microscopy. Nano Letters, 2020, 20, 8951-8958.	9.1	24
24	Giant photothermal nonlinearity in a single silicon nanostructure. Nature Communications, 2020, 11, 4101.	12.8	42
25	Hot Carrier Generation in Two-Dimensional Silver Nanoparticle Arrays at Different Excitation Wavelengths under On-Resonant Conditions. Journal of Physical Chemistry C, 2020, 124, 13936-13941.	3.1	6
26	Direct visualization of an antidepressant analog using surface-enhanced Raman scattering in the brain. JCI Insight, 2020, 5, .	5.0	11
27	Multiline illumination Raman microscopy for rapid cell imaging. , 2020, , .		1
28	High-throughput discrimination of cancerous and noncancerous human cell lines by high-speed spontaneous Raman microscopy. , 2020, , .		0
29	High-Throughput Screening Using Raman Spectroscopy With Multi-Focal Spots. , 2020, , .		0
30	Raman spectroscopic histology using machine learning for nonalcoholic fatty liver disease. FEBS Letters, 2019, 593, 2535-2544.	2.8	18
31	Adaptive printing using VO2 optical antennas with subwavelength resolution. Applied Physics Letters, 2019, 115, 161105.	3.3	7
32	Quantitative Evaluation of Surface-Enhanced Raman Scattering Nanoparticles for Intracellular pH Sensing at a Single Particle Level. Analytical Chemistry, 2019, 91, 3254-3262.	6.5	57
33	High-Resolution Raman Microscopic Detection of Follicular Thyroid Cancer Cells with Unsupervised Machine Learning. Journal of Physical Chemistry B, 2019, 123, 4358-4372.	2.6	25
34	High-Throughput Cell Imaging and Classification by Narrowband and Low-Spectral-Resolution Raman Microscopy. Journal of Physical Chemistry B, 2019, 123, 2654-2661.	2.6	18
35	Using redox-sensitive mitochondrial cytochrome Raman bands for label-free detection of mitochondrial dysfunction. Analyst, The, 2019, 144, 2531-2540.	3.5	33
36	Visualizing Bioactive Small Molecules by Alkyne Tagging and Slit-Scanning Raman Microscopy. Methods in Molecular Biology, 2019, 1888, 99-114.	0.9	0

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37	Visible-wavelength two-photon excitation microscopy with multifocus scanning for volumetric live-cell imaging. Journal of Biomedical Optics, 2019, 25, 1.	2.6	5
38	Super-Resolution Imaging in Raman Microscopy. Biological and Medical Physics Series, 2019, , 195-211.	0.4	3
39	Micro-Raman Spectroscopy. , 2018, , 375-379.		0
40	Resolution enhancement in deep-tissue nanoparticle imaging based on plasmonic saturated excitation microscopy. APL Photonics, 2018, 3, 031301.	5.7	10
41	Raman Microscopy. , 2018, , .		1
42	Saturated excitation microscopy using differential excitation for efficient detection of nonlinear fluorescence signals. APL Photonics, 2018, 3, .	5.7	17
43	High-resolution imaging in two-photon excitation microscopy using in situ estimations of the point spread function. Biomedical Optics Express, 2018, 9, 202.	2.9	25
44	Cell type discrimination based on image features of molecular component distribution. Scientific Reports, 2018, 8, 11726.	3.3	8
45	Protein expression guided chemical profiling of living cells by the simultaneous observation of Raman scattering and anti-Stokes fluorescence emission. Scientific Reports, 2017, 7, 43569.	3.3	13
46	Surface-enhanced Raman scattering (SERS) imaging of alkyne-tagged small molecule drug in live cells with endocytosed gold nanoparticles. Proceedings of SPIE, 2017, , .	0.8	0
47	Improvement of spatial and spectral resolution in Raman microscopy. Proceedings of SPIE, 2017, , .	0.8	0
48	High-Speed and Scalable Whole-Brain Imaging in Rodents and Primates. Neuron, 2017, 94, 1085-1100.e6.	8.1	108
49	Au-Protected Ag Core/Satellite Nanoassemblies for Excellent Extra-/Intracellular Surface-Enhanced Raman Scattering Activity. ACS Applied Materials & Interfaces, 2017, 9, 44027-44037.	8.0	23
50	Nonlinear plasmonic imaging techniques and their biological applications. Nanophotonics, 2017, 6, 31-49.	6.0	27
51	Saturated two-photon excitation fluorescence microscopy with core-ring illumination. Optics Letters, 2017, 42, 571.	3.3	22
52	Follow-up review: recent progress in the development of super-resolution optical microscopy. Microscopy (Oxford, England), 2016, 65, 275-281.	1.5	6
53	Non-label immune cell state prediction using Raman spectroscopy. Scientific Reports, 2016, 6, 37562.	3.3	63
54	Alkyne-Tag SERS Screening and Identification of Small-Molecule-Binding Sites in Protein. Journal of the American Chemical Society, 2016, 138, 13901-13910.	13.7	76

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55	Study of Nonlinear Plasmonic Scattering in Metallic Nanoparticles. ACS Photonics, 2016, 3, 1432-1439.	6.6	25
56	Ultrasmall all-optical plasmonic switch and its application to superresolution imaging. Scientific Reports, 2016, 6, 24293.	3.3	45
57	Measurement of Scattering Nonlinearities from a Single Plasmonic Nanoparticle. Journal of Visualized Experiments, 2016, , .	0.3	2
58	High-speed Raman imaging of cellular processes. Current Opinion in Chemical Biology, 2016, 33, 16-24.	6.1	45
59	Deep-UV biological imaging by lanthanide ion molecular protection. Biomedical Optics Express, 2016, 7, 158.	2.9	29
60	Structured Illumination Raman Microscopy for High-Resolution Label-Free Imaging. The Review of Laser Engineering, 2016, 44, 648.	0.0	0
61	Super-Spatial- and -Spectral-Resolution in Vibrational Imaging via Saturated Coherent Anti-Stokes Raman Scattering. Physical Review Applied, 2015, 4, .	3.8	33
62	Structured line illumination Raman microscopy. Nature Communications, 2015, 6, 10095.	12.8	90
63	Nonlinear fluorescence imaging by photoinduced charge separation. Japanese Journal of Applied Physics, 2015, 54, 042403.	1.5	10
64	Visualizing the appearance and disappearance of the attractor of differentiation using Raman spectral imaging. Scientific Reports, 2015, 5, 11358.	3.3	19
65	Analysis of dynamic SERS spectra measured with a nanoparticle during intracellular transportation in 3D. Journal of Optics (United Kingdom), 2015, 17, 114023.	2.2	22
66	Dualâ€polarization Raman spectral imaging to extract overlapping molecular fingerprints of living cells. Journal of Biophotonics, 2015, 8, 546-554.	2.3	16
67	High-resolution Raman microscopy for molecular imaging of cells. , 2015, , .		0
68	Special Section Guest Editorial:Protein Photonics for Imaging, Sensing, and Manipulation: Honoring Prof. Osamu Shimomura, a Pioneer of Photonics for Biomedical Research. Journal of Biomedical Optics, 2015, 20, 101201.	2.6	0
69	Visible-wavelength two-photon excitation microscopy. , 2015, , .		0
70	Raman microscopy: Chemical and analytical imaging of biomolecules. , 2015, , .		1
71	Raman spectroscopic detection of bio-active small molecules using alkyne tag. , 2015, , .		0
72	Superresolution imaging based on nonlinearities of plasmonic scattering. , 2015, , .		0

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73	A sensitive and specific Raman probe based on bisarylbutadiyne for live cell imaging of mitochondria. Bioorganic and Medicinal Chemistry Letters, 2015, 25, 664-667.	2.2	48
74	Time-lapse Raman imaging of osteoblast differentiation. Scientific Reports, 2015, 5, 12529.	3.3	44
75	An enzyme-responsive metal-enhanced near-infrared fluorescence sensor based on functionalized gold nanoparticles. Chemical Science, 2015, 6, 4934-4939.	7.4	23
76	Label-free Raman imaging of the macrophage response to the malaria pigment hemozoin. Analyst, The, 2015, 140, 2350-2359.	3.5	17
77	A fast- and positively photoswitchable fluorescent protein for ultralow-laser-power RESOLFT nanoscopy. Nature Methods, 2015, 12, 515-518.	19.0	67
78	Sphingomyelin distribution in lipid rafts of artificial monolayer membranes visualized by Raman microscopy. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 4558-4563.	7.1	113
79	Visible-wavelength two-photon excitation microscopy for fluorescent protein imaging. Journal of Biomedical Optics, 2015, 20, 1.	2.6	21
80	For Microscopy special feature on â€˜super resolution microscopyâ€™. Microscopy (Oxford, England), 2015, 64, 225-225.	1.5	1
81	Visualizing Cell State Transition Using Raman Spectroscopy. PLoS ONE, 2014, 9, e84478.	2.5	85
82	Multimodal label-free microscopy. Journal of Innovative Optical Health Sciences, 2014, 07, 1330009.	1.0	21
83	Point spread function analysis with saturable and reverse saturable scattering. Optics Express, 2014, 22, 26016.	3.4	17
84	Saturated Excitation Microscopy with Optimized Excitation Modulation. ChemPhysChem, 2014, 15, 743-749.	2.1	11
85	Measurement of a Saturated Emission of Optical Radiation from Gold Nanoparticles: Application to an Ultrahigh Resolution Microscope. Physical Review Letters, 2014, 112, 017402.	7.8	87
86	In situ Raman imaging of osteoblastic mineralization. Journal of Raman Spectroscopy, 2014, 45, 157-161.	2.5	13
87	Simultaneous imaging of protonated and deprotonated carbonylcyanide p-trifluoromethoxyphenylhydrazone in live cells by Raman microscopy. Chemical Communications, 2014, 50, 1341-1343.	4.1	45
88	Laser-targeted photofabrication of gold nanoparticles inside cells. Nature Communications, 2014, 5, 5144.	12.8	17
89	Saturation and Reverse Saturation of Scattering in a Single Plasmonic Nanoparticle. ACS Photonics, 2014, 1, 32-37.	6.6	52
90	Introduction to super-resolution microscopy. Microscopy (Oxford, England), 2014, 63, 177-192.	1.5	93

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91	3D SERS (surface enhanced Raman scattering) imaging of intracellular pathways. Methods, 2014, 68, 348-353.	3.8	39
92	Metal nanoparticles for nano-imaging and nano-analysis. Physical Chemistry Chemical Physics, 2013, 15, 13713.	2.8	45
93	Surface enhanced Raman scattering (SERS) imaging of intracellular transportation in 3D. , 2013, , .		0
94	Molecular imaging of live cells by Raman microscopy. Current Opinion in Chemical Biology, 2013, 17, 708-715.	6.1	170
95	Featureâ€based recognition of Surfaceâ€enhanced Raman spectra for biological targets. Journal of Biophotonics, 2013, 6, 587-597.	2.3	18
96	Raman and SERS microscopy for molecular imaging of live cells. Nature Protocols, 2013, 8, 677-692.	12.0	304
97	Improving spinning disk confocal microscopy by preventing pinhole cross-talk for intravital imaging. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 3399-3404.	7.1	80
98	Saturated excitation microscopy for sub-diffraction-limited imaging of cell clusters. Journal of Biomedical Optics, 2013, 18, 1.	2.6	22
99	Saturated excitation of fluorescent proteins for subdiffraction-limited imaging of living cells in three dimensions. Interface Focus, 2013, 3, 20130007.	3.0	10
100	Saturable scattering and its application to superresolution microscopy. , 2013, , .		0
101	High-Resolution Fluorescence Imaging by Saturated Excitation (SAX): Its Principle and Imaging Properties in Biology. The Review of Laser Engineering, 2013, 41, 113.	0.0	0
102	Metallic nanoparticles as SERS agents for biomolecular imaging. Current Pharmaceutical Biotechnology, 2013, 14, 141-9.	1.6	5
103	Label-free Raman observation of cytochrome c dynamics during apoptosis. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, 28-32.	7.1	399
104	The molecular chaperone Hsp47 is essential for cartilage and endochondral bone formation. Journal of Cell Science, 2012, 125, 1118-1128.	2.0	46
105	3PS037 Ranian microscopy distinguishes the status of differentiating cell(The 50th Annual Meeting of) Tj ETQq1 1 0.784314 rgBT /Ov	0.1	0
106	Alkyne-Tag Raman Imaging for Visualization of Mobile Small Molecules in Live Cells. Journal of the American Chemical Society, 2012, 134, 20681-20689.	13.7	370
107	CARS Microscopy: Implementation of Nonlinear Vibrational Spectroscopy for Far-Field and Near-Field Imaging. Springer Series in Optical Sciences, 2012, , 317-346.	0.7	0
108	Imaging Small Molecules in Living Cells with a Tiny Tag and Raman Microscopy. Seibutsu Butsuri, 2012, 52, 034-035.	0.1	0

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109	Optical control of cell functions: Using laser light to remote control signalling, contraction and action potentials in living cells. , 2011, , .		0
110	Slit-scanning confocal Raman microscopy: Practical applications in live cell imaging. , 2011, , .		0
111	Dynamic SERS Imaging of Cellular Transport Pathways with Endocytosed Gold Nanoparticles. Nano Letters, 2011, 11, 5344-5348.	9.1	216
112	Imaging of EdU, an Alkyne-Tagged Cell Proliferation Probe, by Raman Microscopy. Journal of the American Chemical Society, 2011, 133, 6102-6105.	13.7	302
113	Two-Photon Excited Fluorescence and Second-Harmonic Generation of the DAST Organic Nanocrystals. Journal of Physical Chemistry C, 2011, 115, 8988-8993.	3.1	40
114	SAX microscopy with fluorescent nanodiamond probes for high-resolution fluorescence imaging. Biomedical Optics Express, 2011, 2, 1946.	2.9	30
115	Nanoscale heating of laser irradiated single gold nanoparticles in liquid. Optics Express, 2011, 19, 12375.	3.4	72
116	1N1312 Time-resolved Raman imaging of malarial hemozoin(Bioimaging 1,The 49th Annual Meeting of the) Tj ETQq0 0 0 rgBT /Overlock	0.1	2
117	Determination of the Expanded Optical Transfer Function in Saturated Excitation Imaging and High Harmonic Demodulation. Applied Physics Express, 2011, 4, 042401.	2.4	16
118	Comparison of Staining Selectivity for Subcellular Structures by Carbazoleâ€Based Cyanine Probes in Nonlinear Optical Microscopy. ChemBioChem, 2011, 12, 52-55.	2.6	24
119	Metallic Nanoparticles for Enhanced Raman Imaging of Living Cells. The Review of Laser Engineering, 2010, 38, 427-432.	0.0	0
120	Dynamic Ramanâ•SERS Imaging of Living Cells by Slit-Scanning Microscopy. AIP Conference Proceedings, 2010, , .	0.4	1
121	Dendrimer adjusted nanocrystals of DAST: organic crystal with enhanced nonlinear optical properties. Nanoscale, 2010, 2, 913.	5.6	20
122	Recent Developments in Super Resolution Fluorescence Microscopy. Seibutsu Butsuri, 2010, 50, 174-179.	0.1	1
123	Photogeneration of membrane potential hyperpolarization and depolarization in non-excitable cells. European Biophysics Journal, 2009, 38, 255-262.	2.2	33
124	On fluorescence blinking of single molecules in polymers. Chemical Physics Letters, 2009, 468, 234-238.	2.6	14
125	Time-resolved observation of surface-enhanced Raman scattering from gold nanoparticles during transport through a living cell. Journal of Biomedical Optics, 2009, 14, 024038.	2.6	74
126	Label-free biochemical imaging of heart tissue with high-speed spontaneous Raman microscopy. Biochemical and Biophysical Research Communications, 2009, 382, 370-374.	2.1	87

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127	Multi-focus excitation coherent anti-Stokes Raman scattering (CARS) microscopy and its applications for real-time imaging. Optics Express, 2009, 17, 9526.	3.4	52
128	Beyond the diffraction-limit biological imaging by saturated excitation microscopy. Journal of Biomedical Optics, 2008, 13, 050507.	2.6	34
129	Raman microscopy for dynamic molecular imaging of living cells. Journal of Biomedical Optics, 2008, 13, 1.	2.6	258
130	Optical trapping and surgery of living yeast cells using a single laser. Review of Scientific Instruments, 2008, 79, 103705.	1.3	47
131	1P-335 An optical pacemaker for heart muscle cells(The 46th Annual Meeting of the Biophysical Society) Tj ETQq1 1 0.784314 rgBT /Ov	0.1	0
132	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). Seibutsu Butsuri, 2008, 48, S74-S75.	0.1	0
133	2P-325 Formation of gold nanoparticles in living cells by reduction of gold ion solution(The 46th) Tj ETQq1 1 0.784314 rgBT /Overlock 1	0.1	0
134	Label-free molecular imaging of living cells. Molecules and Cells, 2008, 26, 530-5.	2.6	30
135	High-Resolution Confocal Microscopy by Saturated Excitation of Fluorescence. Physical Review Letters, 2007, 99, 228105.	7.8	197
136	3P304 Surface enhanced Raman spectroscopy of living cells with gold nanoparticles(Bioimaging. The) Tj ETQq0 0 0 rgBT /Overlock 10 Tf	0.1	0
137	Focus on Microscopy 2008. Imaging & Microscopy, 2007, 9, 16-16.	0.1	0
138	Location-Dependent Photogeneration of Calcium Waves in HeLa Cells. Cell Biochemistry and Biophysics, 2006, 45, 167-176.	1.8	36
139	New Development in Nonlinear Optical Microscopy. The Review of Laser Engineering, 2006, 34, 818-821.	0.0	0
140	Multiphoton excitationâ€“evoked chromophore-assisted laser inactivation using green fluorescent protein. Nature Methods, 2005, 2, 503-505.	19.0	66
141	Time-gated imaging for multifocus second-harmonic generation microscopy. Review of Scientific Instruments, 2005, 76, 073704.	1.3	5
142	Single-pulse cell stimulation with a near-infrared picosecond laser. Applied Physics Letters, 2005, 87, 243901.	3.3	6
143	In situ visualization of the intracellular Ca2+ dynamics at the border of the acute myocardial infarct. Molecular and Cellular Biochemistry, 2003, 248, 135-139.	3.1	21
144	Realtime Nonlinear-Optical Microscopy for Observing Biological Cells. The Review of Laser Engineering, 2003, 31, 370-374.	0.0	0

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145	Second-harmonic-generation microscope with a microlens array scanner. Optics Letters, 2002, 27, 1324.	3.3	88
146	Real-Time Two-Photon Microscopy and Its Application for In Situ Imaging.. Acta Histochemica Et Cytochemica, 2001, 34, 399-403.	1.6	15
147	Generation of calcium waves in living cells by pulsed-laser-induced photodisruption. Applied Physics Letters, 2001, 79, 1208-1210.	3.3	88
148	Three-dimensional subsurface microprocessing of collagen by ultrashort laser pulses. Applied Physics Letters, 2001, 78, 999-1001.	3.3	35
149	Confocal multipoint multiphoton excitation microscope with microlens and pinhole arrays. Optics Communications, 2000, 174, 7-12.	2.1	44
150	Temporal coherence behavior of a semiconductor laser under strong optical feedback. Optics Communications, 1999, 161, 123-131.	2.1	13
151	Double-Pass Confocal Absorption Microscope with a Phase Conjugation Mirror. Japanese Journal of Applied Physics, 1996, 35, L852-L853.	1.5	7
152	Laser Feedback Microscopy Controlling the Laser Oscillation of Semiconductor Laser by Reentered Light.. The Review of Laser Engineering, 1996, 24, 1084-1090.	0.0	1