Hideaki Kano

List of Publications by Year
in descending order

104 papers	2,206 citations	279487 23 h-index	233125 45 g-index
106 all docs	106 docs citations	106 times ranked	1985 citing authors

#	Article	IF	Citations
1	Vibrationally resonant imaging of a single living cell by supercontinuum-based multiplex coherent anti-Stokes Raman scattering microspectroscopy. Optics Express, 2005, 13, 1322.	1.7	148
2	Ultrabroadband (>2500cmâˆ’1) multiplex coherent anti-Stokes Raman scattering microspectroscopy using a supercontinuum generated from a photonic crystal fiber. Applied Physics Letters, 2005, 86, 121113.	1.5	142
3	Time-resolved fluorescence and absorption spectroscopies of porphyrin J-aggregates. Journal of Chemical Physics, 2002, 116, 184.	1.2	133
4	Quantitative Coherent Anti-Stokes Raman Scattering (CARS) Microscopy. Journal of Physical Chemistry B, 2011, 115, 7713-7725.	1.2	120
5	Observation of Herzbergâˆ’Teller-type Wave Packet Motion in Porphyrin J-Aggregates Studied by Sub-5-fs Spectroscopy. Journal of Physical Chemistry A, 2002, 106, 3445-3453.	1.1	98
6	Quantitative CARS Molecular Fingerprinting of Single Living Cells with the Use of the Maximum Entropy Method. Angewandte Chemie - International Edition, 2010, 49, 6773-6777.	7.2	97
7	Femtosecond coherent anti-Stokes Raman scattering spectroscopy using supercontinuum generated from a photonic crystal fiber. Applied Physics Letters, 2004, 85, 4298.	1.5	85
8	In-vivo multi-nonlinear optical imaging of a living cell using a supercontinuum light source generated from a photonic crystal fiber. Optics Express, 2006, 14, 2798.	1.7	83
9	Characterization of a supercontinuum generated from a photonic crystal fiber and its application to coherent Raman spectroscopy. Optics Letters, 2003, 28, 2360.	1.7	82
10	Dynamic Intensity Borrowing in Porphyrin J-Aggregates Revealed by Sub-5-fs Spectroscopy. Journal of Physical Chemistry B, 2001, 105, 413-419.	1.2	78
11	Ultrabroadband multiplex CARS microspectroscopy and imaging using a subnanosecond supercontinuum light source in the deep near infrared. Optics Letters, 2008, 33, 923.	1.7	74
12	Dispersion-compensated supercontinuum generation for ultrabroadband multiplex coherent anti-Stokes Raman scattering spectroscopy. Journal of Raman Spectroscopy, 2006, 37, 411-415.	1.2	68
13	Label-free tetra-modal molecular imaging of living cells with CARS, SHG, THG and TSFG (coherent) Tj ETQq1 1 0.784314 rgBT /Overloc	1.7	62
14	Active involvement of micro-lipid droplets and lipid-droplet-associated proteins in hormone-stimulated lipolysis in adipocytes. Journal of Cell Science, 2012, 125, 6127-6136.	1.2	60
15	Supercontinuum Dynamically Visualizes a Dividing Single Cell. Analytical Chemistry, 2007, 79, 8967-8973.	3.2	51
16	Observation of Raman Optical Activity by Heterodyne-Detected Polarization-Resolved Coherent Anti-Stokes Raman Scattering. Physical Review Letters, 2012, 109, 083901.	2.9	43
17	Optical coherence tomography-based tissue dynamics imaging for longitudinal and drug response evaluation of tumor spheroids. Biomedical Optics Express, 2020, 11, 6231.	1.5	43
18	Ultrabroadband (>2000 cm^âˆ’1) multiplex coherent anti-Stokes Raman scattering spectroscopy using a subnanosecond supercontinuum light source. Optics Letters, 2007, 32, 3050.	1.7	34

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19	Hyperspectral coherent Raman imaging â€“ principle, theory, instrumentation, and applications to life sciences. Journal of Raman Spectroscopy, 2016, 47, 116-123.	1.2	32
20	Identifying the molecular adsorption site of a single molecule junction through combined Raman and conductance studies. Chemical Science, 2019, 10, 6261-6269.	3.7	32
21	Hyper-Raman microspectroscopy: a new approach to completing vibrational spectral and imaging information under a microscope. Optics Letters, 2006, 31, 320.	1.7	31
22	Vibrational Imaging of a Single Pollen Grain by Ultrabroadband Multiplex Coherent Anti-Stokes Raman Scattering Microspectroscopy. Chemistry Letters, 2006, 35, 1124-1125.	0.7	29
23	Molecular vibrational imaging of a human cell by multiplex coherent antiâ€Stokes Raman scattering microspectroscopy using a supercontinuum light source. Journal of Raman Spectroscopy, 2008, 39, 1649-1652.	1.2	24
24	SHG-specificity of cellular Rootletin filaments enables naÃ¯ve imaging with universal conservation. Scientific Reports, 2017, 7, 39967.	1.6	24
25	Mechanism of co-aggregation in a protein mixture with small additives. International Journal of Biological Macromolecules, 2018, 107, 1428-1437.	3.6	24
26	Multiplex coherent anti-Stokes Raman scattering highlights state of chromatin condensation in CH region. Scientific Reports, 2019, 9, 13862.	1.6	24
27	Invited Article: CARS molecular fingerprinting using sub-100-ps microchip laser source with fiber amplifier. APL Photonics, 2018, 3, .	3.0	22
28	Protein Secondary Structure Imaging with Ultrabroadband Multiplex Coherent Anti-Stokes Raman Scattering (CARS) Microspectroscopy. Journal of Physical Chemistry B, 2012, 116, 1452-1457.	1.2	21
29	Multicolor multiphoton microscopy based on a nanosecond supercontinuum laser source. Journal of Biophotonics, 2016, 9, 709-714.	1.1	21
30	Molecular near-field effect and intensity enhancement of solvent modes in resonance hyper-Raman scattering. Journal of Raman Spectroscopy, 2006, 37, 469-471.	1.2	20
31	Simultaneous measurement of real and imaginary parts of nonlinear susceptibility for the verification of the Kramersâ€“Kronig relations in femtosecond spectroscopy. Optics Communications, 2000, 178, 133-139.	1.0	19
32	Raman optical activity by coherent anti-Stokes Raman scattering spectral interferometry. Optics Express, 2013, 21, 13515.	1.7	19
33	Characterization of Intra/Extracellular Water States Probed by Ultrabroadband Multiplex Coherent Anti-Stokes Raman Scattering (CARS) Spectroscopic Imaging. Journal of Physical Chemistry A, 2019, 123, 3928-3934.	1.1	19
34	Raman optical activity spectroscopy by visible-excited coherent anti-Stokes Raman scattering. Optics Letters, 2015, 40, 4170.	1.7	16
35	Identification of intracellular squalene in living algae, <i>Aurantiochytrium mangrovei</i> with hyperâ€spectral coherent antiâ€Stokes Raman microscopy using a subâ€nanosecond supercontinuum laser source. Journal of Raman Spectroscopy, 2017, 48, 8-15.	1.2	16
36	Fast epi-detected broadband multiplex CARS and SHG imaging of mouse skull cells. Biomedical Optics Express, 2018, 9, 245.	1.5	16

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37	Ultra-multiplex CARS spectroscopic imaging with 1-millisecond pixel dwell time. OSA Continuum, 2019, 2, 1693.	1.8	16
38	Real-Time Spectroscopy of the Excited-State Excitons in Porphyrin J-Aggregates. Bulletin of the Chemical Society of Japan, 2002, 75, 1071-1074.	2.0	14
39	Surfactant Uptake Dynamics in Mammalian Cells Elucidated with Quantitative Coherent Anti-Stokes Raman Scattering Microspectroscopy. PLoS ONE, 2014, 9, e93401.	1.1	14
40	Linear and nonlinear Raman microspectroscopy: History, instrumentation, and applications. Optical Review, 2014, 21, 752-761.	1.2	13
41	Three-Dimensional Vibrational Imaging of a Microcrystalline J-Aggregate Using Supercontinuum-Based Ultra-Broadband Multiplex Coherent Anti-Stokes Raman Scattering Microscopy. Journal of Physical Chemistry B, 2006, 110, 3120-3126.	1.2	11
42	Three-pulse multiplex coherent anti-Stokes/Stokes Raman scattering (CARS/CSRS) microspectroscopy using a white-light laser source. Chemical Physics, 2013, 419, 156-162.	0.9	11
43	Multimodal Imaging of Living Cells with Multiplex Coherent Anti-stokes Raman Scattering (CARS), Third-order Sum Frequency Generation (TSFG) and Two-photon Excitation Fluorescence (TPEF) Using a Nanosecond White-light Laser Source. Analytical Sciences, 2015, 31, 299-305.	0.8	11
44	Visualizing intra-medulla lipids in human hair using ultra-multiplex CARS, SHG, and THG microscopy. Analyst, The, 2021, 146, 1163-1168.	1.7	11
45	Timeâ€Resolved Fluorescence Spectroscopy of Porphyrin Jâ€Aggregates Using Optical Kerr Gate Methods. Journal of the Chinese Chemical Society, 2000, 47, 859-861.	0.8	9
46	Real-time spectroscopy of Frenkel exciton system. Journal of Luminescence, 2002, 100, 269-282.	1.5	9
47	Coherent Raman Imaging of Human Living Cells Using a Supercontinuum Light Source. Japanese Journal of Applied Physics, 2007, 46, 6875-6877.	0.8	9
48	Intensity enhancement and selective detection of proximate solvent molecules by molecular near-field effect in resonance hyper-Raman scattering. Journal of Chemical Physics, 2008, 129, 024505.	1.2	9
49	Coherent anti-Stokes Raman scattering under electric field stimulation. Physical Review B, 2016, 94, .	1.1	9
50	Cascading third-order Raman process studied by six-wave mixing broadband multiplex coherent anti-Stokes Raman scattering spectroscopy. Journal of Chemical Physics, 2003, 118, 4556-4562.	1.2	8
51	Time-frequency resolved analysis of a nanosecond supercontinuum source dedicated to multiplex CARS application. Optics Express, 2012, 20, 29705.	1.7	8
52	Electronically resonant third-order sum frequency generation spectroscopy using a nanosecond white-light supercontinuum. Optics Express, 2014, 22, 10416.	1.7	8
53	Multimodal and multiplex spectral imaging of rat cornea <i>ex vivo</i> using a whiteâ€light laser source. Journal of Biophotonics, 2015, 8, 705-713.	1.1	8
54	Dynamical study of the water penetration process into a cellulose acetate film studied by coherent anti-Stokes Raman scattering (CARS) microspectroscopy. Chemical Physics Letters, 2016, 655-656, 86-90.	1.2	8

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55	Multimodal nonlinear optical imaging of<i>Caenorhabditis elegans</i>with multiplex coherent anti-Stokes Raman scattering, third-harmonic generation, second-harmonic generation, and two-photon excitation fluorescence. Applied Physics Express, 2020, 13, 072002.	1.1	7
56	Labelâ€free detection of polysulfides and glycogen of Cyanidium caldarium using ultraâ€multiplex coherent antiâ€Stokes Raman scattering microspectroscopy. Journal of Raman Spectroscopy, 0, , .	1.2	7
57	FIRST OBSERVATION OF DYNAMIC INTENSITY BORROWING INDUCED BY COHERENT MOLECULAR VIBRATIONS IN J-AGGREGATES REVEALED BY SUB-5-FS SPECTROSCOPY. International Journal of Modern Physics B, 2001, 15, 3817-3820.	1.0	6
58	Molecular Spectroscopic Imaging Using a White-Light Laser Source. Bulletin of the Chemical Society of Japan, 2010, 83, 735-743.	2.0	6
59	Raman Microscopy: A Noninvasive Method to Visualize the Localizations of Biomolecules in the Cornea. Cornea, 2017, 36, S67-S71.	0.9	6
60	Good arm identification via bandit feedback. Machine Learning, 2019, 108, 721-745.	3.4	6
61	Cascading third-order Raman process and local structure formation in binary liquid mixtures of benzene and n-hexane. Journal of Chemical Physics, 2005, 122, 064504.	1.2	5
62	Intensity enhancement of vibrational sum frequency generation by gap-mode plasmon resonance. Chemical Physics Letters, 2015, 639, 83-87.	1.2	5
63	Visualization of intracellular lipid metabolism in brown adipocytes by time-lapse ultra-multiplex CARS microspectroscopy with an onstage incubator. Journal of Chemical Physics, 2021, 155, 125102.	1.2	5
64	Vibrational imaging of a J-aggregate microcrystal using ultrabroadband multiplex coherent anti-Stokes Raman scattering microspectroscopy. Vibrational Spectroscopy, 2006, 42, 135-139.	1.2	4
65	Development of a Hyper-Raman Microspectroscopic System Using a Wavelength-tunable Laser Source. Chemistry Letters, 2018, 47, 660-663.	0.7	4
66	Photo-induced meta-stable polar conformations in polystyrene microspheres revealed by time-resolved SHG microscopy. Applied Physics Express, 2020, 13, 052003.	1.1	4
67	Spectroscopic second and third harmonic generation microscopy using a femtosecond laser source in the third near-infrared (NIR-III) optical window. Biomedical Optics Express, 2022, 13, 694.	1.5	4
68	Periodic structures in difference phase and transmission spectra studied by a femtosecond Sagnac interferometer. Optics Communications, 2001, 188, 1-9.	1.0	3
69	Quantitative coherent anti-Stokes Raman scattering microspectroscopy using a nanosecond supercontinuum light source. Optical Fiber Technology, 2012, 18, 388-393.	1.4	3
70	Measurement of the third order nonlinear susceptibility of paratellurite single crystal using multiplex CARS. AIP Advances, 2019, 9, 105301.	0.6	3
71	Visualization of water concentration distribution in human skin by ultra-multiplex coherent anti-Stokes Raman scattering (CARS) microscopy. Applied Physics Express, 2021, 14, 042010.	1.1	3
72	Mapping the second and third order nonlinear susceptibilities in a thermally poled microimprinted niobium borophosphate glass. Optical Materials Express, 2021, 11, 3411.	1.6	3

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73	Effect of a Stretching Procedure on the Penetration Process of Water into a Cellulose Acetate Film by Coherent Anti-Stokes Raman Scattering (CARS) Microspectroscopy. Chemistry Letters, 2017, 46, 92-94.	0.7	2
74	Ultrabroadband Multiplex Coherent anti-Stokes Raman Scattering (CARS) Microspectroscopy Using a CCD Camera with an InGaAs Image Intensifier. Chemistry Letters, 2018, 47, 704-707.	0.7	2
75	Quantification of ex vivo tissue activity by short and long time-course analysis of multifunctional OCT signals. , 2020, , .		2
76	Effect of a Waterproofing Agent on the Penetration Process of Water into a Cellulose Acetate Film by Time-resolved Coherent Anti-Stokes Raman Scattering (CARS) Microspectroscopy. Chemistry Letters, 2017, 46, 833-836.	0.7	1
77	Coherent Raman Spectroscopy Using a Supercontinuum Light Source. Molecular Science, 2007, 1, A0005.	0.2	1
78	Molecular Bioimaging by Coherent Raman Scattering Using a Photonic Crystal Fiber. Seibutsu Butsuri, 2006, 46, 349-352.	0.0	1
79	Quantification of ex-vivo tissue activity by polarization dynamics imaging using Jones matrix optical coherence tomography. , 2020, , .		1
80	Label-free enzymatic reaction monitoring in water-in-oil microdroplets using ultra-broadband multiplex coherent anti-Stokes Raman scattering spectroscopy. Biomedical Optics Express, 2022, 13, 1506-1515.	1.5	1
81	Calibration for a count rate-dependent time correlation function and a random noise reduction in pulsed dynamic light scattering. Analytical Sciences, 2022, 38, 607-611.	0.8	1
82	Multiplex CARS microspectroscopy in the â€œlong-pulseâ€• regime: where are we now?. , 2022, , .		1
83	Two-dimensional femtosecond coherent anti-Stokes Raman scattering spectroscopy using a chirped supercontinuum generated from a photonic crystal fiber. Springer Series in Chemical Physics, 2005, , 560-562.	0.2	0
84	<title>Coherent anti-Stokes Raman scattering microscopy using a supercontinuum generated from a photonic crystal fiber</title>. , 2006, , .		0
85	S0516 Molecular vibrational imaging of a living cell by nonlinear Raman spectroscopy(Vibrational) Tj ETQq1 1 0.784314 rgBT /Overlock 1	0.0	0
86	Linear and non-linear Raman microspectroscopy and imaging of single living cells: Visualization of life and death at the cellular level. Handai Nanophotonics, 2007, , 43-56.	0.0	0
87	Coherent Raman Spectroscopic Imaging Using A Nanosecond White-light Laser Source. The Review of Laser Engineering, 2009, 37, 739-745.	0.0	0
88	CARS Microspectroscopic Study of Human Hair Using a Nanosecond White Light Laser Source. , 2010, , .		0
89	CARS Molecular Fingerprinting Using a White-Light Laser Source. , 2010, , .		0
90	Quantitative CARS Spectral Imaging of a Single Living Cell in the Fingerprint Region. , 2010, , .		0

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91	Label-Free Spectroscopic Imaging of Rat Eye Tissue Using Multimodal and Multiphoton Microscopy. Nippon Laser Igakkaishi, 2015, 36, 201-209.	0.0	0
92	Measurement of the Third Order Nonlinear Susceptibility of a Paratellurite Single Crystal using Multiplex CARS. , 2019, , .		0
93	Contrast-tuneable microscopy for single-shot real-time imaging. EPJ Applied Physics, 2020, 91, 30701.	0.3	0
94	DYNAMICAL INTENSITY BORROWING IN PORPHYRIN J-AGGREGATES REVEALED BY SUB-5-FS SPECTROSCOPY. , 2000, , .		0
95	Dynamic intensity borrowing in porphyrin Jaggregates revealed by sub-5-fs spectroscopy. Springer Series in Chemical Physics, 2001, , 604-606.	0.2	0
96	FIRST OBSERVATION OF DYNAMIC INTENSITY BORROWING INDUCED BY COHERENT MOLECULAR VIBRATIONS IN J-AGGREGATES REVEALED BY SUB-5-FS SPECTROSCOPY. , 2001, , .		0
97	In-vivo multi-nonlinear optical imaging of a living cell using a single femtosecond Ti:Sapphire oscillator. , 2006, , .		0
98	In-vivo multi-nonlinear optical imaging of a living cell using a single femtosecond Ti:Sapphire oscillator. Springer Series in Chemical Physics, 2007, , 822-824.	0.2	0
99	Living Cell Imaging using a White-light Laser Source. Hyomen Kagaku, 2011, 32, 792-796.	0.0	0
100	Multimodal nonlinear spectral imaging of tissue samples with CARS molecular fingerprint. , 2014, , .		0
101	CARS molecular fingerprinting using a sub-nanosecond supercontinuum light source. , 2018, , .		0
102	Label-free imaging of acanthamoeba using multimodal nonlinear optical microscopy. , 2018, , .		0
103	Spectroscopic Imaging Using a Supercontinuum Light Source. The Review of Laser Engineering, 2019, 47, 94.	0.0	0
104	Opalescence Arising from Network Assembly in Antibody Solution. Molecular Pharmaceutics, 2022, 19, 1160-1167.	2.3	0