Alexei V Sokolov

List of Publications by Year
in descending order

64	1,307	516215 16	360668 35
papers	citations	h-index	g-index

66	66	66	1338
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Optimizing the Laser-Pulse Configuration for Coherent Raman Spectroscopy. Science, 2007, 316, 265-268.	6.0	308
2	Comparison of coherent and spontaneous Raman microspectroscopies for noninvasive detection of single bacterial endospores. Proceedings of the National Academy of Sciences of the United States of America, 2007, 104, 7776-7779.	3.3	132
3	Tip-Enhanced Raman Imaging of Single-Stranded DNA with Single Base Resolution. Journal of the American Chemical Society, 2019, 141, 753-757.	6.6	102
4	Optical imaging beyond the diffraction limit via dark states. Physical Review A, 2008, 78, .	1.0	71
5	Coherence brightened laser source for atmospheric remote sensing. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, 15185-15190.	3.3	65
6	Coherent versus incoherent Raman scattering: molecular coherence excitation and measurement. Optics Letters, 2007, 32, 1725.	1.7	51
7	Time-Resolved Surface-Enhanced Coherent Sensing of Nanoscale Molecular Complexes. Scientific Reports, 2012, 2, 891.	1.6	50
8	Femtosecond CARS of methanol-water mixtures. Journal of Raman Spectroscopy, 2006, 37, 392-396.	1.2	40
9	Theoretical analysis of the coherence-brightened laser in air. Physical Review A, 2013, 87, .	1.0	35
10	Enhancing sensitivity of lateral flow assay with application to SARS-CoV-2. Applied Physics Letters, 2020, 117, 120601.	1.5	34
11	Fourth-order dispersion mediated solitonic radiations in HC-PCF cladding. Optics Letters, 2008, 33, 2680.	1.7	29
12	Giant Chemical Surface Enhancement of Coherent Raman Scattering on MoS₂. ACS Photonics, 2018, 5, 4960-4968.	3.2	28
13	Laser spectroscopic technique for direct identification of a single virus I: FASTER CARS. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 27820-27824.	3.3	25
14	Spatially offset Raman microspectroscopy of highly scattering tissue: theory and experiment. Journal of Modern Optics, 2015, 62, 97-101.	0.6	21
15	Picosecond superradiance in a three-photon resonant medium. Physical Review A, 2012, 85, .	1.0	18
16	Metalâ€“Organicâ€“Inorganic Nanocomposite Thermal Interface Materials with Ultralow Thermal Resistances. ACS Applied Materials & Interfaces, 2017, 9, 10120-10127.	4.0	17
17	Gap-Mode Tip-Enhanced Raman Scattering on Au Nanoplates of Varied Thickness. Journal of Physical Chemistry Letters, 2020, 11, 3815-3820.	2.1	17
18	Simple setup for hybrid coherent Raman microspectroscopy. Journal of Raman Spectroscopy, 2009, 40, 795-799.	1.2	16

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19	Resolving the Sequence of RNA Strands by Tip-Enhanced Raman Spectroscopy. ACS Photonics, 2021, 8, 424-430.	3.2	15
20	Pulsed cooperative backward emissions from non-degenerate atomic transitions in sodium. New Journal of Physics, 2014, 16, 103017.	1.2	14
21	Toward Single-Cycle Pulse Generation in Raman-Active Crystals. IEEE Journal of Selected Topics in Quantum Electronics, 2012, 18, 460-466.	1.9	13
22	Femtosecond wave-packet dynamics in cesium dimers studied through controlled stimulated emission. Physical Review A, 2010, 81, .	1.0	12
23	Observing the transition from yoked superfluorescence to superradiance. Optics Communications, 2015, 351, 45-49.	1.0	12
24	Raman Characterization of Fungal DHN and DOPA Melanin Biosynthesis Pathways. Journal of Fungi (Basel, Switzerland), 2021, 7, 841.	1.5	12
25	Enhancing stimulated Raman excitation and two-photon absorption using entangled states of light. Physical Review Research, 2021, 3, .	1.3	12
26	Coherent Raman Generation Controlled by Wavefront Shaping. Scientific Reports, 2019, 9, 1565.	1.6	11
27	Widely tunable femtosecond solitonic radiation in photonic crystal fiber cladding. Physical Review A, 2010, 81, .	1.0	10
28	Identification of toxic mold species through Raman spectroscopy of fungal conidia. PLoS ONE, 2020, 15, e0242361.	1.1	10
29	Time-delayed coherent Raman spectroscopy. Molecular Physics, 2008, 106, 587-594.	0.8	9
30	Broadband light generation using a relatively weak Raman mode in lead tungstate crystal. Journal of Modern Optics, 2010, 57, 1863-1866.	0.6	9
31	Collinear FAST CARS for Chemical Mapping of Gases. Applied Sciences (Switzerland), 2017, 7, 705.	1.3	9
32	Controlled supercontinua via spatial beam shaping. Journal of Modern Optics, 2018, 65, 1332-1335.	0.6	8
33	Molecular origin of the Raman signal from Aspergillus nidulans conidia and observation of fluorescence vibrational structure at room temperature. Scientific Reports, 2020, 10, 5428.	1.6	8
34	Femtosecond Time-Resolved Infrared-Resonant Third-Order Sum-Frequency Spectroscopy. ACS Photonics, 2021, 8, 1137-1142.	3.2	8
35	Quantum optical immunoassay: upconversion nanoparticle-based neutralizing assay for COVID-19. Scientific Reports, 2022, 12, 1263.	1.6	8
36	CARS spectroscopy of Aspergillus nidulans spores. Scientific Reports, 2019, 9, 1789.	1.6	7

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37	Light, the universe and everything â€“ 12 Herculean tasks for quantum cowboys and black diamond skiers. Journal of Modern Optics, 2018, 65, 1261-1308.	0.6	6
38	Synthesis of ultrafast waveforms using coherent Raman sidebands. Physical Review A, 2020, 102, .	1.0	6
39	Observations of ultrafast superfluorescent beatings in a cesium atomic vapor excited by femtosecond laser pulses. Physics Letters, Section A: General, Atomic and Solid State Physics, 2022, 428, 127945.	0.9	6
40	Simple technique for spectral and temporal control of a mode-locked Ti:sapphire oscillator. Journal of Modern Optics, 2007, 54, 2689-2698.	0.6	5
41	Propagation of ultrashort laser pulses in water: linear absorption and onset of nonlinear spectral transformation. Applied Optics, 2010, 49, 513.	2.1	5
42	Carrier-envelope offset frequency measurement for tunable femtosecond lasers using resonant dispersive waves. Optics Letters, 2011, 36, 891.	1.7	5
43	Adaptive optics approach to surface-enhanced Raman scattering. Optics Letters, 2020, 45, 3709.	1.7	5
44	Interaction of femtosecond laser pulses with plants: towards distinguishing weeds and crops using plasma temperature. Journal of Modern Optics, 2017, 64, 942-947.	0.6	4
45	Femtosecond pump-probe studies of atomic hydrogen superfluorescence in flames. Applied Physics Letters, 2020, 116, 201102.	1.5	4
46	Efficient Broadband Raman Generation in Crystals Driven by Dual-Frequency Femtosecond Laser Fields. , 2007, , .		3
47	Fluorescence imaging of stained red blood cells with simultaneous resonance Raman photostability analysis. Analyst, The, 2019, 144, 4362-4370.	1.7	2
48	Hybrid CARS spectroscopy based on a high-repetition-rate all-PM-fiber laser source. Applied Physics Letters, 2020, 117, 081103.	1.5	2
49	Compact X-ray laser amplifier in the â€œWater Windowâ€• Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 2021, 255, 119675.	2.0	2
50	Nonlinear optical effects and trends of near-infrared laser retinal damage. , 2015, , .		2
51	Epi-detected hybrid coherent Raman micro-spectroscopy. Journal of Modern Optics, 2009, 56, 1964-1969.	0.6	1
52	Surface-Enhanced Raman Scattering on Template-Embedded Gold Nanorod Substrates. Journal of Modern Optics, 2014, 61, 72-76.	0.6	1
53	Power and chirp effects on the frequency stability of resonant dispersive waves generated in photonic crystal fibres. Scientific Reports, 2018, 8, 181.	1.6	1
54	Giving entangled photons new colors. Science, 2022, 376, 575-576.	6.0	1

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55	Interplay of molecular modulation technique and stimulated raman scattering for generation of ultra-broadband radiation. , 2006, , .		0
56	Nuclear collisions in heteronuclear molecules driven by an ultrastrong laser field. , 2006, , .		0
57	Absolute phase measurement for broadband collinear Raman generation. , 2008, , .		0
58	Generation of Ultrafast Optical Pulses via Molecular Modulation in Ambient Air. Applied Sciences (Switzerland), 2019, 9, 2509.	1.3	0
59	Comment on â€œEnhancement of the Raman Effect by Infrared Pumpingâ€• Physical Review Letters, 2020, 124, 159401.	2.9	0
60	Gap Mode Tip-Enhanced Raman and AFM Imaging of RNA Strands. , 2021, , .		0
61	Simultaneous In Situ Characterizations of Ultrashort Laser Pulses and the Nonlinear Susceptibility of the Irradiated Medium via Time-Resolved Hybrid Coherent Anti-Stokes Raman Scattering Spectroscopy. Journal of Physical Chemistry Letters, 2021, 12, 925-930.	2.1	0
62	Usability of Tilted Plasmon Antenna with Structured Light. Photonics, 2021, 8, 504.	0.9	0
63	Gold nanolens for chiral single molecule spectroscopy. Laser Physics Letters, 2022, 19, 035701.	0.6	0
64	Characterization and Identification of Fungal Conidia via Shifted Excitation Raman Difference Spectroscopy. Reports in Advances of Physical Sciences, 2022, 06, .	0.6	0