

# Alexei V Sokolov

## List of Publications by Year in descending order

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64  
papers

1,307  
citations

516215

16  
h-index

360668

35  
g-index

66  
all docs

66  
docs citations

66  
times ranked

1338  
citing authors

#	ARTICLE	IF	CITATIONS
1	Quantum optical immunoassay: upconversion nanoparticle-based neutralizing assay for COVID-19. <i>Scientific Reports</i> , 2022, 12, 1263.	1.6	8
2	Observations of ultrafast superfluorescent beatings in a cesium atomic vapor excited by femtosecond laser pulses. <i>Physics Letters, Section A: General, Atomic and Solid State Physics</i> , 2022, 428, 127945.	0.9	6
3	Gold nanolens for chiral single molecule spectroscopy. <i>Laser Physics Letters</i> , 2022, 19, 035701.	0.6	0
4	Giving entangled photons new colors. <i>Science</i> , 2022, 376, 575-576.	6.0	1
5	Characterization and Identification of Fungal Conidia via Shifted Excitation Raman Difference Spectroscopy. <i>Reports in Advances of Physical Sciences</i> , 2022, 06, .	0.6	0
6	Resolving the Sequence of RNA Strands by Tip-Enhanced Raman Spectroscopy. <i>ACS Photonics</i> , 2021, 8, 424-430.	3.2	15
7	Gap Mode Tip-Enhanced Raman and AFM Imaging of RNA Strands. , 2021, , .		0
8	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. <i>Journal of Physical Chemistry Letters</i> , 2021, 12, 925-930.	2.1	0
9	Femtosecond Time-Resolved Infrared-Resonant Third-Order Sum-Frequency Spectroscopy. <i>ACS Photonics</i> , 2021, 8, 1137-1142.	3.2	8
10	Compact X-ray laser amplifier in the "Water Window". <i>Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy</i> , 2021, 255, 119675.	2.0	2
11	Raman Characterization of Fungal DHN and DOPA Melanin Biosynthesis Pathways. <i>Journal of Fungi (Basel, Switzerland)</i> , 2021, 7, 841.	1.5	12
12	Enhancing stimulated Raman excitation and two-photon absorption using entangled states of light. <i>Physical Review Research</i> , 2021, 3, .	1.3	12
13	Usability of Tilted Plasmon Antenna with Structured Light. <i>Photonics</i> , 2021, 8, 504.	0.9	0
14	Enhancing sensitivity of lateral flow assay with application to SARS-CoV-2. <i>Applied Physics Letters</i> , 2020, 117, 120601.	1.5	34
15	Synthesis of ultrafast waveforms using coherent Raman sidebands. <i>Physical Review A</i> , 2020, 102, .	1.0	6
16	Laser spectroscopic technique for direct identification of a single virus I: FASTER CARS. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2020, 117, 27820-27824.	3.3	25
17	Hybrid CARS spectroscopy based on a high-repetition-rate all-PM-fiber laser source. <i>Applied Physics Letters</i> , 2020, 117, 081103.	1.5	2
18	Gap-Mode Tip-Enhanced Raman Scattering on Au Nanoplates of Varied Thickness. <i>Journal of Physical Chemistry Letters</i> , 2020, 11, 3815-3820.	2.1	17

#	ARTICLE	IF	CITATIONS
19	Molecular origin of the Raman signal from <i>Aspergillus nidulans</i> conidia and observation of fluorescence vibrational structure at room temperature. <i>Scientific Reports</i> , 2020, 10, 5428.	1.6	8
20	Comment on "Enhancement of the Raman Effect by Infrared Pumping". <i>Physical Review Letters</i> , 2020, 124, 159401.	2.9	0
21	Femtosecond pump-probe studies of atomic hydrogen superfluorescence in flames. <i>Applied Physics Letters</i> , 2020, 116, 201102.	1.5	4
22	Adaptive optics approach to surface-enhanced Raman scattering. <i>Optics Letters</i> , 2020, 45, 3709.	1.7	5
23	Identification of toxic mold species through Raman spectroscopy of fungal conidia. <i>PLoS ONE</i> , 2020, 15, e0242361.	1.1	10
24	Generation of Ultrafast Optical Pulses via Molecular Modulation in Ambient Air. <i>Applied Sciences (Switzerland)</i> , 2019, 9, 2509.	1.3	0
25	Fluorescence imaging of stained red blood cells with simultaneous resonance Raman photostability analysis. <i>Analyst, The</i> , 2019, 144, 4362-4370.	1.7	2
26	CARS spectroscopy of <i>Aspergillus nidulans</i> spores. <i>Scientific Reports</i> , 2019, 9, 1789.	1.6	7
27	Coherent Raman Generation Controlled by Wavefront Shaping. <i>Scientific Reports</i> , 2019, 9, 1565.	1.6	11
28	Tip-Enhanced Raman Imaging of Single-Stranded DNA with Single Base Resolution. <i>Journal of the American Chemical Society</i> , 2019, 141, 753-757.	6.6	102
29	Light, the universe and everything " 12 Herculean tasks for quantum cowboys and black diamond skiers. <i>Journal of Modern Optics</i> , 2018, 65, 1261-1308.	0.6	6
30	Power and chirp effects on the frequency stability of resonant dispersive waves generated in photonic crystal fibres. <i>Scientific Reports</i> , 2018, 8, 181.	1.6	1
31	Controlled supercontinua via spatial beam shaping. <i>Journal of Modern Optics</i> , 2018, 65, 1332-1335.	0.6	8
32	Giant Chemical Surface Enhancement of Coherent Raman Scattering on MoS <sub>2</sub> . <i>ACS Photonics</i> , 2018, 5, 4960-4968.	3.2	28
33	Metal-Organic-Inorganic Nanocomposite Thermal Interface Materials with Ultralow Thermal Resistances. <i>ACS Applied Materials &amp; Interfaces</i> , 2017, 9, 10120-10127.	4.0	17
34	Interaction of femtosecond laser pulses with plants: towards distinguishing weeds and crops using plasma temperature. <i>Journal of Modern Optics</i> , 2017, 64, 942-947.	0.6	4
35	Collinear FAST CARS for Chemical Mapping of Gases. <i>Applied Sciences (Switzerland)</i> , 2017, 7, 705.	1.3	9
36	Spatially offset Raman microspectroscopy of highly scattering tissue: theory and experiment. <i>Journal of Modern Optics</i> , 2015, 62, 97-101.	0.6	21

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37	Observing the transition from yoked superfluorescence to superradiance. Optics Communications, 2015, 351, 45-49.	1.0	12
38	Nonlinear optical effects and trends of near-infrared laser retinal damage. , 2015, , .		2
39	Pulsed cooperative backward emissions from non-degenerate atomic transitions in sodium. New Journal of Physics, 2014, 16, 103017.	1.2	14
40	Surface-Enhanced Raman Scattering on Template-Embedded Gold Nanorod Substrates. Journal of Modern Optics, 2014, 61, 72-76.	0.6	1
41	Theoretical analysis of the coherence-brightened laser in air. Physical Review A, 2013, 87, .	1.0	35
42	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
43	Time-Resolved Surface-Enhanced Coherent Sensing of Nanoscale Molecular Complexes. Scientific Reports, 2012, 2, 891.	1.6	50
44	Picosecond superradiance in a three-photon resonant medium. Physical Review A, 2012, 85, .	1.0	18
45	Toward Single-Cycle Pulse Generation in Raman-Active Crystals. IEEE Journal of Selected Topics in Quantum Electronics, 2012, 18, 460-466.	1.9	13
46	Carrier-envelope offset frequency measurement for tunable femtosecond lasers using resonant dispersive waves. Optics Letters, 2011, 36, 891.	1.7	5
47	Widely tunable femtosecond solitonic radiation in photonic crystal fiber cladding. Physical Review A, 2010, 81, .	1.0	10
48	Propagation of ultrashort laser pulses in water: linear absorption and onset of nonlinear spectral transformation. Applied Optics, 2010, 49, 513.	2.1	5
49	Femtosecond wave-packet dynamics in cesium dimers studied through controlled stimulated emission. Physical Review A, 2010, 81, .	1.0	12
50	Broadband light generation using a relatively weak Raman mode in lead tungstate crystal. Journal of Modern Optics, 2010, 57, 1863-1866.	0.6	9
51	Epi-detected hybrid coherent Raman micro-spectroscopy. Journal of Modern Optics, 2009, 56, 1964-1969.	0.6	1
52	Simple setup for hybrid coherent Raman microspectroscopy. Journal of Raman Spectroscopy, 2009, 40, 795-799.	1.2	16
53	Fourth-order dispersion mediated solitonic radiations in HC-PCF cladding. Optics Letters, 2008, 33, 2680.	1.7	29
54	Optical imaging beyond the diffraction limit via dark states. Physical Review A, 2008, 78, .	1.0	71

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55	Time-delayed coherent Raman spectroscopy. <i>Molecular Physics</i> , 2008, 106, 587-594.	0.8	9
56	Absolute phase measurement for broadband collinear Raman generation. , 2008, , .		0
57	Comparison of coherent and spontaneous Raman microspectroscopies for noninvasive detection of single bacterial endospores. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2007, 104, 7776-7779.	3.3	132
58	Simple technique for spectral and temporal control of a mode-locked Ti:sapphire oscillator. <i>Journal of Modern Optics</i> , 2007, 54, 2689-2698.	0.6	5
59	Optimizing the Laser-Pulse Configuration for Coherent Raman Spectroscopy. <i>Science</i> , 2007, 316, 265-268.	6.0	308
60	Coherent versus incoherent Raman scattering: molecular coherence excitation and measurement. <i>Optics Letters</i> , 2007, 32, 1725.	1.7	51
61	Efficient Broadband Raman Generation in Crystals Driven by Dual-Frequency Femtosecond Laser Fields. , 2007, , .		3
62	Femtosecond CARS of methanol-water mixtures. <i>Journal of Raman Spectroscopy</i> , 2006, 37, 392-396.	1.2	40
63	Interplay of molecular modulation technique and stimulated raman scattering for generation of ultra-broadband radiation. , 2006, , .		0
64	Nuclear collisions in heteronuclear molecules driven by an ultrastrong laser field. , 2006, , .		0