Konstantin E Dorfman

List of Publications by Year
in descending order

78 papers	2,326 citations	279798 23 h-index	206112 48 g-index
80 all docs	80 docs citations	80 times ranked	1865 citing authors

#	Article	IF	Citations
1	Quantum heat engine power can be increased by noise-induced coherence. Proceedings of the National Academy of Sciences of the United States of America, 2011, 108, 15097-15100.	7.1	342
2	Photosynthetic reaction center as a quantum heat engine. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 2746-2751.	7.1	234
3	Nonlinear optical signals and spectroscopy with quantum light. Reviews of Modern Physics, 2016, 88, .	45.6	234
4	Catching Conical Intersections in the Act: Monitoring Transient Electronic Coherences by Attosecond Stimulated X-Ray Raman Signals. Physical Review Letters, 2015, 115, 193003.	7.8	127
5	Simulating Coherent Multidimensional Spectroscopy of Nonadiabatic Molecular Processes: From the Infrared to the X-ray Regime. Chemical Reviews, 2017, 117, 12165-12226.	47.7	107
6	Roadmap on quantum light spectroscopy. Journal of Physics B: Atomic, Molecular and Optical Physics, 2020, 53, 072002.	1.5	101
7	Entangled Two-Photon Absorption Spectroscopy. Accounts of Chemical Research, 2018, 51, 2207-2214.	15.6	88
8	Quantum-Coherence-Enhanced Surface Plasmon Amplification by Stimulated Emission of Radiation. Physical Review Letters, 2013, 111, 043601.	7.8	87
9	Suppression of population transport and control of exciton distributions by entangled photons. Nature Communications, 2013, 4, 1782.	12.8	78
10	Enhancing photovoltaic power by Fano-induced coherence. Physical Review A, 2011, 84, .	2.5	62
11	Efficiency at maximum power of a laser quantum heat engine enhanced by noise-induced coherence. Physical Review E, 2018, 97, 042120.	2.1	52
12	Time-resolved broadband Raman spectroscopies: A unified six-wave-mixing representation. Journal of Chemical Physics, 2013, 139, 124113.	3.0	50
13	Probing the Conical Intersection Dynamics of the RNA Base Uracil by UV-Pump Stimulated-Raman-Probe Signals; Ab Initio Simulations. Journal of Chemical Theory and Computation, 2014, 10, 1172-1188.	5.3	45
14	Monitoring Nonadiabatic Dynamics of the RNA Base Uracil by UV Pumpâ€“IR Probe Spectroscopy. Journal of Physical Chemistry Letters, 2013, 4, 1933-1942.	4.6	36
15	Stimulated Raman Spectroscopy with Entangled Light: Enhanced Resolution and Pathway Selection. Journal of Physical Chemistry Letters, 2014, 5, 2843-2849.	4.6	36
16	Manipulation of two-photon-induced fluorescence spectra of chromophore aggregates with entangled photons: A simulation study. Physical Review A, 2012, 86, .	2.5	34
17	Broadband infrared and Raman probes of excited-state vibrational molecular dynamics: simulation protocols based on loop diagrams. Physical Chemistry Chemical Physics, 2013, 15, 12348.	2.8	34
18	Femtosecond Stimulated Raman Spectroscopy of the Cyclobutane Thymine Dimer Repair Mechanism: A Computational Study. Journal of the American Chemical Society, 2014, 136, 14801-14810.	13.7	31

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19	Time-, frequency-, and wavevector-resolved x-ray diffraction from single molecules. Journal of Chemical Physics, 2014, 140, 204311.	3.0	29
20	On the Resolution Limit of Femtosecond Stimulated Raman Spectroscopy: Modelling Fifthâ€Order Signals with Overlapping Pulses. ChemPhysChem, 2015, 16, 3438-3443.	2.1	27
21	Monitoring polariton dynamics in the LHCII photosynthetic antenna in a microcavity by two-photon coincidence counting. Journal of Chemical Physics, 2018, 148, 074302.	3.0	26
22	Coherent Raman Umklappscattering. Laser Physics Letters, 2011, 8, 736-741.	1.4	24
23	Nonlinear spectroscopy with time- and frequency-gated photon counting: A superoperator diagrammatic approach. Physical Review A, 2012, 86, .	2.5	24
24	Quantum phase-sensitive diffraction and imaging using entangled photons. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 11673-11678.	7.1	24
25	Multidimensional photon correlation spectroscopy of cavity polaritons. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, 1451-1456.	7.1	23
26	Hong-Ou-Mandel interferometry and spectroscopy using entangled photons. Communications Physics, 2021, 4, .	5.3	23
27	Investigations of Molecular Optical Properties Using Quantum Light and Hongâ€“Ouâ€“Mandel Interferometry. Journal of the American Chemical Society, 2021, 143, 9070-9081.	13.7	20
28	Quantum-interference-controlled resonance profiles from lasing without inversion to photodetection. Physical Review A, 2011, 84, .	2.5	19
29	Detecting electronic coherence by multidimensional broadband stimulated x-ray Raman signals. Physical Review A, 2015, 92, .	2.5	19
30	Multidimensional spectroscopy with entangled light: loop vs ladder delay scanning protocols. New Journal of Physics, 2014, 16, 033013.	2.9	17
31	Coherent control of the multiple wavelength lasing of ${m N}_2^ +$: coherence transfer and beyond. Optica, 2021, 8, 668.	9.3	17
32	Three-dimensional attosecond resonant stimulated X-ray Raman spectroscopy of electronic excitations in core-ionized glycine. Physical Chemistry Chemical Physics, 2014, 16, 24323-24331.	2.8	16
33	Increasing photocell power by quantum coherence induced by external source. Physical Review A, 2011, 84, .	2.5	15
34	Enhancing photocell power by noise-induced coherence. Coherent Optical Phenomena, 2012, 1, .	0.2	13
35	Photon coincidence counting in parametric down-conversion: Interference of field-matter quantum pathways. Physical Review A, 2012, 86, .	2.5	13
36	Detecting electronic coherences by time-domain high-harmonic spectroscopy. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 9776-9781.	7.1	13

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37	Interferometric spectroscopy with quantum light: Revealing out-of-time-ordering correlators. Journal of Chemical Physics, 2021, 154, 210901.	3.0	13
38	Stochastic Liouville equations for femtosecond stimulated Raman spectroscopy. Journal of Chemical Physics, 2015, 142, 024115.	3.0	12
39	Incoherent control of optical signals: Quantum-heat-engine approach. Physical Review Research, 2021, 3, .	3.6	12
40	Plasma-assisted coherent backscattering for standoff spectroscopy. Optics Letters, 2012, 37, 987.	3.3	11
41	Multidimensional four-wave mixing signals detected by quantum squeezed light. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	7.1	11
42	Phase-controlled entanglement in a quantum-beat laser: application to quantum lithography. Journal of Physics B: Atomic, Molecular and Optical Physics, 2011, 44, 225504.	1.5	10
43	Nonlinear fluctuations and dissipation in matter revealed by quantum light. Physical Review A, 2015, 91, .	2.5	10
44	Time-and-frequency-gated photon coincidence counting; a novel multidimensional spectroscopy tool. Physica Scripta, 2016, 91, 083004.	2.5	10
45	Multidimensional four-wave-mixing spectroscopy with squeezed light. Applied Physics Letters, 2020, 116, .	3.3	10
46	Nonlinear light scattering in molecules triggered by an impulsive x-ray Raman process. Physical Review A, 2013, 87, 53826.	2.5	9
47	Indistinguishability and correlations of photons generated by quantum emitters undergoing spectral diffusion. Scientific Reports, 2014, 4, 3996.	3.3	9
48	Coherent control of long-range photoinduced electron transfer by stimulated X-ray Raman processes. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, 10001-10006.	7.1	8
49	Probing electronâ€“atom collision dynamics in gas plasma by high-order harmonic spectroscopy. Optics Letters, 2018, 43, 1970.	3.3	7
50	Multi-wave mixing in the high harmonic regime: monitoring electronic dynamics. Optics Express, 2021, 29, 4746.	3.4	7
51	Revealing topological phase in Pancharatnamâ€“Berry metasurfaces using mesoscopic electrodynamics. Nanophotonics, 2020, 9, 4711-4718.	6.0	7
52	Collective resonances inÏ‡(3): A QED study. Physical Review A, 2013, 87, .	2.5	5
53	Monitoring Spontaneous Charge-Density Fluctuations by Single-Molecule Diffraction of Quantum Light. Journal of Physical Chemistry Letters, 2019, 10, 768-773.	4.6	5
54	Photon-exchange induces optical nonlinearities in harmonic systems. Journal of Physics B: Atomic, Molecular and Optical Physics, 2015, 48, 065401.	1.5	4

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55	Detection of photon statistics and multimode field correlations by Raman processes. Journal of Chemical Physics, 2021, 154, 104116.	3.0	4
56	Ultralow-power local laser control of the dimer density in alkali-metal vapors through photodesorption. Applied Physics Letters, 2012, 101, 091107.	3.3	3
57	Reconstruction of multidimensional nonlinear polarization response of Pancharatnam-Berry metasurfaces. Physical Review B, 2021, 104, .	3.2	3
58	Quantum Thermodynamics of Photo and Solar Cells. , 2011, , .		3
59	Quantum interference and collisional dynamics in excited bounds states revealed by time-resolved pump-high-harmonic-generation-probe spectroscopy. Optics Express, 2019, 27, 7147.	3.4	3
60	Increasing Photovoltaic Power by Noise Induced Coherence Between Intermediate Band States. Coherent Optical Phenomena, 2013, 1, .	0.2	3
61	Origin and universal structure of non-Gaussian statistics of Boseâ€”Einstein condensate in a mesoscopic perfect gas. Radiophysics and Quantum Electronics, 2009, 52, 422-434.	0.5	2
62	Evaluation of optical probe signals from nonequilibrium systems. Physical Review A, 2015, 91, .	2.5	2
63	Open planar Bragg waveguides for mode selection in quantum and classical amplifiers. Laser Physics, 2007, 17, 665-671.	1.2	1
64	Nonlinear interferometers with correlated photons: toward spectroscopy and imaging with quantum light. Light: Science and Applications, 2020, 9, 123.	16.6	1
65	Incoherent control of two-photon induced optical measurements in open quantum systems: Quantum heat engine perspective. Physical Review Research, 2022, 4, .	3.6	1
66	Free-electron masers based on planar Bragg waveguides. Technical Physics Letters, 2009, 35, 540-544.	0.7	0
67	Publisherâ€™s Note: Quantum-interference-controlled resonance profiles from lasing without inversion to photodetection [Phys. Rev. A84, 053803 (2011)]. Physical Review A, 2012, 85, .	2.5	0
68	Nonlinear spectroscopy of chromophore aggregates with entangled photon pulses. EPJ Web of Conferences, 2013, 41, 12006.	0.3	0
69	Reply to â€œComment on â€˜Nonlinear fluctuations and dissipation in matter revealed by quantum lightâ€™â€‰â€. Physical Review A, 2015, 92, .	2.5	0
70	Spatial inhomogeneity of the absorption and re-emission properties of an optically active medium in a resonator. , 2019, , .		0
71	Selective Elimination of Homogeneous Broadening by Multidimensional Spectroscopy in the Electromagnetically Induced Transparency Regime. Journal of Physical Chemistry Letters, 2020, 11, 5504-5509.	4.6	0
72	Light absorption by interacting atomic gas in quantum optical regime. Journal of Chemical Physics, 2021, 155, 044105.	3.0	0

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73	Signatures of Conical Intersection Mediated Relaxation Dynamics in Time-Resolved Broadband Raman Detection. , 2014, , .		0
74	Attosecond Stimulated X-ray Raman Probes of Energy and Electron Transfer in Porphyrin Dimers and Proteins. , 2014, , .		0
75	Multidimensional spectroscopy with entangled light; A novel pulse scanning protocol. , 2014, , .		0
76	Signatures of Conical Intersection Mediated Relaxation Dynamics in Time-Resolved Broadband Raman Detection. Springer Proceedings in Physics, 2015, , 419-423.	0.2	0
77	Nonlinear optical signals and spectroscopy with quantum light and in microcavitites. , 2017, , .		0
78	The role of quantum correlations in entangled two-photon absorption. , 2020, , .		0