

# Alexander Kouzov

## List of Publications by Year in descending order

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41  
papers

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citations

1039880

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1125617

13  
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41  
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41  
docs citations

41  
times ranked

123  
citing authors

#	ARTICLE	IF	CITATIONS
1	Exact Low-Order Classical Moments in Collision-Induced Bands by Linear Rotors: $\langle \text{CO} \rangle^2$	2.9	33
2	Collision-induced absorption by $\langle \text{CO} \rangle^2$ the far infrared: Analysis of leading-order moments and interpretation of the experiment. Physical Review A, 2009, 80, .	1.0	16
3	Effect of stable and metastable dimers on collision-induced rototranslational spectra: Carbon dioxide rare gas mixtures. Journal of Quantitative Spectroscopy and Radiative Transfer, 2017, 196, 87-93.	1.1	15
4	Density evolution of the picosecond time-domain CARS responses from carbon dioxide gas. Journal of Raman Spectroscopy, 2003, 34, 983-988.	1.2	13
5	The isotropic remnant of the CO <sub>2</sub> near-fully depolarized Raman 2 <sup>1</sup> / <sub>2</sub> overtone. Journal of Chemical Physics, 2011, 134, 104310.	1.2	12
6	State-resolved collisional energy transfer of OH, NH and H <sub>2</sub> CO by two-color resonant four-wave mixing spectroscopy. Journal of Raman Spectroscopy, 2002, 33, 925-933.	1.2	11
7	Collision-induced resonances in two-color resonant four-wave mixing spectra. Physical Review A, 2000, 63, .	1.0	10
8	Collision-induced spectroscopy with long-range intermolecular interactions: A diagrammatic representation and the invariant form of the induced properties. Physical Review A, 2006, 74, .	1.0	10
9	Evidence for double incoherent Raman scattering in binary gas mixtures: $\langle \text{SF}_6 \rangle^2$	1.0	9
10	Intermolecular Raman spectroscopy of long-range interactions: The CO <sub>2</sub> collision-induced 2 <sup>1</sup> / <sub>2</sub> CO <sub>2</sub> band. Physical Review A, 2007, 75, .	1.0	9
11	Are asymmetric stretch Raman spectra by centrosymmetric molecules depolarized?: The 2 <sup>1</sup> / <sub>2</sub> overtone of CO <sub>2</sub> . Journal of Chemical Physics, 2011, 134, 044318.	1.2	9
12	Polarization and time-resolved DFWM spectroscopy of the A <sup>2</sup> Σ <sup>+</sup> (0,0) band transitions of nascent OH radicals generated by 266 nm laser photolysis of H <sub>2</sub> O. Journal of Raman Spectroscopy, 2013, 44, 1349-1355.	1.2	9
13	New Line Narrowing Effects in the Infrared Collision-Induced Spectra of Molecular Hydrogens in Liquid Neon. Physical Review Letters, 2008, 101, 093001.	2.9	9
14	Collision-Induced Absorption of Hydrogen Deuteride Dissolved in Liquid Neon. Physical Review Letters, 2004, 92, 023002.	2.9	7
15	State and time-resolved rotational relaxation signatures in two-color resonant four-wave mixing spectra. Journal of Raman Spectroscopy, 2009, 40, 847-852.	1.2	7
16	Double vibrational collision-induced Raman scattering by SF <sub>6</sub> $\langle \text{SF}_6 \rangle^2$	1.0	7
17	The depolarized Raman 2 <sup>1</sup> / <sub>2</sub> overtone of CO <sub>2</sub> : A line-mixing shape analysis. Journal of Chemical Physics, 2011, 134, 194305.	1.2	6
18	Non-linear intermolecular polarization and collision-induced Raman transition by gaseous CO <sub>2</sub> in mixture with argon. Journal of Raman Spectroscopy, 2003, 34, 965-971.	1.2	5

#	ARTICLE	IF	CITATIONS
19	Concentration studies of collision-induced fundamental absorption of hydrogen dissolved in liquid neon. <i>Journal of Chemical Physics</i> , 2012, 137, 084509.	1.2	5
20	Non-Markovian rotational relaxation matrix for fast collisions between two linear molecules in high-pressure gaseous media. I. General formalism and preliminary testing. <i>Journal of Chemical Physics</i> , 2018, 149, 044305.	1.2	5
21	Novel non-linear optical techniques for diagnostics: laser-induced gratings and two-colour four-wave mixing. <i>Comptes Rendus Physique</i> , 2001, 2, 1001-1012.	0.1	4
22	The isotropic spectrum of the CO <sub>2</sub> Raman 2 $\nu_2$ overtone: A line-mixing band shape analysis at pressures up to several tens of atmospheres. <i>Journal of Chemical Physics</i> , 2011, 134, 224301.	1.2	4
23	Line-space description of resonant four-wave mixing: Theory for isotropic molecular states. <i>Journal of Chemical Physics</i> , 2014, 140, 194302.	1.2	4
24	Two-color resonant four-wave mixing as a new tool to study state-to-state energy transfer. , 2002, , .		2
25	Refined theory of two-photon processes accounting for virtual electric quadrupole and magnetic dipole transitions. <i>Journal of Raman Spectroscopy</i> , 2005, 36, 153-157.	1.2	2
26	Origin of abnormally sharp features in collision-induced spectra of cryosolutions. <i>Journal of Chemical Physics</i> , 2015, 143, 044508.	1.2	2
27	Non-empirical calculations of rovibrational band wings: Carbon dioxide-rare gas mixtures. <i>Journal of Quantitative Spectroscopy and Radiative Transfer</i> , 2020, 247, 106950.	1.1	2
28	Pressure effects on N <sub>2</sub> -N <sub>2</sub> rototranslational Raman spectra predicted from leading spectral moments. <i>Journal of Raman Spectroscopy</i> , 2020, 51, 2053-2060.	1.2	1
29	Leading spectral moments for easy computation of pressure effects on rotational lines. <i>Journal of Raman Spectroscopy</i> , 2020, 51, 1390-1394.	1.2	1
30	Spectral Moments of Characteristics of Binary Interactions between Linear Molecules. <i>Optics and Spectroscopy (English Translation of Optika i Spektroskopiya)</i> , 0, , 1.	0.2	1
31	Analysis of the impact shifts of vib-rotational lines of light rotators at high rotational quantum numbers. , 1997, , .		0
32	On the form of rotational relaxation matrix in the infinite-order sudden approximation corrected for energy and frequency. , 1999, , .		0
33	Reconstruction of the Q band spectrum of the 1285-cm <sup>-1</sup> transition in the CO <sub>2</sub> molecule from measurements of a pulsed response. <i>Optics and Spectroscopy (English Translation of Optika i Spektroskopiya)</i> , 1, 0.784314, 2gBT / Overlock 10		0
34	Two-Color Resonant Four-Wave Mixing Spectroscopy: New Perspectives for Direct Studies of Collisional State-to-State Transfer. , 2008, , .		0
35	Exact Low-Order Classical Moments in Collision-Induced Bands by Linear Rotors: CO <sub>2</sub> -CO <sub>2</sub> . , 2008, , .		0
36	Double Raman Scattering In Gas Mixtures. , 2010, , .		0

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37	Raman line shape studies of hydrogen cryosolutions. Journal of Physics: Conference Series, 2012, 397, 012058.	0.3	0
38	Line space theory of Resonant Four-Wave Mixing: New prospects for all-optical studies of photofragment states. Chemical Physics Letters, 2017, 673, 103-107.	1.2	0
39	A "Dipole-Induced Dipole" Quantum Model and the Effect of an Inert Environment on the Intensity of Infrared Absorption. Optics and Spectroscopy (English Translation of Optika i Spektroskopiya), 2019, 127, 212-217.	0.2	0
40	Energy-corrected sudden modeling of the non-Markovian rotational relaxation matrix for high-pressure Raman spectra of pure nitrogen. Journal of Raman Spectroscopy, 0, , .	1.2	0
41	Dynamic induction of satellite lines in rotational Raman spectra of liquid hydrogen. Molecular Physics, 0, , .	0.8	0