

# Emil J Zak

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/8869990/publications.pdf>

Version: 2024-02-01

17  
papers

3,610  
citations

1039406

9  
h-index

996533

15  
g-index

17  
all docs

17  
docs citations

17  
times ranked

4033  
citing authors

#	ARTICLE	IF	CITATIONS
1	The HITRAN2016 molecular spectroscopic database. Journal of Quantitative Spectroscopy and Radiative Transfer, 2017, 203, 3-69.	1.1	2,840
2	The ExoMol database: Molecular line lists for exoplanet and other hot atmospheres. Journal of Molecular Spectroscopy, 2016, 327, 73-94.	0.4	364
3	A uniform approach to the description of multicenter bonding. Physical Chemistry Chemical Physics, 2014, 16, 20514-20523.	1.3	112
4	A room temperature CO2 line list with ab initio computed intensities. Journal of Quantitative Spectroscopy and Radiative Transfer, 2016, 177, 31-42.	1.1	91
5	Room temperature line lists for CO2 symmetric isotopologues with ab initio computed intensities. Journal of Quantitative Spectroscopy and Radiative Transfer, 2017, 189, 267-280.	1.1	49
6	Electron delocalization index based on bond order orbitals. Chemical Physics Letters, 2014, 593, 154-159.	1.2	37
7	Field-Induced Diastereomers for Chiral Separation. Physical Review Letters, 2019, 123, 243202.	2.9	33
8	Room temperature line lists for CO2 asymmetric isotopologues with ab initio computed intensities. Journal of Quantitative Spectroscopy and Radiative Transfer, 2017, 203, 265-281.	1.1	31
9	Highly accurate intensity factors of pure CO2 lines near 2 $\mu$ m. Journal of Chemical Physics, 2017, 146, 244309.	1.2	25
10	Using collocation and a hierarchical basis to solve the vibrational Schrödinger equation. Journal of Chemical Physics, 2019, 150, 204108.	1.2	8
11	Simulating electric field interactions with polar molecules using spectroscopic databases. Scientific Reports, 2017, 7, 45068.	1.6	7
12	Ro-vibronic transition intensities for triatomic molecules from the exact kinetic energy operator; electronic spectrum for the Clfâ€™%1B2â€™%â†â€™%Xlfâ€™%1A1 transition in SO2. Journal of Chemical Physics, 2017, 147, 094305.	1.2	5
13	From quantum superposition to orbital communication. Computational and Theoretical Chemistry, 2017, 1115, 80-87.	1.1	3
14	Controlling rotation in the molecular frame with an optical centrifuge. Physical Review Research, 2021, 3, .	1.3	3
15	Dynamical Semigroups in the Birkhoff Polytope of Order 3 as a Tool for Analysis of Quantum Channels. Open Systems and Information Dynamics, 2020, 27, 2050001.	0.5	1
16	ROOM TEMPERATURE LINE LISTS FOR CO2 ISOTOPOLOGUES WITH AB INITIO COMPUTED INTENSITIES. , 2016, , .		1
17	Quasiperiodic Energy Dependence of Exciton Relaxation Kinetics in the Sexithiophene Crystal. Journal of Physical Chemistry A, 2014, 118, 9653-9660.	1.1	0