

Martin Cizek

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/7723924/publications.pdf>

Version: 2024-02-01

55

papers

1,318

citations

394421

19

h-index

345221

36

g-index

55

all docs

55

docs citations

55

times ranked

957

citing authors

#	ARTICLE	IF	CITATIONS
1	Quantum Dynamics of Photoinduced Electron-Transfer Reactions in Dye-Semiconductor Systems: First-Principles Description and Application to Coumarin 343-TiO ₂ . <i>Journal of Physical Chemistry C</i> , 2007, 111, 11970-11981.	3.1	157
2	Theory of vibrationally inelastic electron transport through molecular bridges. <i>Physical Review B</i> , 2004, 70, .	3.2	113
3	Experimental Results for H ₂ Formation from H ⁺ and H and Implications for First Star Formation. <i>Science</i> , 2010, 329, 69-71.	12.6	113
4	Nuclear dynamics of the H collision complex beyond the local approximation: associative detachment and dissociative attachment to rotationally and vibrationally excited molecules. <i>Journal of Physics B: Atomic, Molecular and Optical Physics</i> , 1998, 31, 2571-2583.	1.5	86
5	Inelastic low-energy electron collisions with the HBr and DBr molecules: Experiment and theory. <i>Physical Review A</i> , 2001, 63, .	2.5	62
6	Vibronic Effects in Single Molecule Conductance: First-Principles Description and Application to Benzenealkanethiolates between Gold Electrodes. <i>Journal of Physical Chemistry C</i> , 2008, 112, 9880-9890.	3.1	58
7	Dissociative electron attachment and vibrational excitation of H ₂ by low-energy electrons: Calculations based on an improved nonlocal resonance model. <i>Physical Review A</i> , 2004, 70, .	2.5	55
8	Associative detachment, dissociative attachment, and vibrational excitation of HCl by low-energy electrons. <i>Physical Review A</i> , 1999, 60, 2873-2881.	2.5	51
9	Switching the Conductance of a Single Molecule by Photoinduced Hydrogen Transfer. <i>Journal of Physical Chemistry C</i> , 2009, 113, 10315-10318.	3.1	51
10	Experimental and Theoretical Evidence for Long-Lived Molecular Hydrogen Anions H ₂ ⁻ and D ₂ ⁻ . <i>Physical Review Letters</i> , 2005, 94, 223003.	7.8	40
11	Dissociative electron attachment and vibrational excitation of H ₂ by low-energy electrons: Calculations based on an improved nonlocal resonance model. II. Vibrational excitation. <i>Physical Review A</i> , 2006, 73, .	2.5	37
12	Vibronic effects on resonant electron conduction through single molecule junctions. <i>Chemical Physics Letters</i> , 2006, 430, 355-360.	2.6	36
13	Electron scattering in cooled HCl: boomerang structures and outer-well resonances in elastic and vibrational excitation cross sections. <i>Journal of Physics B: Atomic, Molecular and Optical Physics</i> , 2000, 33, L209-L213.	1.5	35
14	Vibrational excitation of hydrogen fluoride by low-energy electrons: theory and experiment. <i>Journal of Physics B: Atomic, Molecular and Optical Physics</i> , 2003, 36, 2837-2849.	1.5	34
15	Charge transport through a flexible molecular junction. <i>European Physical Journal D</i> , 2005, 55, 189-202.	0.4	32
16	Motor effect in electron transport through a molecular junction with torsional vibrations. <i>Physical Review B</i> , 2011, 83, .	3.2	26
17	Resonances and Dissociative Electron Attachment in HNCO. <i>Physical Review Letters</i> , 2018, 121, 143402.	7.8	25
18	Isotope effect for associative detachment: $\text{H}_2\text{O}^+ + \text{H}_2 \rightarrow \text{H}_3^+ + \text{H}_2\text{O}$	0.4	22

#	ARTICLE	IF	CITATIONS
19	Long-lived anionic states of H ₂ , HD, D ₂ , and T ₂ . Physical Review A, 2007, 75, .	2.5	19
20	Title is missing!. European Physical Journal D, 2002, 52, 1057-1070.	0.4	18
21	<i>Associative detachment of H</i> $\text{H} \langle \text{mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline" }> \langle \text{mml:msup} \rangle \langle \text{mml:mrow} / \rangle \langle \text{mml:mo} \rangle a \langle / \text{mml:mo} \rangle \langle / \text{mml:msup} \rangle \langle / \text{mml:math} \rangle + \text{H}$ $\text{H} \langle \text{mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline" }> \langle \text{mml:mo} \rangle \hat{a}^{\dagger} \langle / \text{mml:mo} \rangle \langle / \text{mml:math} \rangle \text{H} \langle \text{mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline" }> \langle \text{mml:msub} \rangle \langle \text{mml:mrow} / \rangle \langle \text{mml:mo} \rangle ^2 \langle / \text{mml:mo} \rangle \langle / \text{mml:msub} \rangle \langle / \text{mml:math} \rangle + \text{mml:math}$	2.5	18
22	Generalization of the nonlocal resonance model for low-energy electron collisions with hydrogen halides: the variable threshold exponent. Theoretical Chemistry Accounts, 1998, 100, 31-35.	1.4	17
23	Electron scattering in HCl: An improved nonlocal resonance model. Physical Review A, 2010, 81, .	2.5	16
24	Calculation of rate constants for dissociative attachment of low-energy electrons to hydrogen halides HCl, HBr, and HI and their deuterated analogs. Physical Review A, 2002, 66, .	2.5	14
25	On shooting methods for calculation of potential resonances. Journal of Physics A, 1996, 29, 6325-6342.	1.6	13
26	Associative detachment in low-energy collisions between hydrogen atoms and atomic halogen anions. Journal of Physics B: Atomic, Molecular and Optical Physics, 2001, 34, 983-1004.	1.5	13
27	Effects of Interchannel Coupling in Associative Detachment: Electron Spectra for H+Cl ⁻ and H+Br ⁻ Collisions. Physical Review Letters, 2002, 89, 073201.	7.8	13
28	Electron spectra for associative detachment in low-energy collisions of Cl ⁻ and Br ⁻ with H and D ⁺ . Journal of Physics B: Atomic, Molecular and Optical Physics, 2003, 36, 3513-3531.	1.5	13
29	Interaction of O ²⁻ and H ₂ at low temperatures. Journal of Chemical Physics, 2015, 142, 014304.	3.0	12
30	On irregular oscillatory structures in resonant vibrational excitation cross-sections in diatomic molecules. Chemical Physics, 2008, 347, 250-256.	1.9	11
31	Vibronic Coupling through the Continuum in the $\text{H} \langle \text{mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline" }> \langle \text{mml:mrow} \rangle \langle \text{mml:mi} \rangle e \langle / \text{mml:mi} \rangle \langle \text{mml:mo} \rangle + \langle / \text{mml:mo} \rangle \langle \text{mml:mrow} \rangle \langle \text{mml:msub} \rangle \langle \text{mml:mrow} \rangle \langle \text{mml:mi} \rangle ^{7.8} \text{CO} \langle / \text{mml:mi} \rangle \langle / \text{mml:msub} \rangle \langle / \text{mml:mrow} \rangle \langle / \text{mml:math} \rangle$ System. Physical Review Letters, 2022, 129, .	1.1	11
32	Dissociative electron attachment to HBr: A temperature effect. Physical Review A, 2007, 75, .	2.5	9
33	Metastable states of D ⁻ $\text{D} \langle \text{mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline" }> \langle \text{mml:mrow} \rangle \langle \text{mml:msub} \rangle \langle \text{mml:mrow} / \rangle \langle \text{mml:mn} \rangle ^2 \langle / \text{mml:mn} \rangle \langle / \text{mml:msub} \rangle \langle \text{mml:msup} \rangle \langle \text{mml:mrow} / \rangle \langle \text{mml:mo} \rangle \hat{a}^{\dagger} \langle / \text{mml:mo} \rangle \langle / \text{mml:msup} \rangle \langle / \text{mml:mrow} \rangle \langle / \text{mml:math} \rangle$ observed by foil-induced Coulomb explosion imaging. Physical Review A, 2013, 87, .	2.5	9
34	Study of Dissociative Electron Attachment to HI Molecule by using R-matrix Representation for Green's Function. Physica Scripta, 2002, 65, 328-335.	2.5	8
35	Isotope effects in vibrational excitation and dissociative electron attachment of DCl and DBr. European Physical Journal D, 2005, 35, 225-230.	1.3	8
36	Long-lived metastable anions of hydrogen halides. International Journal of Mass Spectrometry, 2009, 280, 149-153.	1.5	7

#	ARTICLE	IF	CITATIONS
37	Electron-impact vibrational excitation of isocyanic acid HNCO. Physical Review A, 2020, 102, . Vibrational excitation in the $\langle \text{mml:math} \rangle$ system: Nonlocal model of $\langle \text{mml:math} \rangle$ vibrionic coupling through the continuum. Physical Review A, 2022, 105, .	2.5	7
38	$\langle \text{mml:math} \rangle$ system: Nonlocal model of $\langle \text{mml:math} \rangle$ vibrionic coupling through the continuum. Physical Review A, 2022, 105, .	2.5	7
39	Schwingerae Lanczos algorithm for calculation of off-shell -matrix elements and Wynn's epsilon isotopic effects in the interaction of $\langle \text{mml:math} \rangle$	7.5	6
40	$\langle \text{mml:math} \rangle$ with $\langle \text{mml:math} \rangle$ and $\langle \text{mml:math} \rangle$	2.5	6
41	Energy distributions of He+ and He2+ ions formed in ultracold He(23S1)+He(23P2) collisions. Physical Review A, 2002, 66, .	2.5	5
42	Electron Transfer and Associative Detachment in Low-Temperature Collisions of D ⁺ with H. Journal of Physical Chemistry Letters, 2015, 6, 4762-4766.	4.6	5
43	Dissociative attachment of low-energy electrons to vibrationally excited hydrogen molecules. European Physical Journal D, 2002, 52, 29-40.	0.4	4
44	Lowest autodetachment state of the water anion. European Physical Journal D, 2016, 70, 1.	1.3	4
45	Associative detachment in Li+H $\tilde{\cdot}$ collisions. European Physical Journal D, 2018, 72, 1.	1.3	3
46	Resonances in low-energy rare-gas atom scattering. European Physical Journal D, 1996, 46, 55-65.	0.4	2
47	Metastable states of diatomic hydrogen anions. Journal of Physics: Conference Series, 2014, 488, 012034.	0.4	2
48	Giant structures in low-energy electron-deuterium-iodide elastic scattering cross section. Physical Review A, 2007, 75, .	2.5	1
49	Experimental results for H ₂ formation from H $\tilde{\cdot}$ and H and implications for first star formation. AIP Conference Proceedings, 2015, .	0.4	1
50	On shooting methods for calculation of potential resonances. Journal of Physics A, 1997, 30, 4137-4137.	1.6	1
51	Long-lived states of molecular hydrogen anion. AIP Conference Proceedings, 2007, .	0.4	0
52	Improved nonlocal resonance model for electron - HCl collisions. Journal of Physics: Conference Series, 2009, 194, 052036.	0.4	0
53	Model of electron tunneling coupled to torsional vibrations: Exact solution and study of performance of approximation methods. Physica E: Low-Dimensional Systems and Nanostructures, 2014, 63, 36-44.	2.7	0
54	Autodetachment spectroscopy of the metastable HD $\tilde{\cdot}$ and \${{m\{D\}}}_{\{2\}}^{\{-\}}\$ anions. Journal of Physics: Conference Series, 2020, 1412, 132049.	0.4	0

ARTICLE

IF CITATIONS

- 55 NARROW RESONANCES IN DISSOCIATIVE ELECTRON ATTACHMENT AND VIBRATIONAL EXCITATION IN H_2 . , 2006, , . 0