George C Mcbane

List of Publications by Year
in descending order

46	1,299	331259	344852
papers	citations	21 h-index	36 g-index

47	47	47	1030
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	The weakest bond: Experimental observation of helium dimer. Journal of Chemical Physics, 1993, 98, 3564-3567.	1.2	238
2	BASECOL2012: A collisional database repository and web service within the Virtual Atomic and Molecular Data Centre (VAMDC). Astronomy and Astrophysics, 2013, 553, A50.	2.1	193
3	Influence of retardation on the vibrational wave function and binding energy of the helium dimer. Journal of Chemical Physics, 1993, 98, 9687-9690.	1.2	57
4	A hierarchical family of three-dimensional potential energy surfaces for He-CO. Journal of Chemical Physics, 2005, 123, 084314.	1.2	55
5	Photodissociation of ozone in the Hartley band: Potential energy surfaces, nonadiabatic couplings, and singlet/triplet branching ratio. Journal of Chemical Physics, 2010, 132, 044305.	1.2	55
6	An ab initio potential energy surface for Neâ€“CO. Journal of Chemical Physics, 1999, 110, 11734-11741.	1.2	54
7	The 157 nm photodissociation of OCS. Journal of Chemical Physics, 1989, 90, 5364-5372.	1.2	40
8	Stateâ€selective studies of Tâ†'R, V energy transfer: The H+CO system. Journal of Chemical Physics, 1988, 88, 5481-5488.	1.2	37
9	Chemistry from Telephone Numbers: The False Isokinetic Relationship. Journal of Chemical Education, 1998, 75, 919.	1.1	36
10	State-to-State Differential Cross Sections by Velocity Mapping for Rotational Excitation of CO by Ne. Journal of Physical Chemistry A, 2002, 106, 1144-1151.	1.1	33
11	Exploring Renner-Teller induced quenching in the reaction H(S2)+NH(aÎ"1): A combined experimental and theoretical study. Journal of Chemical Physics, 2007, 126, 034304.	1.2	31
12	State to state Heâ€“CO rotationally inelastic scattering. Journal of Chemical Physics, 1999, 110, 2384-2390.	1.2	29
13	Î› Doublet Propensities in Arâ^'NO Rotationally Inelastic Scattering at 220 meV. Journal of Physical Chemistry A, 1999, 103, 1198-1205.	1.1	29
14	Communication: Multi-state analysis of the OCS ultraviolet absorption including vibrational structure. Journal of Chemical Physics, 2012, 136, 131101.	1.2	29
15	Communication: Mapping water collisions for interstellar space conditions. Journal of Chemical Physics, 2010, 133, 131103.	1.2	28
16	Response to â€˜â€˜Comment on â€˜The weakest bond: Experimental observation of helium dimerâ€™ â€™â€™ [J. Chem. Phys. 100, 4021 (1994)]. Journal of Chemical Physics, 1994, 100, 4023-4024.	1.2	26
17	The ultraviolet spectrum of OCS from first principles: Electronic transitions, vibrational structure and temperature dependence. Journal of Chemical Physics, 2012, 137, 054313.	1.2	26
18	Collisional excitation of CO by 2.3 eV H atoms. Journal of Chemical Physics, 1991, 94, 1141-1149.	1.2	24

#	Article	IF	Citations
19	Photodissociation of N2O: Energy partitioning. Journal of Chemical Physics, 2011, 135, 024311.	1.2	24
20	Molecular Physics, 2007, 105, 1183-1191.	0.8	23
21	CO Blocking of D₂ Dissociative Adsorption on Ru(0001). ChemPhysChem, 2008, 9, 2372-2378.	1.0	21
22	Ultraviolet photodissociation of OCS: Product energy and angular distributions. Journal of Chemical Physics, 2013, 138, 094314.	1.2	21
23	Photodissociation dynamics of OCS near 214 nm using ion imaging. Journal of Chemical Physics, 2016, 145, 024310.	1.2	20
24	State to state Neâ€“CO rotationally inelastic scattering. Journal of Chemical Physics, 1999, 110, 11742-11748.	1.2	19
25	Photodissociation of ozone in the Hartley band: Product state and angular distributions. Journal of Chemical Physics, 2010, 133, 144312.	1.2	18
26	State-to-state rotational excitation of CO by H2 near 1000 cmâ^'1 collision energy. Journal of Chemical Physics, 2000, 112, 554-559.	1.2	14
27	State-to-state rotational rate constants for CO+He: Infrared double resonance measurements and simulation of the data using the SAPT theoretical potential energy surface. Journal of Chemical Physics, 2004, 120, 2285-2295.	1.2	14
28	State-to-state rotational relaxation rate constants for CO+Ne from IRâ€“IR double-resonance experiments: Comparing theory to experiment. Journal of Chemical Physics, 2004, 120, 7483-7489.	1.2	14
29	Product angular distributions in the ultraviolet photodissociation of N2O. Journal of Chemical Physics, 2012, 136, 044314.	1.2	12
30	Production of O2 Herzberg states in the deep UV photodissociation of ozone. Journal of Chemical Physics, 2009, 131, 011101.	1.2	9
31	Rovibrational Energy Transfer in Neâ^'Li₂(A¹Î£_u⁺,v=0): Comparison of Experimental Data and Results from Classical and Quantum Calculations. Journal of Physical Chemistry A, 2010, 114, 9875-9885.	1.1	9
32	Relaxation of NH(a1Î”, v = 1) in Collisions with H(2S): An Experimental and Theoretical Study. Journal of Physical Chemistry A, 2009, 113, 14458-14464.	1.1	8
33	Interaction second virial coefficients from a recent H2â€“CO potential energy surface. Journal of Chemical Physics, 2000, 112, 4417-4418.	1.2	7
34	The sulfur (1D) + nitrogen quenching process: determination of branching ratios to triplet fine structure products. The Journal of Physical Chemistry, 1992, 96, 753-755.	2.9	6
35	Nascent O2 (aâ€^1Î”g, v = 0, 1) rotational distributions from the photodissociation of jet-cooled O3 in the Hartley band. Journal of Chemical Physics, 2018, 149, 134309.	1.2	6
36	Programs to Compute Distribution Functions and Critical Values for Extreme Value Ratios for Outlier Detection. Journal of Statistical Software, 2006, 16, .	1.8	6

#	Article	IF	Citations
37	An exchange-Coulomb model potential energy surface for the Neâ€“CO interaction. II. Molecular beam scattering and bulk gas phenomena in Neâ€“CO mixtures. Journal of Chemical Physics, 2010, 132, 024308.	1.2	5
38	A Low-Cost Time-Resolved Spectrometer for the Study of Ruby Emission. Journal of Chemical Education, 2018, 95, 173-177.	1.1	5
39	SIR (Susceptibleâ€“Infectiousâ€“Removed) Model of Epidemiology as an Extended Example for Chemical Kinetics Students. Journal of Chemical Education, 2021, 98, 2906-2911.	1.1	5
40	Simulation and Analysis of Image Data from Crossed Beam Experiments. ACS Symposium Series, 2000, , 215-229.	0.5	4
41	A three-dimensional Heâ€“CO potential energy surface with improved long-range behavior. Journal of Molecular Spectroscopy, 2016, 330, 211-216.	0.4	3
42	Imaging inelastic scattering of CO with argon: polarization dependent differential cross sections. Physical Chemistry Chemical Physics, 2019, 21, 9200-9211.	1.3	3
43	Empirical assignment of absorbing electronic state contributions to OCS photodissociation product state populations from 214 to 248â€¯nm. Chemical Physics, 2019, 520, 1-7.	0.9	1
44	Î› doublet propensities in Ar-NO rotationally inelastic scattering at 212 meV. , 1998, , .		0
45	State-to-state rotational relaxation rate constants for the CO+X series (X=CO, He, and Ne) using IR-IR double resonance experiments: comparing theory to experiment. , 2004, 5448, 906.		0
46	A Plea for the Abandonment of the Atmosphere As a Unit in Gas Law Instruction. Journal of Chemical Education, 2009, 86, 17.	1.1	0