

# Hosung Sun

## List of Publications by Year in descending order

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26  
papers

405  
citations

840119

11  
h-index

752256

20  
g-index

27  
all docs

27  
docs citations

27  
times ranked

143  
citing authors

#	ARTICLE	IF	CITATIONS
1	Ab initio third order effective valence shell Hamiltonian calculations for first row diatomic hydrides. <i>Journal of Chemical Physics</i> , 1981, 74, 6842-6848.	1.2	40
2	Dipole moments, transition moments, oscillator strengths, radiative lifetimes, and overtone intensities for CH and CH <sup>+</sup> as computed by quasi-degenerate many-body perturbation theory. <i>International Journal of Quantum Chemistry</i> , 1991, 39, 269-286.	1.0	39
3	Ab initio effective valence shell hamiltonian calculation of the valence state potential curves of CH and CH <sup>+</sup> . <i>Chemical Physics Letters</i> , 1981, 78, 531-537.	1.2	35
4	Molecular properties by ab initio quasi-degenerate many-body perturbation theory effective Hamiltonian method: Dipole and transition moments of CH and CH <sup>+</sup> . <i>Journal of Chemical Physics</i> , 1988, 88, 2659-2665.	1.2	34
5	Application of quasi-degenerate many-body perturbation theory to the calculation of molecular excited valence state negative ion Feshbach resonances. <i>Journal of Chemical Physics</i> , 1982, 76, 5051-5059.	1.2	33
6	Application of the effective valence shell Hamiltonian method to accurate estimation of valence and Rydberg states oscillator strengths and excitation energies for I <sup>∞</sup> electron systems. <i>Journal of Chemical Physics</i> , 1997, 106, 9252-9264.	1.2	33
7	Ab initio effective valence Hamiltonian description of electron correlation for the neutral and ion valence states of transition metal atoms. <i>Journal of Chemical Physics</i> , 1980, 73, 1472-1474.	1.2	30
8	Ab Initio Calculation of One-Center Integrals of Semiempirical Theories of Valence. <i>Israel Journal of Chemistry</i> , 1980, 19, 99-108.	1.0	22
9	Ab initio determination of bond length dependence of the correlated valence shell Hamiltonian of CH: Comparison with semiempirical theories. <i>Journal of Chemical Physics</i> , 1984, 80, 779-788.	1.2	21
10	Quantum interference and asymptotic interactions in the photodissociation of SH: Total cross section and branching ratios. <i>Journal of Chemical Physics</i> , 2001, 114, 5537-5544.	1.2	16
11	The ab initio effective dipole operator of CH: Comparisons with semiempirical methods. <i>Journal of Chemical Physics</i> , 1992, 96, 5245-5252.	1.2	14
12	Vibrational Predissociation Rates and Final State Distributions for He <sup>+</sup> ICl and He <sup>+</sup> I <sub>2</sub> Using a Computationally Simple Method. <i>Journal of Physical Chemistry A</i> , 1998, 102, 9345-9352.	1.1	11
13	Vector properties of S(3P) and S(1D) in the photodissociation of SH: Quantum interference and overlapping resonance. <i>Journal of Chemical Physics</i> , 2002, 116, 10656-10663.	1.2	11
14	Transition dipole moments, transition probabilities, and radiative lifetimes for NH by ab initio effective valence shell Hamiltonian. <i>Chemical Physics Letters</i> , 1994, 228, 443-450.	1.2	10
15	Valence electronic states of SiH <sub>2</sub> <sup>+</sup> by ab initio effective valence shell Hamiltonian. <i>Journal of Chemical Physics</i> , 1993, 99, 1844-1850.	1.2	9
16	Valence electronic states of NH <sub>2</sub> <sup>+</sup> and PH <sub>2</sub> <sup>+</sup> dications. <i>International Journal of Quantum Chemistry</i> , 1993, 48, 355-365.	1.0	7
17	The effective valence shell Hamiltonian for spin-orbit coupling. <i>Journal of Chemical Physics</i> , 2003, 118, 8281-8289.	1.2	6
18	Vibrational structure and predissociation rates of the He-O <sub>2</sub> vander Waals complex. <i>Molecular Physics</i> , 2001, 99, 1867-1873.	0.8	5

#	ARTICLE	IF	CITATIONS
19	The vibrational structure and predissociation of the B state of HeBr <sub>2</sub> using a simple theoretical method. <i>Chemical Physics Letters</i> , 2001, 336, 311-320.	1.2	5
20	The vibrational structure and predissociation lifetimes of I <sub>2</sub> (B) <sup>+</sup> Ne: VSCF <sup>+</sup> DWB <sup>+</sup> IOS approximation. <i>Chemical Physics Letters</i> , 2003, 377, 406-412.	1.2	5
21	The Effective Valence Shell Hamiltonian Calculations of Spin <sup>+</sup> Orbit Splittings in Small Diatomic Hydrides. <i>Journal of Physical Chemistry B</i> , 2008, 112, 16135-16139.	1.2	5
22	Ab initio study on NH <sup>+</sup> : Transition dipole moments, transition probabilities, and radiative lifetimes. <i>International Journal of Quantum Chemistry</i> , 1996, 57, 79-87.	1.0	4
23	Spin <sup>+</sup> orbit splittings in the valence states of XH (X=K, Ca, Ga, Ge, As, Se, and Br) by the effective Hamiltonian approach. <i>Chemical Physics Letters</i> , 2010, 493, 371-375.	1.2	4
24	Vibrational predissociation rates of I <sub>2</sub> (B) <sup>+</sup> Ne in excited van der Waals modes. <i>Chemical Physics</i> , 2004, 304, 281-288.	0.9	1
25	Exactly Solvable Potentials Derived from SWKB Quantization. <i>Bulletin of the Korean Chemical Society</i> , 2014, 35, 805-810.	1.0	1
26	General Orthogonality for Orthogonal Polynomials. <i>Bulletin of the Korean Chemical Society</i> , 2013, 34, 197-200.	1.0	0