

Aristides Mavridis

List of Publications by Year in descending order

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citing authors

#	ARTICLE	IF	CITATIONS
1	Electronic Structure and Bonding of the Fastidious Species CN_2 and CP_2 : A First-Principles Study. <i>Journal of Physical Chemistry A</i> , 2019, 123, 10290-10302.	1.1	8
2	“Hypervalency” and the chemical bond. <i>Computational and Theoretical Chemistry</i> , 2019, 1153, 65-74.	1.1	11
3	The story of the B_4H_4 molecule told again. <i>Computational and Theoretical Chemistry</i> , 2017, 1115, 217-222.	1.1	6
4	Structural parameters of the ground states of the quasi-stable diatomic anions CO^- , BF^- , and BCl^- as obtained by conventional <i>Ab Initio</i> methods. <i>International Journal of Quantum Chemistry</i> , 2015, 115, 771-778.	1.0	6
5	Accurate first principles calculations on chlorine fluoride ClF and its ions ClF^\pm . <i>Theoretical Chemistry Accounts</i> , 2014, 133, 1.	0.5	9
6	Accurate structural parameters and binding energy of the X_2^+ and X_2^- diatomic ions. <i>Journal of Physical Chemistry A</i> , 2014, 118, 2000-2005.	1.2	1
7	Accurate structural parameters of the diatomic X_2^+ and X_2^- diatomic ions. <i>Journal of Physical Chemistry A</i> , 2014, 118, 2000-2005.	1.1	2
8	All electron ab initio calculations on the ScTi molecule: a really hard nut to crack. <i>Theoretical Chemistry Accounts</i> , 2013, 132, 1.	0.5	2
9	First principles exploration of NiO and its ions NiO^+ and NiO^- . <i>Journal of Chemical Physics</i> , 2013, 138, 054308.	1.2	20
10	An <i>ab initio</i> study of the electronic structure of BF and BF^+ . <i>Journal of Chemical Physics</i> , 2013, 138, 104312.	1.2	18
11	First principles study of cobalt hydride, CoH , and its ions CoH^+ and CoH^- . <i>Journal of Chemical Physics</i> , 2012, 137, 034309.	1.2	12
12	Electronic Structure and Bonding of Cobalt Monoxide, CoO , and Its Ions CoO^+ and CoO^- : An <i>Ab Initio</i> Study. <i>Journal of Physical Chemistry A</i> , 2012, 116, 6935-6949.	1.1	20
13	Electronic spectroscopy and electronic structure of diatomic TiFe . <i>Journal of Chemical Physics</i> , 2012, 137, 054302.	1.2	9
14	Structure and bonding of ScCN and ScNC : Ground and low-lying states. <i>Chemical Physics</i> , 2012, 399, 46-49.	0.9	2
15	Myths and Reality of Hypervalent Molecules. The Electronic Structure of FCIO_3 , Cl_3PO , Cl_3PCH_2 , and $\text{C}(\text{ClO})_4$. <i>Journal of Physical Chemistry A</i> , 2011, 115, 2378-2384.	1.1	14
16	First principles study of the ground and excited states of FeO , FeO^+ , and FeO^- . <i>Journal of Chemical Physics</i> , 2011, 134, 234308.	1.2	63
17	Li atoms attached to helium nanodroplets. <i>International Journal of Quantum Chemistry</i> , 2011, 111, 400-405.	1.0	9
18	The electronic structure of Ti_2 and Ti_2^+ . <i>Journal of Chemical Physics</i> , 2011, 135, 134302.	1.2	16

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19	Electronic spectroscopy and electronic structure of diatomic CrC. Journal of Chemical Physics, 2010, 133, 034303.	1.2	19
20	Accurate <i>ab initio</i> calculations of the ground states of FeC, FeC ⁺ , and FeC ²⁺ . Journal of Chemical Physics, 2010, 132, 194312.	1.2	26
21	An accurate first principles study of the geometric and electronic structure of B ₂ , B ₂ ⁺ , B ₃ , B ₃ ⁺ , and B ₃ H: Ground and excited states. Journal of Chemical Physics, 2010, 132, 164307.	1.2	16
22	Electronic Structure and Bonding of the Early 3d-Transition Metal Diatomic Oxides and Their Ions: ScO ⁺ , TiO ⁺ , CrO ⁺ , and MnO ⁺ . Journal of Physical Chemistry A, 2010, 114, 8536-8572.	1.1	72
23	Ab initio Study of the Electronic Structure of Zinc Oxide and its Ions, ZnO, ZnO ⁺ . Ground and Excited States. Journal of Physical Chemistry A, 2010, 114, 9333-9341.	1.1	15
24	The Sc ₂ dimer revisited. Journal of Chemical Physics, 2010, 132, 024309.	1.2	28
25	The electronic structure and bonding of AlAl. Journal of Chemical Physics, 2009, 130, 154308.	1.2	1
26	First-Principles Investigation of the Early 3d Transition Metal Diatomic Chlorides and Their Ions, ScClO, TiClO, VClO, and CrClO. Journal of Physical Chemistry A, 2009, 113, 6818-6840.	1.1	14
27	Bonding Elucidation of the Three Common Acids H ₂ SO ₄ , HNO ₃ , and HClO ₄ . Journal of Physical Chemistry A, 2009, 113, 13972-13975.	1.1	16
28	Electronic structure and bonding of the 3d transition metal borides, MB, M=Sc, Ti, V, Cr, Mn, Fe, Co, Ni, and Cu through all electron <i>ab initio</i> calculations. Journal of Chemical Physics, 2008, 128, 034309.	1.2	41
29	Electronic structure and bonding of ozone. Journal of Chemical Physics, 2008, 129, 054312.	1.2	56
30	Ab initio Study of the Diatomic Fluorides FeF, CoF, NiF, and CuF. Journal of Physical Chemistry A, 2008, 112, 11235-11250.	1.1	22
31	Interaction of Dioxygen with Al Clusters and Al(111): A Comparative Theoretical Study. Journal of Physical Chemistry C, 2008, 112, 6924-6932.	1.5	41
32	The electronic structure of the two lowest states of CuC. Journal of Chemical Physics, 2008, 129, 174306.	1.2	9
33	<i>Ab initio</i> investigation of the electronic structure and bonding of BH, BH ⁺ , and HBBH molecules. Journal of Chemical Physics, 2008, 128, 144308.	1.2	28
34	First principles study of the electronic structure and bonding of Mn ₂ . Journal of Chemical Physics, 2008, 129, 154310.	1.2	51
35	Theoretical investigation of the ground and low-lying excited states of nickel carbide, NiC. Journal of Chemical Physics, 2007, 126, 194304.	1.2	20
36	Ab Initio Study of the Electronic Structure and Bonding of Aluminum Nitride. Journal of Physical Chemistry A, 2007, 111, 11221-11231.	1.1	8

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37	All-Electron First Principles Calculations of the Ground and Some Low-Lying Excited States of Ba. Journal of Physical Chemistry A, 2007, 111, 10002-10009.	1.1	8
38	A Theoretical Study of Calcium Monohydride, CaH: Low-Lying States and Their Permanent Electric Dipole Moments. Journal of Physical Chemistry A, 2007, 111, 371-374.	1.1	13
39	Electronic Structure of Vanadium Oxide. Neutral and Charged Species, VO _{0,±} . Journal of Physical Chemistry A, 2007, 111, 1953-1965.	1.1	65
40	Electronic Structure of Cobalt Carbide, CoC. Journal of Physical Chemistry A, 2006, 110, 8952-8962.	1.1	26
41	Interaction of the early 3d transition metals Sc, Ti, V, and Cr with N ₂ : An ab initio study. Journal of Chemical Physics, 2006, 124, 104306.	1.2	3
42	Structure and Energetics of Gaseous HZnCl. Journal of Physical Chemistry A, 2006, 110, 10899-10903.	1.1	9
43	Ab initio study of the electronic structure of manganese carbide. Journal of Chemical Physics, 2006, 124, 154308.	1.2	12
44	1937 Nobel Prize. American Journal of Physics, 2006, 74, 373-373.	0.3	0
45	Electronic and Geometric Structure of the 3d-Transition Metal Monocarbonyls MCO, M = Sc, Ti, V and Cr. , 2006, , 1505-1505.		0
46	The Interaction of the Early 3d-transition metals Sc, Ti, V and Cr with N ₂ . An ab initio Study. , 2006, , 1497-1497.		0
47	Ground states of BeC and MgC: A comparative multireference Brillouin-Wigner coupled cluster and configuration interaction study. International Journal of Quantum Chemistry, 2005, 102, 762-774.	1.0	20
48	Multireference configuration interaction and coupled-cluster calculations on the X ³ Σ ⁺ , a ¹ Π ⁺ , and b ¹ Σ ⁺ states of the NF molecule. International Journal of Quantum Chemistry, 2005, 104, 458-467.	1.0	22
49	CH(X ² Σ ⁺ ; a ⁴ Σ ⁺) ← OH ₂ and CH ₂ (³ B ₁ , ¹ A ₁) ← OH ₂ interactions. A first principles investigation. International Journal of Quantum Chemistry, 2005, 104, 497-511.	1.0	3
50	First principles investigation of chromium carbide, CrC. Journal of Chemical Physics, 2005, 123, 014302.	1.2	19
51	Electronic and geometric structure of the 3d-transition metal monocarbonyls MCO, M=Sc, Ti, V, and Cr. Journal of Chemical Physics, 2005, 123, 074327.	1.2	21
52	The electronic structure of vanadium carbide, VC. Journal of Chemical Physics, 2005, 123, 014301.	1.2	28
53	The dipole moments of the excited states of FeC. Journal of Chemical Physics, 2005, 122, 056101.	1.2	18
54	A Multireference Coupled-Cluster Potential Energy Surface of Diazomethane, CH ₂ N ₂ . Journal of Physical Chemistry A, 2005, 109, 10148-10152.	1.1	35

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55	Ab Initio Investigation of the Electronic and Geometric Structure of Magnesium Diboride, MgB ₂ . Journal of Physical Chemistry A, 2005, 109, 10663-10674.	1.1	10
56	Ab Initio Investigation of the Electronic Structure and Bonding of the HC(N ₂) _x ⁺ and HC(CO) _x ⁺ Cations, x = 1, 2. Journal of Physical Chemistry A, 2005, 109, 6549-6554.	1.1	2
57	On the electron affinity of SiN and spectroscopic constants of SiN ⁺ . Journal of Chemical Physics, 2005, 123, 124301.	1.2	18
58	First principles study of the diatomic charged fluorides MF [±] , M=Sc, Ti, V, Cr, and Mn. Journal of Chemical Physics, 2005, 122, 054312.	1.2	21
59	First Principles Investigation of the Electronic Structure of the Iron Carbide Cation, FeC ⁺ . Journal of Physical Chemistry A, 2005, 109, 9249-9258.	1.1	17
60	On the ground state of titanium phosphide, TiP: A theoretical investigation. Journal of Chemical Physics, 2004, 121, 2646.	1.2	6
61	On symmetry breaking in BNB: Real or artifactual?. Journal of Chemical Physics, 2004, 120, 1813-1819.	1.2	27
62	Theoretical Investigation of Organo-Noble Gas Compounds, HC(Ng) _n ⁺ , n= 1, 2; Ng = He, Ne, Ar, Kr, and Xe. Evidence for Potentially Isolable HCAr ⁿ ⁺ , HCKr ⁿ ⁺ , and HCXe ⁿ ⁺ Species. Journal of Physical Chemistry A, 2004, 108, 11127-11131.	1.1	8
63	SiH ₂ , a critical study. Molecular Physics, 2004, 102, 2597-2606.	0.8	12
64	Electronic structure of vanadium and chromium carbide cations, VC ⁺ and CrC ⁺ . Ground and low-lying states. Molecular Physics, 2004, 102, 2451-2466.	0.8	17
65	Carbonyl Boron and Related Systems: An ab Initio Study of B ⁺ X and YB ⁺ (1 ¹ g ⁺), Where X = He, Ne, Ar, Kr, CO, CS, N ₂ and Y = Ar, Kr, CO, CS, N ₂ . Journal of Physical Chemistry A, 2004, 108, 4335-4340.	1.1	66
66	CH ₂ revisited. Canadian Journal of Chemistry, 2004, 82, 684-693.	0.6	49
67	Ab initio investigation of the ground and low-lying states of the diatomic fluorides TiF, VF, CrF, and MnF. Journal of Chemical Physics, 2004, 120, 11500-11521.	1.2	34
68	Ab initio Study of the Ground and Excited States of Zinc Carbide, ZnC ₂ . ChemInform, 2003, 34, no.	0.1	0
69	Theoretical Investigation of the Electronic States of Calcium Carbide, CaC. Journal of Physical Chemistry A, 2003, 107, 7650-7655.	1.1	5
70	Ab Initio Study of the Ground and Excited States of Zinc Carbide, ZnC. Journal of Physical Chemistry A, 2003, 107, 6062-6072.	1.1	22
71	On the dipole moment of the ground state X ⁺ of iron carbide, FeC. Journal of Chemical Physics, 2003, 118, 4984-4986.	1.2	63
72	Electronic structure of linear TiCH. Journal of Chemical Physics, 2003, 119, 3745-3750.	1.2	10

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73	Ab initio investigation of the ground state properties of PO, PO ⁺ , and PO ⁺ . Journal of Chemical Physics, 2003, 119, 5981-5987.	1.2	21
74	Electronic Structure and Bonding Nature of the Ground State Monocarbide Cations, ScC ⁺ , TiC ⁺ , VC ⁺ , and CrC ⁺ . Collection of Czechoslovak Chemical Communications, 2003, 68, 387-404.	1.0	7
75	Theoretical Investigation of Titanium Carbide, TiC: $X^3\Sigma^+$, $a^1\Sigma^+$, $A^3\Pi$, and $b^1\Pi$ States. Journal of Physical Chemistry A, 2002, 106, 3905-3908.	1.1	30
76	First Principles Examination of the Acetylene ⁺ Water Clusters, HCCH ⁺ (H ₂ O) _x , x= 2, 3, and 4. Journal of Physical Chemistry A, 2002, 106, 11327-11337.	1.1	49
77	On the Bonding Nature of the N ₅ ⁺ (=N(N ₂) ₂ ⁺) Cation and Related Species N(CO) _x ⁺ , N(NH ₃) _x ⁺ , and NR _x ⁺ , x = 1, 2 and R = He, Ne, Ar, Kr. Do We Really Need the Resonance Concept?. Journal of Physical Chemistry A, 2002, 106, 4435-4442.	1.1	30
78	Theoretical investigation of iron carbide, FeC. Journal of Chemical Physics, 2002, 116, 4901.	1.2	75
79	Theoretical investigation of the $X^2\Sigma^+$, $A^2\Sigma^+$, and $B^2\Sigma^+$ states of LiAr and LiKr. Journal of Chemical Physics, 2002, 116, 9305-9314.	1.2	24
80	An accurate description of the ground and excited states of SiH. Journal of Chemical Physics, 2002, 116, 6529-6540.	1.2	27
81	On the ground states of CaC and ZnC: A multireference Brillouin ⁺ Wigner coupled cluster study. Journal of Chemical Physics, 2002, 117, 9733-9739.	1.2	40
82	Accurate Theoretical Study of the Excited States of Boron and Aluminum Carbides, BC, AlC. 2. Journal of Physical Chemistry A, 2001, 105, 7672-7685.	1.1	22
83	First-Principles Investigation of the Boron and Aluminum Carbides BC and AlC and Their Anions BC ⁻ and AlC ⁻ . 1. Journal of Physical Chemistry A, 2001, 105, 1175-1184.	1.1	39
84	An Accurate Description of the LiNe $X^2\Sigma^+$, $A^2\Sigma^+$, and $B^2\Sigma^+$ States. Journal of Physical Chemistry A, 2001, 105, 1983-1987.	1.1	18
85	Theoretical Investigation of Scandium Carbide, ScC. Journal of Physical Chemistry A, 2001, 105, 755-759.	1.1	45
86	Structure and Bonding of the Polytropic Molecule Li[BO]. A Theoretical Investigation. Journal of Physical Chemistry A, 2001, 105, 7106-7110.	1.1	10
87	A highly accurate first principles determination of the electron affinity of BO($X^2\Sigma^+$) and binding energy of BO ⁺ ($X^1\Sigma^+$). Chemical Physics Letters, 2001, 341, 382-386.	1.2	8
88	A molecular level study of the aqueous microsolvation of acetylene. Chemical Physics Letters, 2001, 340, 538-546.	1.2	18
89	Conditions conducive to the chemi-ionization reaction O(3P)+CH($X^{\infty}2\Sigma^+$, $a^{\infty}4\Sigma^+$) ⁺ HCO+($X^{\infty}1\Sigma^+$)+e ⁻ . Journal of Chemical Physics, 2001, 115, 6946-6950.	1.2	6
90	Predissociation lifetimes of the E ² Σ^+ and F ² Σ^+ states of CH. Chemical Physics Letters, 2000, 331, 89-94.	1.2	6

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91	A first principles study of the acetylene-water interaction. Journal of Chemical Physics, 2000, 112, 6178-6189.	1.2	34
92	Electronic structure determination of chromium boride cation, CrB+. Journal of Chemical Physics, 2000, 113, 2270-2281.	1.2	8
93	Ab Initio Investigation of the LiHe X ² Σ ⁺ , A ² Σ ⁺ , and B ² Σ ⁺ States: A Basis Set Study. Journal of Physical Chemistry A, 2000, 104, 408-412.	1.1	25
94	The Electronic Structure of ScAl+. Ground and Low-Lying Excited States. Journal of Physical Chemistry A, 2000, 104, 6861-6870.	1.1	3
95	Electronic Structure of Scandium and Titanium Carbide Cations, ScC+ and TiC+. Ground and Low-Lying States. Journal of Physical Chemistry A, 2000, 104, 11777-11785.	1.1	23
96	An accurate description of the ground and excited states of CH. Journal of Chemical Physics, 1999, 111, 9536-9548.	1.2	99
97	Ground and Low-Lying States of the Vanadium Boride Cation, VB+: An ab Initio Investigation. Journal of Physical Chemistry A, 1999, 103, 3336-3345.	1.1	10
98	A Theoretical Investigation of the Structure and Bonding of Diazomethane, CH ₂ N ₂ . Journal of Physical Chemistry A, 1999, 103, 1255-1259.	1.1	22
99	Electronic and Geometrical Structure of the Sc[BO] ⁺ Cation. An Ab Initio Investigation. Journal of Physical Chemistry A, 1999, 103, 9359-9363.	1.1	6
100	Bonding Investigation of the Ground and Low-Lying States of the Titanium Boride Cation, TiB+. Journal of Physical Chemistry A, 1998, 102, 5982-5992.	1.1	11
101	Theoretical Investigation of the Ground X ³ Σ ⁻ State of Nitrogen Bromide. Journal of Physical Chemistry A, 1998, 102, 10536-10539.	1.1	7
102	On the Electronic Structure of NLi ₂ and PLi ₂ , Ground and Low-Lying Excited States. Journal of Physical Chemistry A, 1998, 102, 2223-2230.	1.1	3
103	On the Electronic Structure of ScB+: Ground and Low-Lying Excited States. Advances in Quantum Chemistry, 1998, , 69-91.	0.4	12
104	The dissociation energies of NF(X ³ Σ ⁻) and NCl(X ³ Σ ⁻). Journal of Chemical Physics, 1997, 106, 3280-3286.	1.2	36
105	On the electronic structure of the ground (X ³ Σ ⁻) and some low-lying excited states (A ³ Σ ⁺ , a ¹ Σ ⁺ , b ¹ Σ ⁺ , B ³ Σ ⁻) of the isovalent species Pi-Li and Pi-Na. Computational and Theoretical Chemistry, 1997, 417, 277-287.	1.5	8
106	Ab initio study of the ground and several excited states of the NLi system. Chemical Physics Letters, 1996, 250, 409-414.	1.2	7
107	Elucidation of the structural characteristics of the isovalent species Li[CO] and Li[CS] by ab initio calculations. Chemical Physics Letters, 1996, 259, 185-192.	1.2	12
108	Electronic Structure of the Ground and Low-Lying Excited States of TiP. The Journal of Physical Chemistry, 1996, 100, 13971-13975.	2.9	13

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109	An ab initio study of $\text{Li}^+ \text{C}^{-1/4}\text{S}$, a purely electrostatic system. Computational and Theoretical Chemistry, 1995, 357, 97-101.	1.5	1
110	Theoretical Study of the Electronic and Geometrical Structure of the Ground and Low-Lying States of NCl_2 , PCl_2 , NCl , and PCl Radicals. The Journal of Physical Chemistry, 1995, 99, 10759-10765.	2.9	27
111	All-Electron ab Initio Calculations on Tetramethyltin. The Journal of Physical Chemistry, 1994, 98, 8906-8909.	2.9	6
112	The ScPH^+ Cation. The Journal of Physical Chemistry, 1994, 98, 12232-12235.	2.9	0
113	Ab initio structural study of the B_4H_4 molecule. Asymmetric structure for a $\tilde{\infty}$ -symmetric TM system. Chemical Physics Letters, 1994, 226, 469-474.	1.2	17
114	A theoretical study of the geometrical structure and energy inversion barriers of the cyanopnictogens $\text{Ni}^{-1/4}\text{C-XY}_2$ (X = N or P; Y = H, F, Cl or Br). Computational and Theoretical Chemistry, 1994, 305, 225-239.	1.5	4
115	Electronic and geometrical structure of the NF_2 radical. Chemical Physics Letters, 1993, 216, 167-172.	1.2	11
116	An ab initio structural study of cyanamide. Computational and Theoretical Chemistry, 1993, 279, 151-156.	1.5	7
117	Structural characterization of scandium monophosphide (1+). The Journal of Physical Chemistry, 1993, 97, 10955-10957.	2.9	2
118	Electronic and geometric structure of amidoscandium(1+) and amminescandium(1+). The Journal of Physical Chemistry, 1991, 95, 6854-6859.	2.9	12
119	A well known quantum theorem revisited. European Journal of Physics, 1990, 11, 152-154.	0.3	0
120	On the electrostatic bonding of carbonyl to the monocations of the first-row transition elements. Journal of the American Chemical Society, 1989, 111, 2482-2487.	6.6	44
121	Electronic and geometric structure of the titanium hydrides, TiH^+ and $\text{TiH} + 2$. Journal of the Chemical Society, Faraday Transactions 2, 1989, 85, 1391.	1.1	11
122	The gas phase chemistry of bare and ligated transition metal ions: Correlations of reactivity with electronic structure TM . M^+ and MCO^+ . Polyhedron, 1988, 7, 1559-1572.	1.0	24
123	Electronic structure of CNa and CNa_2 in their electronic ground states. The Journal of Physical Chemistry, 1984, 88, 4973-4978.	2.9	8
124	Electronic structure of carbon-lithium, silicon-hydrogen, and silicon-lithium in the lowest 4. σ - and 2. π . states. The Journal of Physical Chemistry, 1982, 86, 1979-1985.	2.9	24
125	Electronic structure of the carbyne C-Li and the carbene Li_2C . Journal of the American Chemical Society, 1982, 104, 3827-3833.	6.6	22
126	Near-Hartree TM -Fock calculations on the ground state of the fluoronium ion, FH^+ . Journal of the Chemical Society, Faraday Transactions 2, 1982, 78, 447-455.	1.1	7

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127	An ab initio study of the electronic structure of the ground triplet and low-lying singlet states of formylnitrene, HCON and formylphosphinidene, HCOP. Journal of the American Chemical Society, 1980, 102, 7651-7655.	6.6	20
128	Crystal and molecular structure of dimethoxyporphinato-germanium(IV). Inorganic Chemistry, 1976, 15, 2723-2727.	1.9	20
129	Asymmetrical changes in the tertiary structure of \hat{I}_{\pm} -chymotrypsin with change in pH. Biochemistry, 1974, 13, 3661-3666.	1.2	47