SÅ‚awomir J Grabowski

List of Publications by Year
in descending order

117	6,784	44069	62596
papers	citations	48 h-index	80 g-index

123	123	123	3602
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Ï€-Hole Tetrel Bondsâ€"Lewis Acid Properties of Metallylenes. Crystals, 2022, 12, 112.	2.2	17
2	Ïƒ-Hole Bonds and the VSEPR Modelâ€"From the Tetrahedral Structure to the Trigonal Bipyramid. Sci, 2022, 4, 17.	3.0	2
3	Coexistence of Intra- and Intermolecular Hydrogen Bonds: Salicylic Acid and Salicylamide and Their Thiol Counterparts. Journal of Physical Chemistry A, 2021, 125, 1526-1539.	2.5	11
4	Aâ€"Xâ‹¯Ïƒ Interactionsâ€"Halogen Bonds with Ïƒ-Electrons as the Lewis Base Centre. Molecules, 2021, 26, 5175.	3.8	3
5	Classification of So-Called Non-Covalent Interactions Based on VSEPR Model. Molecules, 2021, 26, 4939.	3.8	16
6	The coordination of beryllium and magnesium centres in half-sandwich and sandwich compounds. Journal of Organometallic Chemistry, 2021, 948, 121906.	1.8	1
7	Intramolecular Hydrogen Bond Energy and Its Decompositionâ€"Oâ€"Hâˆ™âˆ™âˆ™Oâ€"Hâˆ™âˆ™âˆ™O Interactions. Crystals, 2021, 11, 5.	2.2	26
8	Hydrogen and Lithium Bondsâ€"Lewis Acid Units Possessing Multi-Center Covalent Bonds. Molecules, 2021, 26, 6939.	3.8	7
9	Triel bond and coordination of triel centres â€“ Comparison with hydrogen bond interaction. Coordination Chemistry Reviews, 2020, 407, 213171.	18.8	72
10	Molecular Hydrogen as a Lewis Base in Hydrogen Bonds and Other Interactions. Molecules, 2020, 25, 3294.	3.8	6
11	Hydrogen Bond and Other Lewis Acidâ€"Lewis Base Interactions as Preliminary Stages of Chemical Reactions. Molecules, 2020, 25, 4668.	3.8	21
12	The Nature of Triel Bonds, a Case of B and Al Centres Bonded with Electron Rich Sites. Molecules, 2020, 25, 2703.	3.8	32
13	Sâˆ'Hâ€¦O and Oâˆ'Hâ€¦O Hydrogen Bondsâ€Comparison of Dimers of Thiocarboxylic and Carboxylic Acids. ChemPhysChem, 2020, 21, 1653-1664.	2.1	10
14	Hydrogen Bonds with BF4âˆ' Anion as a Proton Acceptor. Crystals, 2020, 10, 460.	2.2	23
15	Interactions Steering Arrangement of Molecules in Crystals. Crystals, 2020, 10, 130.	2.2	1
16	Tetravalent Oxygen and Sulphur Centres Mediated by Carborane Superacid: Theoretical Analysis. ChemPhysChem, 2019, 20, 2443-2450.	2.1	8
17	Bifurcated Triel Bondsâ€"Hydrides and Halides of 1,2-Bis(Dichloroboryl)Benzene and 1,8-Bis(Dichloroboryl)Naphthalene. Crystals, 2019, 9, 503.	2.2	16
18	Aâˆ'Hâ€¦Ïƒ Hydrogen Bonds: Dihydrogen and Cycloalkanes as Proton Acceptors. ChemPhysChem, 2019, 20, 565-574.	2.1	17

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19	Pnicogen and tetrel bondsâ€"tetrahedral Lewis acid centres. Structural Chemistry, 2019, 30, 1141-1152.	2.0	50
20	Magnesium Bonds: From Divalent Mg Centres to Trigonal and Tetrahedral Coordination. ChemistrySelect, 2018, 3, 3147-3154.	1.5	8
21	Hydrogen bonds and other interactions as a response to protect doublet/octet electron structure. Journal of Molecular Modeling, 2018, 24, 38.	1.8	9
22	Two faces of triel bonds in boron trihalide complexes. Journal of Computational Chemistry, 2018, 39, 472-480.	3.3	49
23	Tetrel Bonds with Ï€-Electrons Acting as Lewis Basesâ€"Theoretical Results and Experimental Evidences. Molecules, 2018, 23, 1183.	3.8	37
24	Coordination of Be and Mg Centres by HCN Ligands â€" Beâ€¦N and Mgâ€¦N Interactions. ChemPhysChem, 2018, 19, 1830-1840.	2.1	13
25	Thieno[3,4â€‹c]pyrroleâ€4,6â€‹dione Oligothiophenes Have Two Crossed Paths for Electron Delocalization. Chemistry - A European Journal, 2018, 24, 13523-13534.	3.3	13
26	Tetrel bonds, pentaâ€•and hexaâ€‹coordinated tin and lead centres. Applied Organometallic Chemistry, 2017, 31, e3727.	3.5	29
27	Triel bonds-complexes of boron and aluminum trihalides and trihydrides with benzene. Structural Chemistry, 2017, 28, 1163-1171.	2.0	57
28	Are Various Ïƒâ€‹Hole Bonds Steered by the Same Mechanisms?. ChemPhysChem, 2017, 18, 1569-1577.	2.1	67
29	Hydrogen bonds, and Ïƒ-hole and Ï€-hole bonds â€" mechanisms protecting doublet and octet electron structures. Physical Chemistry Chemical Physics, 2017, 19, 29742-29759.	2.8	91
30	Ï€â‹…â‹…â‹…H⁺â‹…â‹…â‹…Ï€ Hydrogen Bonds and Their Lithium and Gold Analogues: MP2 and CASPT2 Calculations. ChemPhysChem, 2017, 18, 2409-2417.	2.1	14
31	New Type of Halogen Bond: Multivalent Halogen Interacting with Ï€- and Ïƒ-Electrons. Molecules, 2017, 22, 2150.	3.8	25
32	Lewis Acid Properties of Tetrel Tetrafluoridesâ€"The Coincidence of the Ïƒ-Hole Concept with the QTAIM Approach. Crystals, 2017, 7, 43.	2.2	31
33	Analysis of Hydrogen Bonds in Crystals. Crystals, 2016, 6, 59.	2.2	29
34	[FHF]â^'â€"The Strongest Hydrogen Bond under the Influence of External Interactions. Crystals, 2016, 6, 3.	2.2	28
35	Complexes of carborane acids linked by strong hydrogen bonds: acidity scales. Physical Chemistry Chemical Physics, 2016, 18, 16152-16160.	2.8	7
36	Hydrogen Bond and Other Lewis Acidâ€"Lewis Base Interactionsâ€"Mechanisms of Formation. , 2016, , 245-277.		0

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37	Dihydrogen bond interactions as a result of H₂cleavage at Cu, Ag and Au centres. Physical Chemistry Chemical Physics, 2016, 18, 12810-12818.	2.8	26
38	What Can Be Learnt from a Location of Bond Paths and from Electron Density Distribution. Challenges and Advances in Computational Chemistry and Physics, 2016, , 399-433.	0.6	2
39	Comparison of Hydrogen and Gold Bonding in [XHX]^{â^'}, [XAuX]^{â^'}, and Isoelectronic [NgHNg]⁺, [NgAuNg]⁺ (X=Halogen, Ng=Noble Gas). Chemistry - A European Journal, 2016, 22, 11317-11328.	3.3	50
40	Triel Bonds, Ï€-Hole-Ï€-Electrons Interactions in Complexes of Boron and Aluminium Trihalides and Trihydrides with Acetylene and Ethylene. Molecules, 2015, 20, 11297-11316.	3.8	100
41	Cleavage of hydrogen by activation at a single non-metal centre â€“ towards new hydrogen storage materials. Physical Chemistry Chemical Physics, 2015, 17, 13539-13546.	2.8	6
42	Pnicogen and hydrogen bonds: complexes between PH3X+ and PH2X systems. Physical Chemistry Chemical Physics, 2015, 17, 3261-3272.	2.8	74
43	Lewis acidâ€“Lewis base interactions: From NFH3+â‹¯NCH and NF4+â‹¯NCH complexes to NFH3+â‹¯(NCH)n and NF4+â‹¯(NCH)n clusters. Computational and Theoretical Chemistry, 2015, 1053, 289-297.	2.5	2
44	Ï€â€Hole Bonds: Boron and Aluminum Lewis Acid Centers. ChemPhysChem, 2015, 16, 1470-1479.	2.1	112
45	What is Common for Dihydrogen Bond and Hâ€¦Ïƒ Interactionâ€”Theoretical Analysis and Experimental Evidences. Challenges and Advances in Computational Chemistry and Physics, 2015, , 159-187.	0.6	3
46	Cooperativity of hydrogen and halogen bond interactions. Highlights in Theoretical Chemistry, 2014, , 59-68.	0.0	5
47	Could the lithium bond be classified as the Ïƒ-hole bond? â€“ QTAIM and NBO analysis. Chemical Physics Letters, 2014, 591, 113-118.	2.6	44
48	Clusters of Ammonium Cationâ€”Hydrogen Bond versus Ïƒâ€Hole Bond. ChemPhysChem, 2014, 15, 876-884.	2.1	19
49	Topological reaction sites â€“ very strong chalcogen bonds. Physical Chemistry Chemical Physics, 2014, 16, 2430-2442.	2.8	97
50	Boron and other Triel Lewis Acid Centers: From Hypovalency to Hypervalency. ChemPhysChem, 2014, 15, 2985-2993.	2.1	133
51	Tetrel bondâ€“Ïƒ-hole bond as a preliminary stage of the S_N2 reaction. Physical Chemistry Chemical Physics, 2014, 16, 1824-1834.	2.8	424
52	Halogen bond with the multivalent halogen acting as the Lewis acid center. Chemical Physics Letters, 2014, 605-606, 131-136.	2.6	41
53	Ïƒâ€Hole Bond Versus Hydrogen Bond: From Tetravalent to Pentavalent N, P, and As Atoms. Chemistry - A European Journal, 2013, 19, 14600-14611.	3.3	61
54	Non-covalent interactions â€“ QTAIM and NBO analysis. Journal of Molecular Modeling, 2013, 19, 4713-4721.	1.8	74

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55	Structural, energetic, spectroscopic and QTAIM analyses of cationâ€“Ï€ interactions involving mono- and bi-cyclic ring fused benzene systems. Physical Chemistry Chemical Physics, 2013, 15, 20839.	2.8	21
56	Resonance-assisted hydrogen bonds revisited. Resonance stabilization vs. charge delocalization. Physical Chemistry Chemical Physics, 2013, 15, 2514.	2.8	71
57	Cooperativity of hydrogen and halogen bond interactions. Theoretical Chemistry Accounts, 2013, 132, 1.	1.4	58
58	Complexes between Dihydrogen and Amine, Phosphine, and Arsine Derivatives. Hydrogen Bond versus Pnictogen Interaction. Journal of Physical Chemistry A, 2013, 117, 3243-3251.	2.5	48
59	Hydrogen and halogen bonds are ruled by the same mechanisms. Physical Chemistry Chemical Physics, 2013, 15, 7249.	2.8	137
60	Dihydrogen bond and Xâ€“Hâ€¦Ïƒ interaction as subâ€classes of hydrogen bond. Journal of Physical Organic Chemistry, 2013, 26, 452-459.	1.9	52
61	Non-covalent interactions in ammonium cationâ€“acetylene clusters. Computational and Theoretical Chemistry, 2012, 992, 70-77.	2.5	11
62	QTAIM Characteristics of Halogen Bond and Related Interactions. Journal of Physical Chemistry A, 2012, 116, 1838-1845.	2.5	176
63	Stabilizing H₃^{â˜†}: Or Are We Stabilizing a Proton?. ChemPhysChem, 2012, 13, 2286-2288.	2.1	8
64	Halogen Bond and Its Counterparts: Bentâ€™s Rule Explains the Formation of Nonbonding Interactions. Journal of Physical Chemistry A, 2011, 115, 12340-12347.	2.5	93
65	Characteristics of X-HÂ·Â·Â·Ï€ Interactions: Ab Initio and QTAIM Studies. Journal of Physical Chemistry A, 2011, 115, 4765-4773.	2.5	85
66	Xâ€“Hâ€¦Ï€ and Xâ€“Hâ€¦Ïƒ Interactions â€“ Hydrogen Bonds with Multicenter Proton Acceptors. , 2011, , 497-516.		0
67	Red- and Blue-Shifted Hydrogen Bonds: the Bent Rule from Quantum Theory of Atoms in Molecules Perspective. Journal of Physical Chemistry A, 2011, 115, 12789-12799.	2.5	91
68	Dihydrogen Bonding vs Metalâ˜†Ïƒ Interaction in Complexes between H₂ and Metal Hydride. Journal of Physical Chemistry A, 2011, 115, 201-210.	2.5	30
69	Hydrocarbons as proton donors in Câ€“Hâ‹¯N and Câ€“Hâ‹¯S hydrogen bonds. Chemical Physics, 2010, 367, 1-6.	1.9	22
70	High-level ab initio calculations on low barrier hydrogen bonds and proton bound homodimers. Chemical Physics Letters, 2010, 493, 37-44.	2.6	23
71	Bond Paths Show Preferable Interactions: Ab Initio and QTAIM Studies on the Xâ˜†HÂ·Â·Â·Ï€ Hydrogen Bond. Journal of Physical Chemistry A, 2010, 114, 7223-7229.	2.5	101
72	Spectroscopic and theoretical studies on some new pyrrol-2-yl-chloromethyl ketones. New Journal of Chemistry, 2010, 34, 556.	2.8	15

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73	Ab initio calculations onÂC₆H₆Â·Â·Â·(HF)_nclustersÂâ€”ÂXâ€“HÂ·Â·Â·Ï€ÂhydrogenÂbond. Canadian Journal of Chemistry, 2010, 88, 769-778.	1.1	8
74	Xâ€“HâˆÏ€ and Xâ€“HâˆN hydrogen bonds â€“ Acetylene and hydrogen cyanide as proton acceptors. Chemical Physics, 2009, 363, 42-48.	1.9	29
75	The enhancement of Xâ€“HâˆÏ€ hydrogen bond by cooperativity effects â€“ Ab initio and QTAIM calculations. Chemical Physics, 2009, 355, 169-176.	1.9	58
76	Do intramolecular halogen bonds exist? Ab initio calculations and crystal structuresâ€™ evidences. Structural Chemistry, 2008, 19, 5-11.	2.0	52
77	Hydrogen bonds assisted by Ï€â€electron delocalization â€“ the influence of external intermolecular interactions on dimer of formic acid. Journal of Physical Organic Chemistry, 2008, 21, 694-702.	1.9	11
78	How To Determine Whether Intramolecular HÂ·Â·Â·H Interactions Can Be Classified as Dihydrogen Bonds. Journal of Physical Chemistry A, 2008, 112, 2721-2727.	2.5	77
79	Covalent character of three-center, two-electron systems â€“C2H3+ and C2H5+. Chemical Physics Letters, 2007, 436, 63-67.	2.6	16
80	Wide spectrum of HâˆH interactions: van der Waals contacts, dihydrogen bonds and covalency. Chemical Physics, 2007, 337, 68-76.	1.9	74
81	Halogen bonding in crystal structure of 1-methylpyrrol-2-yl trichloromethyl ketone. Journal of Molecular Structure, 2007, 829, 208-211.	3.6	58
82	Do intramolecular halogen bonds exist? Ab initio calculations and crystal structuresâ€™ evidences. Structural Chemistry, 2007, 18, 859-865.	2.0	34
83	Professor Tadeusz Marek Krygowski. Structural Chemistry, 2007, 18, 755-756.	2.0	1
84	Quantitative Classification of Covalent and Noncovalent H-Bonds. Journal of Physical Chemistry B, 2006, 110, 6444-6446.	2.6	224
85	Theoretical studies of strong hydrogen bonds. Annual Reports on the Progress of Chemistry Section C, 2006, 102, 131.	4.4	161
86	Cooperativity in Hydrogen-Bonded Interactions:â€‰ Ab Initio and â€œAtoms in Moleculesâ€•Analyses. Journal of Physical Chemistry A, 2006, 110, 6514-6521.	2.5	321
87	Heteronuclear Intermolecular Resonance-Assisted Hydrogen Bonds. The Structure of Pyrrole-2-Carboxamide (PyCa). Journal of Physical Chemistry B, 2006, 110, 5875-5882.	2.6	27
88	Properties of the Halogenâˆ’Hydride Interaction:Â An ab Initio and â€œAtoms in Moleculesâ€•Analysis. Journal of Physical Chemistry A, 2006, 110, 10296-10302.	2.5	95
89	The Possible Covalent Nature of Nâˆ’HÂ·Â·Â·O Hydrogen Bonds in Formamide Dimer and Related Systems:Â An Ab Initio Study. Journal of Physical Chemistry A, 2006, 110, 4772-4779.	2.5	90
90	Attractive halogenâ€“halogen interactions: F3CClâˆFH and F3CClâˆFCH3 dimers. Chemical Physics, 2006, 327, 151-158.	1.9	34

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91	Hydride bonding â€“ Ab initio studies of BeH2â€¦Li+, BeH2â€¦Na+ and BeH2â€¦Mg2+ model systems. Chemical Physics Letters, 2006, 422, 334-339.	2.6	52
92	Cooperativity halogen bonding effect â€“ Ab initio calculations on H2COâ‹¯(ClF)n complexes. Chemical Physics Letters, 2006, 427, 51-55.	2.6	142
93	Can Hâ€¦Ïƒ, Ï€â€¦H+â€¦Ïƒ and Ïƒâ€¦H+â€¦Ïƒ interactions be classified as H-bonded?. Chemical Physics Letters, 2006, 432, 33-39.	2.6	55
94	Blue-shifting Câ€“Hâ€¦Y intramolecular hydrogen bonds â€“ DFT and AIM analyses. Chemical Physics, 2005, 309, 183-188.	1.9	52
95	Crystal Structure of Two Dimethyl 1,3-Thiazolidinedicarboxylates Obtained in Thermal [2 + 3]Cycloaddition of an Azomethine Ylide with 2,2,4,4-Tetramethyl-3-Thioxocyclobutanone. Structural Chemistry, 2005, 16, 55-59.	2.0	1
96	Partial Hydrogen Bonds:Â Structural Studies on Thioureidoalkylphosphonates. Journal of Physical Chemistry A, 2005, 109, 2942-2947.	2.5	12
97	How Short Can the HÂ·Â·Â·H Intermolecular Contact Be? New Findings that Reveal the Covalent Nature of Extremely Strong Interactions. Journal of Physical Chemistry A, 2005, 109, 4331-4341.	2.5	188
98	CHÂ·Â·Â·N and CHÂ·Â·Â·S Hydrogen BondsInfluence of Hybridization on Their Strength. Journal of Physical Chemistry A, 2005, 109, 5683-5688.	2.5	146
99	Dimers of Formic Acid, Acetic Acid, Formamide and Pyrrole-2-carboxylic Acid:â€‰ an Ab Initio Study. Journal of Physical Chemistry A, 2005, 109, 6397-6405.	2.5	157
100	Where the two carbon atoms touch in the triple bond in disubstituted acetylenes: the AIM analysis. Chemical Physics Letters, 2004, 389, 51-57.	2.6	17
101	Hâ‹¯Ïƒ interactions â€“ an ab initio and `atoms in molecules' study. Chemical Physics Letters, 2004, 393, 81-86.	2.6	43
102	The substituent effect in ethylenes and acetylenes â€“ AIM analysis. Chemical Physics Letters, 2004, 400, 362-367.	2.6	13
103	Is a Ï€Â·Â·Â·H+Â·Â·Â·Ï€ Complex Hydrogen Bonded?. Journal of Physical Chemistry A, 2004, 108, 1806-1812.	2.5	68
104	Properties of the Câˆ’HÂ·Â·Â·H Dihydrogen Bond:â€‰ An ab Initio and Topological Analysis. Journal of Physical Chemistry A, 2004, 108, 10865-10872.	2.5	257
105	An analysis of bifurcated H-bonds: crystal and molecular structures ofO,O-diphenyl 1-(3-phenylthioureido)Âpentanephosphonate andO,O-diphenyl 1-(3-phenylthioureido)butanephosphonate. Journal of Physical Organic Chemistry, 2003, 16, 213-219.	1.9	26
106	Role of Câˆ’HÂ·Â·Â·S and Câˆ’HÂ·Â·Â·N Hydrogen Bonds in Organic Crystal StructuresThe Crystal and Molecular Structure of 3-Methyl-2,4-diphenyl-(1,3)-thiazolidine-5-spiro-2â€˜-adamantane and 3-Methyl-2,4,5,5-tetraphenyl-(1,3)-thiazolidine. Journal of Physical Chemistry A, 2003, 107, 2730-2736.	2.5	92
107	Crystal and Molecular Structures of New Chromone Derivatives as Empirical Evidence of Intramolecular Proton Transfer Reaction; Ab Initio Studies on Intramolecular H-Bonds in Enaminones. Journal of Physical Chemistry A, 2002, 106, 11956-11962.	2.5	61
108	Spectroscopic and theoretical studies on the monomeric and dimeric forms of methyl pyrrole-2-carboxylate. New Journal of Chemistry, 2002, 26, 165-169.	2.8	22

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109	Properties of a Ring Critical Pointas Measures of Intramolecular H-Bond Strength. Monatshefte FÃ¼r Chemie, 2002, 133, 1373-1380.	1.8	95
110	Hydrogen Bonding Properties of the Complexes of Formaldehyde and its Derivatives with HF and HCl. Monatshefte FÃ¼r Chemie, 2002, 133, 305-312.	1.8	2
111	Acetylene as potential hydrogen-bond proton acceptor. Journal of Molecular Structure, 2002, 615, 209-218.	3.6	44
112	Ab initio and AIM studies on measures of hydrogen bonding strengthâ€"Râ€"Cî˜†Nâ‹¯HF and Râ€"Cî˜†Nâ‹¯HCl complexes. Journal of Molecular Structure, 2002, 615, 239-245.	3.6	37
113	Influence of Hybridization and Substitution on the Properties of the CHÂ·Â·Â·O Hydrogen Bond. Journal of Physical Chemistry A, 2001, 105, 10607-10612.	2.5	224
114	Angular group-induced bond alternation (AGIBA). Part 5?Conformation dependence and additivity of the effect: structural studies of 3,5-dimethoxybenzaldehyde ï¿½derivatives and related systems. Journal of Physical Organic Chemistry, 2001, 14, 349-354.	1.9	8
115	A new measure of hydrogen bonding strength â€“ ab initio and atoms in molecules studies. Chemical Physics Letters, 2001, 338, 361-366.	2.6	182
116	Reaction pathway of proton transfer from the neutral to zwitterionic forms of amino acids. Support for a water molecule-mediated mechanism. Journal of Physical Organic Chemistry, 2000, 13, 740-744.	1.9	11
117	High-Level Ab Initio Calculations of Dihydrogen-Bonded Complexes. Journal of Physical Chemistry A, 2000, 104, 5551-5557.	2.5	232