Ruslan M Minyaev

List of Publications by Year
in descending order

110	1,920	279798	330143
papers	citations	23 h-index	37 g-index

116	116	116	1230
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Theoretical study of O - > X (S, Se, Te) coordination in organic compounds. Canadian Journal of Chemistry, 1998, 76, 776-788.	1.1	141
2	Cyclic Aromatic Systems with Hypervalent Centers. Chemical Reviews, 2001, 101, 1247-1266.	47.7	122
3	Non-classical structures of organic compounds: unusual stereochemistry and hypercoordination. Russian Chemical Reviews, 2002, 71, 869-892.	6.5	91
4	Quantum Chemistry of Organic Compounds. , 1990, , .		68
5	Gradient lines on multidimensional potential energy surfaces and chemical reaction mechanisms. Russian Chemical Reviews, 1994, 63, 883-903.	6.5	64
6	Poly[n]prismanes:Â A Family of Stable Cage Structures with Half-Planar Carbon Centers. Journal of Organic Chemistry, 2003, 68, 8588-8594.	3.2	64
7	Octacoordinated main-group element centres in a planar cyclic B8 environment: an ab initio study. Mendeleev Communications, 2001, 11, 213-214.	1.6	63
8	Planar and Pyramidal Tetracoordinate Carbon in Organoboron Compounds. Journal of Organic Chemistry, 2005, 70, 6693-6704.	3.2	56
9	Low-Temperature IR and NMR Studies of the Interaction of Group 8 Metal Dihydrides with Alcohols. Chemistry - A European Journal, 2003, 9, 2219-2228.	3.3	48
10	Hypercoordinate carbon in polyhedral organic structures. Mendeleev Communications, 2004, 14, 43-46.	1.6	47
11	Pyramidanes. Journal of the American Chemical Society, 2013, 135, 8794-8797.	13.7	41
12	Computational design of valence tautomeric adducts of Co^{II}diketonates with redox-active o-benzoquinone ligands. Dalton Transactions, 2013, 42, 1726-1734.	3.3	40
13	A Quantum Chemical Study of Bis-(iminoquinonephenolate) Zn(II) Complexes. Journal of Physical Chemistry A, 2010, 114, 7780-7785.	2.5	36
14	Superoctahedral two-dimensional metallic boron with peculiar magnetic properties. Physical Chemistry Chemical Physics, 2019, 21, 19764-19771.	2.8	36
15	Reaction path as a gradient line on a potential energy surface. International Journal of Quantum Chemistry, 1994, 49, 105-127.	2.0	35
16	Gradient line reaction path of HF addition to ethylene. Chemical Physics Letters, 1994, 218, 413-421.	2.6	35
17	Pyramidane and isoelectronic pyramidal cations. Computational and Theoretical Chemistry, 1984, 110, 241-253.	1.5	34
18	Specific and non-specific influence of the environment on dihydrogen bonding and proton transfer to [RuH2{P(CH2CH2PPh2)3}]. Journal of Molecular Structure, 2007, 844-845, 115-131.	3.6	32

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19	Planar Tetracoordinate Carbon in Organoboron Compounds: ab initio Computational Study. Collection of Czechoslovak Chemical Communications, 1999, 64, 1780-1789.	1.0	30
20	Theoretical modeling of the square-planar to tetrahedral isomerization of bis-chelate nickel(II) complexes. Chemical Physics Letters, 2008, 459, 27-32.	2.6	27
21	Pentagermapyramidane: Crystallizing the â€œTransitionâ€Stateâ€•Structure. Angewandte Chemie - International Edition, 2015, 54, 5654-5657.	13.8	27
22	From Borapyramidane to Borole Dianion. Journal of the American Chemical Society, 2018, 140, 6053-6056.	13.7	27
23	1,5-Sigmatropic shifts of bromine over a cyclopentadiene ring. Journal of Physical Organic Chemistry, 1991, 4, 31-47.	1.9	26
24	A quantum-chemical study of carbon sandwich compounds. Mendeleev Communications, 2004, 14, 96-98.	1.6	26
25	Pyramidanes: The Covalent Form of the Ionic Compounds. Organometallics, 2016, 35, 346-356.	2.3	24
26	From Twoâ€•to Threeâ€Dimensional Structures of a Supertetrahedral Boran Using Density Functional Calculations. Angewandte Chemie - International Edition, 2017, 56, 10118-10122.	13.8	24
27	A Cationic Phosphapyramidane. Chemistry - A European Journal, 2016, 22, 17585-17589.	3.3	22
28	Theoretical modeling of enantiomerization mechanisms of tetrahedral bis-(Î²-diiminato) Ni(II) complexes. Computational and Theoretical Chemistry, 2009, 895, 138-141.	1.5	20
29	Stability, electronic, and optical properties of twoâ€dimensional phosphoborane. Journal of Computational Chemistry, 2020, 41, 1456-1463.	3.3	19
30	Electronic structure and magnetic properties of the triangular nanographenes with radical substituents: a DFT study. Physical Chemistry Chemical Physics, 2020, 22, 1288-1298.	2.8	18
31	Periodic F-defects on the MgO surface as potential single-defect catalysts with non-linear optical properties. Chemical Physics, 2020, 532, 110680.	1.9	18
32	Gradient Line Reaction Paths for Hindered Internal Rotation in H2BNH2and Inversion in PF3. Journal of Physical Chemistry A, 1997, 101, 1384-1392.	2.5	16
33	From a (Silatrigerma)cyclobutenylium Ion to a (Silatrigerma)cyclobutenyl Radical and Back. Journal of the American Chemical Society, 2020, 142, 16455-16460.	13.7	16
34	Transition vector symmetry and the internal pseudo-rotation and inversion paths of ClF4 +. Journal of the Chemical Society, Faraday Transactions, 1994, 90, 1831.	1.7	15
35	A hydrocarbon dication with nonplanar hexacoordinated carbon. Mendeleev Communications, 2004, 14, 47-48.	1.6	15
36	Sandwich Compounds of Transition Metals with Cyclopolyenes and Isolobal Boron Analogues. Chemistry - A European Journal, 2010, 16, 2272-2281.	3.3	15

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37	Assessing the Viability of Extended Nonmetal Atom Chains in M_nF_{4n+2} (M=S and Se). Angewandte Chemie - International Edition, 2015, 54, 1476-1480.	13.8	15
38	Computational Prediction of the Lowâ€Temperature Ferromagnetic Semiconducting 2D SiN Monolayer. Physica Status Solidi (B): Basic Research, 2020, 257, 1900619.	1.5	15
39	Novel architectures of boron. Structural Chemistry, 2020, 31, 2105-2128.	2.0	15
40	Polyhedral Organic Molecules and Ions â€" Structural Analogues of Organometallic Clusters. Russian Chemical Reviews, 1982, 51, 332-355.	6.5	13
41	Rapid and Reversible Migration of the Isothiocyanate Group around the Cyclopropene Ring. Mendeleev Communications, 1995, 5, 213-215.	1.6	13
42	Intramolecular Hypervalent Interaction in the Conjugate Five-Membered Rings. Journal of Physical Chemistry A, 2011, 115, 12973-12982.	2.5	13
43	Unusual reaction paths of SN2 nucleophile substitution reactions CH4+Hâ¯â†'CH4+Hâ¯ and CH4+Fâ¯â†'CH3F+Hâ¯: Quantum chemical calculations. Chemical Physics, 2013, 425, 170-176.	1.9	13
44	Supertetrahedral B80H20, C80H20, and Al80H20 analogs of dodecahedrane and their substituted molecules. Structural Chemistry, 2015, 26, 223-229.	2.0	13
45	Bis(stibahousene). Journal of the American Chemical Society, 2017, 139, 13897-13902.	13.7	13
46	Internal conrotation and disrotation in H2BCH2BH2 and diborylmethane 1,3 H exchange. Journal of Computational Chemistry, 1997, 18, 1792-1803.	3.3	12
47	Sandwich compounds with central hypercoordinate carbon, nitrogen, and oxygen: A quantum-chemical study. Heteroatom Chemistry, 2006, 17, 464-474.	0.7	12
48	From a Si₃â€Cyclopropene to a Si₃Sâ€Bicyclo[1.1.0]butane to a Si₃Sâ€Cyclopropene to a Si₃S₂â€Bicyclo[1.1.0]butane: Backâ€andâ€Forth and Inâ€Between. Angewandte Chemie - International Edition, 2015, 54, 14118-14122.	13.8	12
49	Structure and bonding of new boron and carbon superpolyhedra. Structural Chemistry, 2019, 30, 805-814.	2.0	12
50	Aromatic stabilization of organochalcogen compounds with the intramolecular Xâ†O (X = S, Se, Te) coordination. Mendeleev Communications, 2000, 10, 171-172.	1.6	11
51	Supertetrahedral Aluminum â€" A New Allotropic Ultralight Crystalline Form of Aluminum. Journal of Physical Chemistry C, 2017, 121, 22187-22190.	3.1	11
52	DFT Computational Design of a Ligandâ€Driven Lightâ€Induced Mechanism for Spinâ€State Switching. European Journal of Inorganic Chemistry, 2013, 2013, 4203-4219.	2.0	10
53	The structurally variable network of spin couplings and migrating paramagnetic centers in binuclear o-quinone Co^{II} complexes with biradical acene linkers: a computational DFT study. Dalton Transactions, 2018, 47, 15948-15956.	3.3	10
54	Multiplicity of the inversion reaction paths for PF3. Computational and Theoretical Chemistry, 1992, 262, 79-85.	1.5	9

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55	Hetero-Cope Rearrangement of S-(1,2,3-Triphenylcyclopropenyl)-O-ethyldithiocarbonate. Mendeleev Communications, 1994, 4, 9-11.	1.6	9
56	Multi-decker tricarbonyl-bridged sandwich complexes of transition metals: structure, stability and electron-counting rules. Physical Chemistry Chemical Physics, 2012, 14, 14803.	2.8	9
57	Silicon analogues of pyramidane: a quantum-chemical study. Mendeleev Communications, 2012, 22, 8-10.	1.6	9
58	Unidirectional migration of the iodine atom over a cyclopentadiene ring in a rotating electric field. Mendeleev Communications, 2015, 25, 21-23.	1.6	9
59	Supertetrahedrane and its boron analogs. Russian Chemical Bulletin, 2012, 61, 1673-1680.	1.5	8
60	Supertetrahedral aluminum and silicon structures and their hybrid analogues. Russian Journal of Inorganic Chemistry, 2014, 59, 332-336.	1.3	8
61	Germanium, carbonâ€germanium, and siliconâ€germanium triangulenes. Journal of Computational Chemistry, 2015, 36, 2193-2199.	3.3	8
62	[2+2] Cycloadduct of Titanium Silylidene and Benzonitrile. European Journal of Inorganic Chemistry, 2019, 2019, 4224-4227.	2.0	8
63	Stabilization of non-typical forms of boron clusters by beryllium doping. Chemical Physics, 2019, 522, 44-54.	1.9	8
64	Structure and stability of the C-doped boron fullerenes B60C12 and B80C12 with quasi-planar pentacoordinated cage carbon atoms: a quantum-chemical study. Mendeleev Communications, 2016, 26, 485-487.	1.6	7
65	Difluorophosphorane-Flattened Phosphorene through Difluorination. Journal of Physical Chemistry Letters, 2018, 9, 6963-6966.	4.6	7
66	Reaction paths of circumambulatory rearrangements of sulfur-substituted cyclopentadienes. Computational and Theoretical Chemistry, 1989, 186, 293-303.	1.5	6
67	Gradient line reaction path of ammonia addition to formaldehyde. Mendeleev Communications, 1997, 7, 189-191.	1.6	6
68	Stabilization of the glycine zwitterionic form by complexation with Na+ and Clâ¯: an ab initio study. Mendeleev Communications, 2000, 10, 43-44.	1.6	6
69	Inramolecular hypervalent Oâ†'Cl interaction in the chloronium cations: an ab initio study. Mendeleev Communications, 2000, 10, 173-174.	1.6	6
70	Dependence of the structure of alkali metalâ€“trifluoride ion pairs F3â€“M+ on the counterion M+ (M =) Tj ETQq0 0 0 rgBT /Overlock 10	1.6	6
71	Computational Assessment of an Elusive Aromatic N₃P₃ Molecule. ACS Omega, 2018, 3, 286-291.	3.5	6
72	o-Quinone phenalenyl derivatives as expedient ligands for the design of magnetically active metal complexes: A computational study. Chemical Physics Letters, 2020, 740, 137073.	2.6	6

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73	Titanium Germylidenes. Angewandte Chemie - International Edition, 2021, 60, 3951-3955.	13.8	6
74	Band Gap Engineering and 14 Electron Superatoms in 2D Superoctahedral Boranes B₄X₂ (B, N, P, As, Sb). Journal of Physical Chemistry C, 2021, 125, 17280-17290.	3.1	6
75	A symmetrical bridged hydrogen bond in organic compounds. Computational and Theoretical Chemistry, 1983, 92, 205-216.	1.5	5
76	Gradient-line reaction paths for 1,2, H shift reactions in phosphinonitrene and formaldehyde, and H2 elimination from formaldehyde. Journal of the Chemical Society, Faraday Transactions, 1994, 90, 1839.	1.7	5
77	Low-energy barrier B4 ring puckering rearrangement of 1,6-diaza-closo-hexaborane: an ab initio study. Mendeleev Communications, 2001, 11, 132-134.	1.6	5
78	Supertetrahedral cubane C32H8 and supertetrahedral dodecahedrane C80H20 with tetrahedral C4H fragments in the vertices. Mendeleev Communications, 2013, 23, 131-132.	1.6	5
79	Peculiar structure of the potential energy surfaces of typical electrocyclic reactions in the areas of the symmetry-forbidden reaction paths. Computational and Theoretical Chemistry, 2014, 1030, 44-52.	2.5	5
80	Supermolecular design: From molecules to solid states. International Journal of Quantum Chemistry, 2016, 116, 259-264.	2.0	5
81	Hypercoordinated carbon in C-doped boron fullerenes: a quantum chemical study. Structural Chemistry, 2017, 28, 357-369.	2.0	5
82	Computationally Designed Crystal Structures of the Supertetrahedral Al₄X (X = B, C, Al,) Tj ETQq0 0 0 rgBT /Overlock 10 Tf	2.5	5
83	1-Chloroalumole. Organometallics, 2022, 41, 467-471.	2.3	5
84	Computational modeling of the mechanisms of circumambulatory rearrangements of main-group migrants in the cyclopropene ring. Computational and Theoretical Chemistry, 1997, 398-399, 237-253.	1.5	4
85	A theoretical study of internal rotation in H2BOBH2 and H2BNBH2â€“. Mendeleev Communications, 1997, 7, 80-82.	1.6	4
86	Computational modeling of the mechanisms and stereochemistry of circumambulatory rearrangements of formylcyclopropene and 4-hydroxycyclobutenyl cation. Journal of Physical Organic Chemistry, 2000, 13, 3-12.	1.9	4
87	Theoretical modeling of the molecular and crystal structures and a square-planar to tetrahedral conformational rearrangement of trans-planar bis(N-methylsalicylaldiminato)nickel(II). Mendeleev Communications, 2009, 19, 64-66.	1.6	4
88	Stabilization of non-standard conformations of the annulene rings in cyclobutadiene-framed [n]annulenes (nÂ=Â8, 10, 12, 14) and their beryllium sandwich-like complexes: a quantum chemical study. Structural Chemistry, 2016, 27, 1229-1240.	2.0	4
89	Hybrid group 15(E 15)â€“group 14(E 14) element cationic pyramidal structures E 15 [E 14 4 (SiR 3) 4] + : A DFT study. Tetrahedron Letters, 2017, 58, 2054-2057.	1.4	4
90	Quantum chemical modeling of solid-state B 4 X structures containing tetrahedral B 4 units with X = B, C, Al, Si. Mendeleev Communications, 2018, 28, 173-175.	1.6	4

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91	Stabilization of boron clusters with classical fullerene structures by combined doping effect: a quantum chemical study. Structural Chemistry, 2018, 29, 327-340.	2.0	4
92	Molecular dynamics study of a new metastable allotropic crystalline form of galliumâ€"supertetrahedral gallium. Journal of Computational Chemistry, 2019, 40, 1861-1865.	3.3	4
93	Binuclear sandwich and multi-decker sandwich compounds of alkali and alkaline-earth metals: a quantum chemical study. Russian Chemical Bulletin, 2015, 64, 540-550.	1.5	3
94	Parquet compounds on the basis of eight- and twelve-membered structure blocks: Quantum-chemical study. Russian Journal of Organic Chemistry, 2016, 52, 268-282.	0.8	3
95	Group 14 element cationic pentagonalâ€"pyramidal complexes E^a[Î·⁵-E^b₅(SiMe₃)₅]⁺ (E^a = Siâ€"Pb, E^b = Si, Ge): A quantum-chemical study. Phosphorus, Sulfur and Silicon and the Related Elements, 2016, 191, 609-612.	1.6	3
96	From Twoâ€•to Threeâ€Dimensional Structures of a Supertetrahedral Boran Using Density Functional Calculations. Angewandte Chemie, 2017, 129, 10252-10256.	2.0	2
97	Theoretical Prediction for Synthetic Realization: Pyramidal Systems ClE[Eâ€²₄R₄] (E = Bâ€"Ga, Eâ€² = Câ€"Ge, R = SiMe₃,) Tj ETQq1 1 0.784314 rgBT /Overlock 10	1.7	2
98	Phosphatetrasilatricyclo[2.1.0.02,5]pentane. Mendeleev Communications, 2022, 32, 33-34.	1.6	2
99	Geometric and electronic structures of silicon fluorides (N = 4 â€“ 6) and potential energy surfaces for dissociation reactions â† SiF₄â€‰+â€‰F^{â€“} and â† â€‰+â€‰F^{â€“}. International Journal of Quantum Chemistry, 2016, 116, 1358-1361.	2.0	1
100	Metalcarbonyl analogues of annelated cyclooctatetraene and cyclodecapentaene derivatives with a planar core cycle: a quantum chemical study. Physical Chemistry Chemical Physics, 2018, 20, 27830-27837.	2.8	1
101	Titanium Germylidenes. Angewandte Chemie, 2021, 133, 3997-4001.	2.0	1
102	Computationally Designed Crystal Structures of the Supertetrahedral Ga4C and Ga4Si Solids. Journal of Physical Chemistry A, 2021, 125, 6556-6561.	2.5	1
103	An Experimental and PM3 Semiempirical Quantum-chemical Investigation of Anomalous Aluminium Dissolution in Proton-donor Solvents Containing HCl. Mendeleev Communications, 1995, 5, 207-208.	1.6	0
104	Poly[n]prismanes: A Family of Stable Cage Structures with Half-Planar Carbon Centers.. ChemInform, 2004, 35, no.	0.0	0
105	Hypercoordinate Carbon in Polyhedral Organic Structures. ChemInform, 2004, 35, no.	0.0	0
106	Quantum-chemical simulation of boron- and halogen-containing polymers. Russian Journal of Organic Chemistry, 2011, 47, 1675-1681.	0.8	0
107	Nonclassical Organosilicon Compounds. , 2017, , 3-24.		0
108	InnenrÃ¼cktitelbild: Titanium Germylidenes (Angew. Chem. 8/2021). Angewandte Chemie, 2021, 133, 4427-4427.	2.0	0

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109	Pericyclic Reactions. , 1990, , 238-263.		0
110	A DFT insight into the structure and electronic characteristics of group 14 bis-atranes and their analoges. Journal of Organometallic Chemistry, 2022, 960, 122235.	1.8	0