

Qiang Chen

List of Publications by Year in descending order

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172457

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1645
citing authors

#	ARTICLE	IF	CITATIONS
1	Boron-lead multiple bonds in the PbB_2O_6 and PbB_3O_7 clusters. <i>Communications Chemistry</i> , 2022, 5, .	4.5	4
2	B_{48} : a bilayer boron cluster. <i>Nanoscale</i> , 2021, 13, 3868-3876.	5.6	43
3	Transition-metal-like bonding behaviors of a boron atom in a boron-cluster boronyl complex $[(\text{B}_7\text{-B-BO})_7]$. <i>Chemical Science</i> , 2021, 12, 8157-8164.	7.4	11
4	Bilayer B_{54} , B_{60} , and B_{62} Clusters in a Universal Structural Pattern. <i>European Journal of Inorganic Chemistry</i> , 2020, 2020, 3296-3301.	2.0	15
5	Methylene-bridged bis(8-arylimino)-5,6,7-trihydroquinolylnickel precatalysts for ethylene polymerization. <i>Journal of Polymer Science</i> , 2020, 58, 1675-1686.	3.8	8
6	1,5-Naphthyl-linked bis(imino)pyridines as binucleating scaffolds for dicobalt ethylene oligo-/polymerization catalysts: exploring temperature and steric effects. <i>Dalton Transactions</i> , 2019, 48, 8264-8278.	3.3	19
7	B_{31} and B_{32} : chiral quasi-planar boron clusters. <i>Nanoscale</i> , 2019, 11, 9698-9704.	5.6	22
8	Selective Generation of Free Hydrogen Atoms in the Reaction of Methane with Diatomic Gold Boride Cations. <i>Zeitschrift Fur Physikalische Chemie</i> , 2019, 233, 785-797.	2.8	5
9	Planar B_{41} and B_{42} clusters with double-hexagonal vacancies. <i>Nanoscale</i> , 2019, 11, 23286-23295.	5.6	44
10	Predicting lanthanide boride inverse sandwich tubular molecular rotors with the smallest core-shell structure. <i>Nanoscale</i> , 2019, 11, 21311-21316.	5.6	19
11	Neutral Au_1 -Doped Cluster Catalysts AuTi_2O_6 for CO Oxidation by O_2 . <i>Journal of the American Chemical Society</i> , 2019, 141, 2027-2034.	13.7	39
12	Methylene-bridged bimetallic bis(imino)pyridine-cobaltous chlorides as precatalysts for vinyl-terminated polyethylene waxes. <i>Dalton Transactions</i> , 2018, 47, 6124-6133.	3.3	20
13	Thermal activation of methane by vanadium boride cluster cations VB_n^{+} ($n = 3-6$). <i>Physical Chemistry Chemical Physics</i> , 2018, 20, 4641-4645.	2.8	17
14	Aromatic cage-like B_{34} and B_{35}^{+} : new axially chiral members of the borospherene family. <i>Physical Chemistry Chemical Physics</i> , 2018, 20, 15344-15349.	2.8	13
15	Coupling of Methane and Carbon Dioxide Mediated by Diatomic Copper Boride Cations. <i>Angewandte Chemie</i> , 2018, 130, 14330-14334.	2.0	10
16	CH(phenol)-Bridged Bis(imino)pyridines as Compartmental Supports for Diiron Precatalysts for Ethylene Polymerization: Exploring Cooperative Effects on Performance. <i>Organometallics</i> , 2018, 37, 4002-4014.	2.3	24
17	Mechanistic Variants in Methane Activation Mediated by Gold(I) Supported on Silicon Oxide Clusters. <i>Chemistry - A European Journal</i> , 2018, 24, 17506-17512.	3.3	10
18	Coupling of Methane and Carbon Dioxide Mediated by Diatomic Copper Boride Cations. <i>Angewandte Chemie - International Edition</i> , 2018, 57, 14134-14138.	13.8	27

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19	Charge-induced structural transition between seashell-like B_{29}^{+} and B_{29}^{+} in 18 π -electron configurations. <i>Physical Chemistry Chemical Physics</i> , 2018, 20, 15330-15334.	2.8	12
20	B_{26}^{+} : The smallest planar boron cluster with a hexagonal vacancy and a complicated potential landscape. <i>Chemical Physics Letters</i> , 2017, 683, 336-341.	2.6	48
21	Planar B_{38}^{+} and B_{37}^{+} clusters with a double-hexagonal vacancy: molecular motifs for borophenes. <i>Nanoscale</i> , 2017, 9, 4550-4557.	5.6	76
22	A novel borophene featuring heptagonal holes: a common precursor of borospherenes. <i>Physical Chemistry Chemical Physics</i> , 2017, 19, 19890-19895.	2.8	12
23	Cage-like B_{39}^{+} clusters with the bonding pattern of $f + \pi$ double delocalization: new members of the borospherene family. <i>Physical Chemistry Chemical Physics</i> , 2017, 19, 10998-11003.	2.8	23
24	B_{33}^{+} and B_{34}^{+} : Aromatic Planar Boron Clusters with a Hexagonal Vacancy. <i>European Journal of Inorganic Chemistry</i> , 2017, 2017, 4546-4551.	2.0	41
25	Observation and characterization of the smallest borospherene, B_{28}^{+} and B_{28} . <i>Journal of Chemical Physics</i> , 2016, 144, 064307.	3.0	141
26	σ - π transformations in isomerization of B_{39}^{+} borospherenes. <i>AIP Advances</i> , 2016, 6, .	1.3	11
27	Chemical bonding and dynamic fluxionality of a B_{15}^{+} cluster: a nanoscale double-axle tank tread. <i>Physical Chemistry Chemical Physics</i> , 2016, 18, 15774-15782.	2.8	48
28	Cage-like B_{40}^{+} : a perfect borospherene monocation. <i>Journal of Molecular Modeling</i> , 2016, 22, 124.	1.8	16
29	Endohedral charge-transfer complex $Ca@B_{37}^{+}$: stabilization of a B_{37}^{+} borospherene trianion by metal-encapsulation. <i>Physical Chemistry Chemical Physics</i> , 2016, 18, 14186-14190.	2.8	45
30	Competition between quasi-planar and cage-like structures in the B_{29}^{+} cluster: photoelectron spectroscopy and ab initio calculations. <i>Physical Chemistry Chemical Physics</i> , 2016, 18, 29147-29155.	2.8	85
31	From Quasi-Planar B_{56} to Penta-Ring Tubular $Ca@B_{56}$: Prediction of Metal-Stabilized $Ca@B_{56}$ as the Embryo of Metal-Doped Boron \pm -Nanotubes. <i>Scientific Reports</i> , 2016, 6, 37893.	3.3	7
32	Saturn-like charge-transfer complexes $Li_4 \& B_{36}$, $Li_5 \& B_{36}^{+}$, and $Li_6 \& B_{36}^{2+}$: exohedral metalloborospherenes with a perfect cage-like B_{36}^{4+} core. <i>Physical Chemistry Chemical Physics</i> , 2016, 18, 9922-9926.	2.8	58
33	Endohedral $Ca@B_{38}^{+}$: stabilization of a B_{38}^{2+} borospherene dianion by metal encapsulation. <i>Physical Chemistry Chemical Physics</i> , 2016, 18, 11610-11615.	2.8	50
34	Cage-like B_{41}^{+} and B_{42}^{2+} : New Chiral Members of the Borospherene Family. <i>Angewandte Chemie</i> , 2015, 127, 8278-8282.	2.0	11
35	Pyrazino-[2,3-f][1,10]phenanthroline as a new anchoring group of organic dyes for dye-sensitized solar cells. <i>RSC Advances</i> , 2015, 5, 46206-46209.	3.6	5
36	Ni(ii) source as a pre-catalyst for the cross-coupling of benzylic pivalates with arylboronic acids: facile access to tri- and diarylmethanes. <i>RSC Advances</i> , 2015, 5, 15338-15340.	3.6	22

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37	Planar dicyclic B ₆ S ₆ , B ₆ S ₆ ⁺ , and B ₆ S ₆ ²⁺ clusters: Boron sulfide analogues of naphthalene. <i>Journal of Chemical Physics</i> , 2015, 142, 014302.	3.0	14
38	Homo-Coupling of Terminal Alkynes Using a Simple, Cheap Ni(dppe)Cl ₂ /Ag ₂ O Catalyst System. <i>Synthetic Communications</i> , 2015, 45, 824-830.	2.1	7
39	Experimental and Theoretical Evidence of an Axially Chiral Borospherene. <i>ACS Nano</i> , 2015, 9, 754-760.	14.6	228
40	Ribbon Aromaticity of Double-Chain B _{2n} C _{2H} Clusters (n=9): A First Principle Study. <i>Journal of Cluster Science</i> , 2015, 26, 2043-2050.	3.3	4
41	Endohedral C ₃ @B ₃₉ ⁺ and C ₂ @B ₃₉ ⁺ : axially chiral metalloborospherenes based on B ₃₉ ⁺ . <i>Physical Chemistry Chemical Physics</i> , 2015, 17, 19690-19694.	2.8	31
42	Boronyl as a terminal ligand in boron oxide clusters: hexagonal ring C _{2v} B ₆ O ₄ and ethylene-like D _{2h} B ₆ O ₄ ^{+/2+} . <i>Physical Chemistry Chemical Physics</i> , 2015, 17, 19929-19935.	2.8	5
43	Photoelectron spectroscopy of B ₄₀ ⁺ : Dual 3c-4e hyperbonds and rhombic 4c-4e bond in boron oxide clusters. <i>Journal of Chemical Physics</i> , 2015, 142, 134305.	3.0	23
44	Cage-Like B ₄₁ ⁺ and B ₄₂ ²⁺ : New Chiral Members of the Borospherene Family. <i>Angewandte Chemie - International Edition</i> , 2015, 54, 8160-8164.	13.8	105
45	A first-principles study on the B ₅₀ ^{+/0} and B ₅₀ ⁺ clusters: The boron oxide analogs of C ₆ H ₅ ^{+/0} and CH ₃ Cl. <i>Journal of Chemical Physics</i> , 2015, 143, 064303.	3.0	14
46	B ₁₁ ⁺ : a moving subnanoscale tank tread. <i>Nanoscale</i> , 2015, 7, 16054-16060.	5.6	72
47	Endohedral and Exohedral Metalloborospherenes: M@B ₄₀ (M=Ca, Sr) and M&B ₄₀ (M=Be, Mg). <i>Angewandte Chemie - International Edition</i> , 2015, 54, 941-945.	13.8	130
48	Chemical bonding in electron-deficient boron oxide clusters: core boronyl groups, dual 3c-4e hypervalent bonds, and rhombic 4c-4e bonds. <i>Physical Chemistry Chemical Physics</i> , 2014, 16, 7274.	2.8	29
49	Nickel-catalyzed cross-coupling of carboxylic anhydrides with arylboronic acids. <i>RSC Advances</i> , 2014, 4, 53885-53890.	3.6	31
50	Photoelectron spectroscopy of lithium and gold alloyed boron oxide clusters: charge transfer complexes, covalent gold, hyperhalogen, and dual three-center four-electron hyperbonds. <i>Physical Chemistry Chemical Physics</i> , 2014, 16, 5129.	2.8	22
51	Quasi-planar aromatic B ₃₆ and B ₃₆ ⁺ clusters: all-boron analogues of coronene. <i>Physical Chemistry Chemical Physics</i> , 2014, 16, 18282.	2.8	91
52	The B ₃₅ Cluster with a Double-Hexagonal Vacancy: A New and More Flexible Structural Motif for Borophene. <i>Journal of the American Chemical Society</i> , 2014, 136, 12257-12260.	13.7	298
53	Observation of an all-boron fullerene. <i>Nature Chemistry</i> , 2014, 6, 727-731.	13.6	724
54	Boronyl Chemistry: The BO Group as a New Ligand in Gas-Phase Clusters and Synthetic Compounds. <i>Accounts of Chemical Research</i> , 2014, 47, 2435-2445.	15.6	71

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55	Perfectly planar boronyl boroxine B_6O_6 : A boron oxide analog of boroxine and benzene. <i>Journal of Chemical Physics</i> , 2013, 138, 244304.	3.0	43
56	$B_{30}H_8$, $B_{39}H_9$, $B_{42}H_{10}$, $B_{48}H_{10}$, and $B_{72}H_{12}$: polycyclic aromatic snub hydroboron clusters analogous to polycyclic aromatic hydrocarbons. <i>Journal of Molecular Modeling</i> , 2013, 19, 1195-1204.	1.8	15
57	Binary nature of monolayer boron sheets from <i>ab initio</i> global searches. <i>Journal of Chemical Physics</i> , 2013, 138, 024701.	3.0	44
58	Ribbon aromaticity in double-chain planar B_nH_{2n+2} and $Li_2B_nH_2$ nanoribbon clusters up to $n = 22$: lithiated boron dihydride analogues of polyenes. <i>Physical Chemistry Chemical Physics</i> , 2013, 15, 18872.	2.8	31
59	On the structures and bonding in boron-gold alloy clusters: B_6Au_n and B_6Au_n ($n = 1-3$). <i>Journal of Chemical Physics</i> , 2013, 138, 084306.	3.0	24
60	Pi and sigma double conjugations in boronyl polyboroene nanoribbons: $B_n(BO)_2$ and $B_n(BO)_2$ ($n = 5-12$). <i>Journal of Chemical Physics</i> , 2013, 139, 174301.	3.0	40
61	Photoelectron spectroscopy of boron-gold alloy clusters and boron boronyl clusters: B_3Au_n and $B_3(BO)_n$ ($n = 1, 2$). <i>Journal of Chemical Physics</i> , 2013, 139, 044308.	3.0	32
62	Double-chain planar D_{2h} B_4H_2 , C_{2h} B_8H_2 , and C_{2h} $B_{12}H_2$: conjugated aromatic borenes. <i>Physical Chemistry Chemical Physics</i> , 2012, 14, 14769.	2.8	51
63	Probing the structures and chemical bonding of boron-boronyl clusters using photoelectron spectroscopy and computational chemistry: $B_4(BO)_n$ ($n = 1-3$). <i>Journal of Chemical Physics</i> , 2012, 137, 044307.	3.0	26
64	Perfectly planar concentric π -aromatic $B_{18}H_3$, $B_{18}H_4$, $B_{18}H_5^+$, and $B_{18}H_6^{2+}$ with [10]annulene character. <i>Physical Chemistry Chemical Physics</i> , 2011, 13, 20620.	2.8	20
65	Deciphering the mystery of hexagon holes in an all-boron graphene sheet. <i>Physical Chemistry Chemical Physics</i> , 2011, 13, 11575.	2.8	136
66	π -Aromatic $B_{16}H_6$: A Neutral Boron Hydride Analogue of Naphthalene. <i>Journal of Cluster Science</i> , 2011, 22, 513-523.	3.3	23
67	Investigation of pH sensitivity of poly(acrylic acid-co-acrylamide) hydrogel. <i>Polymer International</i> , 2003, 52, 1153-1157.	3.1	44
68	Investigation of the gelation process by in-situ interferometry. <i>Macromolecular Rapid Communications</i> , 2000, 21, 998-1001.	3.9	4