CARBORANE AND CARBORANE-RELATED PUBLICATIONS APPEARING IN 2022

General

Orbital Engineering in Chemistry
Eluvathingal D. Jemmis* and Sagar Ghorai, *Israeli J. Chem.* **2022***, 62*, e2021001 (review)

Planar Networks of Boron Triangles: Analogies to Benzene and Other Planar Aromatic Hydrocarbons
R. B. King, *J. Phys. Chem. A* **2022***, 126*, 901

CARBORANES

Correction to "*closo*- or *nido*-Carborane Diphosphane as Responsible for Strong Thermochromism or Time Activated Delayed Fluorescence (TADF) in $[Cu(N^N)(P^P)]^{0/+}$" *Inorg. Chem.* **2022***, 61*, 8386 [Original paper: *Inorg. Chem.* **2021***, 60*, 18521], Adrián Alconchel, Olga Crespo*, Pilar García-Orduña, and M. Concepción Gimeno* Replace "time activated" with "thermally activated" throughout the paper.

3D and 2D aromatic units behave like oil and water in the case of benzocarborane derivatives
Jordi Poater, Clara Viñas, Miquel Solà, and Francesc Teixidor, *Nature Commun.***2022***, 13*, Article no. 3844

Unconventional conjugation in macromonomers and polymers
Richard M. Laine, *Chem. Commun.* **2022**, *58*, 10596 (review)

Conjugation between 3D and 2D aromaticity: does it really exist? The case of carborane-fused heterocycles
Daniel Buzsaki, Mate Barnabas Kovacs, Evelyn Humpfner, Zsofia Harcsa-Pinter, and Zsolt Kelemen*, *Chem. Sci.* **2022***, 13*, 11388

Theoretical Insight into B–C Chemical Bonding in Closo-Borate $[B_nH_n{-}1CH_3]_2^-$ (n = 6, 10, 12) and Monocarborane $[CB_nH_nCH_3]^-$ (n = 5, 9, 11) Anions
Ilya N. Klyukin, Anastasia V. Kolbunova, Alexander S. Novikov*, Andrey P. Zhdanov, Konstantin Yu. Zhizhin, and Nikolay T. Kuznetsov, *Inorganics* **2022***, 10*, 186

Transition metal catalyzed synthesis of derivatives of polyhedral boron hydrides with B-N, B-P, B-O, and B-S bonds
I. B. Sivaev, S. A. Anufriev, and A. V. Shmal'ko, *Advances in Catalysis* **2022***, 71*, 47

Superatomic icosahedral-C_nB_{12-n} (n = 0, 1, 2) Stuffed mononuclear and binuclear borafullerene and borospherene nanoclusters with spherical aromaticity
Min Zhang, Wei-Ping Jia, Ting Zhang, Bin-Bin Pei, Jia Xu, Xinxin Tian, Hai-Gang Lu*, and Si-Dian Li, *Sci. Reports* **2022***, 12*, Article no. 19741

Closo-$C_3B_9H_{12}^+$ Derivatives

Rearrangement of dicarboranyl methyl cation to icosahedral $C_3B_9H_{12}^+$: An ab initio dynamics view
D. Sravanakumar Perumalla,| Sagar Ghorai, Tanmoy Pal, Drahomír Hnyk, Josef Holub,and Eluvathingal D. Jemmis, *J. Computat. Chem*. **2022**, 1

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Effects of molecular geometry on the efficiency of intramolecular charge transfer-based luminescence in *o*-carboranyl-substituted 1H-phenanthro[9,10-d]imidazoles
Sehee Im, Chan Hee Ryu, Mingi Kim, Dong Kyun You, Sanghee Yi, Wonchul Lee and Kang Mun Lee, *Inorg. Chem. Frontiers* **2022**, *9*, 501

Rhodium-catalyzed sequential B(3)-, B(4)-, and B(5)-trifunctionalization of *o*-carboranes with three different substituents
Biao Cheng, Yu Chen, Peng Zhou and Zuowei Xie*, *Chem. Commun.* **2022**, *58*, 629

Palladium-Catalyzed Regioselective B(3,4)−H Acyloxylation of *o*-Carboranes
Yatong Fu, Yu Li, Donghong Luo, Yibo Lu, Jiajun Huang, Ziyi Yang, Jian Lu, Yuan-Ye Jiang,* and Ju-You Lu, *Inorg. Chem.* **2022***, 61*, 911

Carbon Monoxide in Main-Group Chemistry
Shiori Fujimori and Shigeyoshi Inoue, *J. Am. Chem. Soc.* **2022***, 144*, 2034

Iridium-Catalyzed Selective B(4)−H Acylmethylation of *o*-Carboranes with Sulfoxonium Ylides
Lin-Bao Zhang and Zuowei Xie, *Org. Lett.* **2022**, *24*, 1318

A facile access to mono-C-alkynylated-*o*-carboranes from o-carboranes and arylsulfonylacetylenes
Mengyang Bai, Guanyu Tao, Zhenxing Liu, Lili Wang∗, Zheng Duan, *Chinese Chem. Lett.* **2022***, 33*, 201

Rhodium-Catalyzed B(4)−H and B(3)−H Alkylation Reaction of Pyridyl *o*-Carboranes with α-Diazodicarboxylates
Gi Hoon Ko, Ji Kwon Lee, Sang Hoon Han, and Phil Ho Lee, *Org. Lett.* **2022**, *24*, 1507

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Palladium-Catalyzed Cascade Deboronation/Regioselective B-P Coupling of *closo*-Carboranes
Ziyi Yang, Chaofan Sun, Xing Wei, Jian Lu, and Ju-You Lu*, *ChemCatChem* **2022**, e202101571

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Hideki Yamamoto, Junki Ochi, Kazuhiro Yuhara, Kazuo Tanaka,* and Yoshiki Chujo, *Cell Repts. Phys. Sci.* **2022***, 3*, 100758

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Wenjing Guo, Chenyang Guo, Yan-Na Ma,* and Xuenian Chen, *Inorg. Chem.* **2022***, 61*, 5326

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Shimeng Li and Zuowei Xie*, *J. Am. Chem. Soc.* **2022***, 144*, 7960

Iridium(III)-Catalyzed Regioselective B(4)−H Allenylation of *o*-Carboranes by Ball Milling
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Palladium-Catalyzed Regioselective B(9)-Amination of *o*-Carboranes and *m*-Carboranes in HFIP with Broad Nitrogen Sources
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Yixiu Ge, Zaozao Qiu, and Zuowei Xie, *Acta Chim. Sinica* **2022***, 80*, 432

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Synthesis of Iminoboryl *o*-Carboranes by Lewis Base Promoted Aminoborirane-to-Iminoborane Isomerization
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Recent trends and tactics in facile functionalization of neutral icosahedral carboranes ($C_2B_{10}H_{12}$) and *nido*-carborane (7,8-$C_2B_9H_{12}^-$)
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Boron containing *mono*- and *bis*-carboranethiolate derivatives of respective formula [(bipy)MCl(CBT)] and [(bipy)M(CBT)$_2$] (M = Pd^{II}, Pt^{II})
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Synthesis and Structure-Activity Relationship Study of 1,12-Dicarba-*closo*-dodecaborane-based Triol Derivatives as Nonsecosteroidal Vitamin D Analogs
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$CB_{11}H_{12}^-$

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TRANSITION METAL METALLACARBORANES

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CARBORANE APPLICATIONS IN ELECTRONICS

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