

Recent Research applications utilizing **Spartan** in:

- **Synthesis**
- **Reactions**
- **Transition States**

● ● Noah M. Bartfield, Brandon W. Alexander, Seth B. Herzon. Total Synthesis of Chartelline C. *J. Am. Chem. Soc.* **2025**, 147 (28) , 24921-24931. <https://doi.org/10.1021/jacs.5c07148>

● Lluís Bosch, Anna M. Costa, Juame Vilarrasa\*, Relative Stability and Basicity of Enamines from Aminocatalysts. *Eur. J. Org. Chem.* **2025**, 28(3), 1075. <https://doi.org/10.1002/ejoc.202401075>  
[open access]

● ● Fatemeh Haghighi, Luke T. Jesikiewicz, Corrinne E. Stahl, Jordan Nafie, Amanda Ortega-Vega, Peng Liu\*, Kay M. Brummond\*, Stereo-Differentiating Asymmetric Rh(I)-Catalyzed Pauson–Khand Reaction: A DFT-Informed Approach to Thapsigargin Stereoisomers. *J. Am. Chem. Soc.* **2025**, 147, 498-509. <https://doi.org/10.1021/jacs.4c11661>  
[open access]

● ● Brandon W. Alexander, Noah M. Bartfield, Vaani Gupta, Brandon Q. Mercado, Mark Del Campo, Seth B. Herzon\*, An oxidative photocyclization approach to the synthesis of Securiflustra *securifrons* alkaloids. *Science*. **2024**, 383, 849-854. <https://doi.org/10.1126/science.adl6163>

● Murray G. Rosenberg and Udo H. Brinker\*, Carbene Routes to Cyclopropanetetrahedrane. *J. Org. Chem.* **2022**, 87, 24, 16902–16906. <https://doi.org/10.1021/acs.joc.2c02217> [open access]

● Hang-Fei Tu, Aliénor Jeandin, and Marcos G. Suero\*, Catalytic Synthesis of Cyclopropenium Cations with Rh-Carbynoids. *J. Am. Chem. Soc.* **2022**, 144, 37, 16737–16743. <https://doi.org/10.1021/jacs.2c07769> [open access]

● ● ● Naoaki Kurisawa, Arihiro Iwasaki\*, Kazuya Teranuma, Shingo Dan, Chikashi Toyoshima, Masaru Hashimoto, and Kiyotake Suenaga\*, Structural Determination, Total Synthesis, and Biological Activity of Iezoside, a Highly Potent Ca<sup>2+</sup>-ATPase Inhibitor from the Marine Cyanobacterium *Leptochromothrix valpauliae*. *J. Am. Chem. Soc.* **2022**, 144, 24, 11019–11032. <https://doi.org/10.1021/jacs.2c04459>

  Dominik Lungerich\*, Helen Hölzel, Koji Harano, Norbert Jux, Konstantin Y. Amsharov, Eiichi Nakamura\*, A Singular Molecule-to-Molecule Transformation on Video – The Bottom-Up Synthesis of Fullerene C<sub>60</sub> from Truxene Derivative C<sub>60</sub>H<sub>30</sub>. *ACS Nano* **2021**, 15, 12804–12814. <https://doi.org/10.1021/acsnano.1c02222>

  W. Buijs\*, Molecular Modeling Study to the Relation between Structure of LPEI, Including Water-Induced Phase Transitions and CO<sub>2</sub> Capturing Reactions. *Ind. Eng. Chem. Res.* **2021**, 60 (30), 11309–11316. <https://doi.org/10.1021/acs.iecr.1c00846> [open access]

  Carl Jacky Saint-Louis, David J. Warner, Katie S. Keane, Melody D. Kelley, Connor M. Meyers, and Silas C. Blackstock\*, Photo-Electro switchable Arylaminoazobenzenes. *J. Org. Chem.* **2021**, 86, 17, 11341–11353. <https://doi.org/10.1021/acs.joc.1c00763>

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