

## PUBLICATIONS (Corresponding Author denoted by asterisk)

### Publications from faculty research at Brigham Young University

64. Moyá, D. A.; Lee, M. A.; Chanthakhoun, J. C.; LeSueur, A. K.; Joaquin, D.; Barfuss, J. D.; Castle, S. L.\* “Towards a Streamlined Synthesis of Peptides Containing  $\alpha,\beta$ -Dehydroamino Acids.” *Tetrahedron Lett.* **2021**, *74*, 153175.
63. Singh, J.; Nickel, G. A.; Cai, Y.; Jones, D. D.; Nelson, T. J.; Small, J. E.; Castle, S. L.\* “Synthesis of Functionalized Pyrrolines via Microwave-Promoted Iminyl Radical Cyclizations.” *Org. Lett.* **2021**, *23*, 3970–3974.
62. Cai, Y.; Ma, Z.; Jiang, J.; Lo, C. C. L.; Luo, S.; Jalan, A.; Cardon, J. M.; Ramos, A.; Moyá, D. A.; Joaquin, D.; Castle, S. L.\* “Convergent Total Synthesis of Yaku’amide A.” *Angew. Chem. Int. Ed.* **2021**, *60*, 5162–5167.
61. Joaquin, D.; Lee, M. A.; Kastner, D. W.; Singh, J.; Morrill, S. T.; Damstedt, G.; Castle, S. L.\* “Impact of Dehydroamino Acids on the Structure and Stability of Incipient  $3_{10}$ -Helical Peptides.” *J. Org. Chem.* **2020**, *85*, 1601–1613.
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59. Cardon, J. M.; Coombs, J. C.; Ess, D. H.; Castle, S. L.\* “Insights into Base-Free  $\text{OsO}_4$ -Catalyzed Aminohydroxylations Employing Chiral Ligands.” *Tetrahedron* **2019**, *75*, 945–948.
58. Jackman, M. M.; Im, S.; Bohman, S. R.; Lo, C. C. L.; Garrity, A. L.; Castle, S. L.\* “Synthesis of Functionalized Nitriles via Microwave-Promoted Fragmentations of Cyclic Iminyl Radicals.” *Chem.–Eur. J.* **2018**, *24*, 594–598.
57. Jalan, A.; Kastner, D. W.; Webber, K. G. I.; Smith, M. S.; Price, J. L.\*; Castle, S. L.\* “Bulky Dehydroamino Acids Enhance Proteolytic Stability and Folding in  $\beta$ -Hairpin Peptides.” *Org. Lett.* **2017**, *19*, 5190–5193.
56. Castle, S. L.\* “Remodeling Vancomycin Yields a Victory in the Battle Against Bacteria.” *Proc. Natl. Acad. Sci. U.S.A.* **2017**, *114*, 6656–6657 (invited Commentary article).
55. Jackman, M. M.; Cai, Y.; Castle, S. L.\* “Recent Advances in Iminyl Radical Cyclizations.” *Synthesis* **2017**, *49*, 1785–1795.
54. Borges, R. S.\*; Castle, S. L.\* “The Antioxidant Properties of Salicylate Derivatives: A Possible New Mechanism of Anti-inflammatory Activity.” *Bioorg. Med. Chem. Lett.* **2015**, *25*, 4808–4811.

53. Jiang, J.; Ma, Z.; Castle, S. L.\* “Bulky  $\alpha,\beta$ -Dehydroamino Acids: Their Occurrence in Nature, Synthesis, and Applications.” *Tetrahedron* **2015**, *71*, 5431–5451.
52. Jiang, J.; Luo, S.; Castle, S. L.\* “Solid-Phase Synthesis of Peptides Containing Bulky Dehydroamino Acids.” *Tetrahedron Lett.* **2015**, *56*, 3311–3313.
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50. Castle, S. L.\* “Better Chemistry Through Radicals.” *Nature* **2014**, *516*, 332–333 (invited News & Views article).
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39. Johnson, A. G.; Loertscher, B. M.; Moeck, A. R.; Matthews, S. S.; Ess, D. H.;\* Castle, S. L.\* “Experimental and Theoretical Investigation of the Scope of Enantioselective Ketone Allylations Employing Nakamura’s Allylzinc–Bisoxazoline Reagent.” *Bioorg. Med. Chem. Lett.* **2011**, *21*, 2706–2710.
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### **Publications from graduate research at The Scripps Research Institute**

17. Boger, D. L.\*; Castle, S. L. "Synthesis of Cycloisodityrosine Peptides." In *Houben–Weyl Methods of Organic Chemistry, Synthesis of Peptides and Peptidomimetics*; Goodman, M., Ed.; Thieme: Stuttgart, 2003; Vol. E 22c, pp 194–206.
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#### **Publications from undergraduate research at Brigham Young University**

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Butyl, or Two Allyl Substituents on Chiral Positions Next to the Pyridine Ring.” *J. Org. Chem.* **1996**, *61*, 8391–8396.

**Publications from summer research during high school and college at the University of South Florida**

4. Luo, J.-K.; Castle, S. L.; Castle, R. N.\* “The Synthesis of Novel Polycyclic Heterocyclic Ring Systems Via Photocyclization. **12**. Benzo[*h*]naphtho[2',1':4,5]thieno[2,3-*c*]quinoline and benzo[*f*]naphtho[2',1':4,5]thieno[2,3-*c*]quinoline.” *J. Heterocycl. Chem.* **1993**, *30*, 653–658.
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