

List of Publications

2026

117. N.S. Wenzel, P.C. Brehm, M. Mücke, M.A. Ansari, B. Worbs, M. Simon, C. Golz, R.A. Mata, M. Alcarazo. "A Diazo-free Equivalent of the Unsubstituted Carbyne Cation: Straightforward Synthesis of Naphthalenes and Pyridines via [$^{12/13}\text{CH}$] $^+$ Insertion" *J. Am. Chem. Soc.* **2026**, *148*, 3852-3861.

2025

116. D. Gaviña, Z. Feng, D. Herrero, M. Simon, C. Golz, M. Alcarazo. Introducing the Cis-2,3-Bis(trifluoromethyl)cyclopropyl Chemotype: Late-Stage Installation and Stereoelectronic Properties. *ChemistryEurope* **2025**, e202500384.
115. W. Fu, M. Simon, C. Golz, M. Alcarazo. Enantioselective synthesis and racemization dynamics of trithia[5]helicenes derived from the dithieno[2,3-*b*:30,20-*d'*]-thiophene unit. *Chem. Sci.* **2025**, 19172-19177.
114. S.B.H. Karnbrock, J.F. Köster, I. Becker, C. Golz, F. Meyer, M. Gimferrer, M. Alcarazo. Bis(amidophenolate)-supported pnictoranides: Lewis acid-induced electromerism in a bismuth complex. *Chem. Sci.* **2025**, *16*, 14178-14185.
113. S. Timmann, M.T.H. Dilchert, J. Dietzel, V.S. Pölt, M.R. Wennekamp, C. Golz, M. Alcarazo. A Photocatalytic Approach to Radical 1-(Trifluoromethyl)cyclopropanation. *ACS. Catal.* **2025**, *15*, 7232-7240.
112. S.B.H. Karnbrock, J.F. Köster, C. Golz, R.A. Mata, M. Alcarazo. Isolation of a Square Pyramidal Bis(amidophenolate)-Supported As(III)-Cation: Coordination-Induced Electromerism at As. *Angew. Chem. Int. Ed.* **2025**, e202501439.
111. M. Alcarazo. Dibenzothiophenium Salts: Practical Alternatives to Hypervalent I(III)-Based Reagents. *Acc. Chem. Res.* **2025**, *58*, 635-646.
110. D. Rösch, C. Golz, M. Alcarazo. Pyrrolo[1,2-*c*]pyrimidin-1-ylidene: A Diamino Carbene Embedded in a Six-Membered Aromatic Scaffold. *Organometallics* **2025**, *44*, 179-188.

109. S. Timmann, Z. Feng, M. Alcarazo.
Recent Applications of Sulfonium Salts in Synthesis and Catalysis.
Chem. Eur. J. **2024**, *30*, e202402768.
108. W. Fu, V. Pelliccioli, R. Casares-López, J.M. Cuerva, M. Simon, C. Golz, M. Alcarazo
Enantioselective Synthesis, (Chir)optical Properties, and Postsynthetic
Functionalization of Furan-Containing Oxa[5]-, Oxa[6]-, and Dioxo[6]helicenes.
CCS Chem. **2024**, *6*, 2439-2451.
107. S.B.H. Karnbrock, C. Golz, M. Alcarazo.
P(v)-bis(amidophenolate) ligand cooperation: stoichiometric C=O-bond cleavage in
aldehydes and ketones.
Chem. Commun. **2024**, *60*, 6745-6748.
106. T. Heilmann, J.M. Lopez-Soria, J. Ulbrich, J. Kircher, Z. Li, B. Worbs, C. Golz, R.A.
Mata, M. Alcarazo
N-(Sulfonio)Sulfilimine Reagents: Non-Oxidizing Sources of Electrophilic Nitrogen
Atom for Skeletal Editing.
Angew. Chem. Int. Ed. **2024**, e202403826.
105. S. Timmann, T-H. Wu, C. Golz, M. Alcarazo
Reactivity of α -diazo sulfonium salts: rhodium-catalysed ring expansion of indenenes to
naphthalenes.
Chem. Sci. **2024**, *15*, 5938-5943.
104. B. Worbs, S. Timmann, F. Peng, R. Zhao, M. Alcarazo
Synthesis of 5-(1-Diazo-2-ethoxy-2-oxoethyl) dibenzo[*b,d*]thiophenium Triflate.
Org. Synth. **2024**, *101*, 109-123.
103. M. Recort-Fornals, X. Marset, M. Simon, C. Golz, D.J. Ramón, M. Alcarazo
Photocatalytic Functionalization of
Heptacyclo[6.6.0.0.2,6.0.3,13.0.4,11.0.5,9.0.10,14]Tetradecane.
Adv. Synth. Catal. **2024**, *366*, 877-883.

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102. S.B.H. Karnbrock, M. Alcarazo
Cooperation between p-Block Elements and Redox-Active Ligands: Stoichiometric and Catalytic Transformations.
Chem. Eur. J. **2023**, e202302879.
101. H.D. Doan, C. Rugen, C. Golz, M. Alcarazo
Synthesis of (±)-Angustatin A: Assembly of the Phenanthrene Moiety Despite Increasing Ring Strain.
Organic Letters **2023**, 25, 7181-7185.
100. Z. Feng, L. Riemann, Z. Guo, D. Herrero, M. Simon, C. Golz, R.A. Mata, M. Alcarazo
Pentafluorocyclopropanation of (Hetero)arenes Using Sulfonium Salts: Applications in Late-Stage Functionalization.
Angew. Chem. Int. Ed. **2023**, e202306764.
99. S. Timmann, M. Alcarazo
 α -Diazo- λ^3 -iodanes and α -diazo sulfonium salts: the umpolung of diazo compounds.
Chem. Commun. **2023**, 59, 8032-8042.
98. W. Fu, V. Pelliccioli, M. von Geyso, P. Redero, C. Böhmer, M. Simon, C. Golz, M. Alcarazo
Enantioselective Au-Catalyzed Synthesis of Thia[5]- and Thia[6]helicenes and Their Transformation into Bowl-shaped Pleiadenes.
Adv. Mater. **2023**, 2211279.
97. Feng, X. Marset, J. Tostado, J. Kircher, Z. She, C. Golz, R.A. Mata, M. Simon, M. Alcarazo
5-(Trifluorovinyl)dibenzothiophenium Triflate: Introducing the 1,1,2-Trifluoroethylene Tether in Drug-Like Structures.
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96. J. Zhang, M. Simon, C. Golz, M. Alcarazo
Enantioselective Synthesis of [5]Helicenes Containing Two Additional Chiral Axes.
Isr. J. Chem. **2022**, e202200043.
95. S.B.H. Karnbrock, C. Golz, R.A. Mata, M. Alcarazo
Ligand Enabled Disproportionation of 1,2-Diphenylhydrazine at a P(V)-Center.
Angew. Chem.Int. Ed. **2022**, e202207450.
94. V. Pelliccioli, T. Hartung, M. Simon, C. Golz, E. Licandro, S. Cauteruccio, M. Alcarazo
Enantioselective Synthesis of Dithia[5]helicenes and their Postsynthetic Functionalization to Access Dithia[9]helicenes.
Angew. Chem.Int. Ed. **2022**, 61, e202114577.
93. C.J. Rugen, M. Alcarazo
 α -Cationic Phosphines: from Curiosities to Powerful Ancillary Ligands.
Synlett **2022**, 33, 16-26.

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92. S. Suárez-Pantiga, P. Redero, X. Aniban, M. Simon, C. Golz, R.A. Mata, M. Alcarazo
In-Fjord Substitution in Expanded Helicenes: Effects of the Insert on the Inversion
Barrier and Helical Pitch.
Chem. Eur. J. **2021**, 27, 13358-13366.
91. V. Laserna, A. Istrate, K. Kafuta, T.A. Hakala, T.P.J. Knowles, M. Alcarazo, G.J.L.
Bernardes
Protein Conjugation by Electrophilic Alkynylation Using 5-
(Alkynyl)dibenzothiophenium Triflates.
Bioconjugate Chem. **2021**, 32, 1570-1575.
90. K. Kafuta, C.J. Rugen, T. Heilmann, T. Liu, C. Golz, M. Alcarazo
Reactivity of 5-(Alkynyl)dibenzothiophenium Salts: Synthesis of Diynes, Vinyl
Sulfones, and Phenanthrenes.
Eur. J. Org. Chem. **2021**, 4038-4048.
89. X. Marset, M. Recort-Fornals, M. Kpante, A. Zieliński, C. Golz, L.M. Wolf,
M. Alcarazo
Towards an Effective Synthesis of Difunctionalized Heptacyclo
[6.6.0.0^{2,6}.0^{3,13}.0^{4,11}.0^{5,9}.0^{10,14}]tetradecane: Ligand Effects on the Cage Assembly and
Selective C–H Arylation Reactions.
Adv. Synth. Catal. **2021**, 363, 3546-3553.
88. Z. Li, G. Vijaykumar, X. Li, C. Golz, M. Alcarazo
5-(Diarylimino)- and 5-(sulfoximido)dibenzothiophenium triflates: syntheses and
applications as electrophilic aminating reagents.
Org. Biomol. Chem. **2021**, 19, 2941-2948.
87. S. Karreman, S.B.H. Karnbrock, S. Kolle, C. Golz, M. Alcarazo
Synthesis of 6*H*-Benzo[*c*]chromene Scaffolds from *O*-Benzylated Phenols through a
C-H Sulfenylation/Radical Cyclization Sequence.
Org. Lett. **2021**, 23, 1991-1995.
86. X. Li, C. Golz, M. Alcarazo
 α -Diazo Sulfonium Triflates: Synthesis, Structure, and Application to the Synthesis of
1-(Dialkylamino)-1,2,3-triazoles.
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Enantioselective Synthesis of 1-Aryl Benzo[5]helicenes Using BINOL-Derived Cationic Phosphonites as Ancillary Ligands.
Angew. Chem. Int. Ed. **2020**, *59*, 23527-23531.
84. A. Zieliński, X. Marset, C. Golz, L.M. Wolf, M. Alcarazo
Two-Step Synthesis of Heptacyclo[6.6.0.0^{2,6}.0^{3,13}.0^{4,11}.0^{5,9}.0^{10,14}] tetradecane from Norbornadiene: Mechanism of the Cage Assembly and Post-synthetic Functionalization.
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83. T. Johannsen, C. Golz, M. Alcarazo
 α -Cationic Phospholes: Synthesis and Applications as Ancillary Ligands.
Angew. Chem. Int. Ed. **2020**, *59*, 22779-22784.
82. K. Kafuta, C. Golz, M. Alcarazo
Polymorphism of bis(1,3-benzothiazol-2-yl) trithiocarbonate.
Acta Crystallogr. Sect E **2020**, *E76*, 1126-1130.
81. K. Sprenger, C. Golz, M. Alcarazo
Synthesis of Cycloheptatrienes, Oxepines, Thiepinines, and Silepinines: A Comparison between Brønsted Acid and Au-Catalysis.
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80. S.I. Kozhushkov, M. Alcarazo
Synthetic Applications of Sulfonium Salts.
Eur. J. Inorg. Chem. **2020**, 2486-2500.
79. M. Zhao, A.G. Barrado, K. Sprenger, C. Golz, R.A. Mata, M. Alcarazo
Electrophilic Cyanative Alkenylation of Arenes.
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78. J. Zhang, M. Simon, C. Golz, M. Alcarazo
Gold-Catalyzed Atroposelective Synthesis of 1,1'-Binaphthalene-2,3'-diols.
Angew. Chem. Int. Ed. **2020**, *59*, 5647-5650.
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Synthesis, Structure, and Reactivity of 5-(Aryl)dibenzothiophenium Triflates.
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Preparation of 5-(Triisopropylalkynyl) dibenzo[*b,d*]thiophenium triflate.
Org. Synth. **2019**, *96*, 258-276.
74. K.F.G. Averagesch, H. Pesch, C. Golz, M. Alcarazo
Synthesis of Alkynylthiopyridinium Salts and Their Use as Thioketene Equivalents.
Chem. Eur. J. **2019**, *25*, 10472-10477.
73. X. Li, C. Golz, M. Alcarazo
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Angew. Chem. Int. Ed. **2019**, *58*, 9496-9500.
72. L.D.M. Nicholls, M. Alcarazo
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71. H. Tinnermann, L.D.M. Nicholls, T. Johannsen, C. Wille, C. Golz, R. Goddard, M. Alcarazo
N-Arylpyridiniophosphines: Synthesis, Structure, and Applications in Au(I) Catalysis.
ACS Catal. **2018**, *8*, 10457-10463.
70. M.J. Böhm, C. Golz, I. Rüter, M. Alcarazo
Two-Step Synthesis of Unsymmetrical Diaryl Sulfides by Electrophilic Thiolation of Non-functionalized (Hetero)arenes.
Chem. Eur. J. **2018**, *24*, 15026-15035.
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68. M. Alcarazo
Synthesis, Structure, and Reactivity of Carbodiphosphoranes, Carbodicarbenes, and Related Species.
In: Gessner V. (Eds.) *Modern Ylide Chemistry. Structure and Bonding* **2018**, vol 177, pp 25-50. Springer, Cham.
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TADDOL-Derived Cationic Phosphonites: Toward an Effective Enantioselective Synthesis of [6]Helicenes via Au-Catalyzed Alkyne Hydroarylation.
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66. L. Gu, L.M. Wolf, W. Thiel, C.W. Lehmann, M. Alcarazo
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65. A.G. Barrado, J.M. Bayne, T.C. Johnstone, C.W. Lehmann, D.W. Stephan, M. Alcarazo
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64. A.G. Barrado, A. Zieliński, R. Goddard, M. Alcarazo
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M. Alcarazo
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by Electrophilic Thioalkynylation.
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Synlett **2014**, *25*, 1539-1541.
51. L. Gu, G. Gopakumar, P. Gualco, W. Thiel, M. Alcarazo
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 α -Cationic Phosphines: Synthesis and Applications.
Chem.–Eur. J. **2014**, *20*, 7868-7877.
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