

List of Publications

2024

107. S.B.H. Karnbrock, C. Golz, M. Alcarazo. "
P(ν)-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 (\pm)-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.
Chem. Eur. J. **2023**, e202203966.

2022

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 Dienes, 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.
Angew. Chem. Int. Ed. **2021**, *60*, 6943–6948.

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85. P. Redero, T. Hartung, J. Zhang, L.D.M. Nicholls, G. Zichen, M. Simon, C. Golz, M. Alcarazo
Enantioselective Synthesis of 1-Aryl Benzo[5]helicenes Using BINOL-Derived Cationic Phosponites 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.
Angew. Chem. Int. Ed. **2020**, *59*, 23299-23305.
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.
Eur. J. Org. Chem. **2020**, 6245-6254.
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.
Org. Lett. **2020**, *22*, 4932-4937.
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.
77. T. Hartung, R. Machleid, M. Simon, C. Golz, M. Alcarazo
Enantioselective Synthesis of 1,12-Disubstituted [4]Helicenes.
Angew. Chem. Int. Ed. **2020**, *59*, 5660-5664.
76. K. Kafuta, A. Korzun, M. Böhm, C. Golz, M. Alcarazo
Synthesis, Structure, and Reactivity of 5-(Aryl)dibenzothiophenium Triflates.
Angew. Chem. Int. Ed. **2020**, *59*, 1950-1955.

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75. B. Waldecker, K. Kafuta, M. Alcarazo
Preparation of 5-(Triisopropylalkynyl) dibenzo[*b,d*]thiophenium triflate.
Org. Synth. **2019**, *96*, 258-276.
74. K.F.G. Aversch, 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
5-(Cyano)dibenzothiophenium Triflate: A Sulfur-Based Reagent for Electrophilic
Cyanation and Cyanocyclizations.
Angew. Chem. Int. Ed. **2019**, *58*, 9496-9500.
72. L.D.M. Nicholls, M. Alcarazo
Applications of α -Cationic Phosphines as Ancillary Ligands in Homogeneous Catalysis.
Chem. Lett. **2019**, *48*, 1-13.

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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.
69. B. Waldecker, F. Kraft, C. Golz, M. Alcarazo. "5-(Alkynyl)dibenzothiophenium
Triflates:Sulfur-Based Reagents for Electrophilic Alkynylation". *Angew. Chem. Int. Ed.*
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TADDOL-Derived Cationic Phosphonites: Toward an Effective Enantioselective Synthesis of [6]Helicenes via Au-Catalyzed Alkyne Hydroarylation.
ACS Catal. **2018**, 8, 6079-6085.
66. L. Gu, L.M. Wolf, W. Thiel, C.W. Lehmann, M. Alcarazo
Reductive Elimination of C₆F₅-C₆F₅ from Pd(II) Complexes: Influence of α -Dicationic Chelating Phosphines.
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Dicationic phosphonium salts: Lewis acid initiators for the Mukaiyama-aldol reaction.
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64. A.G. Barrado, A. Zieliński, R. Goddard, M. Alcarazo
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Angew. Chem. Int. Ed. **2017**, 56, 13401-13405.
63. L. Gu, Y. Zheng, E. Haldón, R. Goddard, E. Bill, W. Thiel, M. Alcarazo
 α -Radical Phosphines: Synthesis, Structure, and Reactivity.
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61. E. González-Fernández, L.D.M. Nicholls, L.D. Schaaf, C. Farès, C.W. Lehmann, M. Alcarazo
Enantioselective Synthesis of [6]Carbohelicenes.
J. Am. Chem. Soc. **2017**, 139, 1428-1431.
60. J. Peña, G. Talavera, B. Waldecker, M. Alcarazo
Alkynylthioimidazolium Salts: Efficient Reagents for the Synthesis of Alkynyl Sulfides by Electrophilic Thioalkynylation.
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59. G. Mehler, P. Linowski, J. Carreras, A. Zanardi, J.W. Dube, M. Alcarazo
Bis(cyclopropenium)phosphines: Synthesis, Reactivity, and Applications.
Chem. Eur. J. **2016**, *22*, 15320-15327.
58. M. Alcarazo
Synthesis, Structure, and Applications of α -Cationic Phosphines.
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57. J. W. Dube, Y. Zheng, W. Thiel, M. Alcarazo
 α -Cationic Arsines: Synthesis, Structure, Reactivity, and Applications
J. Am. Chem. Soc. **2016**, *138*, 6869-6877.
56. E. Haldón, Á. Kozma, H. Tinnermann, L. Gu, R. Goddard, M. Alcarazo
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Amidinium Substituents.
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Bis[(dialkylamino)cyclopropenimine]-Stabilized P^{III}- and P^V-Centered Dications.
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53. S. Holle, D. Escudero, B. Inés, J. Rust, W. Thiel, M. Alcarazo
On the Reactivity of Tetrakis(trifluoromethyl)cyclopentadieneone towards
Carbon-Based Lewis Bases.
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 α -Cationic Phosphines: Synthesis and Applications.
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48. Á. Kozma, T. Deden, J. Carreras, C. Wille, J. Petušková, J. Rust, M. Alcarazo
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