

2024

192. S. Torabi, M. Jamshidi, G. Hilt *Org. Lett.* **2024**, submitted.

191. M. L. Abraham, G. Hilt *ChemElectroChem* **2024**, submitted.

190. S. Ibrahim, D. Crespo, S. Blaseio, A. Hockmann, G. Hilt, M. Oezaslan *ChemElectroChem* **2024**, e202400098.

Nanoporous Copper for the Electrosynthesis of Cyclic Carbonates from CO₂ and Epoxides.

189. J. Queder, G. Hilt *Synlett* **2024**, asap.

The Electrochemical trans-Chloroformyloxylation of Alkenes.

188. S. Kail, G. Hilt *Synlett* **2024**, asap.

The FeBr₃-Catalysed Transfer Hydrogenation of Alkenes under Mild Reaction Conditions.

187. B. P. Klein, M. A. Stoodley, D. B. Morgan, L. A. Rochford, L. B. S. Williams, P. T. P. Ryan, L. Sattler, S. M. Weber, G. Hilt, T. J. Liddy, T.-L. Lee, R. J. Maurer, D. A. Duncan *Nanoscale* **2024**, 16, 5802-5812.

Probing the role of surface termination in the adsorption of azupyrrene on copper.

186. G. Hilt *Curr. Opinion Electrochem* **2024**, 43, 101425.

Recent advances in paired electrolysis and their application in organic electrosynthesis.

2023

185. C. Fastie, L. Li, M. Bötcher, G. Hilt *J. Org. Chem.* **2023**, 88, 12526-12530.

Pre-electrolysis of LiClO₄ in Acetonitrile: Electrochemically Induced Protolytic Carbon-Carbon Bond Formation of Benzylic Ethers and Acetals with Allyl Trimethylsilane and Other Carbon Nucleophiles.

184. G. Hilt *Synlett* **2023**, 55, 565-579.

The Synthetic Approaches to 1,2-Chlorohydrins.

183. G. Hilt *Synlett* **2023**, 34, 23-28.

A Twenty-Year Survey in Low-Valent Cobalt-Catalyzed Transformations Comes to an End - A Farewell.

2022

182. B. P. Klein, M. A. Stoodley, M. Edmondson, L. A. Rochford, M. Walker, L. Sattler, S. M. Weber, G. Hilt, L. B. S. Williams, T.-L. Lee, A. Saywell, R. J. Maurer, D. A. Duncan *Appl. Phys. Lett.* **2022**, 121, 191603.

Using polycyclic aromatic hydrocarbons for graphene growth on Cu(111) under ultra-high vacuum.

181. M. Jamshidi, C. Fastie, G. Hilt *Synthesis* **2022**, 54, 4661-4672.

Applications of Alternating Current/Alternating Potential Electrolysis in Organic Synthesis.

180. B. P. Klein, A. Ihle, S. R. Kachel, L. Ruppenthal, S. J. Hall, L. Sattler, S. M. Weber, J. Herritsch, A. Jaegermann, D. Ebeling, R. J. Maurer, G. Hilt, R. Tonner-Zech, A. Schirmeisen, J. M. Gottfried *ACS Nano* **2022**, *16*, 11979-11987.

Topological Stone-Wales Defects Enhance Bonding and Electronic Coupling at the Graphene/Metal Interface.

2021

179. J. Fährmann, L. Hermann, G. Hilt *Synthesis* **2021**, *54*, 2005-2018.

The Application of 1,2-Oxazines as Chiral Cyclic Weinreb-Amide Type Auxiliaries Leading to a Three-Component, One-Pot Reaction.

178. J. Strehl, C. Fastie, G. Hilt *Chem. Eur. J.* **2021**, *27*, 17341-17345.
The Electrochemical cis-Chlorination of Alkenes.

177. L. Li, S. Kail, S. M. Weber, G. Hilt *Angew. Chem.* **2021**, *133*, 23853-23858; *Angew. Chem. Int. Ed.* **2021**, *60*, 23661-23666.

Indium-Catalysed Transfer-Hydrogenation for the Reductive Cyclisation of 2-Alkynyl Enones towards Trisubstituted Furans.

176. J. Strehl, G. Hilt *Eur. J. Org. Chem.* **2021**, 35-39.

Synthesis of Symmetrical and Unsymmetrical Thiosulfonates from Disulfides via Electrochemical Induced Disulfide Bond Metathesis and Site-Selective Oxidation.

175. J. Fährmann, G. Hilt *Angew. Chem.* **2021**, *133*, 20476-20480; *Angew. Chem. Int. Ed.* **2021**, *60*, 20313-20317.

Alternating Current Electrolysis as Efficient Tool for the Direct Electrochemical Oxidation of Hydroxamic Acids for Acyl Nitroso Diels-Alder Reactions.

174. L. Li, G. Hilt *Chem. Eur. J.* **2021**, *27*, 11221-11225.

Indium Tribromide-catalysed Transfer-Hydrogenation - Expanding the Scope of the Hydrogenation and of the Regiodivergent DH or HD Addition to Alkenes.

173. J. Strehl, M. L. Abraham, G. Hilt *Angew. Chem.* **2021**, *133*, 10084-10088; *Angew. Chem. Int. Ed.* **2021**, *60*, 9996-10000.

Linear Paired Electrolysis - Realizing 200% Current Efficiency for Stoichiometric Transformations - The Electrochemical Bromination of Alkenes.

172. S. M. Weber, G. Hilt *Front. Chem.* **2021**, *9*, 635826.

Late 3d Metal-Catalyzed (Cross)-Dimerization of Terminal and Internal Alkynes.

171. B. P. Klein, L. Ruppenthal, S. J. Hall, L. E. Sattler, S. M. Weber, J. Herritsch, A. Jaegermann, R. Maurer, G. Hilt, M. Gottfried *ChemPhysChem* **2021**, *22*, 1065-1073.

Topology Effects in Molecular Organic Electronic Materials: Pyrene and Azupyrene.

170. L. E. Sattler, G. Hilt *Chem. Eur. J.* **2021**, *27*, 605-608.

Iodonium Cation-Pool Electrolysis for the Three-Component Synthesis of 1,3-Oxazoles.

2020

169. C. Kohlmeyer, A. Schäfer, P. H. Huy, G. Hilt *ACS Catal.* **2020**, *10*, 11567-11577.
Formamide Catalyzed Nucleophilic Substitutions: Mechanistic Insight and Rationalization of Catalytic Activity.
168. J. Strehl, G. Hilt *Org. Lett.* **2020**, *22*, 5968-5972.
Electrochemical, Iodine-Mediated α -CH Amination of Ketones by Umpolung of Silyl Enol Ethers.
167. C. K. Krug, M. Zugermeier, J. Kuttner, M. Schmid, G. Hilt, J. M. Gottfried *J. Phys. Chem.* **2020**, *124*, 15928-15934.
Polymorphism at the Metal/Organic Interface: Hybrid Phase with Alternating Coplanar and Vertical Adsorption Geometry.
166. L. E. Sattler, G. Hilt *J. Org. Chem.* **2020**, *85*, 7595-7602.
Allylic Oxidation of Ester-substituted 1,4-Dienes.
165. S. M. Weber, J. Queder, G. Hilt *Chem. Eur. J.* **2020**, *26*, 12129-12133.
Ligand-Controlled Diastereoselective Cobalt-Catalysed Hydroalkynylation of Terminal Alkynes to E- or Z-1,3-Enynes.
164. E. Babaoglu, G. Hilt *Chem. Eur. J.* **2020**, *26*, 8879-8884.
Electrochemical Iodine-Mediated Oxidation of Enamino-Esters to 2H-Azirine-2-Carboxylates supported by Design of Experiments.
163. L. Li, G. Hilt *Org. Lett.* **2020**, *22*, 1628-1632.
Regiodivergent DH or HD Addition to Alkenes: Deuterohydrogenation vs. Hydrodeuterogenation.
162. M. Hapke, G. Hilt, *Cobalt-Catalysis in Organic Synthesis: Methods and Reactions*, **2020**, Wiley-VCH.
161. L. E. Sattler, C. J. Otten, G. Hilt *Chem. Eur. J.* **2020**, *26*, 3129-3136.
Alternating Current Electrolysis for the Electrocatalytic Synthesis of Mixed Disulfide via Sulfur-Sulfur Bond Metathesis towards Dynamic Disulfide Libraries.
160. J. Strehl, C. Kahrs, T. Müller, G. Hilt, J. Christoffers *Chem. Eur. J.* **2020**, *26*, 3222-3225.
Electrochemical Induced Ring Transformation of Cyclic α -(ortho-Iodophenyl)- β -oxoesters.
159. G. Hilt *ChemElectroChem.* **2020**, *7*, 395-405.
Basic Strategies and Types of Applications in Organic Electrochemistry.

2019

- 92a. F. Pünner, A. Schmidt, G. Hilt *Angew. Chem.* **2019**, *131*, 17261-17262.
Berichtigung: Up the Hill: Selektive Doppelbindungsomerisierung von terminalen 1,3-Dienen zu Z-1,3-Dienen oder 2Z,4E-Dienen.
158. F. Weber, G. Hilt *Cobalt-catalysed Hydrogenations*“ in: „*Cobalt in Organic Synthesis*“, J. Teichert (Ed.), VCH, **2019**.

157. J. Strehl, G. Hilt *Org. Lett.* **2019**, *21*, 5259-5263.
Electrochemical, Manganese-Assisted Carbon-Carbon Bond Formation between β -Keto Esters and Silyl Enol Ethers.
156. S. M. Weber, G. Hilt *Org. Lett.* **2019**, *21*, 4106-4110.
Chemoselective Cobalt(I)-Catalyzed Cyclotrimerisation of (Un)Symmetrical 1,3-Butadiynes for the Synthesis of 1,2,4-Regioisomers.

2018

155. Q. Fan, S. Werner, J. Tschakert, D. Ebeling, A. Schirmeisen, G. Hilt, W. Hieringer, J. M. Gottfried *J. Am. Chem. Soc.* **2018**, *140*, 7526-7532.
Precise Monoselective Aromatic C-H Bond Activation by Chemisorption of Meta-Aryne on a Metal Surface.
154. R. Möckel, E. Babaoglu, G. Hilt *Chem. Eur. J.* **2018**, *59*, 15781-15785.
Iodine(III)-mediated Electrochemical Trifluoroethoxylactonisation - Rational Reaction Optimisation and Prediction of Mediator Activity.
153. Q. T. Fan, S. Werner, J. Tschakert, D. Ebeling, A. Schirmeisen, G. Hilt, W. Hieringer, J. M. Gottfried *J. Am. Chem. Soc.* **2018**, *140*, 7526-7532.
Precise Mono-Selective Aromatic C-H Bond Activation by Chemisorption of Meta-Aryne on a Metal Surface.
152. Q. T. Fan, L. Liu, J. Dai, T. Wang, H. Ju, J. Zhao, J. Kuttner, G. Hilt, J. M. Gottfried, J. F. Zhu *ACS Nano* **2018**, *12*, 2267-2274.
Surface Adatom Mediated Structural Transformation in Bromoarene Monolayers: Precursor Phases in Surface Ullmann Reaction.
151. C. Kohlmeyer, M. Klüppel, G. Hilt *J. Org. Chem.* **2018**, *83*, 3915-3920.
Synthesis of Nitrosobenzene Derivatives via Nitrosodesilylation Reaction.
150. M. Ballmann, F. Weber, L. E. Sattler, G. Hilt *Synthesis* **2018**, *50*, 1711-1720.
Synthesis of non conjugated Trienes via in situ Hydrovinylation/Wittig Olefination of unsaturated Phosphonium Salts.
149. R. Möckel, J. Hille, E. Winterling, S. Weidmüller, T. M. Faber, G. Hilt *Angew. Chem.* **2018**, *130*, 450-454; *Angew. Chem. Int. Ed.* **2018**, *57*, 442-445.
Elektrochemische Synthese von Aryliodiden durch anodische Iododesilylierung.

2017

148. L. Li, E. Babaoglu, K. Harms, G. Hilt *Eur. J. Org. Chem.* **2017**, 4543-4547.
Expanding Blaise-Type Reactions towards Indium-Mediated Transformations of α -Bromo- β -keto Esters with Nitriles.
147. M. Chen, J. Shang, Y. Wang, K. Wu, J. Kuttner, G. Hilt, W. Hieringer, J. M. Gottfried *ACS Nano* **2017**, *11*, 134-143.
On-Surface Synthesis and Characterization of Honeycombene Oligophenylene Macrocycles.

146. P. Röse, G. Hilt *Adv. Synth. Catal.* **2017**, *359*, 1359-1372.
Efficient Oxidative Coupling of Arenes via Electrochemical Regeneration of 2,3-Dichloro-5,6-dicyano-1,4-benoquinone (DDQ) under Mild Reaction Conditions.
145. S. M. Weber, G. Hilt *Org. Lett.* **2017**, *19*, 564-567.
Control of the Regioselectivity in Cobalt- versus Ruthenium-Catalyzed Alder-ene Reactions of Unsymmetrical 1,3-Diynes.
144. Q. Fan, T. Wang, J. Dai, J. Kuttner, G. Hilt, J. M. Gottfried, J. Zhu *ACS Nano* **2017**, *11*, 5070-5079
On-Surface Pseudo-High Dilution Synthesis of Macrocycles: Principle and Mechanism.
143. F. Weber, P. S. Steinlandt, M. Ballmann, G. Hilt *Synthesis* **2017**, *49*, 440-450.
Structure dependent Nickel-catalysed Transposition of N-Allylamides to E- or Z-Enamides.

2016

142. A. Nödling, R. Möckel, R. Tonner, G. Hilt *Chem. Eur. J.* **2016**, *22*, 13171-13180.
Lewis acids as activators in CBS-catalysed Diels-Alder reactions - distortion induced Lewis acidity enhancement of SnCl₄.
141. E. Babaoglu, K. Harms, G. Hilt *Synlett* **2016**, *27*, 1820-1823.
Indium-Mediated Blaise-Type Reaction of Bromomalonates with Nitriles and Isocyanates.
140. Q. Fan, J. Dai, T. Wang, J. Kuttner, G. Hilt, J. M. Gottfried, J. Zhu *ACS Nano* **2016**, *10*, 3747-3754.
Confined Synthesis of Organometallic Chains and Macrocycles by Cu-O Surface Templating.
139. J. Dai, Q. Fan, T. Wang, J. Kuttner, G. Hilt, J. M. Gottfried, J. Zhu *Phys. Chem. Chem. Phys.* **2016**, *18*, 20627-20634.
The role of the substrate structure in the on-surface synthesis of organometallic and covalent oligophenylene chains.
138. F. Weber, M. Ballmann, C. Kohlmeyer, G. Hilt *Org. Lett.* **2016**, *18*, 548-551.
Nickel-Catalyzed Double Bond Transposition of Alkenyl-Boronates for in situ syn-Selective Allylboration Reactions.
137. P. Röse, G. Hilt *Synthesis* **2016**, *48*, 463-492.
Cobalt-catalyzed Bond Formation Reactions; Part 2.

2015

136. P. Röse, C. C. M. Garcia, F. Pünner, K. Harms, G. Hilt *J. Org. Chem.* **2015**, *80*, 7311-7316.
Cobalt-catalyzed Cross-Benzannulation of Conjugated Enynes and Diynes.
135. F. Weber, A. Schmidt, P. Röse, M. Fischer, O. Burghaus, G. Hilt *Org. Lett.* **2015**, *17*, 2952-2955.
Double Bond Isomerization - Highly Reactive Nickel Catalyst Applied in the Synthesis of the Pheromone (9Z,12Z)-Tetradeca-9,12-dienyl Acetate.
134. C. Wang, Y. Zheng, H. Huo, P. Röse, L. Zhang, K. Harms, G. Hilt, E. Meggers *Chem. Eur. J.* **2015**, *21*, 7355-7359.
Merger of Visible Light Induced Oxidation and Enantioselective Alkylation with a Chiral Iridium Catalyst.

133. G. Hilt *ChemCatChem* **2015**, 7, 1639-1641.
Asymmetric Nickel-Catalysed Cross-Hydrovinylation of Two Terminal Alkenes.
132. R. Möckel, G. Hilt *Org. Lett.* **2015**, 17, 1644-1647.
Synthesis of Polysubstituted Iodobenzene Derivatives from Alkynylsilanes and 1,3-Dienes via Diels-Alder / Oxidation / Iodination Reaction Sequence.
131. J. Kuttner, G. Hilt *Synthesis* **2015**, 47, 1170-1180.
Synthesis of Acyclic Polycarbonyl Compounds via Ozonolysis of 1,4-Cyclohexadienes.
130. P. Röse, S. Emge, J.-i. Yoshida, G. Hilt *Beilstein J. Org. Chem.* **2015**, 11, 174-183.
Electrochemical Selenium- and Iodonium-Initiated Cyclisation of Hydroxy-functionalised 1,4-Dienes.
129. J. Shang, Y. Wang, M. Chen, J. Dai, X. Zhou, J. Kuttner, G. Hilt, J. M. Gottfried, K. Wu *Nature Chem.* **2015**, 7, 389-393.
Molecular Sierpinski Triangles.
128. A. Schmidt, A. Nödling, G. Hilt *Angew. Chem.* **2015**, 127, 814-818; *Angew. Chem. Int. Ed.* **2015**, 54, 801-804.
An Alternative Mechanism for the Cobalt-Catalyzed Isomerization of Terminal Alkenes to (Z)-2-Alkenes.

2014

127. L. Kersten, G. Hilt *J. Org. Chem.* **2014**, 79, 11661-11673.
Synthesis of Tri-, Tetra- and Pentacarbonyl Derivatives via Ozonolysis of 1,4-Dienes and Cyclisation to Polyaromatic Systems.
126. H. Huo, X. Shen, C. Wang, L. Zhang, P. Röse, L.-A. Chen, K. Harms, M. Marsch, G. Hilt, E. Meggers *Nature* **2014**, 515, 100-103.
Asymmetric photoredox transition-metal catalysis activated by visible light.
125. A. Nödling, G. Jakab, P. R. Schreiner, G. Hilt *Eur. J. Org. Chem.* **2014**, 6394-6398.
³¹P NMR Spectroscopically Quantified Hydrogen-Bonding Strength of Thioureas and Their Activity in Diels-Alder Reactions.
124. J. Kuttner, G. Hilt *Macromolecules* **2014**, 47, 5532-5541.
Regiodivergent Cobalt-Catalysed Diels-Alder Reactions for the Synthesis of Bifunctional Building Blocks and their Suzuki-Cross-Coupling Polymerisations.
123. G. Hilt *ChemCatChem* **2014**, 6, 2484-2485.
Double Bond Isomerisation and Migration - New Playgrounds for Transition Metal-Catalysis.
122. A. Schmidt, E. Meiterth, G. Hilt *Synthesis* **2014**, 46, 2040-2044.
Cobalt-Catalysed Transformations of 1,3,5-Hexatrienes on a Large Scale.
121. P. Susnik, G. Hilt *Organometallics* **2014**, 33, 5907-5910.
Homoallylpinacolboronic Ester as Alkene Component in Cobalt-Catalyzed Alder-ene Reactions.
120. F. Pünner, G. Hilt *Chem. Commun.* **2014**, 50, 7310-7313.
Zinc-mediated CH-activation of tetrahydrofuran under mild conditions for the regioselective addition to aryl-propiolates.

119. Q. Fan, C. Wang, L. Liu, J. Zhao, J. Kuttner, G. Hilt, J. M. Gottfried *J. Phys. Chem.* **2014**, *118*, 13018-13025.
Covalent, Organometallic and Halogen Bonded Nanomeshes from Tetrabromo-Terphenyl by Surface-Assisted Synthesis on Cu(111).
118. A. Schmidt, G. Hilt *Chem. Asian J.* **2014**, *9*, 2407-2410.
Unprecedented Cobalt-Catalysed Isomerisation Reaction to Single Skipped 2,4,7-Trienes Applied in the Synthesis of Urushiol.
117. G. Hilt *Chem. Rec.* **2014**, *14*, 386-396.
1,4-Cyclohexadienes - Easy Access to a Versatile Building Block via Transition Metal-Catalysed Diels-Alder Reactions.
116. A. Nödling, K. Müther, V. Rohde, G. Hilt, M. Oestreich *Organometallics* **2014**, *33*, 302-308.
Ferrocene-Stabilized Silicon Cations as Catalysts for Diels-Alder Reactions: Attempted Experimental Quantification of Lewis Acidity and ReactIR Kinetic Analysis.
115. G. Hilt, J. Janikowski, M. Schwarzer, O. Burghaus, D. Sakow, M. Bröring, M. Drüscher, B. Huber, B. Roling, G. Frenking *J. Organomet. Chem.* **2014**, *749*, 219-223.
Studies of Electronic Effects of Modified Pyridine-Imine Ligand Utilised in Cobalt-catalysed meta-selective Diels-Alder Reactions.
114. Q. Fan, C. Wang, Y. Han, J. Zhu, J. Kuttner, G. Hilt, J. M. Gottfried *ACS Nano* **2014**, *8*, 709-718.
Surface-assisted Formation, Assembly and Dynamics of Planar Organometallic Macrocycles and Zigzag Shaped Polymer Chains with C-Cu-C Bonds.
113. P. Raster, A. Schmidt, M. Rambow, N. Kuzmanovic, B. König, G. Hilt *Chem. Commun.* **2014**, *50*, 1864-1866.
Immobilisation of Photoswitchable Diarylhexenes Synthesised via Cobalt-Mediated Diels-Alder Reaction.
112. A. Miersch, K. Harms, G. Hilt *Chem. Commun.* **2014**, *50*, 542-544.
Zinc-Mediated Addition of Diethyl Bromomalonate to Alkynes for the Initiation of Multi-Component Reactions toward Polysubstituted Pyranones and Tetracarbonyl Derivatives.

2013

111. F. Pünner, J. Schieven, G. Hilt *Org. Lett.* **2013**, *15*, 4888-4891.
Synthesis of Fluorenone and Anthraquinone Derivatives from Aryl- and Aroyl-substituted Propiolates.
110. A. Miersch, C. Kohlmeyer, G. Hilt *Synthesis* **2013**, 3228-3232.
Zinc-Mediated Regiodiverse Synthesis of Vinyl Bromide Derivatives and their in situ Palladium-catalysed Cross-Coupling Reactions.
109. F. Pünner, G. Hilt *Eur. J. Org. Chem.* **2013**, 5580-5584.
Zinc/Iron-mediated Ring-Opening of Dibromocyclopropanes for in situ Diels-Alder Reactions with Electron-deficient Aldehydes and Imines.
108. L. Fiebig, J. Kuttner, G. Hilt, M. Schwarzer, G. Frenking, H.-G. Schmalz, M. Schäfer *J. Org. Chem.* **2013**, *78*, 10485-10493.
Cobalt Catalysis in the Gas Phase: Experimental Characterisation of Cobalt(I) Complexes as Intermediates in Regioselective Diels-Alder Reactions.

107. A. Schmidt, G. Hilt *Org. Lett.* **2013**, *15*, 2708-2711.
Scope and Limitations of 1,3,5-Hexatriene Derivatives in Regioselective Cobalt-Catalyzed Reactions.
106. P. Röse, F. Pünner, G. Hilt, K. Harms *Synlett* **2013**, 1101-1104.
Efficient Synthesis of 2-Pyridylenynes and Application in Cobalt-Catalysed Benzannulation Reactions.
105. Q. Fan, C. Wang, Y. Han, J. Zhu, W. Hieringer, J. Kuttner, G. Hilt, J. M. Gottfried *Angew. Chem.* **2013**, *125*, 4766-4770; *Angew. Chem. Int. Ed.* **2013**, *52*, 4668-4672.
Surface-Assisted Organic Synthesis of Hyperbenzene Nanotroughs.
104. G. Hilt, *Encyclopedia of Reagents for Organic Synthesis*, Wiley, **2013**.
4,4,5,5-Tetramethyl-2-(2-methylene-3-buten-1-yl)-1,3,2-dioxaborolane.

2012

103. M. Arndt, M. Dindaroğlu, H.-G. Schmalz, G. Hilt *Synthesis* **2012**, *44*, 3534-3542.
Ligand Control of the Cobalt-Catalysed 1,4-Hydrovinylation Reaction.
102. F. Erver, J. R. Kuttner, G. Hilt *J. Org. Chem.* **2012**, *77*, 8375-8385.
Multidirectional Cobalt-Catalyzed Diels-Alder / Hydrovinylation Sequences.
101. A. Miersch, G. Hilt *Chem. Eur. J.* **2012**, *18*, 9798-9801.
Stereodivergent Zinc-Mediated Three-Component Synthesis of Tri- and Tetrasubstituted Alkenes.
100. F. Erver, G. Hilt *J. Org. Chem.* **2012**, *77*, 5216-5219.
Cobalt- versus Ruthenium-catalyzed Alder-ene Reaction for the Synthesis of Credneramides A and B.
99. F. Erver, G. Hilt *Org. Lett.* **2012**, *14*, 1884-1887.
Double- and Triple-Cobalt-Catalysis in Multi-Component Reactions.
98. G. Hilt *Eur. J. Org. Chem.* **2012**, 4441-4451.
The Hydrovinylation Reactions - Atom-Economic Transformations with Steadily Increasing Synthetic Potential.
97. G. Hilt, F. Pünner *Diels-Alder Reactions*, in *Transition-Metal-Mediated Aromatic Ring Construction*, K. Tanaka, (Ed.), Wiley, **2012**, 341-353.
96. M. Arndt, G. Hilt, A. F. Khlebnikov, S. I. Kozhushkov, A. de Meijere *Eur. J. Org. Chem.* **2012**, 3112-3121. Correction: *Eur. J. Org. Chem.* **2013**, 1171-1172.
Diels-Alder Reactions for the Construction of Cyclopropylarenes.
95. F. Pünner, G. Hilt *Chem. Commun.* **2012**, 3617-3619.
Regioselective Solvent-dependent Benzannulation of Conjugated Enynes.
94. J. R. Kuttner, S. Warratz, G. Hilt *Synthesis* **2012**, *44*, 1293-1303.
Straightforward Synthesis of Non-Conjugated Cyclohex-3-enones and Conjugated 4-Methylene-cyclohex-2-enone Derivatives.
93. L. Kersten, G. Hilt *Adv. Synth. Catal.* **2012**, *354*, 863-869.
Regioselective Cobalt-Catalysed Hydrovinylation for the Synthesis of non-conjugated Enones and 1,4-Diketones.

92. F. Pünner, A. Schmidt, G. Hilt *Angew. Chem.* **2012**, *124*, 1296-1299; *Angew. Chem. Int. Ed.* **2012**, *51*, 1270-1273.

Up the Hill: Selective Double Bond Isomerisation of Terminal 1,3-Dienes towards Z-1,3-Dienes or 2Z,4E-2,4-Dienes.

91. M. Danz, R. Tonner, G. Hilt *Chem. Commun.* **2012**, 377-379.

Understanding the Regioselectivity in Scholl Reactions for the Synthesis of Oligoarenes.

90. G. Kiefer, J. Ruiz, E. Solari, G. Hilt, K. Severin *Eur. J. Org. Chem.* **2012**, 93-98.

Ruthenium-catalyzed Sequential Enyne Cross-Metathesis/ATRA Reactions.

2011

89. M. Arndt, M. Dindaroğlu, H.-G. Schmalz, G. Hilt *Org. Lett.* **2011**, *13*, 6236-6239.

Gaining Absolute Control of the Regiochemistry in the Cobalt-catalyzed Hydrovinylation Reaction.

88. G. Hilt, A. Nödling *Eur. J. Org. Chem.* **2011**, 7071-7075.

The Correlation of Lewis Acidities of Silyl Triflates with Reaction Rates of Catalyzed Diels-Alder Reactions.

87. F. Erver, G. Hilt *Org. Lett.* **2011**, *13*, 5700-5703.

Multi-Component Regio- and Diastereoselective Cobalt-catalyzed Hydrovinylation-Allylation Reaction Sequence.

86. G. Hilt, F. Pünner, J. Möbus, V. Naseri, M. A. Bohn *Eur. J. Org. Chem.* **2011**, 5962-5966.

A Lewis Acidity Scale in Relation to Rate Constants of Lewis Acid Catalysed Organic Reactions.

85. M. A. Bohn, A. Schmidt, G. Hilt, M. Dindaroğlu, H.-G. Schmalz *Angew. Chem.* **2011**, *123*, 9863-9666; *Angew. Chem. Int. Ed.* **2011**, *50*, 9689-9693.

Cobalt-catalysed 1,4-Hydrobutadienylation of 1-Aryl-1,3-butadienes with 2,3-Dimethyl-1,3-butadiene.

84. M. A. Bohn, A. Paul, G. Hilt "Electrochemical Initiated Radical Reactions" Wiley-VCH, **2012**.

83. G. Hilt *Synlett* **2011**, 1654-1659.

Cobalt(I)-catalysed Reactions for the Synthesis of 1,4-Dienes - Genesis of Two Synthetic Methods.

82. F. Erver, G. Hilt, K. Harms *Synthesis* **2011**, 972-978.

Cobalt(I)-Catalysis in the Diastereoselective Two-Step Synthesis of Tricyclic Systems.

81. P. Raster, S. Weiss, G. Hilt, B. König *Synthesis* **2011**, 905-908.

Synthesis and Photoisomerisation of Diarylcyclobutenes.

80. G. Hilt, F. Erver, K. Harms *Org. Lett.* **2011**, *13*, 304-307.

Regioselective Cobalt-Catalyzed Alder-ene Reaction towards Silicon- and Boron-Functionalized Building Blocks.

79. M. Danz, G. Hilt *Adv. Synth. Catal.* **2011**, *353*, 303-308.

Regiodiverse Three-Component Synthesis of Arenes.

78. G. Hilt, S. Roesner *Synthesis* **2011**, 662-668.

Substrate-controlled Regioselective Cobalt(I)-catalysed 1,4-Hydrovinylation Reactions.

2010

77. L. Kersten, S. Roesner, G. Hilt *Org. Lett.* **2010**, *12*, 4920-4923.
Synthesis and Characterisation of Polycarbonyl Compounds via their BF₃-Adducts.
76. M. Arndt, A. Reinhold, G. Hilt *J. Org. Chem.* **2010**, *75*, 5203-5210.
Cobalt-catalyzed 1,4-Hydrovinylation of Allylsilanes and Allylboronic Esters for the Synthesis of Hydroxy-functionalized 1,4-Dienes.
75. A.-L. Auvinet, J. P. A. Harrity, G. Hilt *J. Org. Chem.* **2010**, *75*, 3893-3896.
Ambient Temperature Cobalt-Catalyzed Cycloaddition Strategies to Aromatic Boronic Esters.
74. M. A. Bohn, G. Hilt, P. Bolze *ChemSusChem* **2010**, *3*, 823-828.
Electrochemical Functionalisation of 1,3-Diisopropylbenzene.
73. G. Hilt, A. Paul, J. Treutwein *Org. Lett.* **2010**, *12*, 1536-1539.
Cobalt-Catalysis at the Crossroads – Cobalt-catalyzed Alder-ene Reaction versus [2+2] Cycloaddition.
72. G. Hilt, M. Arndt, D. F. Weske *Synthesis* **2010**, 1321-1324.
Cobalt-Generated 1,4-Dienes as Synthons for 1,3-Dicarbonyl Compounds and their Application towards Natural Product Syntheses.

2009

- 71a. G. Hilt - Authors Profile *Angew. Chem.* **2009**, *121*, 8106; *Angew. Chem. Int. Ed.* **2009**, *48*, 7964.
71. H. P. Nayek, G. Hilt, S. Dehnen *Eur. J. Inorg. Chem.* **2009**, 4205-4208.
Synthesis, Structure and Electrochemical Properties of a Ferrocene-Bridged Bis[tris(arylselenato)stannyl] Compound.
70. G. Hilt, M. Danz, J. Treutwein *Org. Lett.* **2009**, *11*, 3322-3325.
Cobalt-Catalyzed 1,4-Hydrovinylation of Styrenes and 1-Aryl-1,3-butadienes.
69. G. Hilt, A. Paul, C. Hengst *Synthesis* **2009**, 3305-3310.
Cobalt-catalysed [6+2]-Cycloaddition of Internal Alkynes and Terminal Alkenes with Cycloheptatriene.
68. G. Hilt *Angew. Chem.* **2009**, *121*, 6508-6511; *Angew. Chem. Int. Ed.* **2009**, *48*, 6390-6393.
Transition Metal-Catalysed Ring Opening of Hetero-Diels-Alder Adducts.
67. G. Hilt, D. Weske *Chem. Soc. Rev.* **2009**, *38*, 3082-3091.
Aromatic Compounds as Synthons for 1,3-Dicarbonyl Derivatives.
66. G. Hilt, P. Rinze "Chemisches Praktikum für Mediziner" 7. Auflage, Vieweg-Teubner.
65. G. Hilt, J. Treutwein *Chem. Commun.* **2009**, 1395-1397.
Cobalt-catalyzed Hydrovinylation as the Key Step in a Short Synthesis of Moenocinol.
64. G. Hilt, C. Hengst, M. Arndt *Synthesis* **2009**, 395-398.
The Unprecedented Cobalt-catalysed oxidative Glaser Coupling under Reductive Conditions.

63. G. Hilt, J. Janikowski *Org. Lett.* **2009**, *11*, 773-776.
Regioselective Cobalt-catalysed Diels-Alder Reactions of Silicon-functionalized Terminal and Internal Alkynes.

2008

62. W. Hess, J. Treutwein, G. Hilt *Synthesis* **2008**, 3537-3562.
Cobalt-Catalysed Carbon-Carbon Bond Formation Reactions.
61. J. Treutwein, G. Hilt *Angew. Chem.* **2008**, *120*, 6916-6919; *Angew. Chem. Int. Ed.* **2008**, *47*, 6811-6813.
Cobalt-catalysed [2+2]-Cycloaddition.
60. G. Hilt, M. Danz *Synthesis* **2008**, 2257-2263.
Regioselective Cobalt-catalysed Diels-Alder Reaction towards 1,3-di- and 1,2,3-trisubstituted Benzene Derivatives.
59. G. Hilt, A. Paul, K. Harms *J. Org. Chem.* **2008**, *73*, 5187-5190.
Cobalt-catalysed intermolecular [2+2+2]-Cycloaddition for the Synthesis of 1,3-Cyclohexadienes.
58. G. Hilt, J. Janikowski *Angew. Chem.* **2008**, *120*, 5321-5323; *Angew. Chem. Int. Ed.* **2008**, *47*, 5243-5245.
Kobalt-katalysierte [4+2+2]-Cycloaddition zur Synthese von 1,3,6-Cyclooctatrienen.
57. G. Hilt, C. Hengst, W. Hess *Eur. J. Org. Chem.* **2008**, 2293-2297.
Solvent Dependent Regiochemical Cyclotrimerization of Phenylacetylene with Cobalt Disulfide Ligands. A Case Study.
56. G. Hilt, W. Hess, K. Harms *Synthesis* **2008**, 75-78.
Cobalt-catalyzed [2+2+2]-Cycloaddition of Phenylacetylene with 1,3-Dienes for the Synthesis of Vinyl-substituted 1,4-Diphenyl-1,3-Cyclohexadienes.
55. G. Hilt, J. Janikowski "Cycloadditions and Ring Expansion Reactions" in "Iron-Catalysis in Organic Chemistry", B. Plietker, (Ed.), Wiley-VCH, **2008**.
54. P. Mörschel, J. Janikowski, G. Hilt, G. Frenking *J. Am. Chem. Soc.* **2008**, *130*, 8952-8966.
Ligand-tuned Regioselectivity of a Cobalt Catalyzed Diels-Alder Reaction. A Theoretical Study.

2007

53. G. Hilt, J. Treutwein *Angew. Chem.* **2007**, *119*, 8653-8655; *Angew. Chem. Int. Ed.* **2007**, *46*, 8500-8502.
Kobalt-katalysierte Alder-En-Reaktion.
52. G. Hilt, C. Hengst *J. Org. Chem.* **2007**, *72*, 7337-7342.
A Concise Synthesis of Substituted Stilbenes and Styrenes from Propargylic Phosphonium Salts by a Cobalt-catalyzed Diels-Alder / Wittig Olefination Reaction Sequence.
51. G. Hilt, W. Hess, C. Hengst *Comp. Heterocycl. Chem. III (Review)* **2007**, Vol. 11, 351-366.
Bicyclic 5-5 Systems with One Bridgehead N - Four Extra Heteroatoms 3 : 1.

50. G. Hilt, P. Rinze "Chemisches Praktikum für Mediziner", 6. Auflage, **2007**, Teubner Verlag.
49. G. Hilt, P. Bolze, K. Harms *Chem. Eur. J.* **2007**, 13, 4312-4325.
An Improved Catalyst System for the Iron-catalyzed Intermolecular Ring Expansion Reaction of Epoxides.
48. G. Hilt, P. Bolze, M. Heitbaum, K. Hasse, K. Harms, W. Massa *Adv. Synth. Catal.* **2007**, 349, 2018-2026.
Synthesis of Cylopenta[c]furanes by an Intramolecular Ring Expansion Reaction.
47. T. Linker, T. Krüger, W. Hess, G. Hilt *Arkivoc* **2007**, 8, 85-96.
Photooxygenation of Chiral 1,3-Cyclohexadienes: Strong influence of substituents on the Stereo- and Chemoselectivity.

2006

46. G. Hilt, C. Hengst *Synlett* **2006**, 3247-3250.
Propargylic Phosphonium Salts in Cobalt-catalysed Diels-Alder Reactions.
45. G. Hilt, J. Janikowski, W. Hess *Angew. Chem.* **2006**, 118, 5328-5331; *Angew. Chem. Int. Ed.* **2006**, 45, 5204-5206.
Meta-dirigierende Kobalt-katalysierte Diels-Alder-Reaktionen.
44. G. Hilt, W. Hess, K. Harms *Org. Lett.* **2006**, 8, 3287-3290.
Asymmetric Cobalt-catalyzed Diels-Alder Reaction of a Boron-functionalized 1,3-Diene with Alkynes.
43. G. Hilt, C. Walter, P. Bolze *Adv. Synth. Catal.* **2006**, 348, 1241-1247.
Iron-Salen Complexes as Efficient Catalysts in Ring Expansion Reactions of Epoxyalkenes.
42. G. Hilt, F. Galbiati *Synthesis* **2006**, 3589-3596.
Rhodium- or Copper-catalysed CH-Insertion of Carbenoids into Dihydroaromatic Compounds and Acyclic 1,4-Dienes.

41. G. Hilt, F. Galbiati *Org. Lett.* **2006**, 8, 2195-2198.
Regioselective Carbene Insertion on Polysubstituted Dihydroaromatic Compounds.

40. G. Hilt, F. Galbiati, K. Harms *Synthesis* **2006**, 3575-3584.
A Modular Approach for the Synthesis of Dibenzo-Azepine Derivatives.

2005

39. G. Hilt, P. Bolze *Synthesis* **2005**, 2091-2114.
Boron-Substituted Building Blocks in Diels-Alder and other Cycloaddition Reactions.
38. G. Hilt, W. Hess, F. Schmidt *Eur. J. Org. Chem.* **2005**, 2526-2533.
Dihydroaromatic Boronic Esters as Building Blocks for the Synthesis of Phenanthrene and Phenanthridine Derivatives.
37. G. Hilt, W. Hess, T. Vogler, C. Hengst *J. Organomet. Chem.* **2005**, 690, 5170-5181.
Ligand and Solvent Effects on Cobalt(I)-catalysed Reactions: Alkyne Dimerisation versus [2+2]-Cyclotrimerisation versus Diels-Alder Reaction versus [4+2+2]-Cycloaddition.

36. G. Hilt, P. Bolze, I. Kieltsch *Chem. Commun.* **2005**, 1996-1998.
An Iron-catalysed Chemo- and Regioselective Tetrahydrofuran Synthesis.
Addition/Correction: *Chem. Commun.* **2006**, 1673.
35. G. Hilt, F. Galbiati *Synlett* **2005**, 829-833.
Cobalt(I)-catalysed Neutral Diels-Alder Reactions of Nitrogen-functionalised Alkynes.
34. G. Hilt, T. Vogler, W. Hess, F. Galbiati *Chem. Commun.* **2005**, 1474-1475.
A Simple Cobalt Catalyst System for the Efficient and Regioselective Cyclotrimerisation of Alkynes.
33. G. Hilt, S. Lüers, K. I. Smolko *Org. Lett.* **2005**, 7, 251-253.
A Two-Step Reaction Sequence for the Synthesis of Tetrahydronaphthalene Derivatives.

2004

32. G. Hilt, S. Lüers, F. Schmidt *Synthesis* **2004**, 634-638.
Cobalt-catalysed Diels-Alder, 1,4-Hydrovinylation and 1,4-Hydrosilylation Reactions of Non-Activated Starting Materials on a Large Scale.
31. G. Hilt, S. Lüers, K. Harms *J. Org. Chem.* **2004**, 69, 624-630.
The First Broad Application of Alkynyl Sulfides as Dienophiles in Cobalt(I)-catalyzed Diels-Alder Reactions.

2003

30. G. Hilt, S. Lüers *Synthesis* **2003**, 1784-1786.
Alkynyl Sulfides as Dienophiles in Cobalt-catalysed Diels-Alder Reactions.
29. G. Hilt, K. I. Smolko *Angew. Chem.* **2003**, 115, 2901-2903; *Angew. Chem. Int. Ed.* **2003**, 42, 2795-2797.
Alkynyl Boronic Esters as Efficient Dienophiles in Cobalt-catalysed Cycloadditions.
28. G. Hilt *Angew. Chem.* **2003**, 115, 1760-1762; *Angew. Chem. Int. Ed.* **2003**, 42, 1720-1721.
Convergent Paired Electrolysis for the Three-Component Synthesis of Protected Homoallylic Alcohols.
27. G. Hilt *Synthesis* **2003**, 1304.
Book-Review: "Catalysts for Fine Chemical Synthesis; Volume 1: Hydrolysis, Oxidation and Reduction", Edited by S. M. Roberts, G. Poignant, Series Edited by S. M. Roberts, I. V. Kozhevnikov, E. Derouane, Wiley&Sons, Chichester, England, **2002**".
26. G. Hilt, T. J. Korn, K. I. Smolko *Synlett* **2003**, 241-244.
A Short Three-Component Synthesis of Tricyclic Compounds.

2002

25. G. Hilt *Angew. Chem.* **2002**, 114, 3737-3739; *Angew. Chem. Int. Ed.* **2002**, 41, 3586-3588.
Direkte Elektrochemische Aziridinierung von Alkenen unter Metallfreien Bedingungen.

24. T. Ohkuma, M. Koizumi, K. Muñiz, G. Hilt, C. Kabuto, R. Noyori *J. Am. Chem. Soc.* **2002**, *124*, 6508-6509.
trans-RuH(BH₄)(binap)(1,2-diamine): A Catalyst for Asymmetric Hydrogenation of Simple Ketones under Base-Free Conditions.
23. G. Hilt, K. I. Smolko, B. V. Lotsch *Synlett* **2002**, 1081-1084.
Cobalt(I)-catalysed Neutral Diels-Alder Reactions of Oxygen-Functionalized Acyclic 1,3-Dienes.
22. G. Hilt, S. Lüers *Synthesis* **2002**, 609-618.
Cobalt(I)-Catalyzed 1,4-Hydrovinylation Reactions of 1,3-Dienes with Functionalized Terminal Alkenes under Mild Conditions.
21. G. Hilt, K. I. Smolko *Synthesis* **2002**, 686-694.
Cobalt(I)-catalysed Neutral Diels-Alder Reactions of 1,3-Diyynes with Acyclic 1,3-Dienes.
20. G. Hilt, K. I. Smolko, C. Waloch *Tetrahedron Lett.* **2002**, *43*, 1437-1439.
Indium-catalysed Allylation of Imines with Electrochemically Assisted Catalyst Regeneration.

2001

19. G. Hilt, K. I. Smolko in *Elektronenübertragung in Chemie und Biochemie*, Hrsg. J. Russow, H.-J. Schäfer, GDCh Monographie Bd. 23, **2001**, 167-173.
Elektrochemische Regenerierung Niedervalenter Indium-Spezies zur C-C Bindungsknüpfung in der Organischen Synthese.
18. G. Hilt, S. Lüers, K. Polborn *Isr. J. Chem.* **2001**, *41*, 317-327.
Synthesis of Polycyclic Polyfunctionalized Carbocycles by a Cobalt(I)-Initiated Tandem Diels-Alder Reaction Sequence.
17. G. Hilt, S. Lüers Proceedings - Electrochemical Society **2001**, 2001-14 (Reactive Intermediates in Organic and Biological Electrochemistry), 97-100.
Redox initiated cobalt(I) mediated C-C bond formation reactions.
16. H. Piotrowski, G. Hilt, A. Schulz, P. Mayer, K. Polborn, K. Severin *Chem. Eur. J.* **2001**, *7*, 3196-3208.
Self-Assembled Organometallic [12]Metallacrown-3 Complexes.
15. G. Hilt, K. I. Smolko *Angew. Chem.* **2001**, *113*, 3514-3516; *Angew. Chem. Int. Ed.* **2001**, *40*, 3399-3402.
Elektrochemische Regenerierung Niedervalenter Indium(I)-Spezies als Reagenzien zur C-C Bindungsknüpfung.
14. G. Hilt, T. J. Korn *Tetrahedron Lett.* **2001**, *42*, 2783-2785.
An Efficient Cobalt Catalyst for the Neutral Diels-Alder Reaction of Acyclic 1,3-Dienes with Internal Alkynes.
13. E. Steckhan, T. Arns, W. R. Heineman, G. Hilt, D. Hoormann, J. Jörissen, L. Kröner, B. Lewall, H. Pütter *Chemosphere* **2001**, *43*, 63-73.
Environmental protection and economization of resources by electroorganic and electroenzymatic syntheses.

12. H. Piotrowski, K. Polborn, G. Hilt, K. Severin *J. Am. Chem. Soc.* **2001**, *123*, 2699-2700.
Selfassembled Metallomacrocyclic Ionophore with high Affinity and Selectivity for Li⁺ and Na⁺.

11. G. Hilt, F.-X. du Mesnil, S. Lüers *Angew. Chem.* **2001**, *113*, 408-410; *Angew. Chem. Int. Ed.* **2001**, *40*, 387-389.

An Efficient Cobalt(I) Catalyst System for the Selective 1,4-Hydrovinylation of 1,3-Dienes.

2000

10. E. Steckhan, T. Arns, L. Kröner, D. Hoormann, J. Jörissen, H. Pütter, G. Hilt *Proc. - Electrochem. Soc.* **2000**, 2000-15, New Directions in Organic Electrochemistry, 160-162.
Some aspects of sustainability in electroorganic syntheses.

9. G. Hilt, F.-X. du Mesnil *Tetrahedron Lett.* **2000**, *41*, 6757-6761.
An Improved Cobalt Catalyst for Homo Diels-Alder Reactions of Acyclic 1,3-Dienes with Alkynes.

8. M. F. Semmelhack, G. Hilt, *Synlett* **2000**, 1127-1128.
Selective Functionalization of an Isodurene-Cr(CO)₃ Complex.

1998

7. M. F. Semmelhack, G. Hilt, J. H. Colley *Tetrahedron Lett.* **1998**, *39*, 7683-7686.
S_{NAr} Reactions with Fluoroarene-Cr(CO)₂L Complexes where L is a Potential Linker for Solid Phase Synthesis.

1997

6. G. Hilt, B. Lewall, G. Montero, J. H. P. Utley, E. Steckhan *Liebigs Ann.* **1997**, 2289-2296.
Efficient In-situ Redox Catalytic NAD(P)⁺ Regeneration in Enzymatic Synthesis Using Transition Metal Complexes of 1,10-Phenanthroline-5,6-dione and its N-monomethylated Derivative as Catalysts.

5. E. Steckhan, G. Hilt, R. Kempf, M. Sadakane *Development of Transition Metal Complexes as Redox Reagents and Redox Catalysts*, in *Organic Synthesis via Organometallics*, (OSM 5), Vieweg, Braunschweig, **1997**, 253-278.

4. G. Hilt, T. Jarbawi, W. R. Heinman, E. Steckhan *Chem. Eur. J.* **1997**, *3*, 79-88.
Analytical Study of the Redox Behaviour of 1,10-Phenanthroline-5,6-dione, its Transition Metal Complexes, and of its N-monomethylated Derivative with Regard to their Efficiency as Mediators for the NAD(P)⁺ Regeneration.

1996

3. E. Steckhan, B. Brielbeck, M. Frede, G. Hilt *Electroenzymatic Synthesis: the development of continuos bioelectrochemical processes*, 10th Int. Forum Electrosynthesis in the Chemical Industry, **1996**, 226-254.

1995

2. B. Brielbeck, M. Frede, G. Hilt, L. Krämer, E. Steckhan *Electroenzymatic Synthesis in Novel Trends in Electroorganic Synthesis*, S. Torii, Ed., Kodansha, Tokyo, **1995**, 383-386.

1993

1. G. Hilt, E. Steckhan *J. Chem. Soc. Chem. Commun.* **1993**, 1706-1707.
Transition Metal Complexes of 1,10-Phenanthroline-5,6-dione as Efficient Mediators for the Regeneration of NAD⁺ in Enzymatic Systems.