

Publikationsliste Prof. Dr. Gerhard Hilt

Institut für Chemie – Universität Oldenburg (Stand Januar 2023)

2023

185. G. Hilt *Synthesis* **2023**, 54, A-O
The Synthetic Approaches to 1,2-Chlorohydrins.

184. G. Hilt, *Synlett* **2023**, 34, 23-28
A Twenty-Year Survey in Low-Valent Cobalt-Catalyzed Transformations Comes to an End - A Farewell.

2022

183. 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.

182. M. Jamshidi, C. Fastie, G. Hilt *Synthesis* **2022**, 54, accepted
Applications of Alternating Current/Alternating Potential Electrolysis in Organic Synthesis

181. 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, 8, 11979–11987
Topological Stone-Wales Defects Enhance Bonding and Electronic Coupling at the Graphene/Metal Interface

2021

180. 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

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

178. L. Li, S. Kail, S. M. Weber, G. Hilt, *Angew. Chem.* **2021**, accepted. *Angew. Chem. Int. Ed.*, **2021**, accepted
Indium-Catalysed Transfer-Hydrogenation for the Reductive Cyclisation of 2-Alkynyl Enones towards Trisubstituted Furans.

177. J. Strehl, G. Hilt, *Eur. J. Org. Chem.* **2021**, accepted
Synthesis of Symmetrical and Unsymmetrical Thiosulfonates from Disulfides via Electrochemical Induced Disulfide Bond Metathesis and Site-Selective Oxidation.

176. 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.

175. 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**, *accepted*.
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.

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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 Doppelbindungsisomerisierung 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.), **2019**, in press.

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.
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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.
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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.
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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. Weidemüller, 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.

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148. L. Li, E. Babaoglu, K. Harms, G. Hilt, *Eur. J. Org. Chem.* **2017**, 4543-4547.
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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-benzoquinone (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.
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142. A. Nödling, R. Möckel, R. Tonner, G. Hilt, *Chem. Eur. J.* **2016**, *22*, 13171-13180.
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141. E. Babaoglu, K. Harms, G. Hilt, *Synlett* **2016**, *27*, 1820-1823.
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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.
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134. C. Wang, Y. Zheng, H. Huo, P. Röse, L. Zhang, K. Harms, G. Hilt, E. Meggers, *Chem. Eur. J.* **2015**, *21*, 7355-7359.
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133. G. Hilt, *ChemCatChem* **2015**, *7*, 1639-1641.
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132. R. Möckel, G. Hilt, *Org. Lett.* **2015**, *17*, 1644-1647.
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131. J. Kuttner, G. Hilt, *Synthesis* **2015**, *47*, 1170-1180.
Synthesis of Acyclic Polycarbonyl Compounds via Ozonolysis of 1,4-Cyclohexadienes.

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121. P. Susnik, G. Hilt, *Organometallics* **2014**, *33*, 5907-5910.
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117. G. Hilt, *Chem. Rec.* **2014**, *14*, 386-396.
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