

## Publication List

### Independent Career (since 07/2014, Max-Planck-Institut für Kohlenforschung)

- [30] “Catalytic C–X Bond (X = S, Se, P, As) Metathesis through Reversible Arylation”  
Z. Lian, B. N. Bhawal, P. Yu, **B. Morandi\***, submitted for publication.
- [29] “Unlocking elusive reactions with shuttle catalysis: CO- and HCl-free synthesis of acid chlorides from unsaturated hydrocarbons”  
X. Fang, B. Cacherat, **B. Morandi\***, under review.
- [28] “Recent Developments in the Direct Synthesis of Unprotected Primary Amines”  
L. Legnani, B. N. Bhawal, **B. Morandi\***, *Synthesis* **2016**, 776. (Invited Review)
- [27] “Direct and Practical Synthesis of Primary Anilines through Iron-Catalyzed C–H Bond Amination”  
L. Legnani, G. Prina Cerai, **B. Morandi\***, *ACS Catal.* **2016**, 6, 8162.
- [26] “Catalytic Transfer Functionalization through Shuttle Catalysis”  
B. N. Bhawal, **B. Morandi\***, *ACS Catal.* **2016**, 6, 7528. (Invited Perspective)
- [25] “Unlocking Mizoroki-Heck Type Reactions of Aryl Cyanides Using Transfer Hydrocyanation as a Turnover-Enabling Step”  
X. Fang, P. Yu, G. Prina Cerai, **B. Morandi\***, *Chem. Eur. J.* **2016**, 22, 15629.
- [24] “Copper-Catalyzed C(sp<sup>3</sup>)–C(sp<sup>3</sup>) Cross-Coupling of Polyol Derivatives: Harnessing the High Reactivity of Cyclic Sulfate Esters in Chemoselective Catalysis”  
R. Ramirez-Contreras, **B. Morandi\***, *Org. Lett.* **2016**, 18, 3718.
- [23] “Atom-Economical Cobalt-Catalyzed Regioselective Coupling of Epoxides and Aziridines with Alkenes”  
G. Prina Cerai, **B. Morandi\***, *Chem. Commun.* **2016**, 52, 9769.
- [22] “Die Transferhydrocyanierung von Alkenen”  
X. Fang, P. Yu, E. Wöstefeld, **B. Morandi\***, *GIT Labor-Fachzeitschrift* **2016**, 8, 33. (Invited popular science article)
- [21] “Catalytic Selective Deoxygenation of Polyols Using the B(C<sub>6</sub>F<sub>5</sub>)<sub>3</sub>/Silane System”  
N. Drosos, E. Ozkal, **B. Morandi\***, *Synlett* **2016**, 27, 1760. (Invited Synfacts article)
- [20] “Catalytic Reversible Alkene-Nitrile Interconversion through Controllable Transfer Hydrocyanation”  
X. Fang, P. Yu, **B. Morandi\***, *Science* **2016**, 351, 832.
- [19] “Direct Catalytic Synthesis of Unprotected Amino Alcohols from Alkenes Using Iron(II)-Phthalocyanine”  
L. Legnani, **B. Morandi\***, *Angew. Chem. Int. Ed.* **2016**, 55, 2248.
- [18] “Cobalt(III)-Catalyzed Functionalization of Unstrained Carbon–Carbon Bonds through β-Carbon Cleavage of Alcohols”  
E. Ozkal, B. Cacherat, **B. Morandi\***, *ACS Catal.* **2015**, 5, 6458.
- [17] “Boron-Catalyzed Regioselective Deoxygenation of Terminal 1,2-Diols to 2-Alkanols Enabled by the Strategic Formation of a Cyclic Siloxane Intermediate”  
N. Drosos, **B. Morandi\***, *Angew. Chem. Int. Ed.* **2015**, 54, 8814.

### Postdoctoral Work (California Institute of Technology)

- [16] “Rapid Access to β-Trifluoromethyl-Substituted Ketones: Harnessing Inductive Effects in Wacker-Type Oxidations of Internal Alkenes”  
M. M. Lerch, **B. Morandi**, Z. K. Wickens, R. H. Grubbs\*, *Angew. Chem. Int. Ed.* **2014**, 53, 8654.
- [15] “Catalyst-Controlled Wacker-Type Oxidation: Facile Access to Functionalized Aldehydes”  
Z. K. Wickens, K. Skakuj, **B. Morandi**, R. H. Grubbs\*, *J. Am. Chem. Soc.* **2014**, 136, 890.

- [14] “Aldehyde-Selective Wacker-Type Oxidation of Unbiased Alkenes”  
Z. K. Wickens, **B. Morandi**, R. H. Grubbs\*, *Angew. Chem. Int. Ed.* **2013**, 52, 11257.
- [13] “Regioselective Wacker Oxidation of Internal Alkenes: Rapid Access to Functionalized Ketones Facilitated by Cross-Metathesis”  
**B. Morandi**, Z. K. Wickens, R. H. Grubbs\*, *Angew. Chem. Int. Ed.* **2013**, 52, 9751.
- [12] “Practical and General Palladium-Catalyzed Synthesis of Ketones from Internal Olefins”  
**B. Morandi**, Z. K. Wickens, R. H. Grubbs\*, *Angew. Chem. Int. Ed.* **2013**, 52, 2944.

#### PhD Work (ETH Zürich)

- [11] “Homologative Trifluoromethylation of Acetals”  
J. Hamilton, **B. Morandi**, E. M. Carreira\*, *Synthesis* **2013**, 45, 1857.
- [10] “Iron-Catalyzed Cyclopropanation in 6 M KOH with in situ Generation of Diazomethane”  
**B. Morandi**, E. M. Carreira\*, *Science* **2012**, 335, 1471.
- [9] “Iron-Catalyzed Cyclopropanation with Glycine Ethyl Ester Hydrochloride in Water”  
**B. Morandi**, A. Dolva, E. M. Carreira\*, *Org. Lett.* **2012**, 14, 2162.
- [8] “Preparation of Trifluoromethyl-Substituted Aziridines with in Situ Generated  $CF_3CHN_2$ ”  
S. Künzi, **B. Morandi**, E. M. Carreira\*, *Org. Lett.* **2012**, 14, 1900.
- [7] “Expedient Preparation of Trifluoromethyl-Substituted Dehydrobenzofuranols”  
**B. Morandi**, E. M. Carreira\*, *Org. Lett.* **2011**, 13, 5984.
- [6] “Synthesis of Trifluoroethyl-Substituted Ketones from Aldehydes and Cyclohexanones”  
**B. Morandi**, E. M. Carreira\*, *Angew. Chem. Int. Ed.* **2011**, 50, 9085.
- [5] “Iron-Catalyzed Preparation of Trifluoromethyl Substituted Vinyl- and Alkynylcyclopropanes”  
**B. Morandi**, J. Cheang, E. M. Carreira\*, *Org. Lett.* **2011**, 13, 3080.
- [4] “Enantioselective Cobalt-Catalyzed Preparation of Trifluoromethyl-Substituted Cyclopropanes”  
**B. Morandi**, B. Mariampillai, E. M. Carreira\*, *Angew. Chem. Int. Ed.* **2011**, 50, 1101.
- [3] “Rhodium-Catalyzed Cyclopropanation of Alkynes: Synthesis of Trifluoromethyl-Substituted Cyclopropenes”  
**B. Morandi**, E. M. Carreira\*, *Angew. Chem. Int. Ed.* **2010**, 49, 4294.
- [2] “Iron-Catalyzed Cyclopropanation with Trifluoroethylamine Hydrochloride and Olefins in Aqueous Media: In Situ Generation of Trifluoromethyl Diazomethane”  
**B. Morandi**, E. M. Carreira\*, *Angew. Chem. Int. Ed.* **2010**, 49, 938.

#### Undergraduate Work (ETH Zürich)

- [1] “Catalytic Decarbonylation of Epoxyaldehydes: Applications to the Preparation of Terminal Epoxides”  
**B. Morandi**, E. M. Carreira\*, *Synlett* **2009**, 2076.

#### Patents

##### At Max-Planck

- [3] “Process for the Catalytic Reversible Alkene-Nitrile Interconversion”  
X. Fang, **B. Morandi**, P. Yu, EPO patent application, filed December 1<sup>st</sup>, **2015**.

##### At ETH/Caltech

- [2] “Process for the Synthesis of Ketones from Internal Alkenes”  
**B. Morandi**, R. H. Grubbs, Z. K. Wickens, M. M. Lerch, US Patent #9096519, issued August 4<sup>th</sup>, **2015**.

- [1] “Aldehyde-Selective Wacker-Type Oxidation of Unbiased Alkenes”  
Z. K. Wickens, B. Morandi, R. H. Grubbs, K. Skakuj, S. Bronner, US Patent #20140316149, issued October 23<sup>rd</sup>,  
**2014.**

### **Book Chapters**

- [2] “Base Metal Catalyzed Addition Reactions across C–C Multiple Bonds”  
R. Ramirez-Contreras, **B. Morandi\***, in Non-Noble Metal Catalysis: Molecular Approaches and Reactions, John Wiley & Sons Ltd, *in print*.
- [1] “N-Methyl-N-nitroso-p-toluenesulfonamide”  
R. Ramirez-Contreras, **B. Morandi\***, in Encyclopedia of Reagents for Organic Synthesis [Online], John Wiley & Sons Ltd, **2016**.