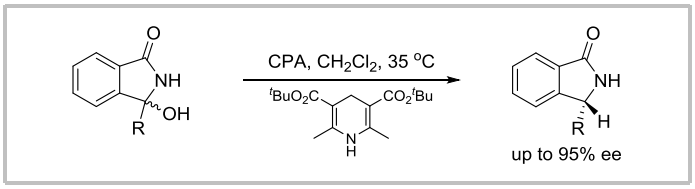
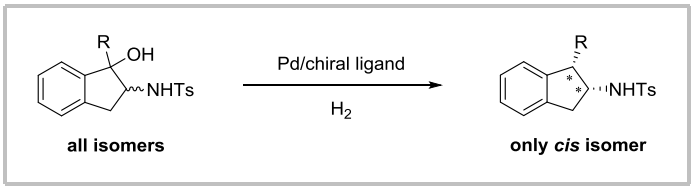
Research

我们组不对称氢解反应

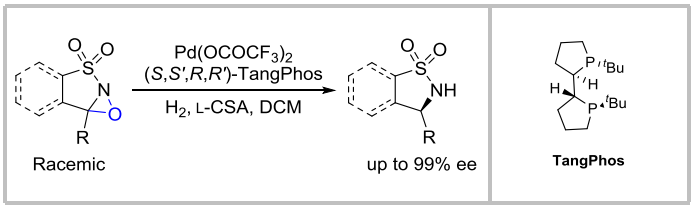
1. Mu-Wang Chen, Qing-An Chen, Ying Duan, Zhi-Shi Ye and **Yong-Gui Zhou.*** Asymmetric Hydrogenolysis of Racemic Tertiary Alcohol, 3-Substituted 3-Hydroxyisoindolin-1-ones. *Chem. Commun*. **2012**, *48*, 1698-1700.



2. Chang-Bin Yu, **Yong-Gui Zhou***. Palladium-Catalyzed Asymmetric Hydrogenolysis of *N*-Sulfonyl Aminoalcohols *via* Achiral Enesulfonamide Intermediates. *Angew. Chem. Int. Ed.* **2013**, *52*, 13365-13368.



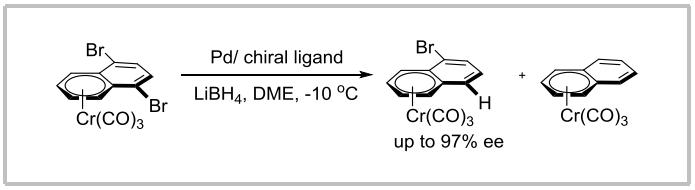
3. Bo Song, Chang-Bin Yu, Wen-Xue Huang, Mu-Wang Chen and **Yong-Gui Zhou.*** Formal Palladium-Catalyzed Asymmetric Hydrogenolysis of Racemic *N*-Sulfonyloxaziridines. *Org. Lett*. **2015**, *17*, 190-193.



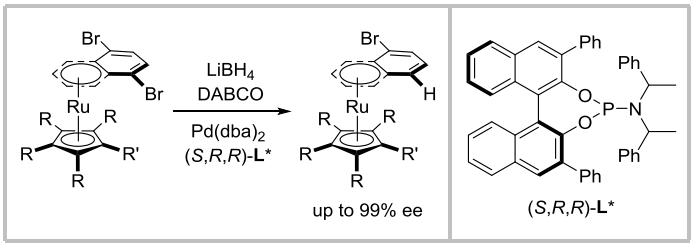
其它组氢解反应

去对称化的不对称氢解反应

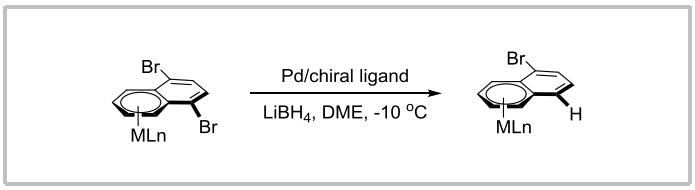
1. **E. Peter Kündig.*** Piyali Datta Chaudhuri, David House, and Gérald Bernardinelli. Catalytic Enantioselective Hydrogenolysis of [$Cr(CO)_3$(5,8-Dibromonaphthalene)]. *Angew.Chem. Int. Ed.* **2006**, *45*, 1092-1095.



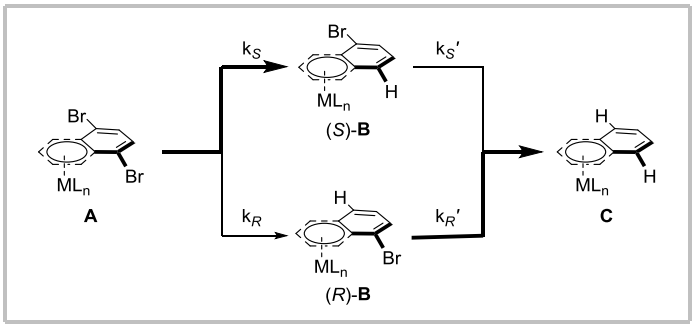
2. Audrey Mercier, Wee Chuan Yeo, Jingyu Chou, Piyali Datta Chaudhuri, Gérald Bernardinelli and **E. Peter Kündig.*** Synthesis of Highly Enantiomerically Enriched Planar Chiral Ruthenium Complexes *via* Pd-catalysed Asymmetric Hydrogenolysis. *Chem. Commun.* **2009**, *5*227-5229.



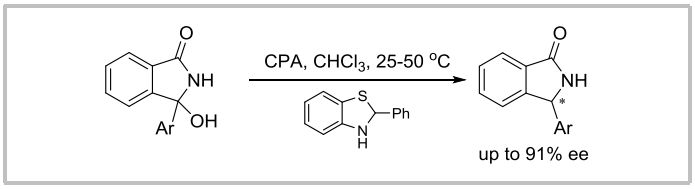
3. Audrey Mercier, Wee Chuan Yeo, Xavier Urbaneja and **E. Peter Kündig.*** An Efficient Entry to Planar Chiral Organometallic Complexes *via* Pd-Catalyzed Asymmetric Hydrogenolysis. *Chimia.* **2010**, *64*, 177-179.



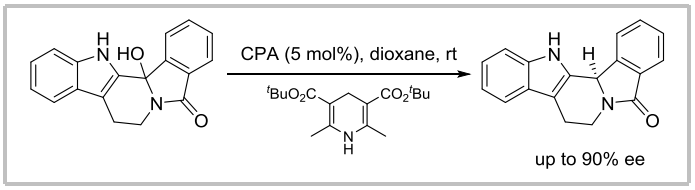
4. Audrey Mercier, Xavier Urbaneja, Wee Chuan Yeo, Piyali Datta Chaudhuri, Graham R. Cumming, David House, Gérald Bernardinelli and **E. Peter Kndig.*** Asymmetric Catalytic Hydrogenolysis of Aryl Halide Bonds in Fused Arene Chromium and Ruthenium Complexes. *Chem. Eur. J.* **2010**, *16*, 6285-6299.



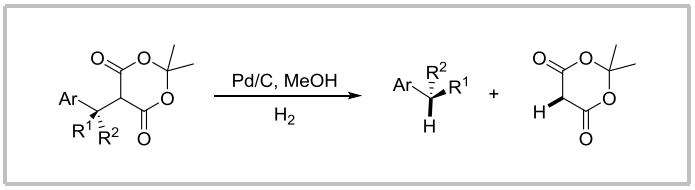
5. Jian-Qing Zhou, Wei-Jian Sheng, Jian-Hong Jia, Qing Ye, Jian-Rong Gao and **Yi-Xia Jia.*** Chiral Phosphoric Acid Catalyzed Asymmetric Hydrogenolysis of Racemic 3-Aryl-3-hydroxyisoindolin-1-ones. *Tetrahedron Lett.* **2013**, *54*, 3082-3084.



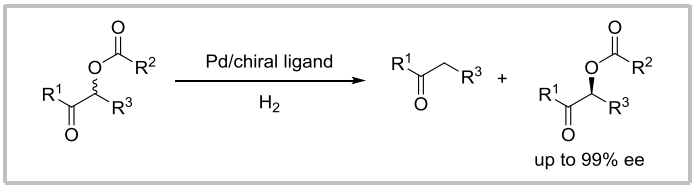
6. Qin Yin, Shou-Guo Wang and **Shu-Li You.*** Asymmetric Synthesis of Tetrahydro-*β*-carbolines *via* Chiral Phosphoric Acid Catalyzed Transfer Hydrogenation Reaction. *Org. Lett.* **2013**, *15*, 2688-2691.



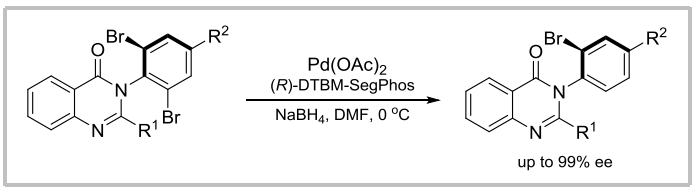
7. Ashraf Wilsily, Yen Nguyen and **Eric Fillion.*** Hydrogenolysis of Unstrained Carbon-Carbon σ Bonds: Stereoselective Entry into Benzylic Tertiary Centers. *J. Am. Chem. Soc.* **2009**, *131*, 15606–15607.



8. Jianzhong Chen, Zhenfeng Zhang, Delong Liu and **Wanbin Zhang.*** Palladium-Catalyzed Chemo- and Enantioselective C-O Bond Cleavage of *α*-Acyloxy Ketones by Hydrogenolysis. *Angew. Chem. Int. Ed.* **2016**, *55*, 8444-8447.

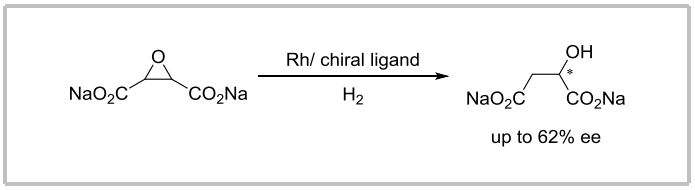


9. Motohiro Hirai, Shumpei Terada, Hiroaki Yoshida, Kenki Ebine, Tomoaki Hirata and **Osamu Kitagawa.*** Catalytic Enantioselective Synthesis of N−C Axially Chiral Mebroqualone and Its Derivatives through Reductive Asymmetric Desymmetrization. *Org. Lett*. **2016**, *18*, 5700-5703.

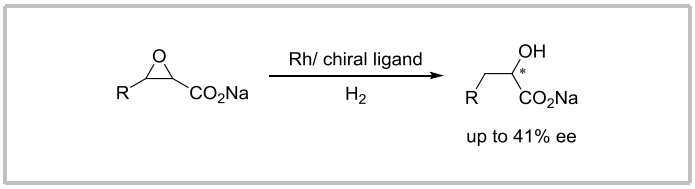


环氧化合物的不对称氢解反应

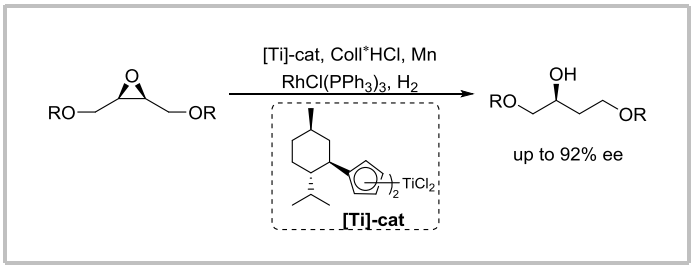
1. **Albert S. C. Chan*** and James P. Coleman. Homogeneous Catalytic Asymmetric Hydrogenolysis of Sodium Epoxysuccinate: the First Example of Asymmetric Hydrogenolysis of an Epoxide. *J. Chem. Soc. Chem. Commun.* **1991**, 535-536.



2. **József Bakos,*** árpád Orosz, Stefánia Cserépi, Imre Tóth, Denis Sinou. Chiral Sulfonated Phosphines. Rhodium(I) Catalyzed Asymmetric Hydrogenolysis of Epoxides. *J. Mol. Catal. A: Chem.* **1997**, *116*, 85-97.

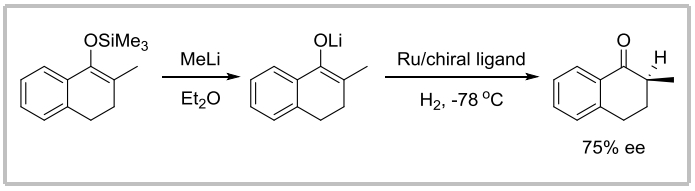


3. **Andreas Gansāuer,*** Chun-An Fan and Frederik Piestert. Sustainable Radical Reduction through Catalytic Hydrogen Atom Transfer. *J. Am. Chem. Soc.* **2008**, *130*, 6916-6917.



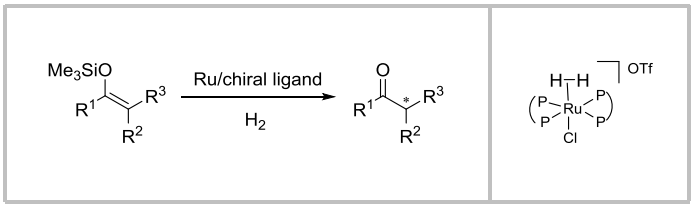
烯醇硅醚的不对称氢解反应

1. Yoshiaki Nishibayashi, Izuru Takei and **Masanobu Hidai.*** Novel Catalytic Hydrogenolysis of Trimethylsilyl Enol Ethers by the Use of an Acidic Ruthenium Dihydrogen Complex. *Angew. Chem. Int. Ed.* **1999**, *38*, 3047-3050.



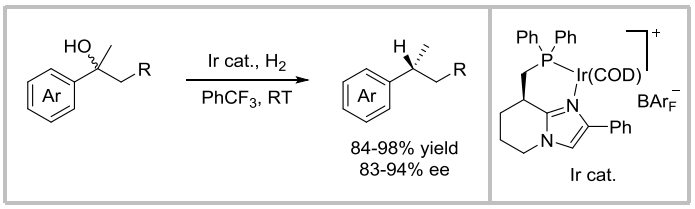
2. Izuru Takei, Yoshiaki Nishibayashi, Youichi Ishii,Yasushi Mizobe, Sakae Uemura

and **Masanobu Hidai.*** Novel Catalytic Hydrogenolysis of Silyl Enol Ethers by the Use of Acidic Ruthenium Dihydrogen Complexes. *J. Organomet. Chem.* **2003**, *679*, 32.



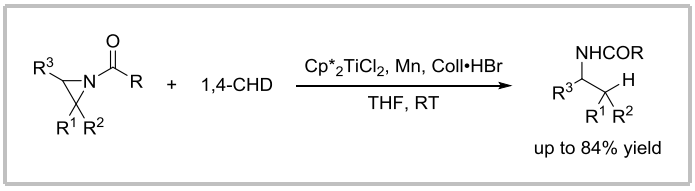
烷基醇的不对称氢解反应

1. Iridium-Catalysed Enantioselective Formal Deoxygenation of Racemic Alcohols via Asymmetric Hydrogenation. Jia Zheng, Jira Jongcharoenkamol, Bram B. C. Peters, Jasper Guhl, Sudipta Ponra, Mårten S. G. Ahlquist and **Pher G. Andersson.*** *Nat. Catal.* **2019**, *2*, 1093-1100.

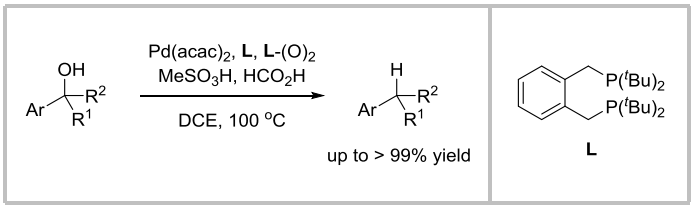


非手性氢解反应

1. Titanocene-Catalyzed Radical Opening of N-Acylated Aziridines. Yong-Qiang Zhang, Elisabeth Vogelsang, Zheng-Wang Qu, Stefan Grimme and **Andreas Gansäuer.*** *Angew. Chem. Int. Ed*. **2017**, *56*, 12654-12657.

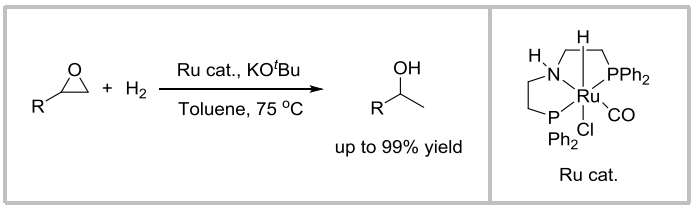


2. Homogeneous Palladium-Catalyzed Transfer Hydrogenolysis of Benzylic Alcohols Using Formic Acid as Reductant. Benjamin Cisze, **Ivana Fleischer.*** *Chem. Eur. J*. **2018**, *24*, 12259-12263.

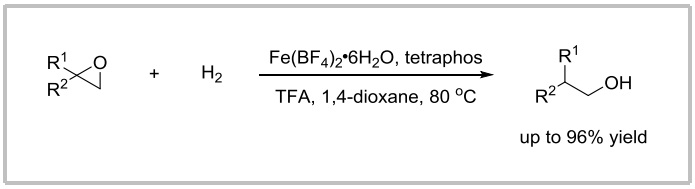


3. Ruthenium-Catalyzed Selective Hydrogenation of Epoxides to Secondary Alcohols. Subramanian Thiyagarajan, **Chidambaram Gunanathan.*** *Org. Lett.* **2019**, *21*,

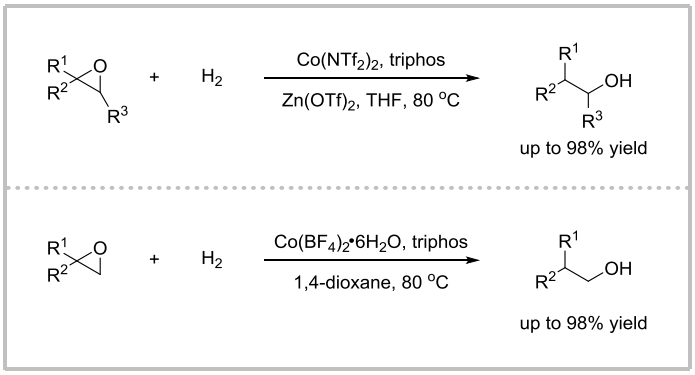
9774-9778.



4. Iron-Catalysed Regioselective Hydrogenation of Terminal Epoxides to Alcohols under Mild Conditions. Weiping Liu, Wu Li, Anke Spannenberg, Kathrin Junge and **Matthias Beller.*** *Nat. Catal*. **2019**, *2*, 523-528.



5. A General Regioselective Synthesis of Alcohols by Cobalt-Catalyzed Hydrogenation of Epoxides. Weiping Liu, Thomas Leischner, Wu Li, Kathrin Junge and **Matthias Beller.*** *Angew. Chem. Int. Ed*. **2020**, *59*, 11321-11324.



6. $Cp_2Ti^{III}Cl$ Catalysis in a New Light. Yuqing Chen, Shuangjie Lin, Fusheng Li, Xinhai Zhang, Luqing Lin and **Lei Shi.*** *ChemPhotoChem* **2020**, *4*, 659-663.