

2022

256.) Manuel J. Scharf and Benjamin List*

A Catalytic Asymmetric Pictet–Spengler Platform as a Biomimetic Diversification Strategy toward Naturally Occurring Alkaloids

J. Am. Chem. Soc., **2022**, *144*, xx–xx.

255.) Hui Zhou, Jung Tae Han, Nils Nöthling, Monika M. Lindner, Judith Jenniches, Clemens Kühn, Nobuya Tsuji, Li Zhang and Benjamin List*

Organocatalytic Asymmetric Synthesis of Si-Stereogenic Silyl Ethers

J. Am. Chem. Soc., **2022**, *144*, 10156–10161.

254.) Jie Ouyang, Rajat Maji, Markus Leutzsch, Benjamin Mitschke and Benjamin List*

Design of an Organocatalytic Asymmetric (4 + 3) Cycloaddition of 2-Indolylalcohols with Dienolsilanes

J. Am. Chem. Soc., **2022**, *144*, 8460–8466.

253.) Hui Zhou, Yu Zhou, Han Yong Bae, Markus Leutzsch, Yihang Li, Chandra Kanta De, Gui-Juan Cheng and Benjamin List*

Organocatalytic stereoselective cyanosilylation of small ketones

Nature, **2022**, *605*, 84–89.

252.) Santanu Ghosh, Johannes Eike Erchinger, Rajat Maji and Benjamin List*

Catalytic Asymmetric Spirocyclizing Diels–Alder Reactions of Enones: Stereoselective Total and Formal Syntheses of α -Chamigrene, β -Chamigrene, Laurencenone C, Colleteic Acid, and Omphalic Acid

J. Am. Chem. Soc., **2022**, *144*, 6703–6708.

251.) Meng Duan, Christian David Díaz-Oviedo, Yang Zhou, Xiangyang Chen, Peiyuan Yu, Benjamin List*, Kendall N. Houk* and Yu Lan*

Chiral Phosphoric Acid Catalyzed Conversion of Epoxides into Thiiranes: Mechanism, Stereochemical Model, and New Catalyst Design

Angew. Chem. Int. Ed., **2022**, *61*, e202113204.

250.) Carla Obradors, Benjamin Mitschke, Miles Aukland, Markus Leutzsch, Oleg Grossmann, Sebastian Brunen, Sebastian Schwengers and Benjamin List*

Direct and Catalytic C-Glycosylation of Arenes: Expeditious Synthesis of the Remdesivir Nucleoside

Angew. Chem. Int. Ed., **2022**, *61*, e202114619.

249.) Benjamin List*, Denis Höfler, Karl Kaupmees and Ivo Leito

A Chiral Sulfoxide-Based C–H Acid

Synlett, **2022**, *33*, 45–47.

248.) Benjamin List* and Denis Höfler

A Chiral, Dendralenic C–H Acid

Synlett, **2022**, *33*, 38–39.

247.) Oleg Grossmann, Rajat Maji, Miles H. Aukland, Sunggi Lee and Benjamin List*

Catalytic Asymmetric Additions of Enol Silanes to in situ Generated Cyclic, Aliphatic N-Acyliminium Ions

Angew. Chem. Int. Ed., **2022**, *61*, e202115036.

2021

246.) Jennifer L. Kennemur, Rajat Maji, Manuel J. Scharf, and Benjamin List*

Catalytic Asymmetric Hydroalkoxylation of C–C Multiple Bonds

Chem. Rev., **2021**, *121*, 14649–14681.

245.) Sayantani Das, Benjamin Mitschke, Chandra Kanta De, Ingolf Harden, Giovanni Bistoni and Benjamin List*

Harnessing the ambiphilicity of silyl nitronates in a catalytic asymmetric approach to aliphatic β 3-amino acids

Nat. Catal., **2021**, *4*, 1043–1049.

244.) C. David Diaz-Oviedo, Rajat Maji and Benjamin List*

The Catalytic Asymmetric Intermolecular Prins Reaction

J. Am. Chem. Soc., **2021**, *143*, 20598–20604.

- 243.) Hui Zhou, Pinglu Zhang and Benjamin List*
The Silicon–Hydrogen Exchange Reaction: Catalytic Kinetic Resolution of 2-Substituted Cyclic Ketones
Synlett, **2021**, *32*, 1953–1956.
- 242.) Sebastian A. Schwengers, Chandra Kanta De, Oleg Grossmann, Joyce A. A. Grimm, Natascha R. Sadlowski, Gabriela G. Gerosa, and Benjamin List*
Unified Approach to Imidodiphosphate-Type Brønsted Acids with Tunable Confinement and Acidity
J. Am. Chem. Soc., **2021**, *143*, 14835–14844.
- 241.) Tynchtyk Amatov, Nobuya Tsuji, Rajat Maji, Lucas Schreyer, Hui Zhou, Markus Leutzsch, and Benjamin List*
Confinement-Controlled, Either syn- or anti-Selective Catalytic Asymmetric Mukaiyama Aldolizations of Propionaldehyde Enolsilanes
J. Am. Chem. Soc., **2021**, *143*, 14475–14481.
- 240.) Guoli He, Prof. Dr. Benjamin List, Prof. Dr. Mathias Christmann
Unified Synthesis of Polycyclic Alkaloids by Complementary Carbonyl Activation
Angew. Chem. Int. Ed., **2021**, *60*, 13591–13596.
- 239.) Carla Obradors and Benjamin List*
Azine Activation via Silylium Catalysis
J. Am. Chem. Soc., **2021**, *143*, 6817–6822.
- 238.) Chendan Zhu, Francesca Mandrelli, Hui Zhou, Rajat Maji and Benjamin List*
Catalytic Asymmetric Synthesis of Unprotected β 2-Amino Acids
J. Am. Chem. Soc., **2021**, *143*, 3312–3317.
- 237.) Pinglu Zhang, Nobuya Tsuji, Jie Ouyang and Benjamin List*
Strong and Confined Acids Catalyze Asymmetric Intramolecular Hydroarylations of Unactivated Olefins with Indoles
J. Am. Chem. Soc., **2021**, *143*, 675–680.
- 236.) Jie Ouyang, Hanyong Bae, Samuel Jordi, Quang Minh Dao, Sandro Dossenbach, Stefanie Dehn, Juilia Beatrice Lingnau, Chandra Kanta De, Philip Kraft and Benjamin List*
The Odorous Principle of Vetiver Oil, Unveiled by Chemical Synthesis
Angew. Chem. Int. Ed., **2021**, *60*, 5666–5672.
- 2020**
- 235.) Zhipeng Zhang*, Martin Klussmann and Benjamin List
Kinetic Study of Disulfonimide-Catalyzed Cyanosilylation of Aldehydes by Using a Method of Progress Rates
Synlett, **2020**, *31*, 1593–1597.
- 234.) Benjamin Mitschke, Mathias Turberg and Benjamin List*
Confinement as a Unifying Element in Selective Catalysis
Chem, **2020**, *6*, 2515–2532.
- 233.) Roberta Properzi, Philip S. J. Kaib, Markus Leutzsch, Gabriele Pupo, Raja Mitra, Chandra Kanta De, Lijuan Song, Peter R. Schreiner and Benjamin List*
Catalytic enantiocontrol over a non-classical carbocation
Nat. Chem., **2020**, *12*, 1174–1179.
- 232.) Gabriela Guillermina Gerosa, Sebastian Armin Schwengers, Rajat Maji, Chandra Kanta De* and Benjamin List*
Homologation of the Fischer Indolization: A Quinoline Synthesis via Homo-Diaza-Cope Rearrangement
Angew. Chem. Int. Ed., **2020**, *59*, 20485–20488.
- 231.) Vijay N. Wakchaure, Carla Obradors and Benjamin List*
Chiral Brønsted Acids Catalyze Asymmetric Additions to Substrates that Are Already Protonated: Highly Enantioselective Disulfonimide-Catalyzed Hantzsch Ester Reductions of NH–Imine Hydrochloride Salts
Synlett, **2020**, *31*, 1707–1712.

230.) Hui Zhou, Han Yong Bae, Markus Leutzsch, Jennifer L. Kennemur, Diane Bécart, and Benjamin List*

The Silicon–Hydrogen Exchange Reaction: A Catalytic σ -Bond Metathesis Approach to the Enantioselective Synthesis of Enol Silanes
J. Am. Chem. Soc., **2020**, *142*, 13695–13700.

229.) Diana Yepes, Frank Neese, Benjamin List and Giovanni Bistoni*

Unveiling the Delicate Balance of Steric and Dispersion Interactions in Organocatalysis Using High-Level Computational Methods
J. Am. Chem. Soc., **2020**, *142*, 3613–3625.

228.) Alois Fürstner, Benjamin List, Tobias Ritter, Ferdi Schüth, Frank Neese

Walter Thiel (1949–2019)

Angew. Chem. Int. Ed., **2020**, *59*, 1382–1383.

227.) Santanu Ghosh, Sayantani Das, Chandra Kanta De, Diana Yepes, Frank Neese, Giovanni Bistoni, Markus Leutzsch and Benjamin List*

Strong and Confined Acids Control Five Stereogenic Centers in Catalytic Asymmetric Diels–Alder Reactions of Cyclohexadienones with Cyclopentadiene
Angew. Chem. Int. Ed., **2020**, *59*, 12347–12351.

2019

226.) Lucas Schreyer, Roberta Properzi and Benjamin List*

IDPi Catalysis

Angew. Chem. Int. Ed., **2019**, *58*, 12761–12777.

225.) Francesca Mandrelli, Aurélie Blond, Thomas James, Hyejin Kim and Benjamin List*

Deracemizing α -Branched Carboxylic Acids by Catalytic Asymmetric Protonation of bis-Silyl Ketene Acetals with Water or Methanol

Angew. Chem. Int. Ed., **2019**, *58*, 11479–11482.

224.) Denis Höfler, Richard Goddard, Nils Nöthling, Benjamin List*

A Dendralenic C–H Acid

Synlett, **2019**, *30*, 433–436.

223.) Jie Ouyang, Jennifer L. Kennemur, Chandra Kanta De, Christophe Farès, Benjamin List*

Strong and Confined Acids Enable a Catalytic Asymmetric Nazarov Cyclization of Simple Divinyl Ketones
J. Am. Chem. Soc., **2019**, *141*, 3414–3418.

222.) Hyejin Kim, Gabriela Gerosa, Jonas Aronow, Pinar Kasaplar, Jie Ouyang, Julia B. Lingnau, Paul Guerry, Christophe Farès, Benjamin List*

A multi-substrate screening approach for the identification of a broadly applicable Diels–Alder catalyst
Nat. Commun., **2019**, *10*, 770, 1–6.

221.) Grigory A. Shevchenko, Gabriele Pupo, Benjamin List*

Direct Asymmetric α -Hydroxylation of Cyclic α -Branched Ketones through Enol Catalysis

Synlett, **2019**, *30*, 49–53.

2018

220.) Popovic, J.; Höfler, D.; Melchior, J. P.; Münchinger, A.; List, B.; Maier, J.

High Lithium Transference Number Electrolytes Containing Tetratriflylpropene's Lithium Salt.

J. Phys. Chem. Lett. **2018**, *9*, 5116–5120.

219.) Lucas Schreyer, Philip S. J. Kaib, Vijay N. Wakchaure, Carla Obradors, Roberta Properzi, Sunggi Lee, Benjamin List*

Confined acids catalyze asymmetric single aldolizations of acetaldehyde enolates

Science, **2018**, *362*, 216–219.

218.) Grigory A. Shevchenko, Stefanie Dehn and Benjamin List*

Brønsted Acid Mediated Direct α -Hydroxylation of Cyclic α -Branched Ketones

Synlett, **2018**, *29*, 2298–3000.

217.) Tim Gatzemeier, Mathias Turberg, Diana Yepes, Youwei Xie, Frank Neese, Giovanni Bistoni and Benjamin List*
Scalable and Highly Diastereo- and Enantioselective Catalytic Diels–Alder Reaction of α,β -Unsaturated Methyl Esters
J. Am. Chem. Soc., **2018**, *140*, 12671–12676.

216.) Sunggi Lee, Han Yong Bae and Benjamin List*
Can a Ketone Be More Reactive than an Aldehyde? Catalytic Asymmetric Synthesis of Substituted Tetrahydrofurans
Angew. Chem. Int. Ed., **2018**, *57*, 12162–12166.

215.) Han Yong Bae and Benjamin List*
Triflimide: An Overlooked High-Performance Catalyst of the Mukaiyama Aldol Reaction of Silyl Ketene Acetals with Ketones
Chem. Eur. J., **2018**, *24*, 13767–13772

214.) Han Yong Bae, Denis Höfler, Philip S. J. Kaib, Pinar Kasaplar, Chandra Kanta De, Arno Döhring, Sunggi Lee, Karl Kaupmees, Ivo Leito and Benjamin List*
Approaching sub-ppm-level asymmetric organocatalysis of a highly challenging and scalable carbon–carbon bond forming reaction
Nat. Chem., **2018**, *10*, 888–894.

213.) Grigory A. Shevchenko, Barry Oppelaar and Benjamin List*
An Unexpected α -Oxidation of Cyclic Ketones with 1,4-Benzoquinone via Enol Catalysis
Angew. Chem. Int. Ed., **2018**, *57*, 10756–10759.

212.) Denis Höfler, Richard Goddard, Julia B. Lingnau, Nils Nöthling and Benjamin List*
A Purely Organic Tricarbanion
Angew. Chem. Int. Ed., **2018**, *57*, 8326–8329.

211.) Nobuya Tsuji, Jennifer L. Kennemur, Thomas Buyck, Sunggi Lee, Sébastien Prévost, Philip S. J. Kaib, Dmytro Bykov, Christophe Farès and Benjamin List*
Activation of olefins via asymmetric Brønsted acid catalysis
Science, **2018**, *359*, 1501–1505.

210.) Tim Gatzemeier, Philip S. J. Kaib, Julia B. Lingnau, Richard Goddard and Benjamin List*
The Catalytic Asymmetric Mukaiyama–Michael Reaction of Silyl Ketene Acetals with α,β -Unsaturated Methyl Esters
Angew. Chem. Int. Ed., **2018**, *57*, 2464–2468.

2017

209.) Benjamin List*
Crowd-based peer review can be good and fast
Nature, **2017**, *546*, 9.

208.) José Tiago Menezes Correia, Benjamin List* and Fernando Coelho*
Catalytic Asymmetric Conjugate Addition of Indolizines to α,β -Unsaturated Ketones
Angew. Chem. Int. Ed., **2017**, *56*, 7967–7970.

207.) Luping Liu, Hyejin Kim, Youwei Xie, Christophe Farès, Philip S. J. Kaib, Richard Goddard, and Benjamin List*
Catalytic Asymmetric [4+2]-Cycloaddition of Dienes with Aldehydes
J. Am. Chem. Soc., **2017**, *139*, 13656–13659.

206.) Chandra Kanta De, Raja Mitra and Benjamin List*
Design and Synthesis of Enantiopure Tetrakis(pentafluorophenyl) Borate Analogues for Asymmetric Counteranion Directed Catalysis
Synlett, **2017**, *28*, 2435–2438.

205.) Denis Höfler and Benjamin List*
Schneller und weniger aufwendig begutachten
Nachrichten aus der Chemie, **2017**, *65*, 1129–1131

- 204.) Sunggi Lee, Philip S. J. Kaib and Benjamin List*
N-Triflylphosphorimidoyl Trichloride: A Versatile Reagent for the Synthesis of Strong Chiral Brønsted Acids
Synlett, 2017, 28, 1478–1480.
- 203.) Benjamin List*, Chandra Kanta De, Qinggang Wang
Methods for the Preparation of Obeticholic acid and derivatives thereof
PCT. Int. Ap., 2017, WO2017184598A1.
- 202.) Ji Hye Kim, Aurélien Tap, Luping Liu and Benjamin List*
Catalytic Asymmetric Thioacetalization of Aldehydes
Synlett, 2017, 28, 333–336.
- 201.) Youwei Xie and Benjamin List*
Catalytic Asymmetric Intramolecular [4+2] Cycloaddition of In Situ Generated *ortho*-Quinone Methides
Angew. Chem. Int. Ed., 2017, 56, 4936–4940.
- 200.) Sunggi Lee, Philip S. J. Kaib and Benjamin List*
Asymmetric Catalysis via Cyclic, Aliphatic Oxocarbenium Ions
J. Am. Chem. Soc., 2017, 139, 2156–2159.
- 199.) Benjamin List*, Philip S. J. Kaib, Lucas Schreyer, Sunggi Lee, Roberta Properzi, Luping Liu
Chiral phosphoramidimides and derivatives thereof
PCT. Int. Ap., 2017, WO2017037141A1.
- 198.) Benjamin List* and Philip S. J. Kaib
Chiral phosphoramidimides and derivatives thereof
European Patent, 2017, EP3138845A1.
- 197.) Sayantani Das, Nilanjana Majumdar, Chandra Kanta De, Dipti Sankar Kundu, Arno Döhring, Anika Garczynski and Benjamin List*
Asymmetric Catalysis of the Carbonyl-Amine Condensation: Kinetic Resolution of Primary Amines
J. Am. Chem. Soc., 2017, 139, 1357–1359.
- 196.) Denis Höfler, Manuel van Gemmeren, Petra Wedemann, Karl Kaupmees, Ivo Leito, Markus Leutzsch, Julia B. Lingnau, and Benjamin List*
1,1,3,3-Tetratrylpropene (TTP): A Strong, Allylic C–H Acid for Brønsted and Lewis Acid Catalysis
Angew. Chem. Int. Ed., 2017, 56, 1411–1415.
- 2016**
- 195.) Vijay N. Wakchaure and Benjamin List*
Catalytic Asymmetric Reductive Condensation of N–H Imines: Synthesis of C₂-Symmetric Secondary Amines
Angew. Chem. Int. Ed., 2016, 55, 15775–15778.
- 194.) Youwei Xie, Gui-Juan Cheng, Sunggi Lee, Philip S. J. Kaib, Walter Thiel and Benjamin List*
Catalytic Asymmetric Vinylogous Prins Cyclization: A Highly Diastereo- and Enantioselective Entry to Tetrahydrofurans
J. Am. Chem. Soc., 2016, 138, 14538–14541.
- 193.) Mattia Ricardo Monaco, Daniele Fazzi, Nobuya Tsuji, Markus Leutzsch, Saihu Liao, Walter Thiel and Benjamin List*
The Activation of Carboxylic Acids via Self-Assembly Asymmetric Organocatalysis: A Combined Experimental and Computational Investigation
J. Am. Chem. Soc., 2016, 138, 14740–14749.
- 192.) Philip S. J. Kaib, Lucas Schreyer, Sunggi Lee, Roberta Properzi and Benjamin List*
Extremely Active Organocatalysts Enable a Highly Enantioselective Addition of Allyltrimethylsilane to Aldehydes
Angew. Chem. Int. Ed., 2016, 55, 13200–13203.
- 191.) Luping Liu[†], Philip S. J. Kaib[†], Aurélien Tap, and Benjamin List*
A General Catalytic Asymmetric Prins Cyclization
J. Am. Chem. Soc., 2016, 138, 10822–10825.

- 190.) Zhipeng Zhang, Han Yong Bae, Joyram Guin, Constantinos Rabalakos, Manuel van Gemmeren, Markus Leutzsch, Martin Klussmann and Benjamin List*
Asymmetric counteranion-directed Lewis acid organocatalysis for the scalable cyanosilylation of aldehydes
Nat. Commun., **2016**, *7*, 12478, 1–8.
- 189.) Sayantani Das, Luping Liu, Yiyang Zheng, M. Wasim Alachraf, Walter Thiel*, Chandra Kanta De* and Benjamin List*
Nitrated Confined Iridodiphosphates Enable a Catalytic Asymmetric Oxa-Pictet–Spengler Reaction
J. Am.Chem.Soc., **2016**, *138*, 9429–9432.
- 188.) Aurélien Tap, Aurélie Blond, Vijay N. Wakchaure and Benjamin List*
Chiral Allenes via Alkynylogous Mukaiyama Aldol Reaction
Angew. Chem. Int. Ed., **2016**, *55*, 8962–8965.
- 187.) Lisa Kötzner, Markus Leutzsch, Sonja Sievers, Sumersing Patil, Herbert Waldmann, Yiyang Zheng, Walter Thiel and Benjamin List*
The Organocatalytic Approach to Enantiopure 2H- and 3H- Pyrroles: Inhibitors of the Hedgehog Signaling Pathway
Angew. Chem. Int. Ed., **2016**, *55*, 7693–7697.
- 186.) Saihu Liao, Markus Leutzsch, Mattia Riccardo Monaco and Benjamin List*
Catalytic Enantioselective Conversion of Epoxides to Thiiranes
J. Am.Chem.Soc., **2016**, *138*, 5230–5233.
- 185.) Gabriele Pupo, Roberta Properzi and Benjamin List*
Asymmetric Catalysis with CO₂: The Direct α -Allylation of Ketones.
Angew. Chem. Int. Ed., **2016**, *55*, 6099–6102.
- 184.) Thomas Mayer-Gall, Ji-Woong Lee, Klaus Opwis, Benjamin List, Jochen S. Gutmann
Textile Catalysts—An unconventional approach towards heterogeneous catalysis
ChemCatChem., **2016**, *8*, 1428–1436.
- 183.) Tim Gatzemeier*, Manuel van Gemmeren*, Youwei Xie, Denis Höfler, Markus Leutzsch and Benjamin List†
Asymmetric Lewis acid organocatalysis of the Diels–Alder reaction by a silylated C–H acid
Science, **2016**, *351*, 949–952.
- 182.) Mattia Riccardo Monaco, Gabriele Pupo and Benjamin List*
Phosphoric Acid Based Heterodimers in Asymmetric Catalysis
Synlett, **2016**, *27*, 1027–1040.
- 181.) Mattia Riccardo Monaco, Roberta Properzi and Benjamin List*
An Approach to Highly Hindered BINOL Phosphates
Synlett, **2016**, *27*, 591–594.
- 180.) Philip S. J. Kaib and Benjamin List*
Highly Acidic BINOL-Derived Phosphoramidimides and their Application in the Brønsted Acid Catalyzed Synthesis of α -Tocopherol.
Synlett, **2016**, *27*, 156–158.

2015

- 179.) Luping Liu, Markus Leutzsch, Yiyang Zheng, M. Wasim Alachraf, Walter Thiel and Benjamin List*
Confined Acid-Catalyzed Asymmetric Carbonyl–Ene Cyclization.
J. Am. Chem. Soc., **2015**, *137*, 13268–13271.
- 178.) Vijay N. Wakchaure, Philip S. J. Kaib, Markus Leutzsch and Benjamin List*
Disulfonimide-Catalyzed Asymmetric Reduction of *N*-Alkyl Imines.
Angew. Chem. Int. Ed., **2015**, *54*, 11852–11856.
- 177.) Thomas James, Manuel van Gemmeren and Benjamin List*
Development and Applications of Disulfonimides in Enantioselective Organocatalysis.
Chem. Rev., **2015**, *115*, 9388–9409.

- 176.) Christian Merten,* Corina H. Pollok, Saihu Liao and Benjamin List*
Stereochemical Communication within a Chiral Ion Pair Catalyst.
Angew. Chem. Int. Ed., **2015**, *54*, 8841–8845.
- 175.) Grigory A. Shevchenko, Gabriele Pupo and Benjamin List*
Catalytic Asymmetric α -Amination of α -Branched Ketones via Enol Catalysis.
Synlett, **2015**, *26*, 1413–1416.
- 174.) Gavin Chit Tsui, Luping Liu and Benjamin List*
The Organocatalytic Asymmetric Prins Cyclization.
Angew. Chem. Int. Ed., **2015**, *54*, 7703–7706.
- 173.) Shenlin Huang, Lisa Kötzner, Chandra Kanta De and Benjamin List*
Catalytic Asymmetric Dearomatizing Redox Cross Coupling of Ketones with Aryl Hydrazines Giving 1,4-Diketones.
J. Am. Chem. Soc., **2015**, *137*, 3446–3449.
- 172.) Kengo Hyodo, Shikha Gandhi, Manuel van Gemmeren and Benjamin List*
Brønsted Acid Catalyzed Asymmetric Silylation of Alcohols.
Synlett, **2015**, *26*, 1093–1095.
- 171.) Qinggang Wang and Benjamin List*
A Mukaiyama–Claisen Approach to 3,5-Diketo Esters.
Synlett, **2015**, *26*, 1525–1527.
- 170.) Qinggang Wang and Benjamin List*
Disulfonimide-Catalyzed Asymmetric Synthesis of δ -Amino- β -Keto Esters.
Synlett, **2015**, *26*, 807–809.
- 169.) Ji Hye Kim, Ilija Čorić, Chiara Palumbo and Benjamin List*
Resolution of Diols via Catalytic Asymmetric Acetalization.
J. Am. Chem. Soc., **2015**, *137*, 1778–1781.
- 168.) Irene Felker, Gabriele Pupo, Philip Kraft and Benjamin List*
Design and Enantioselective Synthesis of Cashmeran Odorants by Using “Enol Catalysis”.
Angew. Chem. Int. Ed., **2015**, *54*, 1960–1964.
- 167.) Joyram Guin, Qinggang Wang, Manuel van Gemmeren and Benjamin List*
The Catalytic Asymmetric Abramov Reaction
Angew. Chem. Int. Ed., **2015**, *54*, 355–358.

2014

- 166.) Mattia Riccardo Monaco, Sébastien Prévost and Benjamin List*
Catalytic Asymmetric Synthesis of Thiols.
J. Am. Chem. Soc. **2014**, *136* (49), 16982-16985.
- 165.) Qinggang Wang, Manuel van Gemmeren and Benjamin List*
Asymmetric Disulfonimide-Catalyzed Synthesis of δ -Amino- β -Ketoester Derivatives by Vinylogous Mukaiyama–Mannich Reactions.
Angew. Chem. Int. Ed. **2014**, *53* (49), 13592-13595.
- 164.) Benjamin List*
Catalytic Processes that Changed the World: 100 Years Max-Planck-Institut für Kohlenforschung.
Angew. Chem. Int. Ed., **2014**, *53*, 8528-8530.
- 163.) Sébastien Prévost, Nathalie Dupré, Markus Leutzsch, Qinggang Wang, Vijay Wakchaure and Benjamin List*
Catalytic Asymmetric Torgov Cyclization: A Concise Total Synthesis of (+)-Estrone.
Angew. Chem. Int. Ed., **2014**, *53* (33), 8770-8773.
- 162.) Mattia Riccardo Monaco, Sébastien Prévost and Benjamin List*
Organocatalytic Asymmetric Hydrolysis of Epoxides.
Angew. Chem. Int. Ed., **2014**, *53* (31), 8142-8145.

161.) Mattia Riccardo Monaco, Belén Poladura, Miriam Diaz de Los Bernardos, Markus Leutzsch, Richard Goddard and Benjamin List*
Activation of Carboxylic Acids in Asymmetric Organocatalysis.
Angew. Chem. Int. Ed., 2014, 53 (27), 7063-7067.

160.) Lars Ratjen, Manuel van Gemmeren, Fabio Pesciaioli and Benjamin List*
Towards High-Performance Lewis Acid Organocatalysis.
Angew. Chem. Int. Ed., 2014, 53 (33), 8765-8769.

159.) Lisa Kötzner, Matthew J. Webber, Alberto Martínez, Claudia De Fusco and Benjamin List*
Asymmetric Catalysis on the Nanoscale: The Organocatalytic Approach to Helicenes.
Angew. Chem. Int. Ed., 2014, 53 (20) 5202-5205.

158.) Denis Chusov* and Benjamin List*
Reductive Amination without an External Hydrogen Source.
Angew. Chem. Int. Ed., 2014, 53 (20), 5199-5201.

157.) Alberto Martínez, Manuel van Gemmeren and Benjamin List*
Unexpected Beneficial Effect of *ortho*-Substituents on the (S)-Proline-Catalyzed Asymmetric Aldol Reaction of Acetone with Aromatic Aldehydes.
Synlett, 2014, 25, 961-964.

156.) Alberto Martínez, Kristina Zumbansen, Arno Döhring, Manuel van Gemmeren and Benjamin List*
Improved Conditions for the Proline-Catalyzed Aldol Reaction of Acetone with Aliphatic Aldehydes.
Synlett, 2014, 25 (7), 932-934.

155.) Benjamin List,* Ilija Čorić, Oleksandr O. Grygorenko, Philip S.J. Kaib, Igor Komarov, Anna Lee, Markus Leutzsch, Subhas Chandra Pan, Andrey V. Tymtsunik and Manuel van Gemmeren
The Catalytic Asymmetric α -Benzoylation of Aldehydes.
Angew. Chem. Int. Ed., 2014, 53 (1), 282-285.

154.) Manuel van Gemmeren, Frank Lay and Benjamin List*
Asymmetric Catalysis Using Chiral, Enantiopure Disulfonimides.
Aldrichimica Acta, 2014, 47 (1), 3-13.

2013

153.) Zhipeng Zhang and Benjamin List*
Kinetics of the Chiral Disulfonimide-Catalyzed Mukaiyama Aldol Reaction.
Asian J. Org. Chem., 2013, 2 (11), 957-960.

152.) Han Yong Bae, Jae Hun Sim, Ji-Woong Lee, Benjamin List* and Choong Eui Song*
Organocatalytic Enantioselective Decarboxylative Aldol Reaction of Malonic Acid Half Thioesters with Aldehydes.
Angew. Chem. Int. Ed., 2013, 52 (46), 12143-12147.

151.) Qinggang Wang, Markus Leutzsch, Manuel van Gemmeren and Benjamin List*
Disulfonimide-Catalyzed Asymmetric Synthesis of β^3 -Amino Esters Directly from N-Boc-Amino Sulfones.
J. Am. Chem. Soc., 2013, 135 (41), 15334-15337.

150.) Ji-Woong Lee, Thomas Mayer-Gall, Klaus Opwis*, Choong Eui Song, Jochen Stefan Gutmann and Benjamin List*
Organotextile Catalysis.
Science, 2013, 341 (6151), 1225-1229.

149.) Chandra Kanta De, Fabio Pesciaioli and Benjamin List*
Catalytic Asymmetric Benzidine Rearrangement.
Angew. Chem. Int. Ed., 2013, 52 (35), 9293-9295.

148.) Alberto Martínez, Matthew J. Webber, Steffen Müller and Benjamin List*
Versatile Access to Chiral Indolines by Catalytic Asymmetric Fischer Indolization.
Angew. Chem. Int. Ed., 2013, 52 (36), 9486-9490.

147.) Olga Lifchits, Manuel Mahlau, Corinna M. Reisinger, Anna Lee, Christophe Farès, Iakov Polyak, Gopinadhanpillai Gopakumar, Walter Thiel and Benjamin List*
The Cinchona Primary Amine-Catalyzed Asymmetric Epoxidation and Hydroperoxidation of α,β -Unsaturated Carbonyl Compounds with Hydrogen Peroxide.
J. Am. Chem. Soc., **2013**, *135* (17), 6677-6693.

146.) Ji Hye Kim, Ilija Čorić, Sreekumar Vellalath and Benjamin List*
The Catalytic Asymmetric Acetalization.
Angew. Chem. Int. Ed., **2013**, *52* (13), 4474-4477.

145.) Ilija Čorić, Ji Hye Kim, Tjostil Vlaar, Mahendra Patil, Walter Thiel and Benjamin List*
Brønsted Acid Catalyzed Asymmetric S_N2 -Type O-Alkylations.
Angew. Chem. Int. Ed., **2013**, *52* (12), 3490-3493.

144.) Ilija Čorić, Sreekumar Vellalath, Steffen Müller, Xu Cheng and Benjamin List*
Developing Catalytic Asymmetric Acetalizations.
Top. Organomet. Chem., **2013**, *44*, 165-193.

143.) Shikha Gandhi and Benjamin List*
Catalytic Asymmetric Three-Component Synthesis of Homoallylic Amines.
Angew. Chem. Int. Ed., **2013**, *52* (9), 2573-2576.

142.) Joyram Guin, Georgy Varseev and Benjamin List*
Catalytic Asymmetric Protonation of Silyl Ketene Imines.
J. Am. Chem. Soc., **2013**, *135* (6), 2100-2103.

141.) Manuel Mahlau and Benjamin List*
Asymmetric Counteranion-Directed Catalysis: Concept, Definition, and Applications.
Angew. Chem. Int. Ed., **2013**, *52*, 518-533.

2012

140.) Manuel Mahlau, Pilar García-García and Benjamin List*
Asymmetric Counteranion-Directed Catalytic Hosomi–Sakurai Reaction.
Chem. Eur. J., **2012**, *18* (51), 16283-16287.

139.) Manuel Mahlau and Benjamin List*
Asymmetric Synthesis II (Ed. M. Christmann, S. Bräse)
Wiley-VCH, Weinheim, **2012**, 79-84.

138.) Ji-Woong Lee and Benjamin List*
Deracemization of α -Aryl Hydrocoumarins via Catalytic Asymmetric Protonation of Ketene Dithioacetals.
J. Am. Soc. Chem., **2012**, *134* (44), 18245-18248.

137.) Keiji Maruoka, Benjamin List, Hisashi Yamamoto and Liu-Zhu Gong
Organocatalysis: a web collection.
Chem. Commun., **2012**, 48, 10703-10703.

136.) Benjamin List, Sai-Hu Liao
Organic Chemistry - Breakthroughs and Perspectives
The Proline-Catalyzed Mannich Reaction and the Advent of Enamine Catalysis
Wiley-VCH, Weinheim, **2012**.

135.) Nicolas Demoulin, Olga Lifchits and Benjamin List*
Organocatalytic Asymmetric α -Benzoyloxylation of α -Branched Aldehydes and Enals. A Useful Approach to Oxygenated Quaternary Stereocenters.
Tetrahedron, **2012**, *68*, 7568-7574.

134.) Saihu Liao and Benjamin List*
Asymmetric Counteranion-Directed Iron Catalysis: A Highly Enantioselective Sulfoxidation.
Adv. Synth. Catal., **2012**, *354* (13), 2363-2367.

133.) Benjamin List
Organocatalysis.
Beilstein J. Org. Chem., **2012**, *8*, 1358-1359.

- 132.) Manuel Mahlau and Benjamin List*
Asymmetric Counteranion-Directed Catalysis (ACDC): A Remarkably General Approach to Enantioselective Synthesis.
Isr. J. Chem., **2012**, *52*, 630-638.
- 131.) Joyram Guin, Constantinos Rabalakos and Benjamin List*
Highly Enantioselective Hetero-Diels-Alder Reaction of 1,3-Bis(silyloxy)-1,3-dienes with Aldehydes Catalyzed by Chiral Disulfonimide.
Angew. Chem. Int. Ed., **2012**, *51* (35), 8859-8863.
- 130.) Saihu Liao, Ilija Čorić, Qinggang Wang and Benjamin List*
Activation of H₂O₂ by Chiral Confined Brønsted Acids: A Highly Enantioselective Catalytic Sulfoxidation.
J. Am. Chem. Soc., **2012**, *134* (26), 10765- 10768.
- 129.) Anna Lee, Corinna M. Reisinger, Benjamin List*
Catalytic Asymmetric Epoxidation of 2-Cyclopentenones.
Adv. Synth. Catal., **2012**, *354*, 1701-1706.
- 128.) Ilija Čorić and Benjamin List*
Asymmetric Spiroacetalization Catalysed by Confined Brønsted Acids.
Nature, **2012**, *483* (7389), 315- 319.
- 127.) Benjamin List (Vol. Ed.)
Asymmetric Organocatalysis 1: Lewis Base and Acid Catalysts.
Science of Synthesis, Georg Thieme Verlag KG, Stuttgart, **2012**.

2011

- 126.) Steffen Müller, Matthew J. Webber and Benjamin List*
The Catalytic Asymmetric Fischer Indolization.
J. Am. Chem. Soc., **2011**, *133*, 18534-18537.
- 125.) Gaoxi Jiang, Rajkumar Halder, Yewen Fang and Benjamin List*
A Highly Enantioselective Overman Rearrangement through Asymmetric Counteranion-Directed Palladium Catalysis.
Angew. Chem. Int. Ed., **2011**, *50*, 9752-9755.
- 124.) Olga Lifchits, Nicolas Demoulin and Benjamin List*
Direct Asymmetric α Benzoyloxylation of Cyclic Ketones.
Angew. Chem. Int. Ed., **2011**, *41*, 9854-9857.
- 123.) Gaoxi Jiang and Benjamin List*
Direct Asymmetric α -Allylation of Aldehydes with Simple Allylic Alcohols Enabled by the Concerted Action of Three Different Catalysts.
Angew. Chem. Int. Ed., **2011**, *50*, 9471-9474.
- 122.) Gaoxi Jiang and Benjamin List*
Enantioselective Hydrovinylation *via* Asymmetric Counteranion-Directed Ruthenium Catalysis.
Chem. Commun., **2011**, *47*, 10022-10024.
- 121.) Benjamin List
Cluster Preface: Challenges of Proline-Based Aminocatalysis.
Synlett, **2011**, *4* (20), 462-463.
- 20.) Gaoxi Jiang and Benjamin List*
Palladium/Brønsted Acid Catalyzed α -Allylation of Aldehydes with Allylic Alcohols.
Adv. Synth. Catal., **2011**, *353* (10), 1667-1670.
- 119.) Anna Lee, Anna Michrowska, Sarah Sulzer-Mosse and Benjamin List*
The Catalytic Asymmetric Knoevenagel Condensation.
Angew. Chem. Int. Ed., **2011**, *50*, 1707-1710.
- 118.) Lars Ratjen, Pilar García-García, Frank Lay, Michael Edmund Beck and Benjamin List*
Disulfonimide-Catalyzed Asymmetric Vinylogous and Bisvinylogous Mukaiyama Aldol Reactions.
Angew. Chem. Int. Ed., **2011**, *50*, 754-758.

2010

- 117.) Vijay Wakchaure, Marcello Nicoletti, Lars Ratjen and Benjamin List*
Towards a Practical Brønsted Acid Catalyzed and Hantzsch Ester Mediated Asymmetric Reductive Amination of Ketones with Benzylamine.
Synlett, **2010**, *18*, 2708-2710.
- 116.) Martin Klussmann, Lars Ratjen, Sebastian Hoffmann, Vijay Wakchaure, Richard Goddard and Benjamin List*
Synthesis of TRIP and Analysis of Phosphate Salt Impurities.
Synlett, **2010**, *14*, 2189-2192.
- 115.) Dominique Anna Bock, Christian W. Lehmann and Benjamin List*
Crystal structures of proline-derived enamines.
PNAS, **2010**, *107*, 20636-20641.
- 114.) Sreekumar Vellalath, Ilija Coric and Benjamin List*
N-Phosphinyl Phosphoramidate - A Chiral Brønsted Acid Motif for the Direct Asymmetric N,O-Acetalization of Aldehydes.
Angew. Chem. Int. Ed., **2010**, *49*, 9749-9752.
- 113.) Ilija Coric, Steffen Müller and Benjamin List*
Kinetic Resolution of Homoaldols via Catalytic Asymmetric Transacetalization.
J. Am. Chem. Soc., **2010**, *132*, 17370-17373.
- 112.) Zhang, Y., F. Lay, P. García-García, Benjamin List and E.Y.-X. Chen
High-Speed Living Polymerization of Polar Vinyl Monomers by Self-Healing Silylium Catalysts.
Chemistry - A European Journal, **2010**, *16* (34), 10462-10473.
- 111.) Lars Ratjen, Steffen Müller and Benjamin List*
ACDC - not just for heavy metal fans.
Nachrichten aus der Chemie, **2010**, *58*, 640-646.
- 110.) Steffen Müller and Benjamin List*
Catalytic asymmetric 6 π -electrocyclization: accessing highly substituted optically active 2-pyrazolines via diastereoselective alkylations.
Synthesis, **2010**, *13*, 2171-2178.
- 109.) Olga Lifchits, Corinna M. Reisinger and Benjamin List*
Catalytic Asymmetric Epoxidation of α -Branched Enals.
J. Am. Chem. Soc., **2010**, *132*, 10227-10229.
- 108.) Vijay N. Wakchaure, Jian Zhou, Sebastian Hoffmann and Benjamin List*
Catalytic Asymmetric Reductive Amination of α -Branched Ketones.
Angew. Chem. Int. Ed., **2010**, *49*, 4612-4614.
- 107.) Ilija Coric, Sreekumar Vellalath and Benjamin List*
Catalytic Asymmetric Transacetalization.
J. Am. Chem. Soc., **2010**, *132*, 8536-8537.
- 106.) Vijay N. Wakchaure and Benjamin List*
A New Structural Motif for Bifunctional Brønsted Acid/Base Organocatalysis.
Angew. Chem. Int. Ed., **2010**, *49*, 4136-4139.
- 105.) Kristina Zumbansen, Arno Döhring and Benjamin List*
Morpholinium Trifluoroacetate Catalyzed Aldol Condensation of Acetone with both Aromatic and Aliphatic Aldehydes.
Adv. Synth. Catal., **2010**, *352*, 1135-1138.
- 104.) Benjamin List
Enough Organocatalysis? (Ed.)
Top. Curr. Chem., **2010**, *291*, *Asymmetric Organocatalysis*, ix-x.

103.) Daniela Kampen, Corinna M. Reisinger and Benjamin List*
Chiral Brønsted Acids for Asymmetric Organocatalysis.
Top. Curr. Chem., **2010**, *291*, 395-456.

102.) Benjamin List*
Emil Knoevenagel and the Roots of Aminocatalysis.
Angew. Chem. Int. Ed., **2010**, *49*, 1730-1734.

101.) Saihu Liao and Benjamin List*
Asymmetric Counteranion-Directed Transition-Metal Catalysis: Enantioselective Epoxidation of Alkenes with Manganese(III) Salen Phosphate Complexes.
Angew. Chem. Int. Ed., **2010**, *49*, 628-631.

2009

100.) Steffen Müller and Benjamin List*
A Catalytic Asymmetric 6π Electrocyclization: Enantioselective Synthesis of 2-Pyrazolines.
Angew. Chem. Int. Ed., **2009**, *48*, 9975-9978.

99.) Anna Michrowska and Benjamin List*
Concise synthesis of ricciocarpin A and discovery of a more potent analogue.
Nature Chem., **2009**, *1*, 225-228.

98.) Pilar Garcia Garcia, Frank Lay, Patricia Garcia Garcia, Constantinos Rabalakos and Benjamin List*
A Powerful Chiral Counteranion Motif for Asymmetric Catalysis.
Angew. Chem. Int. Ed., **2009**, *48*, 4363-4366.

97.) Rubén Manzano, Lidia Ozores, Andreas Job, Lars Rodefeld and Benjamin List*
Catalytic Synthesis of (*E*)- α,β -Unsaturated Esters from Aldehydes and 1,1-Diethoxyethylene.
Beilstein J. Org. Chem., **2009**, *5*, doi:10.3762/bjoc.5.3.

96.) Carley Chandler, Patrizia Galzerano, Anna Michrowska and Benjamin List*
The Proline-Catalyzed Double Mannich Reaction of Acetaldehyde with N-Boc Imines.
Angew. Chem. Int. Ed., **2009**, *48*, 1978-1980.

95.) Wolfgang Schrader, Peni Purwa Handayani, Jian Zhou and Benjamin List*
Characterization of Key Intermediates in a Complex Organocatalytic Cascade Reaction Using Mass Spectrometry.
Angew. Chem. Int. Ed., **2009**, *48*, 1463-1466.

94.) Jung Woon Yang, Subhas Chandra Pan and Benjamin List*
Synthesis of *tert*-Butyl (1*S*,2*S*)-2-methyl-3-oxo-1-phenylpropylcarbamate by Asymmetric Mannich Reaction.
Org. Synth., **2009**, *86*, 11-17.

2008

93.) Xu Cheng, Sreekumar Vellalath, Richard Goddard and Benjamin List*
Direct Catalytic Asymmetric Synthesis of Cyclic Aminals from Aldehydes.
J. Am. Chem. Soc., **2008**, *130* (47), 15786-15787.

92.) Nolwenn J. A. Martin, Xu Cheng and Benjamin List*
Organocatalytic Asymmetric Transferhydrogenation of β -Nitroacrylates: Accessing β^2 -Amino Acids.
J. Am. Chem. Soc., **2008**, *130*, 13862-13863.

91.) Corinna M. Reisinger, Xingwang Wang and Benjamin List*
Catalytic Asymmetric Hydroperoxidation of α,β -Unsaturated Ketones: An Approach to Enantiopure Peroxyhemiketals, Epoxides, and Aldols.
Angew. Chem. Int. Ed., **2008**, *47*, 8112-8115.

90.) Jian Zhou, Vijay Wakchaure, Philip Kraft and Benjamin List*
Primary-Amine-Catalyzed Enantioselective Intramolecular Aldolizations.
Angew. Chem. Int. Ed., **2008**, *47*, 7656-7658.

- 89.) Gareth Adair, Santanu Mukherjee and Benjamin List*
TRIP-A Powerful Brønsted Acid Catalyst for Asymmetric Synthesis.
Aldrichimica Acta, **2008**, *41* (2), 31-39.
- 88.) Xu Cheng, Richard Goddard, Gernoth Buth and Benjamin List*
Direct Catalytic Asymmetric Three-Component Kabachnik-Fields Reaction.
Angew. Chem. Int. Ed., **2008**, *47*, 5079-5081.
- 87.) Patricia García-García, Arnaud Ladépêche, Rajkumar Halder and Benjamin List*
Catalytic Asymmetric Michael Reactions of Acetaldehyde.
Angew. Chem. Int. Ed., **2008**, *120*, 4797-4799.
- 86.) Carley L. Chandler and Benjamin List*
Catalytic Asymmetric Transannular Aldolizations: Total Synthesis of (+)-Hirsutene.
J. Am. Chem. Soc., **2008**, *130*, 6737-6739.
- 85.) Xingwang Wang, Corinna M. Reisinger and Benjamin List*
Catalytic Asymmetric Epoxidation of Cyclic Enones.
J. Am. Chem. Soc., **2008**, *130*, 6070-6071.
- 84.) Subhas Chandra Pan and Benjamin List*
Catalytic Three-Component Ugi Reaction.
Angew. Chem. Int. Ed., **2008**, *47*, 3622-3625.
- 83.) Daniela Kampen, Arnaud Ladépêche, Gerrit Claßen and Benjamin List*
Brønsted Acid-Catalyzed Three-Component Hosomi-Sakurai Reactions.
Adv. Synth. Catal., **2008**, *350*, 962-966.
- 82.) Jung Woon Yang, Carley Chandler, Michael Stadler, Daniela Kampen and Benjamin List*
Proline-catalysed Mannich reaction of acetaldehyde.
Nature, **2008**, *452*, 453-455.
- 81.) Michael Stadler and Benjamin List*
Heck Reactions of Crotonaldehyde.
Synlett, **2008**, 597-599.
- 80.) Subhas Chandra Pan and Benjamin List*
The Catalytic Acylcyanation of Imines.
Chem. Asian J., **2008**, *3*, 430-437.
- 79.) Xingwang Wang and Benjamin List*
Asymmetric Counteranion-Directed Catalysis for the Epoxidation of Enals.
Angew. Chem. Int. Ed., **2008**, *120*, 1135-1138.
- 2007**
- 78.) Subhas C. Pan and Benjamin List*
New Concepts for Organocatalysis
In Ernst Schering Research Foundation Workshop,
M. T. Reetz, B. List, S. Jaroch and H. Weinmann (Eds.), Springer Berlin Heidelberg, **2007**, *2*, 1-43
- 77.) Benjamin List*
Introduction: Organocatalysis.
Chem. Rev., **2007**, *107*, 5413-5415.
- 76.) Santanu Mukherjee, Jung Woon Yang, Sebastian Hoffmann and Benjamin List*
Asymmetric Enamine Catalysis.
Chem. Rev., **2007**, *107*, 5471-5569.
- 75.) Santanu Mukherjee and Benjamin List*
Chiral Counteranions in Asymmetric Transition-Metal Catalysis: Highly Enantioselective Pd/Brønsted Acid-Catalyzed Direct α -Allylation of Aldehydes.
J. Am. Chem. Soc., **2007**, *129*, 11336-11337.

- 74.) Jung Woon Yang, Michael Stadler and Benjamin List*
Practical Proline-Catalyzed Asymmetric Mannich Reaction of Aldehydes with N-Boc-imines.
Nat. Protocols, **2007**, *2*, 1937-1942.
- 73.) Jian Zhou and Benjamin List*
Synthesis of trans-3-Substituted Cyclohexylamines via Brønsted Acid Catalyzed and substrate-Mediated Triple Organocatalytic Cascade Reaction.
Synlett, **2007**, 2037-2040.
- 72.) Nolwenn J. A. Martin, Lidia Ozores and Benjamin List*
Organocatalytic Asymmetric Transfer Hydrogenation of Nitroolefins.
J. Am. Chem. Soc., **2007**, *129*, 8976-8977.
- 71.) Jian Zhou and Benjamin List*
Organocatalytic Asymmetric Reaction Cascade to Substituted Cyclohexylamines.
J. Am. Chem. Soc., **2007**, *129*, 7498-7499.
- 70.) Benjamin List
Biocatalysis and Organocatalysis: Asymmetric Synthesis Inspired by Nature. In *Asymmetric Synthesis: The Essentials*, Christmann, M. and Bräse, S., Ed. Wiley-VCH: Weinheim, Germany, **2007**, 161-165.
- 69.) Santanu Mukherjee and Benjamin List*
Organic Chemistry: Radical Catalysis.
Nature, **2007**, *447*, 152-153.
- 68.) Xiaoguang Li and Benjamin List*
Catalytic Asymmetric Hydrogenation of Aldehydes.
Chem. Commun. **2007**, *17*, 1739-1741.
- 67.) Subhas Chandra Pan and Benjamin List*
Catalytic One-Pot, Three-Component Acyl-Strecker Reaction.
Synlett, **2007**, *2*, 318-320.
- 66.) Subhas Chandra Pan and Benjamin List*
Catalytic Asymmetric Three-Component Acyl-Strecker Reaction.
Org. Lett., **2007**, *9* (4), 1149-1151.
- 65.) Subhas Chandra Pan, Jian Zhou and Benjamin List*
Catalytic Asymmetric Acylcyanation of Imines.
Angew. Chem. Int. Ed., **2007**, *46* (4), 612-614.
- 64.) Jung Woon Yang, Michael Stadler and Benjamin List*
Proline-Catalyzed Mannich Reaction of Aldehydes with N-Boc-Imines.
Angew. Chem. Int. Ed., **2007**, *46* (4), 609-611.
- 2006**
- 63.) Subhas Chandra Pan, Jian Zhou and Benjamin List*
Catalytic Acylcyanation of Imines with Acetylcyanide.
Synlett, **2006**, *19*, 3275-3276.
- 62.) Jung Woon Yang* and Benjamin List*
Catalytic Asymmetric Transfer Hydrogenation of α -Ketoesters with Hantzsch Esters.
Org. Lett., **2006**, *8*, 5653-5655.
- 61.) Benjamin List* and Jung Woon Yang
The Organic Approach to Asymmetric Catalysis.
Science, **2006**, *313* (5793), 1584-1586.
- 60.) Nolwenn J. A. Martin and Benjamin List*
Highly Enantioselective Transfer Hydrogenation of α,β -Unsaturated Ketones.
J. Am. Chem. Soc., **2006**, *128* (40), 13368-13369.

- 59.) Daniela Kampen and Benjamin List*
Efficient Brønsted Acid Catalyzed Hosomi–Sakurai Reaction of Acetals.
Synlett, **2006**, *16*, 2589-2592.
- 58.) Sebastian Hoffmann, Marcello Nicoletti and Benjamin List*
Catalytic Asymmetric Reductive Amination of Aldehydes via Dynamic Kinetic Resolution.
J. Am. Chem. Soc., **2006**, *128* (40), 13074-13075.
- 57.) Sonja Mayer and Benjamin List*
Asymmetric Counteranion-Directed Catalysis.
Angew. Chem. Int. Ed., **2006**, *45* (25), 4193-4195.
- 56.) Aiping Fu, Benjamin List* and Walter Thiel*
Density Functional Study of the Enantioselectivity in the 2-Methylproline-Catalyzed α -Alkylation of Aldehydes.
J. Org. Chem., **2006**, *71* (1), 320-326.
- 55.) Benjamin List*
The Ying and Yang of Asymmetric Aminocatalysis.
Chem. Comm., **2006**, 819-824.
- 54.) Jayasree Seayad, Abdul Majeed Seayad and Benjamin List*
Catalytic Asymmetric Pictet-Spengler Reaction.
J. Am. Chem. Soc., **2006**, *128* (4), 1086-1087.
- 53.) Benjamin List*, Arno Doehring, Maria T. Hechavarría Fonseca, Andreas Job and Ramon Rios Torres
A Practical, efficient, and atom economic alternative to the Wittig and Horner–Wadsworth-Emmons reactions for the synthesis of (E)- α,β -unsaturated esters from aldehydes.
Tetrahedron **2006**, *62* (2-3), 476-482.

2005

- 52.) Jayasree Seayad and Benjamin List
Chapter 9. Catalytic Asymmetric Multi-Component Reactions.
In Multi-Component Reactions, Zhu, J. and Bienayme, H., Eds. Wiley-VCH: Weinheim, Germany, **2005**.
- 51.) Sebastian Hoffmann, Abdul Majeed Seayad and Benjamin List*
A Powerful Brønsted Acid Catalyst for the Organocatalytic Asymmetric Transfer Hydrogenation of Imines.
Angew. Chem. Int. Ed., **2005**, *44*, 7424-7427.
- 50.) Jung Woon Yang, Maria H. Fonseca and Benjamin List*
Catalytic Asymmetric Reductive Michael Cyclization.
J. Am. Chem. Soc., **2005**, *127*, 15036-15037.
- 49.) Benjamin List*, Arno Doehring, Maria T. Hechavarría Fonseca, Kathrin Wobser, Hendrik van Thienen, Ramon Rios Torres and Pedro Llamas Galilea
Practical Synthesis of (E)- α,β -Unsaturated Esters from Aldehydes.
Adv. Synth. Catal., **2005**, *347*, 1558 – 1560.
- 48.) Jayasree Seayad and Benjamin List*
Asymmetric Organocatalysis.
Org. Biomol. Chem., **2005**, *3*, 719-724.

2004

- 47.) Jung Woon Yang, Maria H. Fonseca, Nicola Vignola and Benjamin List*
Metal-Free, Organocatalytic Asymmetric Transfer Hydrogenation of α,β -Unsaturated Aldehydes.
Angew. Chem. Int. Ed., **2004**, *117*, 110-112.
- 46.) Jung Woon Yang, Maria T. Hechavarría Fonseca and Benjamin List*
A Metal-Free Transfer Hydrogenation: Organocatalytic Conjugate Reduction of α,β -Unsaturated Aldehydes.
Angew. Chem. Int. Ed., **2004**, *43*, 6660-6662.

- 45.) Benjamin List
Organokatalyse: Eine neue und breit anwendbare Synthesemethode
Jahrb. - Max-Planck-Ges., Vandenhoeck & Ruprecht: Göttingen, 2004, S. 353-356.
- 44.) Benjamin List: Organocatalysis
A Complementary Catalysis Strategy Advances Organic Synthesis.
Adv. Synth. Catal., 2004, 346, 1021.
- 43.) Benjamin List
Amine-Catalyzed Aldol Reactions.
In Modern Aldol Reactions, Vol. 1, Mahrwald, R., Ed. Wiley-VCH: Weinheim, Germany, 2004, 161-200.
- 42.) Benjamin List*
Enamine Catalysis is a Powerful Strategy for the Catalytic Generation and Use of Carbanion Equivalents.
Acc. Chem. Res., 2004, 37, 548-557.
- 41.) K. N. Houk and Benjamin List
Asymmetric Organocatalysis.
Acc. Chem. Res., 2004, 37, 487-487.
- 40.) Maria T. Hechavarría Fonseca and Benjamin List*
Catalytic Asymmetric Intramolecular Michael Reaction of Aldehydes.
Angew. Chem. Int. Ed., 2004, 43, 3958-3960.
- 39.) Maria T. Hechavarría Fonseca and Benjamin List*
Combinatorial Chemistry and High-Throughput-Screening for the Discovery of Organocatalysts.
Curr. Opin. Chem. Biol., 2004, 8, 319-326.
- 38.) Benjamin List*, Linh Hoang and Harry J. Martin
New Mechanistic Studies on the Proline-Catalyzed Aldol Reaction.
Proc. Natl. Acad. Sci., 2004, 101, 5839-5842.
- 37.) Nicola Vignola and Benjamin List*
Catalytic Asymmetric Intramolecular α -Alkylation of Aldehydes.
J. Am. Chem. Soc., 2004, 126, 450-451.
- 2003**
- 36.) Peter Pojarliev, William T. Biller, Harry J. Martin and Benjamin List*
Highly Enantioselective Synthesis of 1,2-Amino Alcohol Derivatives via Proline-Catalyzed Mannich Reaction.
Synlett, 2003, 12, 1903-1905.
- 35.) Harry J. Martin and Benjamin List*
Mining Sequence Space for Asymmetric Aminocatalysis: N-Terminal Prolyl-Peptides Efficiently Catalyze Enantioselective Aldol and Michael Reactions.
Synlett, 2003, 12 1901-1902.
- 34.) Chandrakala Pidathala, Linh Hoang, Nicola Vignola and Benjamin List*
Direct Catalytic Asymmetric Enol-oxo-Aldolizations.
Angew. Chem. Int. Ed., 2003, 42, 2785-2788.
- 33.) S. Bahmanyar, K. N. Houk*, Harry J. Martin and Benjamin List*
Quantum Mechanical Predictions of the Stereoselectivities of Proline-Catalyzed Asymmetric Intermolecular Aldol Reactions.
J. Am. Chem. Soc., 2003, 125, 2475-2479.
- 32.) Linh Hoang, S. Bahmanyar, K. N. Houk and Benjamin List*
Kinetic and Stereochemical Evidence for the Involvement of Only One Proline Molecule in the Transition States of Proline-Catalyzed Intra- and Intermolecular Aldol Reactions.
J. Am. Chem. Soc., 2003, 125, 16-17.

2002

31.) Benjamin List*

Proline-Catalyzed Asymmetric Reactions.

Tetrahedron, **2002**, *58*, 5573-5590.

30.) Benjamin List*

Direct Catalytic Asymmetric α -Amination of Aldehydes.

J. Am. Chem. Soc., **2002**, *124*, 5656-5657.

29.) Benjamin List*, Peter Pojarliev, William T. Biller and Harry J. Martin

The Proline-Catalyzed Direct Asymmetric Three-Component Mannich Reaction:

Scope, Optimization, and Application to the Highly Enantioselective Synthesis of 1,2-Amino Alcohols.

J. Am. Chem. Soc., **2002**, *124*, 827-833.

2001

28.) Dorothy S. Worrall, Jonathan E. McDunn, Benjamin List, Donna Reichart, Andrea Hevener, Thomas Gustafson, Carlos F. Barbas III, Richard A. Lerner* and Jerrold M. Olefsky*

Synthesis of an Organoinulin Molecule that can be Activated by Antibody Catalysis.

Proc. Natl. Acad. Sci., **2001**, *98*, 13514-13518.

27.) Cecilia Subauste*, Benjamin List, Xiaojun Guan, Klaus M. Hahn, Richard A. Lerner and Norton B. Gilula

A Catalytic Antibody Produces Fluorescent Tracers of Gap Junction Communication in Living Cells.

J. Biol. Chem., **2001**, *276*, 49164-49168.

26.) Benjamin List*

Asymmetric Aminocatalysis.

Synlett, **2001**, 1675-1686.

25.) Benjamin List* and Chris Castello

A Novel Proline-Catalyzed Three-Component Reaction of Ketones, Aldehydes, and Meldrum's Acid.

Synlett, **2001**, 1687-1689.

24.) Benjamin List*, Peter Pojarliev and Harry J. Martin

Efficient Proline-Catalyzed Michael-Additions of Unmodified Ketones to Nitroolefins.

Org. Lett., **2001**, *3*, 2423-2425.

23.) Benjamin List*, Peter Pojarliev and Chris Castello

Proline-Catalyzed Asymmetric Aldol Reactions between Ketones and α -Unsubstituted Aldehydes.

Org. Lett., **2001**, *3*, 573-575.

2000

22.) Benjamin List*

The Direct Catalytic Asymmetric Three-Component Mannich Reaction.

J. Am. Chem. Soc., **2000**, *122*, 9336-9337.

21.) Wolfgang Notz and Benjamin List*

Catalytic Asymmetric Synthesis of anti-1,2-Diols.

J. Am. Chem. Soc., **2000**, *122*, 7386-7387.

20.) Carlos F. Barbas III*, Christoph Reader, David J. Segal, Benjamin List and James M. Turner

From Catalytic Asymmetric Synthesis to the Transcriptional Regulation of Genes: In Vivo and In Vitro evolution of Proteins.

Advances in Protein Chemistry, **2000**, *55*, 317-366.

19.) James Turner, Tommy Bui, Richard A. Lerner*, Carlos F. Barbas* and Benjamin List*

An Efficient Benchtop System for Multigram-Scale Kinetic Resolutions Using Aldolase Antibodies.

Chem. Eur. J., **2000**, *6*, 2772-2774.

18.) Christoph Rader and Benjamin List*

Catalytic Antibodies as Magic Bullets.

Chem. Eur. J., **2000**, *6*, 2091-2095.

- 17.) Benjamin List*, Richard. A. Lerner and Carlos F. Barbas III
Proline-Catalyzed Direct Asymmetric Aldol Reactions.
J. Am. Chem. Soc., **2000**, *122*, 2395-2396.
- 16.) Amelie Karlstrom, Guofu Zhong, Christoph Rader, Nicholas A. Larsen, Andreas Heine, Roberta Fuller, Benjamin List, Fujie Tanaka, Ian A. Wilson, Carlos F. Barbas III* and Richard A. Lerner*
Using Antibody Catalysis to Study the Outcome of Multiple Evolutionary Trials of a Chemical Task.
Proc. Natl. Acad. Sci., **2000**, *97*, 3878-3883.
- 1999 - 1994**
- 15.) Benjamin List, Doron Shabat, Guofu Zhong, James M. Turner, Tony Li, Tommy Bui, James Anderson, Richard. A. Lerner* and Carlos F. Barbas III*
A Catalytic Enantioselective Route to Hydroxy-Substituted Quaternary Carbon Centers: Resolution of Tertiary Aldols with a Catalytic Antibody.
J. Am. Chem. Soc., **1999**, *121*, 7283-7291.
- 14.) Doron Shabat, Christoph Rader, Benjamin List, Richard. A. Lerner* and Carlos F. Barbas III*
Multiple Event Activation of a Generic Prodrug Trigger by Antibody Catalysis.
Proc. Natl. Acad. Sci., **1999**, *96*, 6925-6930.
- 13.) Benjamin List, Richard. A. Lerner* and Carlos F. Barbas III*
Enantioselective Aldol-Cyclodehydrations Catalyzed by Antibody 38C2.
Org. Lett., **1999**, *1*, 59-62.
- 12.) Doron Shabat, Benjamin List, Richard A. Lerner* and Carlos F. Barbas III*
A Short Enantioselective Synthesis of 1-Deoxy-L-Xylulose by Antibody Catalysis.
Tetrahedron Lett., **1999**, *40*, 1437-40.
- 11.) Benjamin List, Carlos F. Barbas III* and Richard. A. Lerner*
Aldol Sensors for the Rapid Generation of Tunable Fluorescence by Antibody Catalysis.
Proc. Natl. Acad. Sci., **1998**, 15351-55.
- 10.) Carlos F. Barbas III and Benjamin List
Alchemy, Enzymes, and the Blind-Watchmaker.
Nature Biotechnology, **1998**, *16*, 423-24.
- 9.) Benjamin List, Doron Shabat, Carlos F. Barbas III* and Richard A. Lerner*
Enantioselective Total Synthesis of Some Brevicomins Using Aldolase Antibody 38C2.
Chem. Eur. J., **1998**, 881-885.
- 8.) Guofu Zhong, Doron Shabat, Benjamin List, James Anderson, Subash C. Sinha, Richard A. Lerner* and Carlos F. Barbas III*
Angew. Chem., Int. Ed., **1998**, *37*, 2481-84.
- 7.) Torsten Hoffmann, Guofu Zhong, Benjamin List, Doron Shabat, James Anderson, Svetlana Gramatikova, Richard A. Lerner* and Carlos F. Barbas III*
Aldolase Antibodies of Remarkable Scope.
J. Am. Chem. Soc., **1998**, *120*, 2768-79.
- 6.) Carlos F. Barbas III*, Andreas Heine, Guofu Zhong, Torsten Hoffmann, Svetlana Gramatikova, Robert Bjoernstedt, Benjamin List, James Anderson, Enrico A. Stura, Ian Wilson* and Richard A. Lerner*
Immune vs. Natural Selection: Antibody Aldolases with Enzymic Rates but Broader Scope.
Science, **1997**, *278*, 2085-2092.
- 5.) Johann Mulzer*, Jan W. Bats, Benjamin List, Till Opatz and Dirk Trauner
The Phenanthrene Approach to Opium Alkaloids: Formal Total Synthesis of Morphine by Sigmatropic Rearrangement.
Synlett, **1997**, 441-44.
- 4.) Johann Mulzer*, Benjamin List and Jan W. Bats
Stereocontrolled Synthesis of a Nonracemic Vitamin B₁₂ A-B Semicorrin.
J. Am. Chem. Soc., **1997**, *119*, 5512-18.

3.) Johann Mulzer*, Harry J. Martin and Benjamin List
Three Component, One-Pot Synthesis of α,β -Unsaturated Ketones.
Tetrahedron Lett., **1996**, *37*, 9177-78.

2.) Johann Mulzer* and Benjamin List
[2,3]-Wittig Rearrangement of (Trimethylsilyl)methyl Allyl Ethers.
Tetrahedron Lett., **1996**, *37*, 2403-04.

1.) Johann Mulzer* and Benjamin List
Highly Stereoselective Synthesis of Tetrasubstituted Alkenes via [2,3]-Wittig Rearrangement.
Tetrahedron Lett., **1994**, *35*, 9021-24.