

Full Publication List

PUBLICATIONS

110 Research Articles
12 Reviews/Highlight Articles
7 Book Chapters
2 Patent

Paolo Melchiorre (*author profile*): *Angew. Chem. Int. Ed.* **2009**, *48*, 3389 [[link](#)]

PM has an h-factor of **60** and has attracted a total of 9950 citations for the period 1999-2019 (source: *ISI-Web of Science* as of October 1, 2019).

122. Photochemical Asymmetric Nickel-Catalyzed Acyl Cross-Coupling

Eugenio Gandolfo, Xinjun Tang, Sudipta Raha Roy, and Paolo Melchiorre
Angew. Chem. Int. Ed. **2019**, DOI: 10.1002/anie.201910168

121. Photochemical C-H Hydroxyalkylation of Quinolines and Isoquinolines

Bartosz Bieszczad, Luca A. Perego, and Paolo Melchiorre
Angew. Chem. Int. Ed. **2019**, DOI: 10.1002/anie.201910641

120. Photo-Organocatalytic Enantioselective Radical Cascade Enabled by Single-Electron Transfer Activation of Allenes

Luca A. Perego, Pablo Bonilla, and Paolo Melchiorre
Adv. Synth. Catal. **2019**, DOI: 10.1002/adsc.201900973 (EN Jacobsen special issue)

119. A Redox Active Nickel Complex that Acts as an Electron Mediator in Photochemical Giese Reactions

Thomas van Leeuwen, Luca Buzzetti, Luca A. Perego and Melchiorre
Angew. Chem. Int. Ed. **2019**, *58*, 4953–4957 (open access [[Link](#)])

118. Photochemical Organocatalytic Borylation of Alkyl Chlorides, Bromides, and Sulfonates

Daniele Mazzarella, Giandomenico Magagnano, Bertrand Schweitzer-Chaput and Paolo Melchiorre
ACS Catal. **2019**, *9*, 5876–5880 (open access [[Link](#)])

117. A visible-light mediated three-component radical process using dithiocarbamate anion catalysis

Sara Cuadros, Matthew A. Horwitz, Bertrand Schweitzer-Chaput and Paolo Melchiorre
Chem. Sci. **2019**, *10*, 5484–5488 (open access [[Link](#)])

116. Photochemical generation of radicals from alkyl electrophiles using a nucleophilic organic catalyst

Bertrand Schweitzer-Chaput, Matthew A. Horwitz, Eduardo de Pedro Beato, and Paolo Melchiorre
Nature Chem. **2019**, *11*, 129–135. [[Link](#)]

115. Stereocontrolled Synthesis of 1,4-Dicarbonyl Compounds by Photochemical Organocatalytic Acyl Radical Addition to Enals

Giulio Goti, Bartosz Bieszczad, Alberto Vega-Peñaloza, and Paolo Melchiorre
Angew. Chem. Int. Ed. **2019**, *58*, 1213–1217 (open access [[Link](#)])

114. Mechanistic Studies in Photocatalysis

Luca Buzzetti, Giacomo E. M. Crisenza, and Paolo Melchiorre
Angew. Chem. Int. Ed. **2019**, *58*, 3730–3747 (review - open access, [[Link](#)])

113. Enhancing the potential of enantioselective organocatalysis with light

Mattia Silvi, and Paolo Melchiorre
Nature **2018**, *554*, 41–49 (review [[Link](#)])

112. Enantioselective radical conjugate additions driven by a photoactive intramolecular iminium-ion-based EDA complex

Zhong-Yan Cao, Tamal Ghosh, and Paolo Melchiorre
Nat. Commun. **2018**, *9*, 3274 (open access [[Link](#)])

111. Organocatalytic Strategies to Stereoselectively Trap Photochemically Generated Hydroxy-o-quinodimethanes

Sara Cuadros and Paolo Melchiorre
Eur. J. Org. Chem. **2018**, 2884–2891 (review)

110. Asymmetric photocatalytic C–H functionalization of toluene and derivatives

Daniele Mazzarella, Giacomo E.M. Crisenza, and Paolo Melchiorre
J. Am. Chem. Soc. **2018**, *140*, 8439–8443 (open access [\[Link\]](#))

109. Photo-Organocatalytic Enantioselective Radical Cascade Reactions of Unactivated Olefins

Pablo Bonilla, Yannick P. Rey, Catherine Holden, and Paolo Melchiorre
Angew. Chem. Int. Ed. **2018**, *57*, 12819–12823 (open access [\[Link\]](#))

108. Enantioselective Photochemical Organo-Cascade Catalysis

Łukasz Woźniak, Giandomenico Magagnano, and Paolo Melchiorre
Angew. Chem. Int. Ed. **2018**, *57*, 1068–1072 (open access [\[Link\]](#))

107. Direct Stereoselective Installation of Alkyl Fragments at the β -Carbon of Enals via Excited Iminium Ion Catalysis

Charlie Verrier, Nurtalya Alandini, Cristofer Pezzetta, Mauro Moliterno, Luca Buzzetti, Hamish B. Hepburn, Alberto Vega-Peñaloza, Mattia Silvi, Paolo Melchiorre
ACS Catalysis **2018**, *8*, 1062-1066 ([\[Link\]](#))

106. Visible-Light Excitation of Iminium Ions Enables the Enantioselective β -Alkylation of Enals

Mattia Silvi, Charlie Verrier, Yannick Rey, Luca Buzzetti, and Paolo Melchiorre
Nature Chem. **2017**, *9*, 868-873 (open access [\[Link\]](#))

105. Studies on the Enantioselective Iminium Ion Trapping of Radicals Triggered by an Electron-Relay Mechanism

Ana Bahamonde, John J. Murphy, Marika Savarese, Erik Bremond, Andrea Cavalli, Paolo Melchiorre
J. Am. Chem. Soc. **2017**, *139*, 4559-4567 (open access [\[Link\]](#))

104. Radical-based C-C Bond-Forming Processes Enabled by the Photoexcitation of 4-Alkyl-1,4-dihydropyridines

Luca Buzzetti, Alexis Prieto, Sudipta R. Roy, Paolo Melchiorre
Angew. Chem. Int. Ed. **2017**, *56*, 15039–15043 (open access [\[Link\]](#))

103. Forging Quaternary Fluorine Stereocenters by a Light-driven Organocatalytic Aldol Desymmetrization Process

Sara Cuadros, Luca Dell'Amico, Paolo Melchiorre
Angew. Chem. Int. Ed. **2017**, *56*, 1875-11879 (open access [\[Link\]](#))

102. Enantioselective Formal α -Methylation and α -Benzoylation of Aldehydes by Means of Photo-Organocatalysis

Giacomo Filippini, Mattia Silvi, Paolo Melchiorre
Angew. Chem. Int. Ed. **2017**, *56*, 4447-4451 (open access [\[Link\]](#))

101. Light-Driven Enantioselective Organocatalytic β -Benzoylation of Enals

Luca Dell'Amico, Victor M. Fernández-Alvarez, Feliu Maseras, and Paolo Melchiorre
Angew. Chem. Int. Ed. **2017**, *56*, 3304-3308 (open access [\[Link\]](#))

100. Light-triggered Enantioselective Organocatalytic Mannich-type Reaction

Hamish B. Hepburn, Giandomenico Magagnano, and Paolo Melchiorre
Synthesis **2017**, *49*, 76-86 ([\[Link\]](#))
Special Issue celebrating the 70th Birthday of Prof. Dr. Dieter Enders (Invited paper)

99. Asymmetric catalytic formation of quaternary carbons by iminium ion trapping of radicals

John J. Murphy, David Bastida, Suva Paria, Maurizio Fagnoni, and Paolo Melchiorre
Nature **2016**, *532*, 218–222 ([\[Link\]](#))

98. Mechanism of the Stereoselective α -Alkylation of Aldehydes Driven by the Photochemical Activity of Enamines

Ana Bahamonde, and Paolo Melchiorre
J. Am. Chem. Soc. **2016**, *138*, 8019–8030 (open access [\[Link\]](#))

97. Enantioselective Vinylogous Organocascade Reactions

Hamish B. Hepburn, Luca Dell'Amico, and Paolo Melchiorre
Chemical Record **2016**, *16*, 1787–1806 (invited Personal Account)

96. Enantioselective Organocatalytic Diels–Alder Trapping of Photochemically Generated Hydroxy α -Quinodimethanes

Luca Dell'Amico, Alberto Vega-Peñaloza, Sara Cuadros, and Paolo Melchiorre
Angew. Chem. Int. Ed. **2016**, *55*, 3313–3317 (open access [\[Link\]](#))

95. Brønsted acid-catalysed conjugate addition of photochemically generated α -amino radicals to alkenylpyridines

Hamish B. Hepburn, and P. Melchiorre
Chem. Commun. **2016**, *52*, 3520–3523 (open access [\[Link\]](#))

94. Light opens pathways for nickel catalysis

John J. Murphy, and Paolo Melchiorre
Nature **2015**, *524*, 297–298 (News & Views [\[Link\]](#))

93. Diastereodivergent organocatalysis for the asymmetric synthesis of chiral annulated furans

Charlie Verrier, and Paolo Melchiorre
Chem. Sci. **2015**, *6*, 4242–4246 (open access [\[Link\]](#))

92. Enantioselective Organocatalytic Alkylation of Aldehydes and Enals Driven by the Direct Photoexcitation of Enamines

M. Silvi, E. Arceo, I. D. Jurberg, C. Cassani, and P. Melchiorre
J. Am. Chem. Soc. **2015**, *137*, 6120–6123 (open access [\[Link\]](#))

91. Photo-organocatalytic Enantioselective Perfluoroalkylation of β -Ketoesters

Łukasz Woźniak, John J. Murphy, and Paolo Melchiorre
J. Am. Chem. Soc. **2015**, *137*, 5678–5681 (open access [\[Link\]](#))

90. Computational Study with DFT and Kinetic Models on the Mechanism of Photoinitiated Aromatic Perfluoroalkylations

Victor M. Fernández-Alvarez, Manuel Nappi, Paolo Melchiorre, and Feliu Maseras
Org. Lett. **2015**, *17*, 2676–2679 ([\[Link\]](#))

89. X-Ray Characterization of an EDA Complex which Drives the Photochemical Alkylation of Indoles
Sandeep R. Kandukuri, Ana Bahamonde, Indranil Chatterjee, Igor D. Jurberg, Eduardo C. Escudero-Adán, and Paolo Melchiorre

Angew. Chem. Int. Ed. **2015**, *54*, 1485–1489. [\[Link\]](#)

88. Photochemical direct perfluoroalkylation of phenols

Giacomo Filippini, Manuel Nappi, and Paolo Melchiorre
Tetrahedron **2015**, *71*, 4535–4542 [\[Link\]](#)

Symposium in Print to honour the Tetrahedron Young Investigator Award to Prof. Yoshiaki Nakao

87. Photo-Organocatalysis of Atom-Transfer Radical Additions to Alkenes

Elena Arceo, Elisa Montroni, and Paolo Melchiorre
Angew. Chem. Int. Ed. **2014**, *53*, 12064–12068. [\[Link\]](#)

Selected as a **VIP Paper**

86. Metal-free Photochemical Aromatic Perfluoroalkylation of α -Cyano Arylacetates

Manuel Nappi, Giulia Bergonzini, and Paolo Melchiorre
Angew. Chem. Int. Ed. **2014**, *53*, 4921–4925. [\[Link\]](#)
Selected as a HOT Paper - Highlighted in SynForm 2014, issue 2014/09 [\[Link\]](#)

- 85. Enantioselective direct α -alkylation of cyclic ketones by means of photo-organocatalysis**
Elena Arceo, Ana Bahamonde, Giulia Bergonzini, and Paolo Melchiorre
Chem. Science **2014**, 5, 2438-2442. [\[Link\]](#)
Highlighted in *Synfact* 2014, 535
- 84. Asymmetric Vinylogous Diels–Alder Reactions Catalyzed by a Chiral Phosphoric Acid**
Xu Tian, Nora Hofmann, and Paolo Melchiorre
Angew. Chem. Int. Ed. **2014**, 53, 2997-3000. [\[Link\]](#)
Highlighted in *Synfact* 2014, 433
- 83. Synthesis of Cyclopropane Spirooxindoles by means of a Vinylogous Organocatalytic Cascade**
Rodrigo César da Silva, Indranil Chatterjee, Eduardo Escudero-Adán, Marcio Weber Paixão, and Paolo Melchiorre
Asian J. Org. Chem. **2014**, 3, 466–469.
Special Issue: Organocatalysis (edited by Professor Keiji Maruoka)
- 82. Photochemical activity of a key donor–acceptor complex can drive stereoselective catalytic α -alkylation of aldehydes**
Elena Arceo, Igor D. Jurberg, Ana Álvarez-Fernández, and Paolo Melchiorre
Nature Chem. **2013**, 5, 750-756. [\[Link\]](#)
Highlighted in *Synfact* 2013, 1229
- 81. Vinylogous Organocatalytic Triple Cascade Reaction: Forging Six Stereocenters in Complex Spiro Oxindolic Cyclohexanes**
Indranil Chatterjee, David Bastida, and Paolo Melchiorre
Adv. Synth. Catal. **2013**, 355, 3124–3130. [\[Link\]](#)
- 80. Controlling the Molecular Topology of Vinylogous Iminium Ions by Logical Substrate Design: Highly Regio- and Stereoselective Aminocatalytic 1,6-Addition to Linear 2,4-Dienals**
Mattia Silvi, Indranil Chatterjee, Yankai Liu, and Paolo Melchiorre
Angew. Chem. Int. Ed. **2013**, 52, 10780-10783. [\[link\]](#)
- 79. A Mechanistic Rationale for the 9-Amino(9-deoxy)epi Cinchona Alkaloids Catalyzed Asymmetric Reactions via Iminium Ion Activation of Enones**
Antonio Moran, Alex Hamilton, Carles Bo, and Paolo Melchiorre
J. Am. Chem. Soc. **2013**, 135, 9091-9098. [\[link\]](#)
Highlighted in *Synfact* 2013, 891
- 78. Control of Remote Stereochemistry in the Synthesis of Spirocyclic Oxindoles by Means of Vinylogous Organocascade Catalysis**
Xu Tian and Paolo Melchiorre
Angew. Chem. Int. Ed. **2013**, 52, 5360–5363 [\[link\]](#)
- 77. When Asymmetric Aminocatalysis Meets the Vinylogy Principle**
Igor Jurberg, Indranil Chatterjee, René Tannert, and Paolo Melchiorre
Chem. Comm. **2013**, 49, 4869-4883 [\[link\]](#) (invited feature article)
- 76. Synthesis of 9-amino(9-deoxy)epi cinchona alkaloids, general chiral organocatalysts for the stereoselective functionalization of carbonyl compounds**
Carlo Cassani, Rafael Martín-Rapún, Elena Arceo, Fernando Bravo and Paolo Melchiorre
Nature Protocols **2013**, 8, 325-344 [\[link\]](#)
- 75. Asymmetric Vinylogous Aldol Reaction via H-Bond-Directing Dienamine Catalysis**
David Bastida, Yankai Liu, Xu Tian, Eduardo Escudero-Adán, and Paolo Melchiorre
Org. Lett. **2013**, 15, 220–223 [\[link\]](#)
- 74. Cinchona-based Primary Amine Catalysis in the Asymmetric Functionalisation of Carbonyls**
Paolo Melchiorre
Angew. Chem. Int. Ed. **2012**, 51, 9748-9770 (Review Article) [\[link\]](#)
- 73. Direct Catalytic Enantioselective Vinylogous Aldol Reaction of α -Branched Enals with Isatins**
Carlo Cassani, and Paolo Melchiorre
Org. Lett. **2012**, 14 (21), 5590–5593 [\[link\]](#)

72. Secondary amine-catalyzed asymmetric gamma-alkylation of alpha-branched enals via dienamine activation

Mattia Silvi, Carlo Cassani, Antonio Moran, and Paolo Melchiorre

Helvetica Chim. Acta **2012**, *95*, 1985-2006 [\[link\]](#)Special Issue celebrating the 75th Birthday of Prof. Dr. Dieter Seebach (Invited paper)**71. Aminocatalytic Enantioselective 1,6-Additions of Alkyl Thiols to Cyclic Dienones: Vinylogous Iminium Ion Activation**

Xu Tian, Yankai Liu, and Paolo Melchiorre

Angew. Chem. Int. Ed. **2012**, *51*, 6439-6442 [\[link\]](#)Highlighted in *Synfact* 2012, 905**70. Extending the Aminocatalytic HOMO-Raising Activation Strategy: Where is the Limit?**

Elena Arceo, and Paolo Melchiorre

Angew. Chem. Int. Ed. **2012**, *51*, 5290-5292 (Highlight Article) [\[link\]](#)**69. Dioxindole in Asymmetric Catalytic Synthesis: Routes to Enantioenriched 3-Substituted 3-Hydroxyoxindoles and the Preparation of Maremycin A**

Giulia Bergonzini and Paolo Melchiorre

Angew. Chem. Int. Ed. **2012**, *51*, 971-974 [\[link\]](#)Highlighted in *Synfact* 2012, 329**68. Dioxindole in asymmetric catalytic synthesis: direct access to 3-substituted 3-hydroxy-2-oxindoles via 1,4-additions to nitroalkenes**

Michele Retini, Giulia Bergonzini, and Paolo Melchiorre

Chem. Commun., **2012**, *48*, 3336-3338 [\[link\]](#)**67. Multicatalytic Asymmetric Synthesis of Complex Tetrahydrocarbazoles via a Diels–Alder/Benzoin Reaction Sequence**

Yankai Liu, Manuel Nappi, Eduardo C. Escudero-Adán, and Paolo Melchiorre

Org. Lett., **2012**, *14* (5), 1310–1313 [\[link\]](#)**66. A Bio-Inspired Route to α -Amino Acid Derivatives**

Elena Arceo and Paolo Melchiorre

ChemCatChem **2012**, *4*, 459–461 (invited Highlight article) [\[link\]](#)**65. Diastereodivergent Asymmetric Sulfa-Michael Additions of α -Branched Enones using a Single Chiral Organic Catalyst**

Xu Tian, Carlo Cassani, Yankai Liu, Antonio Moran, Atsushi Urakawa, Patrizia Galzerano, Elena Arceo, and Paolo Melchiorre

J. Am. Chem. Soc. **2011**, *133*, 17934–17941 [\[link\]](#)Highlighted in *Science* 2011, 334, 570 & in *Synfact* 2012, 213**64. Asymmetric Catalysis of Diels–Alder Reactions with in Situ Generated Heterocyclic *ortho*-Quinodimethanes**

Yankai Liu, Manuel Nappi, Elena Arceo, Silvia Vera, and Paolo Melchiorre

J. Am. Chem. Soc. **2011**, *133*, 15212–15218 [\[link\]](#)**63. Multiple approaches to enantiopure spirocyclic benzofuranones using organocatalytic cascade reactions**

Carlo Cassani, Xu Tian, Eduardo C. Escudero-Adán, and Paolo Melchiorre

Chem. Comm. **2011**, *47*, 233-235 [\[link\]](#) (Emerging Investigator Themed issue)**63. Asymmetric Michael Addition of Nitrobenzyl Pyridines to Enals via Iminium Catalysis**

S. Vera, Y. Liu, M. Marigo, E. C. Escudero-Adán, P. Melchiorre

Synlett **2011**, 489-494 [\[link\]](#)Special Cluster Issue on *Proline and Proline-based Organocatalyst***61. Cooperative Organocatalysis for the Asymmetric γ -Alkylation of α -Branched Enals**

G. Bergonzini, S. Vera, P. Melchiorre

Angew. Chem. Int. Ed. **2010**, *49*, 9685-9688 [\[link\]](#)Highlighted in *Synfact* 2011, 101

60. Direct asymmetric vinylogous Michael addition of cyclic enones to nitroalkenes via dienamine catalysis

G. Bencivenni, P. Galzerano, A. Mazzanti, G. Bartoli, and P. Melchiorre

Proc. Natl. Acad. Sci. U.S.A. **2010**, *107*, 20642-20647 [\[link\]](#)Organocatalysis Special Issue - Highlighted in *Synfact* 2010, 1299 and Selected as **Synfact of the Month****59. Reacciones Dominó Aminocatalíticas: una cascada de posibilidades**

S. Vera and P. Melchiorre

An. Quim. **2010**, *106*(4), 277-284**58. Organocatalytic Asymmetric Conjugate Additions of Oxindoles and Benzofuranones to Cyclic Enones**

F. Pesciaioli, X. Tian, G. Bencivenni, G. Bartoli, P. Melchiorre

Synlett **2010**, 1704-1708 [\[link\]](#)

Special Cluster Issue on Stereoselective Synthesis of Stereogenic Quaternary Carbons

57. Chemoselectivity in Asymmetric Aminocatalysis

M. Marigo, P. Melchiorre

ChemCatChem **2010**, *2*, 621-623 (Invited Highlight) [\[link\]](#)**56. Cinchona Alkaloids in Synthesis & Catalysis. Ligands, Immobilization and Organocatalysis.**

Edited by Choong Eui Song

P. Melchiorre

Angew. Chem. Int. Ed. **2010**, *49*, 3259-3260 (Invited Book Review)**55. Asymmetric Catalytic Aziridination of Cyclic Enones**

F. De Vincentiis, G. Bencivenni, F. Pesciaioli, A. Mazzanti, G. Bartoli, P. Galzerano, P. Melchiorre

Chem. Asian J. **2010**, *5*, 1652-1656 [\[link\]](#)Highlighted in *Synfact* 2010, 949**54. Controlling Stereoselectivity in the Aminocatalytic Enantioselective Mannich Reaction of Aldehydes with In Situ Generated N-Carbamoyl Imines**

P. Galzerano, D. Agostino, G. Bencivenni, L. Sambri, G. Bartoli, P. Melchiorre

Chem. Eur. J. **2010**, *16*, 6069-6076 [\[link\]](#)**53. Perchloric Acid and Its Salts: Very Powerful Catalysts in Organic Chemistry**

R. Dalpozzo, L. Sambri, G. Bartoli, P. Melchiorre

Chem. Rev. **2010**, *110*, 3501-3551 (REVIEW) [\[link\]](#)**52. Asymmetric organocatalytic cascade reactions with α -substituted α,β -unsaturated aldehydes**

P. Galzerano, F. Pesciaioli, A. Mazzanti, G. Bartoli, P. Melchiorre

Angew. Chem. Int. Ed. **2009**, *48*, 7892-7894 [\[link\]](#)Highlighted in *Synfact* 2009, 1278**Publications from Bologna University****51. Targeting structural and stereochemical complexity by organocascade catalysis: construction of spirocyclic oxindoles having multiple stereocentres**

G. Bencivenni, L.-Y. Wu, A. Mazzanti, F. Pesciaioli, M.-P. Song, G. Bartoli, P. Melchiorre

Angew. Chem. Int. Ed. **2009**, *48*, 7200-7203 - Selected as a **HOT Paper** [\[link\]](#)Highlighted in *Synfact* 2009, 1165, and *Angew. Chem. Int. Ed.* 2010, 49, 846**50. Organocascade reactions of enones catalyzed by a chiral primary amine**

L.-Y. Wu, G. Bencivenni, M. Mancinelli, A. Mazzanti, G. Bartoli, P. Melchiorre

Angew. Chem. Int. Ed. **2009**, *48*, 7196-7199 [\[link\]](#)Highlighted in *Synfact* 2009, 1283**49. Bifunctional catalysis by natural cinchona alkaloids: a mechanism explained**

C. S. Cucinotta, M. Kosa, P. Melchiorre, A. Cavalli, F. L. Gervasio

Chem. Eur. J. **2009**, *15*, 7913-7921 [\[link\]](#) Special Issue: 100th Anniversary of SCI (Società Chimica Italiana)

48. Asymmetric Iminium Ion Catalysis with a Novel Bifunctional Primary Amine Thiourea: Controlling Adjacent Quaternary and Tertiary Stereocenters

P. Galzerano, G. Bencivenni, F. Pesciaioli, A. Mazzanti, B. Giannichi, L. Sambri, G. Bartoli, and P. Melchiorre
Chem. Eur. J. **2009**, *15*, 7846-7849 [[link](#)] Special Issue: 100th Anniversary of SCI (Societ  Chimica Italiana)

47. Light in Aminocatalysis: the Asymmetric Intermolecular α -Alkylation of Aldehydes

P. Melchiorre

Angew. Chem. Int. Ed. **2009**, *48*, 1360-1363 (invited HIGHLIGHT article) [[link](#)]

46. Recent Development about the Use of Pyrocarbonates as Activator in Organic Synthesis

R. Dalpozzo, G. Bartoli, M. Bosco, P. Melchiorre, L. Sambri

Curr. Org. Synth. **2009**, *6*, 79-101

45. Proline Catalyzed Asymmetric Formal α -Alkylation of Aldehydes via Vinylogous Iminium Ion Intermediate Generated from Arylsulfonyl Indoles

R. R. Shaikh, A. Mazzanti, M. Petrini,* G. Bartoli, and P. Melchiorre*

Angew. Chem. Int. Ed. **2008**, *47*, 8707-8710 [[link](#)]

Highlighted in *Angew. Chem. Int. Ed.* **2011**, *50*, 12146-12147

44. Organocatalytic Asymmetric Aziridination of Enones

F. Pesciaioli, F. De Vincentiis, P. Galzerano, G. Bencivenni, G. Bartoli, A. Mazzanti, and P. Melchiorre

Angew. Chem. Int. Ed. **2008**, *47*, 8703-8706 [[link](#)]

Highlighted in *Synfact* 2009, 100

43. Aminocatalytic Enantioselective anti-Mannich Reaction of Aldehydes with in Situ Generated N-Cbz and N-Boc Imines

C. Gianelli, L. Sambri, A. Carlone, G. Bartoli, and P. Melchiorre

Angew. Chem. Int. Ed. **2008**, *47*, 8700-8702 [[link](#)]

Highlighted in *Synfact* 2009, 92

42. Asymmetric Aminocatalysis-Gold Rush in Organic Chemistry

P. Melchiorre,* M. Marigo,* A. Carlone, G. Bartoli

Angew. Chem. Int. Ed. **2008**, *47*, 6138-6171 (REVIEW) [[link](#)]

41. A Novel Organocatalytic Tool for the Iminium Activation of α,β -Unsaturated Ketones

G. Bartoli, P. Melchiorre

Synlett **2008**, 1759-1771 (Invited Personal Account) [[link](#)]

40. Multicomponent Domino Reaction Promoted by $Mg(ClO_4)_2$: Highly Efficient Access to Functionalized 1,4-Dihydropyridines

G. Bartoli, M. Bosco, P. Galzerano, R. Giri, A. Mazzanti, P. Melchiorre, L. Sambri

Eur. J. Org. Chem. **2008**, 3970-3975

39. Quaternary Stereogenic Carbons in Complex Molecules by an Asymmetric Organocatalytic Triple-Cascade Reaction

O. Penon, A. Carlone, A. Mazzanti, M. Locatelli, L. Sambri, G. Bartoli, P. Melchiorre

Chem. Eur. J. **2008**, *14*, 4788-4791 [[link](#)]

38. Magnesium perchlorate as efficient Lewis acid for the Knoevenagel condensation between β diketones and aldehydes

G. Bartoli, M. Bosco, A. Carlone, R. Dalpozzo, P. Galzerano, P. Melchiorre, L. Sambri

Tetrahedron Lett. **2008**, *49*, 2555-2557

37. Organocatalytic Asymmetric Sulfa-Michael Addition to α,β -Unsaturated Ketones

P. Ricci, A. Carlone, G. Bartoli, M. Bosco, L. Sambri, P. Melchiorre

Adv. Synth. Catal. **2008**, *350*, 49-53 [[link](#)]

36. Magnesium Perchlorate as Efficient Lewis Acid: A Simple and Convenient Route to 1,4 Dihydropyridines

G. Bartoli, K. Babiuch, M. Bosco, A. Carlone, P. Galzerano, P. Melchiorre, L. Sambri

Synlett **2007**, 2897-2901

35. Organocatalytic Asymmetric β -Hydroxylation of α,β -Unsaturated Ketones

A. Carlone, G. Bartoli, M. Bosco, F. Pescioli, P. Ricci, L. Sambri, P. Melchiorre,
Eur. J. Org. Chem. **2007**, 5492-5495 [\[link\]](#)

Highlighted in *Synfact* 2008, 98

34. Organocatalytic Asymmetric α -Selenenylation of Aldehydes

M. Tiecco, A. Carlone, S. Sternativo, F. Marini, G. Bartoli, P. Melchiorre,
Angew. Chem. Int. Ed. **2007**, 46, 6882-6885 [\[link\]](#)

33. Organocatalytic Asymmetric Hydrophosphination of α,β -Unsaturated Aldehydes

A. Carlone, G. Bartoli, M. Bosco, L. Sambri, P. Melchiorre,

Angew. Chem. Int. Ed. **2007**, 46, 4504-4506 [\[link\]](#). Highlighted in *Synfact* 2007, 760

32. Reaction of Dicarbonates with Carboxylic Acids Catalyzed by Weak Lewis Acids: General Method for the Synthesis of Anhydrides and Esters

G. Bartoli, M. Bosco, A. Carlone, R. Dalpozzo, E. Marcantoni, P. Melchiorre, L. Sambri
Synthesis **2007**, 3489-3496

31. Organocatalytic Asymmetric Friedel-Crafts Alkylation of Indoles with Simple α,β -Unsaturated Ketones

G. Bartoli, M. Bosco, A. Carlone, F. Pescioli, L. Sambri, P. Melchiorre,

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