

Prof. Dr Paolo Melchiorre

Full Publication List

PUBLICATIONS

116 Research Articles
14 Reviews/Highlight Articles
7 Book Chapters
3 Patents

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

PM has an h-factor of **65** and has attracted a total of 12300 citations for the period 1999-2021 (source: *ISI-Web of Science as of September 24, 2021*).

3 most important publications:

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. [\[Link\]](#)

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

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. [\[Link\]](#)

Full list of publications:

131. Catalytic asymmetric C–C cross-couplings enabled by photoexcitation

G. E. M. Crisenza, A. Faraone, E. Gandolfo, D. Mazzarella, P. Melchiorre,
Nature Chem. **13**, 575–580 (2021) [\[link\]](#)

130. A General Organocatalytic System for Electron Donor–Acceptor Complex Photoactivation and Its Use in Radical Processes

Eduardo de Pedro Beato, Davide Spinnato, Wei Zhou, and Paolo Melchiorre
J. Am. Chem. Soc. **2021**, *143*, 12304–12314 (open access [\[Link\]](#))

129. A General Organocatalytic System for Enantioselective Radical Conjugate Additions to Enals

Emilien Le Saux, Dengke Ma, Pablo Bonilla, Catherine M. Holden, Danilo Lustosa, and Paolo Melchiorre
Angew. Chem. Int. Ed. **2021**, *60*, 5357–5362 (open access [\[Link\]](#))

128. Photochemical Chemoselective Alkylation of Tryptophan-Containing Peptides

Benjamin Laroche, Xinjun Tang, Gaétan Archer, Riccardo Di Sanza, and Paolo Melchiorre
Org. Lett. **2021**, *23*, 285–289 ([\[Link\]](#))

127. Synthetic Methods Driven by the Photoactivity of Electron Donor-Acceptor Complexes

Giacomo E. M. Crisenza, Daniele Mazzarella, and Paolo Melchiorre
J. Am. Chem. Soc. **2020**, *142*, 5461–5476 (review, open access [\[Link\]](#))

126. Chemistry glows green with photoredox catalysis

Giacomo E. M. Crisenza, and Paolo Melchiorre
Nat. Commun. **2020**, *11*, article number: 803 (review, open access [\[Link\]](#))

125. A Photochemical Organocatalytic Strategy for the α -Alkylation of Ketones by using Radicals

Davide Spinnato, Bertrand Schweitzer-Chaput, Giulio Goti, Maksim Oseka, and Paolo Melchiorre
Angew. Chem. Int. Ed. **2020**, *59*, 9485–9490 (open access [\[Link\]](#))

124. Amide Synthesis by Nickel/Photoredox-Catalyzed Direct Carbamoylation of (Hetero)Aryl Bromides

Nurtalya Alandini, Luca Buzzetti, Gianfranco Favi, Tim Schulte, Lisa Candish, Karl Collins, Paolo Melchiorre
Angew. Chem. Int. Ed. **2020**, *59*, 5248–5253 (open access [\[Link\]](#))

123. Photochemical generation of acyl and carbamoyl radicals using a nucleophilic organic catalyst: applications and mechanism thereof

Eduardo de Pedro Beato, Daniele Mazzarella, Matteo Balletti, and Paolo Melchiorre
Chem. Sci. **2020**, *11*, 6312–6324 (open access [\[Link\]](#))

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

Luca A. Perego, Pablo Bonilla, and Paolo Melchiorre
Adv. Synth. Catal. **2020**, *362*, 302–307 (EN Jacobsen special issue)

121. Photochemical Asymmetric Nickel-Catalyzed Acyl Cross-Coupling

Eugenio Gandolfo, Xinjun Tang, Sudipta Raha Roy, and Paolo Melchiorre
Angew. Chem. Int. Ed. **2019**, *58*, 16854–16858 (open access [\[Link\]](#))

120. Photochemical C-H Hydroxyalkylation of Quinolines and Isoquinolines

Bartosz Bieszczyk, Luca A. Perego, and Paolo Melchiorre
Angew. Chem. Int. Ed. **2019**, *58*, 16878–16883 (open access [\[Link\]](#))

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 Paolo 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 Bieszczyk, 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*, 11875–11879 (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 *o*-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*, 277–284

58. Organocatalytic Asymmetric Conjugate Additions of Oxindoles and Benzofuranones to Cyclic Enones

F. Pesciaoli, 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. Pesciaoli, 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 [\[link\]](#)**52. Asymmetric organocatalytic cascade reactions with α -substituted α,β -unsaturated aldehydes**

P. Galzerano, F. Pesciaoli, 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. Pesciaoli, 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. Pesciaoli, 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 (Società 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. Pesciaoli, 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**

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