

LIST OF PUBLICATIONS (1999-2017)

PAPERS (111)

111. "Nickel-catalyzed synthesis of stereochemically defined enamides via bi- and tri-component coupling reaction"

Y. Liu, A. De Nisi, A. Cerveri, M. Monari and **M. Bandini***
submitted

110. "Convenient Metal-Free Catalyzed One-pot Synthesis of Allenyl-indoles"

A. De Nisi, S. Sierra, M. Ferrara, M. Monani, **M. Bandini***
Org. Chem. Front., **2017**, *4*, 1849-1853. [[link](#)]

109. "Unveiling the reaction machinery of the [Au(I)]-catalyzed synthesis of substituted acenes via [1,5]-H shift cascade reaction"

M. Bandini,* G. Cera, G.P. Miscione*
ChemCatChem **2017**, *9*, 316-327. [[link](#)]

108. "Catalytic α -allylation of enones with alcohols via [Au(I)]-mediated [3,3]-sigmatropic rearrangement of propargylic carboxylates"

E. Manoni, M. Daka, M. M. Mastandrea, A. De Nisi, M. Monari, **M. Bandini***
Adv. Synth. Catal. **2016**, *358*, 1404-1409 (special issue "Gold Catalysis: Quo Vadis?", on invitation). [[link](#)]
Selected as a 'VIP' article by the Editorial Board.

107. "Gold-catalyzed allylation reactions"

A. Quintavalla, **M. Bandini***
ChemCatChem **2016**, *8*, 1437-1453 (MicroReview on invitation). [[link](#)]

106. "New Opportunities in the Stereoselective Dearomatization of Indoles"

E. Manoni, A. De Nisi, **M. Bandini***
Pure & Appl. Chem. **2016**, *88*, 207-214 (special issue XIX ESOC-15, on invitation). [[link](#)]

105. "New alkynyl-gold(I) complexes featuring anti-cancer activity"

A. De Nisi, C. Bergamini, M. Leonzio, G. Sartor, R. Fato, M. Monari,* N. Calonghi,* **M. Bandini***
Dalton Transactions **2016**, *45*, 1546-1553. [[link](#)]

104. "Au(I)]-assisted alpha Allylation of Enals and Enones with Alcohols"

M. M. Mastandrea, N. Mellonei, P. Giacinto, A. Collado, S. P. Nolan, G. P. Miscione, A. Bottoni, **M. Bandini***
Angew. Chem. Int. Ed. **2015**, *54*, 14885-14889; [*Angew. Chem.* **2015**, *127*, 15098-15102]. [[link](#)]

103. "Gold(I)-dearomative [2+2]-Cycloaddition of Indoles with Activated Allenes. A Combined Experimental Computational Study"

R. Ocello, A. De Nisi, M. Jia, Q.-Q. Yang, P. Giacinto, A. Bottoni, G.P. Miscione,* **M. Bandini***
Chem. Eur. J. **2015**, *21*, 18445-18453. [[link](#)]

102. "Visible light-induced direct photocatalytic carboxylation of indoles with CBr₄/MeOH"

Q.-Q. Yang, M. Marchini, W.-J. Xiao, P. Ceroni,* **M. Bandini***

Chem. Eur. J. **2015**, *21*, 18052-18056. [[link](#)]

101. "Assessing the Role of Counterion in Gold Catalyzed Dearomatization of Indoles with Allenamides by NMR Studies"

L. Rocchigiani, M. Jia, **M. Bandini**,* A. Macchioni*

ACS Catalysis **2015**, *5*, 3911-3915. [[link](#)]

100. "A DFT mechanistic investigation of the gold(I) catalyzed synthesis of azepino[1,2-a]indoles"

P. Giacinto, G. Cera, A. Bottoni, **M. Bandini**,* G. P. Miscione*

ChemCatChem **2015**, *7*, 2480-2484.

Selected as a 'VIP' article by the Editorial Board. [[link](#)]

99. "Counterion effects in homogeneous gold catalysis"

M. Jia, **M. Bandini***

ACS Catalysis **2015**, *5*, 1638-1652. [[link](#)]

98. "Organocatalytic enantioselective synthesis of 1-vinyltetrahydroisoquinolines through allenamide activation with chiral Brønsted acids"

E. Manoni, A. Gualandi, L. Mengozzi, M. Bandini, P. G. Cozzi*

RSC Adv. **2015**, *5*, 10546-10550. [[link](#)]

97. "Enantioselective Gold Catalyzed Dearomative [2+2]-Cycloaddition between Indoles and Allenamides"

M. Jia, M. Monari, Q.-Q. Yang, **M. Bandini***

Chem. Commun. **2015**, *51*, 2320-2323. [[link](#)]

96. "Metal-free enantioselective electrophilic activation of allenamides: stereoselective de-aromatization of indoles"

C. Romano, M. Jia, M. Monari, E. Manoni, **M. Bandini***

Angew. Chem. Int. Ed. **2014**, *53*, 13854-13857; [*Angew. Chem.* **2014**, *126*, 14074-14077]. [[link](#)]

95. "Taming [Au(I)]-counterion interplay in the de-aromatization of indoles with allenamides"

M. Jia, G. Cera, D. Perrotta, **M. Bandini***

Chem. Eur. J. **2014**, *20*, 9875-9878. [[link](#)]

94. "Blue and highly emitting [Ir(IV)] complexes by an efficient photoreaction of green luminescent [Ir(III)] complexes"

E. Marchi, M. Locritani, M. Baroncini, G. Bergamini, R. Sinisi, M. Monari, C. Botta, W. Mroz, **M. Bandini**,* P. Ceroni,* V. Balzani

J. Mat. Chem. C. **2014**, *2*, 4461-4467. [[link](#)]

93. "New developments in gold-catalyzed manipulation of unactivated alkenes"

M. Chiarucci,* **M. Bandini***

Beilstein J. Org. Chem. **2013**, *9*, 2586-2614.

92. "Merging Synthesis and Enantioselective Functionalization of Indoles via Gold-catalyzed Asymmetric Cascade Reaction"

M. Chiarucci, R. Mocci, L.-D. Syntrivanis, G. Cera, A. Mazzanti, **M. Bandini***

Angew. Chem. Int. Ed. **2013**, *52*, 10850-10853; [*Angew. Chem.* **2013**, *125*, 11050-11053] [[link](#)]

[Highlighted in Synfacts 2014, 10, 68.](#) [[link](#)]

91. "Gold(I) Catalyzed Functionalization of Benzhydryl C(sp³)-H Bonds"

G. Cera, M. Chiarucci, F. Dosi, **M. Bandini***

Adv. Synth. Catal. **2013**, *355*, 2227–2231. [[link](#)]

90. "Electrophilicity: the "Dark-Side" of Indole Chemistry"

M. Bandini*

Org. Biomol. Chem. **2013**, *11*, 5206-5212. [[link](#)]

[Selected as an "HOT paper" by the Editorial Board.](#)

[Top ten most accessed articles \(Q3\) Org. Biomol. Chem.](#)

89. "Enantioselective Gold(I) Catalysis With Chiral Monodentate Ligands"

G. Cera, **M. Bandini***

Isr. J. Chem. **2013**, *53*, 848-855. [[link](#)]

88. "New Entry to Polycyclic Fused Indoles via Gold(I)-catalyzed Cascade Reaction"

M. Chiarucci, E. Matteucci, G. Cera, G. Fabrizi, **M. Bandini***

Chem. Asian J. **2013**, *8*, 1776-1779. [[link](#)]

87. "Mechanistic Insights into Enantioselective Gold-Catalyzed Allylation of Indoles with Alcohols: the Counterion Effect"

M. Bandini,* A. Bottoni, M. Chiarucci, G. Cera, G. Miscione*

J. Am. Chem. Soc. **2012**, *134*, 20690-20700. [[link](#)]

86. "De Novo Gold-Catalyzed one-pot Synthesis of Azepino[1,2-*a*]indoles"

G. Cera, S. Piscitelli, M. Chiarucci, G. Fabrizi, A. Goggiamani, R. S. Ramón, S. P. Nolan, **M. Bandini***

Angew. Chem. Int. Ed. **2012**, *51*, 9891-9895. [*Angew. Chem.* **2012**, *124*, 10029-10033] [[link](#)]

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85. "The Golden Age of Gold Catalysis in Organic Synthesis"

M. Bandini,* G. Cera, M. Chiarucci

La Chimica e L'Industria, **2012**, 74-77. [[link](#)]

84. "Easy Separation of D and L Isomers of Highly Luminescent [Ir(III)]-cyclometalated Complexes Based on Chiral Phenol-oxazoline Ancillary Ligands"

E. Marchi, R. Sinisi, G. Bergamini, M. Tragni, M. Monari,* **M. Bandini,*** P. Ceroni*

Chem. Eur. J. **2012**, *18*, 8765-8773. [[link](#)]

83. "Gold Meets Enamine Catalysis in the Enantioselective alpha-Allylic Alkylation of Aldehydes with Alcohols"

M. Chiarucci, M. di Lillo, A. Romaniello, P.G. Cozzi, G. Cera, M. **Bandini***

Chem. Sci. **2012**, *2*, 2859-2863. [[link](#)]

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82. "Enantioselective Gold-Catalyzed Synthesis of Polycyclic Indolines"

G. Cera, M. Chiarucci, A. Mazzanti, M. Mancinelli, **M. Bandini***

Org. Lett. **2012**, *14*, 1350-1353. [\[link\]](#)

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81. "Catalytic Enantioselective Alkylations with Allylic Alcohols"

M. Bandini*, G. Cera, M. Chiarucci

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80. "Accessing Chemical Diversity by Stereoselective Gold-catalyzed Manipulation of Allylic/Propargylic Alcohols"

M. Chiarucci, G. Cera, **M. Bandini***

Pure & Appl. Chem. **2012**, *84*, 1673-1684. [\[link\]](#)

79. "Gold(I)-catalyzed synthesis of γ -vinylbutyrolactones by intramolecular oxallylic alkylation with alcohols"

M. Chiarucci, M. Locritani, G. Cera, **M. Bandini***

Beilstein J. Org. Chem. **2011**, *7*, 1198-1204. [\[link\]](#)

78. "Stereoselective Synthesis of Tetracyclic Indolines via Gold-Catalyzed Cascade Cyclization Reactions"

G. Cera, P. Crispino, M. Monari, **M. Bandini***

Chem. Commun. **2011**, *47*, 7803-7805. [\[link\]](#)

77. "Allylic alcohols: valuable synthetic equivalents of non-activated alkenes in gold-catalyzed enantioselective alkylation of indoles"

M. Bandini*, A. Gualandi, M. Monari, M. Tragni, D. Savoia

J. Organomet. Chem. **2011**, *696*, 338-347. [\[link\]](#)

76. "Allylic Alcohols: new sustainable sources for catalytic enantioselective alkylation reactions"

M. Bandini*

Angew. Chem. Int. Ed. **2011**, *50*, 994-995; [*Angew. Chem.* **2011**, *123*, 1026-1027]. [\[link\]](#)

75. "Gold-Catalyzed Decorations of Arenes and Heteroarenes with C-C Multiple Bonds"

M. Bandini*

Chem. Soc. Rev. **2011**, *40*, 1358-1367. [\[link\]](#)

74. "Gold Catalyzed Direct Activation of Allylic Alcohols in the Stereoselective Synthesis of Functionalized 2-Vinyl-Morpholines"

M. Bandini*, M. Monari, A. Romaniello, M. Tragni

Chem. Eur. J. **2010**, *16*, 14272-14277. [\[link\]](#)

[Highlighted in *Synfacts* 2011, 3, 297. \[link\]](#)

73. "Creating Chemical Diversity in Indole Compounds by Merging Au and Ru Catalysis"

M. Bandini*, A. Eichholzer, A. Gualandi, T. Quinto, D. Savoia

ChemCatChem **2010**, *2*, 661-665. [[link](#)]

72. "Asymmetric Phase-Transfer-Catalyzed Intramolecular N-Alkylation of Indoles and Pyrroles: a Combined Experimental and Theoretical Investigation"

M. Bandini,* A. Bottoni, A. Eichholzer, G. P. Miscione,* M. Stenta

Chem. Eur. J. **2010**, *16*, 12462-12473. [[link](#)]

71. "Novel Electrochemiluminescent Functionalizable Cyclometalated Thiophene-Based Iridium(III) Complexes"

M. Bandini,* M. Bianchi, G. Valenti, F. Piccinelli, F. Paolucci, M. Monari, A. Umani-Ronchi, M. Marcaccio*

Inorg. Chem. **2010**, *49*, 1439-1448. [[link](#)]

70. "Enantioselective gold-catalyzed allylic alkylation of indoles with alcohols: efficient route to functionalized tetrahydrocarbazoles"

M. Bandini,* A. Eichholzer

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69. "Diastereoselective Addition of Organometallic Reagents to Diimines Derived from (*R,R*)-1,2-Diaminocyclohexane and Aromatic Aldehydes"

D. Savoia,* A. Gualandi, M. Bandini

Lett. Org. Chem. **2009**, *6*, 434-438. [[link](#)]

68. "Iron(III)-Catalyzed Intramolecular Friedel-Crafts Alkylation of Electron-Deficient Arenes with π -Activated Alcohols"

M. Bandini,* M. Tragni, A. Umani-Ronchi

Adv. Synth. Catal. **2009**, *351*, 2521. [[link](#)]

67. "Catalytic Functionalizations of Indoles in a New Dimension"

M. Bandini,* A. Eichholzer

Angew. Chem. Int. Ed. **2009**, *48*, 9608-9644; [*Angew. Chem.* **2009**, *121*, 9786-9824]. [[link](#)]

66. "Efficient Guanidine-catalyzed Alkylation of Indoles with Fluoromethyl Ketones in the presence of Water"

M. Bandini,* R. Sinisi

Org. Lett. **2009**, *11*, 2093-2096. [[link](#)]

65. "New Electrochemically Generated Polymeric Pd-complexes as Heterogeneous Catalysts for Suzuki Cross-Coupling Reactions"

M. Bandini,* A. Pietrangelo, R. Sinisi, A. Umani-Ronchi, M. O. Wolf

Eur. J. Org. Chem. **2009**, 3554-3561. [[link](#)]

64. " π -Activated alcohols: an emerging class of alkylating agents for catalytic Friedel-Crafts reactions"

M. Bandini,* M. Tragni

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PUBLICATIONS IN COLLABORATION WITH PhD SUPERVISOR

63. "New adaptive chiral thiophene ligands for copper-catalyzed asymmetric reaction"

M. Bandini,* S. Cabiddu, E. Cadoni, P. Olivelli, R. Sinisi, A. Umani-Ronchi,* M. Usai

Chirality, **2009**, *21*, 239-244. [[link](#)]

62. "Ligand-free silver(I)-catalyzed intramolecular Friedel-Crafts alkylation of arenes with allyl-alcohols"

M. Bandini,* A. Eichholzer, P. Kotrusz, M. Tragni, S. Troisi, A. Umani-Ronchi*

Adv. Synth. Catal. **2009**, *351*, 319-324. [[link](#)]

61. "Novel blue-emitting bis-cyclometalated Iridium(III) complexes. synthesis, photophysical and electrochemical characterization"

E. Marchi, P. Ceroni,* G. Bergamini, V. Balzani, **M. Bandini,*** R. Sinisi, A. Umani-Ronchi

Luminescence **2008**, *23*, 245-247.

60. "A Nonclassical Stereoselective Semi-Synthesis of Drospirenone via Cross-Metathesis Reaction"

M. Bandini,* M. Contento, A. Garelli, M. Monari, A. Tolomelli, A. Umani-Ronchi,* E. Andriolo, M. Montorsi

Synthesis, **2008**, 3801-3804. [[link](#)]

59. "Enantioselective organocatalyzed Henry reaction with fluoromethyl ketones"

M. Bandini,* R. Sinisi, A. Umani-Ronchi*

Chem. Commun. **2008**, 4360-4362. [[link](#)]

58. "Enantioselective phase-transfer catalyzed intramolecular aza-Michael reaction: effective route to pyrazino-indole compounds"

M. Bandini,* A. Eichholzer, M. Tragni, A. Umani-Ronchi*

Angew. Chem. Int. Ed. **2008**, *i*, 3238-3241; [*Angew. Chem.* **2008**, *120*, 3282-3285]. [[link](#)]

57. "Highly Efficient Molybdenum Catalyzed Intramolecular Allylic Alkylation of Arenes"

M. Bandini,* A. Eichholzer, P. Kotrusz, A. Umani-Ronchi*

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56. "New chiral diamino-bis(tert-thiophene): effective ligand for Pd and Zn-catalyzed asymmetric transformations"

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55. "New chiral diamino-bis(tert-thiophene): effective ligand for Pd and Zn-catalyzed asymmetric transformations"

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54. "New Recoverable PEG-Supported Copper Catalyst for Highly Stereocontrolled Nitroaldol Condensation"

M. Bandini,* M. Benaglia,* R. Sinisi, S. Tommasi, A. Umani-Ronchi

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53. "An Electropolymerized Pd-containing Thiophene Polymer: A Reusable Supported Catalyst for Cross-coupling Reactions"

V. G. Albano, **M. Bandini**,* C. Moorlag, F. Piccinelli, A. Pietrangelo, S. Tommasi, A. Umani-Ronchi, M. O. Wolf*

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52. "Practical Aspects in the Gram-scale Synthesis of Chiral Diamino-Bithienyl-DAT Ligand"

M. Bandini,* A. Eichholzer, S. Tommasi, A. Umani-Ronchi

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51. "Titanium-Catalyzed Reformatsky-Type Reaction"

L. Sgreccia, M. Bandini, S. Morganti, A. Quintavalla, A. Umani-Ronchi, L. Sgreccia, P.G. Cozzi*

J. Organomet. Chem. **2007**, *692*, 3191-3197. [[link](#)]

50. "Versatile base-catalyzed route to polycyclic heteroaromatic compounds via intramolecular aza-Michael addition"

M. Bandini,* A. Eichholzer, M. Monari, F. Piccinelli, A. Umani-Ronchi*

Eur. J. Org. Chem. **2007**, 2917-1920. [[link](#)]

49. "An update on catalytic enantioselective alkylation of indoles"

M. Bandini,* A. Eichholzer, A. Umani-Ronchi

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48. "Highly Enantioselective Nitroaldol Reaction Catalyzed by New Chiral Copper Complexes"

M. Bandini,* S. Tommasi, F. Piccinelli, A. Umani-Ronchi,* C. Ventrici

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Highlighted in Synfacts 2007, *4*, 410 [[link](#)]

47. "Synthesis, Structural Characterization and Catalytic Activity of Chiral Diamine and Diimine Pd(II)-Complexes"

V.G. Albano,* **M. Bandini**,* M. Monari, S. Tommasi, F. Piccinelli, A. Umani-Ronchi*

Inorg. Chim. Acta **2007**, *360*, 1000-1008. [[link](#)]

46. "Phosphinite ligand effects in palladium(II)-catalysed cycloisomerisation of 1,6-dienes: B[3.2.0]DPO ligands exhibit flexible bite angles, an effect derived from conformational changes (exo- or endo-envelope) in the bicyclic ligand scaffold"

I. J. S. Fairlamb,* S. Grant, S. Tommasi, J. M. Lynam, M. Bandini, H. Dong, Z. Lin, A. C. Whitwood

Adv. Synth. Cat. **2006**, *348*, 2515-2530. [[link](#)]

45. "A Practical Synthetic Route to Functionalized THBCs and Oxygenated Analogous via Intramolecular Friedel-Crafts Reactions"

M. Angeli, **M. Bandini**,* A. Garelli, F. Piccinelli, S. Tommasi, A. Umani-Ronchi*

Org. Biomol. Chem. **2006**, *4*, 3291-3296. [[link](#)]

44. "New Recoverable Poly(ethylen glycol)-supported C1-DAT Ligands for Pd-Promoted AAA Reactions"
M. Bandini,* M. Benaglia, T. Quinto, S. Tommasi, A. Umani-Ronchi*
Adv. Synth. Catal. **2006**, *348*, 1521-1527. [[link](#)]
43. "Synthesis and crystallographic characterization of chiral bis-oxazoline-amides. Fine-tunable ligands for Pd-catalyzed asymmetric alkylations"
V.G. Albano, **M. Bandini,*** M. Monari, E. Marcucci, F. Piccinelli, A. Umani-Ronchi
J. Org. Chem. **2006**, *71*, 6451-6458. [[link](#)]
42. "Innovative Catalytic Protocols for Ring-Closing Friedel-Crafts-type Alkylations and Alkenylations of Arenes"
M. Bandini,* E. Emer, S. Tommasi, A. Umani-Ronchi*
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41. "Controlling stereochemical outcomes of Pd-catalyzed asymmetric processes by catalyst remote molecular functionalizations"
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40. "Highly enantioselective synthesis of tetrahydro- β -carbolines and tetrahydro- γ -carbolines via Pd-catalyzed intramolecular allylic alkylation"
M. Bandini,* A. Melloni, F. Piccinelli, R. Sinisi, S. Tommasi, A. Umani-Ronchi*
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39. "Synthesis, Multiphase Characterization and Helicity Control in Chiral DACH-Linked Oligothiophenes"
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38. "Chiral boron C2-bis(oxazolines) in asymmetric catalysis. A combined experimental and theoretical study of the catalyzed enantioselective reduction of Ketones promoted by catecholboran"
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37. "Aryl Alkynylation vs. Alkyne Homocoupling: Unprecedented Selectivity Switch in Cu, P and Solvent-Free Heterogeneous Pd-Catalysed Couplings"
M. Bandini, R. L. Alvarez, V. Budarin, D. J. Macquarrie*
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36. "Catalytic enantioselective addition of indoles to aryl-nitroalkenes. Effective route to enantiomerically enriched tryptamine precursor"
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Chirality, **2005**, *17*, 522-529. [[link](#)]

35. "A journey across recent advances in catalytic and stereoselective alkylation of indoles"
M. Bandini,* A. Melloni, S. Tommasi, A. Umani-Ronchi*
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34. "Novel chiral diamino-oligothiophenes (DATs) as valuable ligands in Pd-catalyzed allylic alkylations. On the -primary- role of -secondary-interactions in asymmetric catalysis"
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33. "Can simple enones be useful partner for the catalytic stereoselective alkylation of indoles"
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J. Org. Chem. **2004**, 69, 7511-7518. [[link](#)]
32. "New versatile Pd-catalyzed alkylation of indoles via nucleophilic allylic substitution. In controlling the regioselectivity"
M. Bandini,* A. Melloni, A. Umani-Ronchi*
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31. "Polymer-supported indium Lewis acid: highly versatile catalyst for regio- and stereoselective ring-opening of epoxides"
M. Bandini,* M. Fagioli, A. Melloni, A. Umani-Ronchi*
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30. "A cross metathesis based protocol for the effective synthesis of functionalised allyl bromides and chlorides"
M. Bandini, P.G. Cozzi,* P. Melchiorre, S. Licciulli, A. Umani-Ronchi
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29. "Solid acids catalyzed Michael-type conjugate addition of indoles to electron-poor C-C double bonds: towards high atom economy semi-continuous processes"
M. Bandini,* M. Fagioli, A. Umani-Ronchi*
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28. "New catalytic approaches in the enantioselective Friedel-Crafts alkylation reaction"
M. Bandini,* A. Melloni, A. Umani-Ronchi*
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27. "Kinetic resolution of epoxides via C-C bond forming reaction. Highly enantioselective addition of indoles to *Cis*, *Trans*, and *Meso* aromatic epoxides catalyzed by [Cr(Salen)] complexes"
M. Bandini, P.G. Cozzi,* P. Melchiorre, A. Umani-Ronchi*
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26. "Designing new α,β -unsaturated thioesters for the catalytic enantioselective Friedel-Crafts alkylation of indoles"
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25. "New versatile route to the synthesis of tetrahydro- β -carbolines and tetrahydro-pyrano[3,4-*b*]indoles via intramolecular Michael addition catalyzed by InBr_3 "
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J. Org. Chem. **2003**, *68*, 7126-7129. [[link](#)]
24. "Catalytic enantioselective Friedel-Crafts-type conjugate addition of indoles to simple α,β -unsaturated ketones"
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