



Planar-Chiral Hydrogen-Bond Donor Catalysts

By Jakob Schneider

Cuvillier Verlag Nov 2010, 2010. Taschenbuch. Condition: Neu. Neuware - This thesis focuses on the first synthesis and application of planar-chiral [2.2]paracyclophane-derived hydrogen-bond donor catalysts, thereby inducing a unique chiral motif into the emerging field of thiourea organocatalysis. Reaction acceleration through hydrogen-bond catalysis has made a significant impact on the field, rendering the development of potent catalyst structures extremely valuable. Based on the [2.2]paracyclophane scaffold, mono- and bi-functional thiourea catalysts were prepared. The rigidity of the [2.2]paracyclophane structure leads to a unique setup of the substituents. In pseudo-geminal position to the thiourea moiety, a hydroxy group was selected and introduced as the second functionality. In a 12-step synthesis, the enantiopure hydroxy-substituted [2.2]paracyclophane thiourea was obtained. Furthermore, efficient access to enantiopure pseudo-geminally substituted 13-amino-4-bromo[2.2]paracyclophane was developed. The aminobromide was employed in cross-coupling reactions to yield arylated amino[2.2]paracyclophanes, exhibiting a broad range of electronic and steric features useful for organocatalytic applications. The developed catalysts were applied in asymmetric organic transformations and proved most useful in the transfer hydrogenation reaction. The hydroxy-substituted thiourea catalyst particularly exhibited catalytic activity and stereoselectivity. To shed light on the mode of action of this class of hydrogen-bond catalysts, various analytic methods were conducted. Through extensive crystallographic and...



READ ONLINE
[6.46 MB]

Reviews

The ebook is straightforward in study better to fully grasp. It is actually loaded with knowledge and wisdom I am just delighted to tell you that here is the best pdf i have read through during my very own lifestyle and may be he greatest ebook for at any time.

-- **Dr. Karelle Glover**

The book is simple in read through safer to understand. I could comprehend everything out of this published e pdf. I discovered this book from my i and dad advised this pdf to learn.

-- **Maud Kulas I**

See Also



Busting Vegas: The MIT Whiz Kid Who Brought the Casinos to Their Knees [Sep 2.

No Binding. Book Condition: New. Brand New, Unread Book in Excellent Condition with Minimal Shelf-Wear, \$AVE! FAST SHIPPING W/ FREE TRACKING!.



Oxford Reading Tree Read with Biff, Chip and Kipper: Phonics: Level 2: A Yak at the Picnic (Hardback)

Oxford University Press, United Kingdom, 2014. Hardback. Book Condition: New. Mr. Nick Schon (illustrator). 177 x 148 mm. Language: English . Brand New Book. Read With Biff, Chip and Kipper is the UK's best-selling home reading series. It is based on...



At-Home Tutor Language, Grade 2

Evan-Moor Educational Publishers. Paperback. Book Condition: New. Paperback. 96 pages. Dimensions: 10.7in. x 8.2in. x 0.3in. Developed by teachers, this curriculum-based series provides practice of important math and reading skills-ideal for providing additional practice at home. The colorful and engaging activities motivate children...



Learn at Home: Learn to Read at Home with Bug Club: Pink Pack Featuring Trucktown (Pack of 6 Reading Books with 4 Fiction and 2 Non-fiction)

Pearson Education Limited. Paperback. Book Condition: new. BRAND NEW, Learn at Home: Learn to Read at Home with Bug Club: Pink Pack Featuring Trucktown (Pack of 6 Reading Books with 4 Fiction and 2 Non-fiction), Catherine Baker, Alison Hawes, Jon Scieszka, Margaret Clyne,...



Phonics Comics Hiro Dragon Warrior - Battle at Mount Kamado Phonics Comics Level 2

Innovative Kids. Paperback. Book Condition: New. Robbie Short (illustrator). Paperback. 24 pages. Dimensions: 9.2in. x 6.2in. x 0.5in. Exhilarating adventures, daring heroes, magic, time travel and much, much more! Each cool 24-page comic book features three exciting, phonetically decodable stories. Developed and leveled...



TJ new concept of the Preschool Quality Education Engineering: new happy learning young children (3-5 years old) daily learning book Intermediate (2)(Chinese Edition)

paperback. Book Condition: New. Ship out in 2 business day, And Fast shipping, Free Tracking number will be provided after the shipment. Paperback. Pub Date :2005-09-01 Publisher: Chinese children before making Reading: All books are the Youth Pre-employment Training software download generated pictures...