

INDEX

A

Acrylate	201, 224, 225
aldehyde.....	2, 17, 19, 24, 221, 258
alkaloid	4, 191, 192, 193, 197, 217, 219, 66, 68, 256
allene.....	198, 205, 206, 234, 235
amidine	15, 16, 18, 20, 28, 52, 65
<i>Aspidosperma</i>	191
asymmetric	3, 4, 65, 67, 357, 359, 363, 368, 371
aziridine.....	63, 64, 65, 68

C

carbocycle.....	2
carbodiimide.....	15, 16, 17, 19, 20, 28, 29, 64
catalyst.....	5, 6, 8, 21, 25
C–H activation	217, 222
C–H insertion	193, 213, 217, 218, 264
chiral	2, 3, 4, 18, 65, 68, 357, 358, 361
Claisen rearrangement	207, 208, 209
cobalt	375
communesin B	357, 358
conjugate acceptor	194, 195, 196
copper	358, 370, 375
crispine A	4, 65, 66
Curtius rearrangement	67
cyanate	5, 6
cycloaddition	3, 4, 5, 6, 7, 8, 10, 11, 12, 15, 16, 17, 18, 19, 20, 22, 193, 194, 195, 196, 209, 210, 211, 212, 213, 214, 219, 220, 222, 63, 65, 66, 68, 262, 263, 265, 360
cyclopentane.....	192, 194, 196, 209, 211, 214, 215, 220, 240
cyclopentene.....	197
cyclopropane	
alkylidenecyclopropane.....	204, 205, 207, 209

alkynylcyclopropane.....	263, 264, 279
cyclopropanation.....	198, 200, 203, 205, 206, 68
cyclopropane	
....1, 2, 3, 4, 5, 6, 7, 8, 11, 12, 13, 15, 16, 17, 18, 19, 20, 21, 26, 27, 28, 30, 31, 32, 33, 35, 37, 38, 195,	
196, 197, 198, 201, 202, 203, 204, 205, 206, 207, 208, 209, 210, 219, 230, 65, 66, 67, 68, 72, 263,	
264, 280	
divinylcyclopropane	206, 208
donor–acceptor cyclopropane	1, 3, 6, 11, 19, 22
methylenecyclopropane.....	204, 207
vinylcyclopropane.....	194, 195, 196, 197, 199, 203, 204, 208, 209, 210, 211, 212, 219, 232, 236, 239
vinylcyclopropene.....	263, 264, 279
vinylidenecyclopropane.....	263, 280
D	
diastereomer	194, 202, 213, 230, 231, 232, 239, 256, 257, 259, 260, 261, 368, 375, 376, 378
diastereoselective	196, 211, 215, 368
diastereoselectivity	195, 213, 368, 375, 376, 377, 378, 379
diazodimethylmalonate	203, 205, 206, 230, 235
dipolarophile	4, 5, 16, 20, 21
divinylcyclopropane	193, 197, 198, 199, 200, 204, 207, 211, 221
E	
enantioenriched	2, 3, 18, 19, 20, 21, 22, 64, 65, 375
enantiomer	3
enantiomeric excess	64
enantioselective.....	211, 218, 219, 220, 249, 357, 358, 359, 363, 367, 368, 369
enantioselectivity	367, 369, 372, 374, 375, 376, 378
epimeloscine.....	192, 211, 212
epoxide	5
<i>Erythrina</i>	4, 66, 68
G	
guanidine	64, 65, 68

H

heterocumulene4, 5, 9, 11, 17, 18, 19, 20, 22, 63, 65, 66
heterocycle2, 4, 22, 63

I

iron 10, 11, 17, 18, 20, 26, 195, 63
isocyanate6, 8, 9, 10, 15, 18, 20, 26, 66, 67, 68
isothiocyanate11, 12, 13, 14, 15, 16, 19, 20, 22, 27, 29
isothiourea65

L

lactam4, 5, 6, 7, 8, 10, 215, 218, 249, 65, 66, 257
lactone.....2, 203, 219
Lewis acid 1, 2, 3, 4, 6, 7, 8, 10, 12, 17, 20, 21, 218, 64, 65, 67, 360, 361, 369

M

Melodinus191, 192, 193, 197, 217, 219, 256, 261
meloscandonine192, 221
meloscine.....192, 211, 212, 220, 249
methylidene dimethylmalonate 198, 200, 201

N

natural product4, 21, 22, 193, 211, 213, 218, 220, 65, 66, 257, 261, 262, 284
nitrostyrene.....193, 210, 213, 219, 220, 222, 238, 239

O

olefin isomerization262
organic synthesis 1
ortho-azaxylylene358
ortho-quinone methide359, 360, 361, 362, 363, 364, 365, 366, 368, 369, 371, 373, 374, 377, 378, 379
oxindole357, 358, 359, 360, 361, 362, 367

P

palladium 194, 195, 196, 202, 204, 208, 209, 210, 212, 213, 222, 63, 74
para-azaxylylenes359

Q

quaternary 192, 193, 197, 207, 218, 262, 284, 357, 358, 373

R

racemization 18, 20, 21

reductive amination 215, 257, 258

retrosynthesis 199

retrosynthetic analysis 193, 194, 198, 211, 66

ring-closing metathesis 193, 211, 215, 216, 217, 222, 256, 257, 258, 259, 260, 276

ring-expansion 2

S

scandine 191, 192, 193, 194, 211, 212, 218, 220, 221

stereoablative 359, 367

stereocenter 192, 193, 358, 373

stereochemical 2, 18, 19, 64

stereochemistry 2, 3, 18, 193, 214, 221, 373, 377

stereogenic 193

stereoselective 2, 3, 4, 196, 358

stereoselectivity 196

stereospecific 3

symmetry 193

T

thioamide 11

thioimidate 11, 12, 13, 14, 15, 18, 42, 47

thiolactam 11, 12

tin 2, 6, 8, 11, 15, 17, 18, 19, 20, 21, 27, 28, 30

Total Synthesis 191, 211, 219, 221, 357

trolline 4, 65, 66

V

vinylation 197, 201, 212, 213

vinylcyclopentane 195, 215

W

water 5, 7, 9, 10, 15, 25

X

X-ray 14, 15, 18, 19, 52, 373

Z

zinc 64, 375, 376, 381