

1. Record Nr.	UNINA9911019428603321
Autore	Tietze Lutz-Friedjan
Titolo	Domino reactions in organic synthesis // Lutz F. Tietze, Gordon Brasche, and Kersten M. Gericke
Pubbl/distr/stampa	Weinheim, : Wiley-VCH, c2006
ISBN	9786610722679 9781280722677 1280722673 9783527609925 352760992X 9783527608683 3527608680
Descrizione fisica	1 online resource (633 p.)
Altri autori (Persone)	BrascheGordon <1976-> GerickeKersten M. <1976->
Disciplina	547.1393
Soggetti	Organic compounds - Synthesis Chemical reactions
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Domino Reactions in Organic Synthesis; Table of Contents; Preface; Abbreviations; Introduction; Classification; 1 Cationic Domino Reactions; 1.1 Cationic/Cationic Processes; 1.1.1 Cationic/Cationic/Cationic Processes; 1.2 Cationic/Pericyclic Processes; 1.3 Cationic/Reductive Processes; 2 Anionic Domino Reactions; 2.1 Anionic/Anionic Processes; 2.1.1 Anionic/Anionic/Anionic Processes; 2.1.2 Fourfold and Higher Anionic Processes; 2.1.3 Two- and Threefold Anionic Processes Followed by a Nonanionic Process; 2.2 Anionic/Radical Processes; 2.3 Anionic/Pericyclic Processes 2.3.1 Anionic/Pericyclic Processes Followed by Further Transformations2.4 Anionic/Transition Metal-Catalyzed Processes; 2.5 Anionic/Oxidative or Reductive Processes; 3 Radical Domino Reactions; 3.1 Radical/Cationic Domino Processes; 3.2 Radical/Anionic Domino Processes; 3.3 Radical/Radical Domino Processes; 3.3.1 Radical/Radical/Anionic Domino Processes; 3.3.2

Radical/Radical/Radical Domino Processes; 3.3.3
 Radical/Radical/Pericyclic Domino Processes; 3.3.4
 Radical/Radical/Oxidation Domino Processes; 3.4 Radical/Pericyclic
 Domino Processes; 4 Pericyclic Domino Reactions
 4.1 Diels-Alder Reactions4.1.1 Diels-Alder/Diels-Alder Reactions;
 4.1.2 Diels-Alder Reactions/Sigmatropic Rearrangements; 4.1.3 Diels-
 Alder/Retro-Diels-Alder Reactions; 4.1.4 Diels-Alder Reactions/Mixed
 Transformations; 4.1.5 Hetero-Diels-Alder Reactions; 4.2 1,3-Dipolar
 Cycloadditions; 4.3 [2+2] and Higher Cycloadditions; 4.4 Sigmatropic
 Rearrangements; 4.5 Electrocyclic Reactions; 4.6 Ene Reactions; 4.7
 Retro-Pericyclic Reactions; 5 Photochemically Induced Domino
 Processes; 5.1 Photochemical/Cationic Domino Processes; 5.2
 Photochemical/Anionic Domino Processes
 5.3 Photochemical/Radical Domino Processes5.4
 Photochemical/Pericyclic Domino Processes; 5.5
 Photochemical/Photochemical Domino Processes; 5.6
 Photochemical/Transition Metal-Catalyzed Domino Processes; 6
 Transition Metal-Catalyzed Domino Reactions; 6.1 Palladium-Catalyzed
 Transformations; 6.1.1 The Heck Reaction; 6.1.1.1 Domino Heck
 Reactions; 6.1.1.2 Heck/Cross-Coupling Reactions; 6.1.1.3 Heck/Tsuji-
 Trost Reactions; 6.1.1.4 Heck Reactions/CO-Insertions; 6.1.1.5 Heck
 Reactions/C-H-Activations; 6.1.1.6 Heck Reactions: Pericyclic
 Transformations; 6.1.1.7 Heck Reactions/Mixed Transformations
 6.1.2 Cross-Coupling Reactions6.1.2.1 Suzuki Reactions; 6.1.2.2 Stille
 Reactions; 6.1.2.3 Sonogashira Reactions; 6.1.2.4 Other Cross-
 Coupling Reactions; 6.1.3 Nucleophilic Substitution (Tsuji-Trost
 Reaction); 6.1.4 Reactions of Alkynes and Allenes; 6.1.5 Other Pd(0)-
 Catalyzed Transformations; 6.1.6 Pd(II)-Catalyzed Transformations; 6.2
 Rhodium-Catalyzed Transformations; 6.2.1 Formation of Carbenes;
 6.2.2 Hydroformylations; 6.2.3 Other Rhodium-Catalyzed
 Transformations; 6.3 Ruthenium-Catalyzed Transformations; 6.3.1
 Metathesis Reactions; 6.3.1.1 Metathesis-Metathesis Processes
 6.3.1.2 Metathesis/Heck Reaction/Pericyclic Reaction/Hydrogenation

Sommario/riassunto

Domino reactions enable you to build complex structures in one-pot
 reactions without the need to isolate intermediates- a dream comes
 true. In this book, the well-respected expert, Professor Lutz Tietze,
 summarizes the possibilities of this reaction type - an approach for an
 efficient, economically beneficial and ecologicalbenign synthesis.A
 definite must for every organic chemist.