

1. Record Nr.	UNINA9910144109703321
Titolo	Microreactors in organic synthesis and catalysis // edited by Thomas Wirth
Pubbl/distr/stampa	Weinheim, [Germany] : , : Wiley-VCH Verlag GmbH & Co. KGaA, , 2008 ©2008
ISBN	1-281-94705-9 9786611947057 3-527-62285-3 3-527-62286-1
Descrizione fisica	1 online resource (299 p.)
Classificazione	35.52
Disciplina	547.2 660.2832
Soggetti	Microreactors Organic compounds - Synthesis Catalysis
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 at the end of each chapters and index.
Nota di contenuto	Microreactors in Organic Synthesis and Catalysis; Contents; Preface; List of Contributors; 1 Fabrication of Microreactors Made from Metals and Ceramics; 1.1 Manufacturing Techniques for Metals; 1.1.1 Etching; 1.1.2 Machining; 1.1.3 Generative Method: Selective Laser Melting (SLM); 1.1.4 Metal-Forming Techniques; 1.1.5 Assembling and Bonding of Metal Microstructures; 1.2 Ceramic Devices; 1.2.1 Joining and Sealing; References; 2 Fabrication and Assembling of Microreactors Made from Glass and Silicon; 2.1 How Microreactors are Constructed; 2.2 Glass as Material; 2.3 Silicon as Material 2.4 The Structuring of Glass and Silicon2.5 Structuring by Means of Masked Etching in Microsystems Technology; 2.6 Etching Technologies; 2.6.1 Anisotropic (Crystallographic) Wet Chemical Etching of Silicon (KOH); 2.6.2 Isotropic Wet Chemical Etching of Silicon; 2.6.3 Anisotropic Dry Etching of Silicon; 2.6.4 Isotropic Wet Chemical Etching of Silicon Glass; 2.6.5 Photostructuring of Special Glass; 2.7 Chip

Removing Processing; 2.7.1 Drilling, Diamond Lapping, Ultrasonic Lapping; 2.7.2 Micropowder Blasting; 2.7.3 Summary; 2.8 Bonding Methods; 2.8.1 Anodic Bonding of Glass and Silicon 2.8.2 Silicon Direct Bonding (Silicon Fusion Bonding) 2.8.3 Glass Fusion Bonding; 2.9 Establishing Fluid Contact; 2.10 Other Materials; References; 3 Properties and Use of Microreactors; 3.1 Introduction; 3.2 Physical Characteristics of Microreactors; 3.2.1 Geometries; 3.2.2 Constructional Materials and Their Properties; 3.3 Fluid Flow and Delivery Regimes; 3.3.1 Fluid Flow; 3.3.2 Fluid Delivery; 3.3.3 Mixing Mechanisms; 3.4 Multifunctional Integration; 3.5 Uses of Microreactors; 3.5.1 Overview; 3.5.2 Unstable Intermediates Fast and Exothermic Reactions; 3.5.3 Precision Particle Manufacture 3.5.4 Wider Industrial Context 3.5.4.1 Sustainability Agenda; 3.5.4.2 Point-of-Demand Synthesis; References; 4 Organic Chemistry in Microreactors; 4.1 Homogeneous Reactions; 4.1.1 Acid-Promoted Reactions; 4.1.2 Base-Promoted Reactions; 4.1.3 Condensation Reactions; 4.1.4 Metal-Catalyzed Reactions; 4.1.5 Photochemical Reactions; 4.1.6 Electrochemical Reactions; 4.1.7 Miscellaneous; 4.1.7.1 Swern Oxidation; 4.1.7.2 Grignard Exchange Reaction; 4.1.7.3 Lithium-Halogen Exchange Reaction; 4.1.7.4 Phenyl Boronic Acid Synthesis; References; 4.2 Heterogeneous Reactions; 4.2.1 Introduction 4.2.2 Concepts in Flow Mode Synthesis 4.2.3 Methods of Conducting Flow Chemistry; 4.2.3.1 On-Bead Synthesis; 4.2.3.2 Solution-Phase Synthesis; 4.2.3.3 Library Synthesis in Flow; 4.2.3.4 Heterocycle Synthesis; 4.2.4 Introduction to Monoliths; 4.2.5 Transition Metal Chemistry Under Flow Conditions; 4.2.5.1 Reduction; 4.2.5.2 Oxidation; 4.2.5.3 Cross-Coupling Reactions; 4.2.5.4 Olefin Metathesis; 4.2.6 Enantioselective Reactions; 4.2.6.1 Hydrolytic Kinetic Resolution; 4.2.6.2 Organometallic Additions; 4.2.6.3 Enantioselective Diels-Alder Reactions; 4.2.6.4 Ene Reactions; 4.2.6.5 Cyclopropanation 4.2.6.6 Asymmetric Conjugate Addition

Sommario/riassunto

This one-stop reference is the first book on this emerging and rapid developing field with a focus on synthesis and catalysis. As such, it covers all aspects from academia and industry in a clearly structured way. Leading experts provide the background information as an initial aid for newcomers to the field, while chapters on different reaction types and industrial applications make this an equally vital resource for specialists.

2. Record Nr.	UNICAMPANIAVAN00132638
Autore	Centro internazionale matematico estivo
Titolo	Progress in Mathematical Fluid Dynamics : Cetraro, Italy 2019 / Tristan Buckmaster ... [et al.] ; Luigi C. Berselli, Michael Ržika editors]
Pubbl/distr/stampa	Cham, : Springer, 2020
Titolo uniforme	Progress in Mathematical Fluid Dynamics : Cetraro, Italy 2019
Descrizione fisica	vii, 161 p. : ill. ; 24 cm
Soggetti	35Q30 - Navier-Stokes equations [MSC 2020] 74F10 - Fluid-solid interactions (including aero- and hydro-elasticity, porosity, etc.) [MSC 2020] 76-XX - Fluid mechanics [MSC 2020] 76A02 - Foundations of fluid mechanics [MSC 2020] 76F02 - Fundamentals of turbulence [MSC 2020]
Lingua di pubblicazione	Inglese
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3. Record Nr.	UNINA9910337608803321
Autore	Carl Timo
Titolo	Deep skin architecture : design potentials of multi-layered architectural boundaries / / by Timo Carl
Pubbl/distr/stampa	Wiesbaden : , : Springer Fachmedien Wiesbaden : , : Imprint : Springer Vieweg, , 2019
ISBN	3-658-26333-4 9783658263331
Edizione	[1st ed. 2019.]
Descrizione fisica	1 online resource (189 pages)
Disciplina	729.1
Soggetti	Architecture Buildings Design
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references.
Sommario/riassunto	Timo Carl presents alternatives to curtain wall facades and other flat boundaries creating autonomous spaces. He investigates facade typologies with multiple material layers to strategize the relationship between buildings and their environment. By revisiting Le Corbusier's seminal brise soleil an alternative reading of the modern project emerges: one that is not based on classical compositional rules, but instead on the dynamic relationships with environmental forces. Finally, an exciting series of project-based investigations sets out innovative ways in which novel deep skins combine energy-conscious performance with the poetics of architecture.