

1. Record Nr.	UNINA9910815752103321
Autore	Iacovella Stefano
Titolo	GeoServer Cookbook : boost your map server's performance using the power and flexibility of GeoServer // Stefano Iacovella
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Descrizione fisica	1 online resource (280 p.)
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Soggetti	Application program interface (Computer software)
Lingua di pubblicazione	Inglese
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Livello bibliografico	Monografia
Note generali	"Quick answers to common problems"--Cover. Includes index.
Nota di contenuto	Cover; Copyright; Credits; About the Author; Acknowledgments; About the Reviewers; www.PacktPub.com; Table of Contents; Preface; Chapter 1: Working with Vectors; Introduction; Using different WFS versions in OpenLayers; Using WFS nonspatial filters; Using WFS spatial filters; Using WFS vendor parameters; Filtering data with CQL; Filtering data with CQL spatial operators; Creating a SQL view; Creating a parametric view; Improving performance with pregeneralized features; Chapter 2: Working with Rasters; Introduction; Getting coverages in different formats; Using WCS vendor parameters Publishing a mosaicUsing pyramids; Adding GDAL formats; Adding a PostGIS raster data source; Chapter 3: Advanced Styling; Introduction; Installing the CSS module; Creating a simple polygon style with CSS; Adding filters to your style; Adding labels with CSS; Creating scale-dependant rules; Rendering transformations for raster data; Creating a dot density chart; Chapter 4: Geoprocessing; Introduction; Installing the WPS module; Using the WPS process builder; Chaining process - selecting features contained in a polygon; Chaining process - building your own task Chapter 5: Advanced ConfigurationsIntroduction; Upgrading GeoServer; Creating a script for automatic startup; Optimizing Java; Setting up a JNDI connection pool; Working with CRS; Using the reprojection console; Overriding an official EPSG code; Setting up GeoWebCache -

how to make pre-rendered tiles for high availability; Storing configurations in an RDBMS; Chapter 6: Automating GeoServer Configurations; Introduction; Managing workspaces with REST; Creating and editing data stores with REST; Managing layers with REST; Uploading and updating styles with REST  
Managing layers with the GWC REST API Managing cache tiles with the GWC REST API; Chapter 7: Advanced Visualizations; Introduction; Adding time to WMS maps; Using the WMS animator; Keyhole Markup Language styling; Using z-order creatively; Using transparency creatively; Using symbology encoding; Chapter 8: Monitoring and Tuning; Introduction; Installing the control flow module; Setting a per-user limit; Setting a per-request limit; Installing the monitoring extension; Configuring the monitoring extension; Creating reports from the monitoring database; Limiting the GeoWebCache disk use  
Appendix: OGC for ESRI professionals Introduction; ArcGIS versus GeoServer; Understanding standards; WMS versus the mapping service; WFS versus feature access; Publishing raster data with WCS; Index

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## Sommario/riassunto

This book is ideal for GIS experts, developers, and system administrators who have had a first glance at GeoServer and who are eager to explore all its features in order to configure professional map servers. Basic knowledge of GIS and GeoServer is required.

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2. Record Nr.	UNINA9911019731103321
Autore	Verma Dakeshwar Kumar
Titolo	Green Chemical Synthesis with Microwaves and Ultrasound
Pubbl/distr/stampa	Newark : , : John Wiley & Sons, Incorporated, , 2024 ©2024
ISBN	9783527844470 3527844473 9783527844494 352784449X
Edizione	[1st ed.]
Descrizione fisica	1 online resource (409 pages)
Altri autori (Persone)	VermaChandrabhan FuertesPaz Otero
Soggetti	Green chemistry Microwave heating
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	Cover -- Title Page -- Copyright -- Contents -- About the Editors -- Preface -- Chapter 1 Ultrasound Irradiation: Fundamental Theory, Electromagnetic Spectrum, Important Properties, and Physical Principles -- 1.1 Introduction -- 1.2 Cavitation History -- 1.2.1 Basics of Cavitation -- 1.2.2 Types of Cavitation -- 1.3 Application of Ultrasound Irradiation -- 1.3.1 Sonoluminescence and Sonophotocatalysis -- 1.3.2 Industrial Cleaning -- 1.3.3 Material Processing -- 1.3.4 Chemical and Biological Reactions -- 1.4 Conclusion -- Acknowledgments -- References -- Chapter 2 Fundamental Theory of Electromagnetic Spectrum, Dielectric and Magnetic Properties, Molecular Rotation, and the Green Chemistry of Microwave Heating Equipment -- 2.1 Introduction -- 2.1.1 Historical Background -- 2.1.2 Green Chemistry Principles for Sustainable System -- 2.2 Fundamental Concepts of the Electromagnetic Spectrum Theory -- 2.3 Electrical, Dielectric, and Magnetic Properties in Microwave Irradiation -- 2.4 Microwave Irradiation Molecular Rotation -- 2.5 Fundamentals of Electromagnetic Theory in Microwave Irradiation -- 2.5.1 Electromagnetic Radiations and Microwave -- 2.5.2 Heating Mechanism of Microwave:

Conventional Versus Microwave Heating -- 2.6 Physical Principles of Microwave Heating and Equipment -- 2.7 Green Chemistry Through Microwave Heating: Applications and Benefits -- 2.8 Conclusion -- References -- Chapter 3 Conventional Versus Green Chemical Transformation: MCRs, Solid Phase Reaction, Green Solvents, Microwave, and Ultrasound Irradiation -- 3.1 Introduction -- 3.2 A Brief Overview of Green Chemistry -- 3.2.1 Definition and Historical Background -- 3.2.2 Significance -- 3.3 Multicomponent Reactions -- 3.4 Solid Phase Reactions -- 3.5 Microwave Induced Synthesis -- 3.6 Ultrasound Induced Synthesis -- 3.7 Green Chemicals and Solvents. 3.8 Conclusions and Outlook -- References -- Chapter 4 Metal Catalyzed Reactions Under Microwave and Ultrasound Irradiation -- 4.1 Ultrasonic Irradiation -- 4.1.1 IronBased Catalysts -- 4.1.2 Copper Based Catalysts -- 4.1.2.1 Dihydropyrimidinones by CuBased Catalysts -- 4.1.2.2 Dihydroquinazolinones by CuBased Catalysts -- 4.1.3 Misalliances MetalBased Catalysts -- 4.2 MicrowaveAssisted Reactions -- 4.2.1 Solid Acid and Base Catalysts -- 4.2.1.1 Condensation Reactions -- 4.2.1.2 Cyclization Reactions -- 4.2.1.3 Multicomponent Reactions -- 4.2.1.4 Friedel-Crafts Reactions -- 4.2.1.5 Reaction Involving Catalysts of Biological Origin -- 4.2.1.6 Reduction -- 4.2.1.7 Oxidation -- 4.2.1.8 Coupling Reactions -- 4.2.1.9 Micelliances Reactions -- 4.2.1.10 Click Chemistry -- 4.3 Conclusion -- Acknowledgments -- References -- Chapter 5 Microwave and UltrasonicAssisted Coupling Reactions -- 5.1 Introduction -- 5.2 Microwave -- 5.2.1 MicrowaveAssisted Coupling Reactions -- 5.2.2 UltrasoundAssisted Coupling Reactions -- 5.3 Conclusion -- References -- Chapter 6 Synthesis of Heterocyclic Compounds Under Microwave Irradiation Using Name Reactions -- 6.1 Introduction -- 6.2 Classical Methods for Heterocyclic Synthesis Under Microwave Irradiation -- 6.2.1 Piloty-Robinson Pyrrole Synthesis -- 6.2.2 Clauson-Kaas Pyrrole Synthesis -- 6.2.3 Paal-Knorr Pyrrole Synthesis -- 6.2.4 Paal-Knorr Furan Synthesis -- 6.2.5 Paal-Knorr Thiophene Synthesis -- 6.2.6 Gewald Reaction -- 6.2.7 Fischer Indole Synthesis -- 6.2.8 Bischler-Möhlau Indole Synthesis -- 6.2.9 Hemetsberger-Knittel Indole Synthesis -- 6.2.10 Leimgruber-Batcho Indole Synthesis -- 6.2.11 Cadogan-Sundberg Indole Synthesis -- 6.2.12 Pechmann Pyrazole Synthesis -- 6.2.13 Debus-Radziszewski Reaction -- 6.2.14 van Leusen Imidazole Synthesis -- 6.2.15 van Leusen Oxazole Synthesis. 6.2.16 Robinson-Gabriel Reaction -- 6.2.17 Hantzsch Thiazole Synthesis -- 6.2.18 Einhorn-Brunner Reaction -- 6.2.19 Pellizzari Reaction -- 6.2.20 Huisgen Reaction -- 6.2.21 Finnegan Tetrazole Synthesis -- 6.2.22 Fourcomponent Ugi-azide Reaction -- 6.2.23 Kröhnke Pyridine Synthesis -- 6.2.24 Bohlmann-Rahtz Pyridine Synthesis -- 6.2.25 Boger Reaction -- 6.2.26 Skraup Reaction -- 6.2.27 Gould-Jacobs Reaction -- 6.2.28 Friedländer Quinoline Synthesis -- 6.2.29 Povarov Reaction -- 6.3 Conclusion -- Acknowledgments -- References -- Chapter 7 Microwave and UltrasoundAssisted Enzymatic Reactions -- 7.1 Introduction -- 7.2 Influence Microwave Radiation on the Stability and Activity of Enzymes -- 7.3 Principle of UltrasonicAssisted Enzymolysis -- 7.4 Applications of UltrasonicAssisted Enzymolysis -- 7.4.1 Proteins and Other Plant Components Can Be Transformed and Extracted -- 7.4.2 Modification of Protein Functionality -- 7.4.3 Enhancement of Biological Activity -- 7.4.4 UltrasonicAssisted Acceleration of Hydrolysis Time -- 7.5 Enzymatic Reactions Supported by Ultrasound -- 7.5.1 Lipase -- 7.5.2 Protease -- 7.5.3 Polysaccharide Enzymes -- 7.6 Biodiesel Production via UltrasoundSupported Transesterification -- 7.6.1 Homogenous

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#### Sommario/riassunto

This book, edited by Dakeshwar Kumar Verma, Chandrabhan Verma, and Paz Otero, delves into the application of microwave and ultrasound irradiation in green chemical synthesis. It explores how these technologies can improve the efficiency and environmental impact of chemical reactions. The book covers fundamental theories, contemporary trends, and practical applications, including the synthesis of heterocycles, polymers, and nanomaterials. It aims to provide insights into reducing energy consumption and minimizing hazardous waste in chemical processes. The intended audience includes researchers, scientists, and students in the field of chemistry and chemical engineering.

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