Publications:

**Bead-based screening in chemical biology and drug discovery**
Publication: Research - peer-review › Journal article – Annual report year: 2018

**Oxidative Modification of Tryptophan-Containing Peptides**
Publication: Research - peer-review › Journal article – Annual report year: 2018

**Petasis/Diels-Alder/Cyclization Cascade Reactions for the Generation of Scaffolds with Multiple Stereogenic Centers and Orthogonal Handles for Library Production**
Publication: Research - peer-review › Journal article – Annual report year: 2018

**Photolabile Linkers for Solid-Phase Synthesis**
Publication: Research - peer-review › Journal article – Annual report year: 2018

**A broad range quorum sensing inhibitor working through sRNA inhibition**
Publication: Research - peer-review › Journal article – Annual report year: 2017

**Accessing Tri-substituted γ-Lactam Scaffolds Via Cascade Reactions: What Opportunities For Libraries!**
Publication: Research - peer-review › Conference abstract in journal – Annual report year: 2017

**A Linker for the Solid-Phase Synthesis of Hydroxamic Acids and Identification of HDAC6 Inhibitors**
Publication: Research - peer-review › Journal article – Annual report year: 2017

**Development of a UV-Cleavable Protecting Group for Hydroxylamines, Synthesis of a Structurally Wide Variety of Hydroxamic Acids, and Identification of Histone Deacetylase Inhibitors**
Publication: Research › Ph.D. thesis – Annual report year: 2017

**Diastereoselective Synthesis of Novel Heterocyclic Scaffolds through Tandem Petasis 3-Component/Intramolecular Diels-Alder and ROM-RCM Reactions**
Publication: Research - peer-review › Journal article – Annual report year: 2017

**Scaffold Diversity from N-Acyliminium Ions**
Publication: Research - peer-review › Journal article – Annual report year: 2017

**Solvent-Controlled Chemoselectivity in the Photolytic Release of Hydroxamic Acids and Carboxamides from Solid Support**
Publication: Research - peer-review › Journal article – Annual report year: 2017

**Synthesis and biological evaluation of dihydropyrano-[2,3-c]pyrazoles as a new class of PPARγ partial agonists**
Publication: Research - peer-review › Journal article – Annual report year: 2017

**Accessing Tri-substituted γ-Lactam Scaffolds Via Cascade Reactions: What Opportunities For Libraries!**
Publication: Research - peer-review › Conference abstract for conference – Annual report year: 2017

**A metal-catalyzed enyne-cyclization step for the synthesis of bi- and tricyclic scaffolds amenable to molecular library production**
Publication: Research - peer-review › Journal article – Annual report year: 2016
Catalytic Enantioselective Synthesis of Tetrahydocarbazoles and Exocyclic Pictet-Spengler-Type Reactions
Publication: Research - peer-review › Journal article – Annual report year: 2016

In-Bead Screening of Hydroxamic Acids for the Identification of HDAC Inhibitors
Publication: Research - peer-review › Journal article – Annual report year: 2016

Small-molecule kinase inhibitors: an analysis of FDA-approved drugs
Publication: Research - peer-review › Journal article – Annual report year: 2016

Synthesis of sp3-rich scaffolds for molecular libraries through complexity-generating cascade reactions
Publication: Research - peer-review › Journal article – Annual report year: 2016

Tandem Mannich/Diels–Alder reactions for the synthesis of indole compound libraries
Publication: Research - peer-review › Journal article – Annual report year: 2016

A Four-Component Reaction for the Synthesis of Dioxadiazaborocines
Publication: Research - peer-review › Journal article – Annual report year: 2015

Cyclic N-acyliminium ions for the diversity-oriented synthesis of functionalized γ-lactams
Publication: Research - peer-review › Conference abstract for conference – Annual report year: 2015

Multiple diguanylate cyclase-coordinated regulation of pyoverdine synthesis in Pseudomonas aeruginosa
Publication: Research - peer-review › Journal article – Annual report year: 2015

Reductive Cyclization and Petasis-Like Reaction for the Synthesis of Functionalized γ-Lactams
Publication: Research - peer-review › Journal article – Annual report year: 2015

Ritter-Hydrolysis Cascade Strategy for the Synthesis of Substituted gamma-Lactams
Publication: Research - peer-review › Conference abstract for conference – Annual report year: 2015

Synthesis of 1,4,5 trisubstituted γ-lactams via a 3-component cascade reaction
Publication: Research - peer-review › Journal article – Annual report year: 2015

Synthesis of (Arylamido)pyrrolidinone Libraries through Ritter-Type Cascade Reactions of Dihydroxylactams
Publication: Research - peer-review › Journal article – Annual report year: 2015

Publication: Research - peer-review › Journal article – Annual report year: 2015

Synthesis of Substituted γ- and δ-Lactams through Mannich-Type Reactions of Solid-Supported N-Acyliminium Ions
Publication: Research - peer-review › Journal article – Annual report year: 2015

Triazole-containing N-acyl homoserine lactones targeting the quorum sensing system in Pseudomonas aeruginosa
Publication: Research - peer-review › Journal article – Annual report year: 2015
An Improved Protocol for the Synthesis of 1-(Mesitylenesulfonyl)-3-nitro-1,2,4-triazole (MSNT)
Publication: Research - peer-review › Journal article – Annual report year: 2014

A Photolabile Linker for the Solid-Phase Synthesis of Peptide Hydrazides and Heterocycles
Publication: Research - peer-review › Journal article – Annual report year: 2014

Bacteria-Triggered Release of Antimicrobial Agents
Publication: Research - peer-review › Journal article – Annual report year: 2014

Bacteria-Triggered Release of Antimicrobial Agents
Publication: Research - peer-review › Journal article – Annual report year: 2013

Combining Organometallic Catalysis and Organocatalysis for the Synthesis of Heterocyclic Scaffolds
Publication: Research › Ph.D. thesis – Annual report year: 2015

Comparative Systems Biology Analysis To Study the Mode of Action of the Isothiocyanate Compound Iberin on Pseudomonas aeruginosa
Publication: Research - peer-review › Journal article – Annual report year: 2014

Metal-catalyzed variations on the Pictet-Spengler theme
Publication: Research - peer-review › Conference abstract in journal – Annual report year: 2014

Novel 4-component reaction for the synthesis of boron heterocyclic scaffolds
Publication: Research - peer-review › Conference abstract for conference – Annual report year: 2014

Petasis-type reactions for the synthesis of substituted pyrrolidin-2-ones
Publication: Research - peer-review › Conference abstract in journal – Annual report year: 2014

Solid-Phase Synthesis and Biological Evaluation of N-Dipeptido L-Homoserine Lactones as Quorum Sensing Activators
Publication: Research - peer-review › Journal article – Annual report year: 2014

Solid-phase synthesis of NH-1,2,3-triazoles using 4,4′- bismethoxybenzhydryl azide
Publication: Research - peer-review › Letter – Annual report year: 2014

Solid-phase synthesis of peptide thioureas and thiazole-containing macrocycles through ru-catalyzed ring-closing metathesis
Publication: Research - peer-review › Journal article – Annual report year: 2015

Synthesis of 4-Halogenated 3-Fluoro-6-methoxyquinolines: Key Building Blocks for the Synthesis of Antibiotics
Publication: Research - peer-review › Journal article – Annual report year: 2014

Synthesis of a Natural Product-Like Compound Collection through Oxidative Cleavage and Cyclization of Linear Peptides
Publication: Research - peer-review › Journal article – Annual report year: 2014

Synthesis of a Natural Product-Like Compound Collection through Oxidative Cleavage and Cyclization of Linear Peptides.
Publication: Research - peer-review › Journal article – Annual report year: 2014

Synthesis of heterocycles through transition-metal-catalyzed isomerization reactions
Publication: Research - peer-review › Journal article – Annual report year: 2014
Synthesis of Oxacyclic Scaffolds via Dual Ruthenium Hydride/Brønsted Acid-Catalyzed Isomerization/Cyclization of Allylic Ethers
Publication: Research - peer-review › Journal article – Annual report year: 2014

Synthesis of substituted gamma-lactams through petasis-type addition of boronic acids to N-acyliminium ions
Publication: Research - peer-review › Conference abstract in journal – Annual report year: 2014

Clearance of Pseudomonas aeruginosa Foreign-Body Biofilm Infections through Reduction of the Cyclic Di-GMP Level in the Bacteria
Publication: Research - peer-review › Journal article – Annual report year: 2013

Design, Synthesis and Biological Evaluation of Quorum Sensing Modulators
Publication: Research › Ph.D. thesis – Annual report year: 2013

Discovery of a novel selective PPARy ligand with partial agonist binding properties by integrated in silico / in vitro workflow
Publication: Research - peer-review › Journal article – Annual report year: 2013

Extracellular DNA Shields against Aminoglycosides in Pseudomonas aeruginosa Biofilms
Publication: Research - peer-review › Journal article – Annual report year: 2013

Identification of Five Structurally Unrelated Quorum-Sensing Inhibitors of Pseudomonas aeruginosa from a Natural-Derivative Database
Publication: Research - peer-review › Journal article – Annual report year: 2014

Identification of LasR Ligands through a Virtual Screening Approach
Publication: Research - peer-review › Journal article – Annual report year: 2013

In-bead screening
Publication: Research › Patent – Annual report year: 2013

Photolabile linker for the synthesis of hydroxamic acids
Publication: Research › Patent – Annual report year: 2013

Ruthenium Hydride/Brønsted Acid-Catalyzed Tandem Isomerization/N-Acyliminium Cyclization Sequence for the Synthesis of Tetrahydro-β-carbolines
Publication: Research - peer-review › Journal article – Annual report year: 2013

Solid-phase iminium cyclization reactions for the synthesis of natural product-like diketopiperazines
Publication: Research - peer-review › Conference abstract in journal – Annual report year: 2013

Synthesis and biological evaluation of triazole-containing N-acyl homoserine lactones as quorum sensing modulators
Publication: Research - peer-review › Journal article – Annual report year: 2013

Synthesis of heterocycles through ruthenium-catalyzed ring-closing metathesis and isomerization reactions
Publication: Research - peer-review › Conference abstract in journal – Annual report year: 2013

Tandem ring-closing metathesis/isomerization reactions for the total synthesis of violacein
Publication: Research - peer-review › Conference abstract in journal – Annual report year: 2013

Tandem Ring-Closing Metathesis/Isomerization Reactions for the Total Synthesis of Violacein
Publication: Research - peer-review › Journal article – Annual report year: 2013
Build/Couple/Pair and Multifunctional Catalysis Strategies for the Synthesis of Heterocycles from Simple Starting Materials
Publication: Research › Ph.D. thesis – Annual report year: 2012

Build/Couple/Pair Strategy Combining the Petasis 3-Component Reaction with Ru-Catalyzed Ring-Closing Metathesis and Isomerization
Publication: Research - peer-review › Journal article – Annual report year: 2012

Fluorescence-Based Reporter for Gauging Cyclic Di-GMP Levels in Pseudomonas aeruginosa
Publication: Research - peer-review › Journal article – Annual report year: 2012

Petasis Three-Component Coupling Reactions of Hydrazides for the Synthesis of Oxadiazolones and Oxazolidinones
Publication: Research - peer-review › Journal article – Annual report year: 2012

Solid-Phase Iminium Cyclization Reactions for the Synthesis of Natural Product-Like Diketopiperazines
Publication: Research › Ph.D. thesis – Annual report year: 2012

Solid-Phase Synthesis of Modified Peptides as Putative Inhibitors of Histone Modifying Enzymes
Publication: Research › Ph.D. thesis – Annual report year: 2013

Solid-Phase Synthesis of Structurally Diverse Heterocycles by an Amide–Ketone Condensation/N-Acyliminium Pictet–Spengler Sequence
Publication: Research - peer-review › Journal article – Annual report year: 2012

Solid-supported synthesis: From pharmacologically relevant heterocycles to biologically active surfaces
Publication: Research › Ph.D. thesis – Annual report year: 2012

Synthesis of tetrahydro-β-carbolines via isomerization of N-allyltryptamines: a metal-catalyzed variation on the Pictet–Spengler theme
Publication: Research - peer-review › Journal article – Annual report year: 2012

A convenient procedure for the solid-phase synthesis of hydroxamic acids on PEGA resins
Publication: Research - peer-review › Journal article – Annual report year: 2011

A photolabile linker for the solid-phase synthesis of 4-substituted NH-1,2,3-triazoles
Publication: Research - peer-review › Journal article – Annual report year: 2011

Chemical synthesis on SU-8
Publication: Research - peer-review › Journal article – Annual report year: 2011

Levulinic acid derivatives: Building blocks for solid-phase synthesis of diverse heterocyclic scaffolds
Publication: Research - peer-review › Conference abstract for conference – Annual report year: 2011

Solid-phase synthesis of an apoptosis-inducing tetrapeptide mimicking the Smac protein
Publication: Research - peer-review › Journal article – Annual report year: 2012

Solid-Phase Synthesis of Smac Peptidomimetics Incorporating Triazoloprolines and Biarylalanines
Publication: Research - peer-review › Journal article – Annual report year: 2011

Synthesis of Heterocycles through a Ruthenium-Catalyzed Tandem Ring-Closing Metathesis/Isomerization/N-Acyliminium Cyclization Sequence
Publication: Research - peer-review › Journal article – Annual report year: 2011
Synthesis of Heterocycles through a Ruthenium-Catalyzed Tandem Ring-Closing Metathesis/Isomerization/N-Acyliminium Cyclization Sequence
Publication: Research - peer-review › Journal article – Annual report year: 2011

N-Acyliminium Intermediates in Solid-Phase Synthesis
Publication: Research - peer-review › Journal article – Annual report year: 2010

Traceless Azido Linker for the Solid-Phase Synthesis of NH-1,2,3-Triazoles via Cu-Catalyzed Azide-Alkyne Cycloaddition Reactions
Publication: Research - peer-review › Journal article – Annual report year: 2010

Small molecules and medicine
Publication: Research › Book chapter – Annual report year: 2009

Solid-phase synthesis of complex and pharmacologically interesting heterocycles
Publication: Research - peer-review › Journal article – Annual report year: 2009

An Experimental and Theoretical Study of the Mechanism of Stannylcupration of α,β-Acetylenic Ketones and Esters
Publication: Research - peer-review › Journal article – Annual report year: 2006

Synthesis of the Zoanthamine ABC Ring System: Some Surprises from Intramolecular Diels-Alder Reactions
Publication: Research - peer-review › Journal article – Annual report year: 2006

Pd-Catalyzed Silastannation of Secondary Propargylic Alcohols and Their Derivatives
Publication: Research - peer-review › Journal article – Annual report year: 2004

Highly stereoselective addition of stannylcuprates to alkynones
Publication: Research - peer-review › Journal article – Annual report year: 2002

Stereoselective synthesis of (E)-beta-tributylstannyl-alpha,beta-unsaturated ketones: Construction of a key intermediate for the total synthesis of zoanthamine
Publication: Research - peer-review › Journal article – Annual report year: 2002

Stannylcupration of (alpha, beta)-Unsaturated Ketones
Publication: Research › Poster – Annual report year: 2001

Projects:

Development of receptors for Aqueous Carbohydrate Recognition
Project: PhD

In-Bead Diagnostics and Screening
Project: PhD

Microfabrication an Chemical Functionalization of Tailor-made Materials for Biomedical Applications
Project: PhD

Ruthenium-Catalyzed Tandem RCM/Isomerization Sequences
Project: PhD
Total synthesis of Sioboldine A  
Project: PhD

Catalysis Orchestration: One Catalysts with multiple modes of Action  
Project: PhD

Ligand assisted Site-Specific Modification of Proteins  
Project: PhD

Synthesis of Antibacterial Tetrahydro-b-Carbolines via Metal-Catalyzed N-Allylamine Isomerization/N-Alkyliminium Cyclization Sequence  
Project: PhD

Synthesis of novel antibacterial agents via combinatorial solid-phase synthesis  
Project: PhD

Synthesis of Antimicrobial Natural Product Derivatives on Photlabile Solid Support  
Project: PhD

Ruthenium-catalyzed tandem reactions  
Project: PhD

Azumamide E and Analogs as Epigenetic Modulators  
Project: PhD

Organic Synthesis of antimicrobial agents and antibiotics  
Project: PhD

Integrated Chemical Synthesis and Cell Screening In Patient Cells  
Project: PhD

Diversity-Oriented Synthesis of Small Molecules Trageting Bacterial Biofilm  
Project: PhD

Diversity-Oriented Synthesis of Composite Antimicrobial Agents  
Project: PhD

Design, Synthesis and Biological Evaluation of Histone Demethylase Inhibitors  
Project: PhD

Development of New Methods for the Synthesis of Biologically Active small Molecules  
Project: PhD

Tools for Chemical Biology: New Macroyclic Antibiotics from Diversity Oriented Synthesis  
Project: PhD

Syntetiske GLP-1 analoger  
Project: PhD

Metalorganiske reaktioner med aldehyde og kulhydrater  
Project: PhD
Alkenyltin Chemistry: Method Development and Applications in Organic Synthesis
Project: PhD