Publications:

Calanus hyperboreus and the lipid pump
Publication: Research - peer-review › Journal article – Annual report year: 2017

Connectivity and Dispersal of Salmon Lice in a Tidal Energetic Island System: Faroe Islands
Publication: Research › Conference abstract for conference – Annual report year: 2017

Dynamics of phytoplankton blooms in turbulent vortex cells
Publication: Research - peer-review › Journal article – Annual report year: 2017

Effect of exposure on salmon lice Lepeophtheirus salmonis population dynamics in Faroese salmon farms
Publication: Research - peer-review › Journal article – Annual report year: 2017

Effects of high-frequency strobed laser light on Atlantic cod (Gadus morhua) physiology and behavior
Publication: Research › Conference abstract for conference – Annual report year: 2017

Identifying salmon lice transmission characteristics between Faroese salmon farms
Publication: Research - peer-review › Journal article – Annual report year: 2017

Seasonal succession in zooplankton feeding traits reveals trophic trait coupling
Publication: Research - peer-review › Journal article – Annual report year: 2017

Seasonal succession in zooplankton feeding traits reveals trophic trait coupling
Publication: Research › Conference abstract for conference – Annual report year: 2017

Adult lifetime reproductive value in fish depends on size and fecundity type
Publication: Research - peer-review › Journal article – Annual report year: 2016

Carbon export by vertically migrating zooplankton: Optimal vertical migration and carbon export
Publication: Research - peer-review › Journal article – Annual report year: 2016

Characteristic sizes of life in the oceans - from bacteria to whales
Publication: Research - peer-review › Journal article – Annual report year: 2016

Functional responses of North Atlantic fish eggs to increasing temperature
Publication: Research - peer-review › Journal article – Annual report year: 2016
UTOFIA: Time-of-Flight camera for underwater applications
Publication: Research - peer-review › Conference abstract for conference – Annual report year: 2016

Advection loss of overwintering Calanus finmarchicus from the Faroe-Shetland Channel
Publication: Research - peer-review › Journal article – Annual report year: 2015

An effective algorithm for approximating adaptive behavior in seasonal environments
Publication: Research - peer-review › Journal article – Annual report year: 2015

A new compact, cost-efficient concept for underwater range-gated imaging: the UTOFIA project
Publication: Research › Poster – Annual report year: 2015

A time for every season: seasonal cycles of plankton and fish
Publication: Research › Ph.D. thesis – Annual report year: 2017

Deep water overflow in the Faroe Bank Channel; modelling, processes, and impact
Publication: Research › Ph.D. thesis – Annual report year: 2015

Fisheries oceanography of northern pelagic fish species
Publication: Research › Ph.D. thesis – Annual report year: 2015

Functional responses of North Atlantic fish eggs to increasing temperature
Publication: Research › Conference abstract for conference – Annual report year: 2015

Modelling emergent trophic strategies in plankton
Publication: Research - peer-review › Journal article – Annual report year: 2015

Oceanography and the base of the pelagic food web in the southern Indian Ocean
Publication: Research - peer-review › Journal article – Annual report year: 2015

Predicting future shifts in herring spawning habitat in the North Sea
Publication: Research › Conference abstract for conference – Annual report year: 2015

Seasonal copepod lipid pump promotes carbon sequestration in the deep North Atlantic
Publication: Research - peer-review › Journal article – Annual report year: 2015

Size structures sensory hierarchy in ocean life
Publication: Research - peer-review › Journal article – Annual report year: 2015

Synoptic-scale analysis of mechanisms driving surface chlorophyll dynamics in the North Atlantic
Publication: Research - peer-review › Journal article – Annual report year: 2015

Accuracy and precision in the calculation of phenology metrics
Publication: Research - peer-review › Journal article – Annual report year: 2015

Analysis of self-overlap reveals trade-offs in plankton swimming trajectories
Publication: Research - peer-review › Journal article – Annual report year: 2014

Capital versus income breeding in a seasonal environment
Publication: Research - peer-review › Journal article – Annual report year: 2014
From fish to phytoplankton
Publication: Research › Conference abstract for conference – Annual report year: 2014

Phytoplankton bloom and subpolar gyre induced dynamics in the North Atlantic
Publication: Research › Conference abstract for conference – Annual report year: 2014

Phytoplankton bloom and subpolar gyre induced dynamics in the North Atlantic
Publication: Research › Poster – Annual report year: 2014

Phytoplankton bloom and subpolar gyre induced dynamics in the North Atlantic
Publication: Research › Poster – Annual report year: 2014

The Biological carbon pump in the North Atlantic
Publication: Research - peer-review › Journal article – Annual report year: 2014

Behavioral traits and their trade-off in the plankton
Publication: Research › Conference abstract for conference – Annual report year: 2013

Characteristic sizes of life in the oceans - from bacteria to whales
Publication: Research › Conference abstract for conference – Annual report year: 2013

Control of plankton seasonal succession by adaptive grazing
Publication: Research - peer-review › Journal article – Annual report year: 2012

Diel vertical migration arising in a habitat selection game
Publication: Research - peer-review › Journal article – Annual report year: 2012

Estimating phytoplankton phenology metrics from noisy, gappy data
Publication: Research › Poster – Annual report year: 2013

Feeding season duration and the relative success of capital and income spawning copepods
Publication: Research › Conference abstract for conference – Annual report year: 2013

From phytoplankton to fish
Publication: Research › Conference abstract for conference – Annual report year: 2014

Optimal foraging and diel vertical migration in a life history model
Publication: Research › Poster – Annual report year: 2013

Optimal foraging in marine ecosystem models: selectivity, profitability and switching
Publication: Research - peer-review › Journal article – Annual report year: 2013

Trait-based plankton trophic interactions and community composition in a global ocean ecosystem model
Publication: Research › Conference abstract for conference – Annual report year: 2013

Zooplankton feeding traits and community composition in a global ecosystem model
Publication: Research › Conference abstract for conference – Annual report year: 2013

Zooplankton feeding traits and community composition in a global ecosystem model
Publication: Research › Poster – Annual report year: 2013
Adaptive behaviour, tri-trophic food-web stability and damping of chaos
Publication: Research - peer-review › Journal article – Annual report year: 2011

How the Subpolar gyre strength influences phytoplankton blooms dynamics in the North Atlantic
Publication: Research › Paper – Annual report year: 2012

Subpolar gyre strength influences phytoplankton bloom dynamics
Publication: Research › Conference abstract for conference – Annual report year: 2012

Weak subpolar Gyre lead to early blooms
Publication: Research › Conference abstract for conference – Annual report year: 2012

Phytoplankton spring bloom influence on larval and juvenile fish survival
Publication: Research › Conference abstract for conference – Annual report year: 2011

Small, wet & rational: Individual based zooplankton ecology
Publication: Research › Doctoral thesis – Annual report year: 2011

Optimization and emergence in marine ecosystem models
Publication: Research - peer-review › Journal article – Annual report year: 2010

Assessing the role of food quality in the production and hatching of Temora longicornis eggs
Publication: Research - peer-review › Journal article – Annual report year: 2009

Ecosystem productivity: From: DTU Climate Change Technologies
Publication: Research › Report – Annual report year: 2009

Evolutionens matematik
Publication: Education - peer-review › Book chapter – Annual report year: 2009

Optimal behaviour and dynamical impact in a plankton predator-prey system
Publication: Research › Conference abstract for conference – Annual report year: 2009

Preferential concentration of plankton by turbulence; a critical examination of mechanisms
Publication: Research › Conference abstract for conference – Annual report year: 2009

Significance of swimming and feeding currents for nutrient uptake in osmotrophic and interception feeding flagellates
Publication: Research - peer-review › Journal article – Annual report year: 2009

Swimming in turbulence: zooplankton fitness in terms of foraging efficiency and predation risk
Publication: Research - peer-review › Journal article – Annual report year: 2009

Vandloppernes vækst i forhold til fødekvaliteten
Publication: Research › Conference abstract for conference – Annual report year: 2009

Lagrangian modelling of plankton motion: From deceptively simple random walks to Fokker-Planck and back again
Publication: Research - peer-review › Journal article – Annual report year: 2008

Biomixing of the oceans?
Publication: Research - peer-review › Journal article – Annual report year: 2007
Grazing effects of blue mussel Mytilus edulis on the pelagic food web under different turbulence conditions
Publication: Research - peer-review › Journal article – Annual report year: 2007

Individual based model of cod larvae feeding behavior: interaction with turbulence and search shape
Publication: Research › Conference abstract for conference – Annual report year: 2007

Individual-based simulations of larval fish feeding in turbulent environments
Publication: Research - peer-review › Journal article – Annual report year: 2007

Klimaændringer og Dogger banke
Publication: Research › Conference abstract in proceedings – Annual report year: 2007

Mixing it up with krill - response
Publication: Research - peer-review › Journal article – Annual report year: 2007

Motility of zooplankton: fitness, foraging and predation
Publication: Research - peer-review › Journal article – Annual report year: 2007

Nye optiske instrumenter ved Danmarks Fiskeriundersøgelser
Publication: Research › Conference abstract in proceedings – Annual report year: 2007

The fate of discarded appendicularian houses: degradation by the copepod, Microsetella norvegica, and other agents
Publication: Research - peer-review › Journal article – Annual report year: 2007

Plankton motility patterns and encounter rates
Publication: Research - peer-review › Journal article – Annual report year: 2006

Turbulence and feeding behaviour affect the vertical distributions of Oithona similis and Microsetella norvegica
Publication: Research - peer-review › Journal article – Annual report year: 2006

Vejret og vandmiljøet
Publication: Research › Book chapter – Annual report year: 2006

Effects of prey motility and concentration on feeding in Acartia tonsa and Temora longicornis: the importance of feeding modes
Publication: Research - peer-review › Journal article – Annual report year: 2005

Vertikal fordeling af vandlopper i forhold til føde og turbulens
Publication: Research › Poster – Annual report year: 2005

Characteristics of the chemical plume behind a sinking particle in a turbulent water column
Publication: Research - peer-review › Journal article – Annual report year: 2004

Escape responses of copepod nauplii in the flow field of the blue mussel, Mytilus edulis
Publication: Research - peer-review › Journal article – Annual report year: 2003

Microscale distribution of zooplankton in relation to turbulent diffusion
Publication: Research - peer-review › Journal article – Annual report year: 2003
Random motility of plankton: diffusive and aggregative contributions
Publication: Research - peer-review › Journal article – Annual report year: 2003

Turbulence and zooplankton production: insights from PROVESS
Publication: Research - peer-review › Journal article – Annual report year: 2002

Udvalget om Miljøpåvirkninger og fiskeriresourcer: Delrapport vedr. klimaændringer
Publication: Research › Report – Annual report year: 2002

Det turbulente liv i havet
Publication: Research › Journal article – Annual report year: 2001

Fisheries and climate change: the danish perspective
Publication: Research - peer-review › Book chapter – Annual report year: 2001

Hydromechanical signals and turbulent noise
Publication: Research › Conference abstract for conference – Annual report year: 2001

Hydromechanical signals in the plankton
Publication: Research - peer-review › Journal article – Annual report year: 2001

Klimaændringer og mulige effekter på dyre- og plantelivet i danske farvande
Publication: Research › Report – Annual report year: 2001

Observations of copepod feeding and vertical distribution under natural turbulent conditions in the North Sea
Publication: Research - peer-review › Journal article – Annual report year: 2001

Phaeocystis globosa (Prymnesiophyceae) and the planktonic food web: Feeding, growth, and trophic interactions among grazers
Publication: Research - peer-review › Journal article – Annual report year: 2001

The influence of tidal straining and wind on suspended matter and phytoplankton distribution in the Rhine outflow region
Publication: Research - peer-review › Journal article – Annual report year: 2001

Modelling the attack success of planktonic predators: patterns and mechanisms of prey size selectivity
Publication: Research - peer-review › Journal article – Annual report year: 2000

On the reorientation of non-spherical prey particles in a feeding current
Publication: Research - peer-review › Journal article – Annual report year: 2000

Subsurface phytoplankton blooms fuel pelagic production in the North Sea
Publication: Research - peer-review › Journal article – Annual report year: 2000

Buoyancy control of Calanus finmarchicus
Publication: Research › Journal article – Annual report year: 1999

Hydrodynamic signal perception in the copepod Acartia tonsa
Publication: Research - peer-review › Journal article – Annual report year: 1999

Lipids, buoyancy and the seasonal vertical migration of Calanus finmarchicus
Publication: Research - peer-review › Journal article – Annual report year: 1999
Predator and prey perception in copepods due to hydromechanical signals
Publication: Research - peer-review › Journal article – Annual report year: 1999

Environmental variability along the drift track of larval haddock in the east Shetland Atlantic inflow
Publication: Research › Conference article – Annual report year: 1998

Intensive aggregate formation with low vertical flux during an upwelling-induced diatom bloom
Publication: Research - peer-review › Journal article – Annual report year: 1998

Predation vulnerability of planktonic copepods: consequences of predator foraging strategies and prey sensory abilities
Publication: Research - peer-review › Journal article – Annual report year: 1998

Role of diatoms in copepod production: good, harmless or toxic?
Publication: Research - peer-review › Journal article – Annual report year: 1998

Turbulence-induced contact rates of plankton: the question of scale
Publication: Research - peer-review › Journal article – Annual report year: 1998

The Rhine outflow: a prototypical pulsed discharge plume in a high energy shallow sea
Publication: Research - peer-review › Journal article – Annual report year: 1997

Using random walk models to simulate the vertical distribution of particles in a turbulent water column
Publication: Research - peer-review › Journal article – Annual report year: 1997

Shear dispersion in a wind and density driven plume
Publication: Research - peer-review › Book chapter – Annual report year: 1996

The use of models in eutrophication studies
Publication: Research - peer-review › Book chapter – Annual report year: 1996

On tidal rectification, friction and geostrophic degeneracy
Publication: Research - peer-review › Journal article – Annual report year: 1994

The effect of stratification on tidal current profiles in a region of freshwater influence
Publication: Research - peer-review › Journal article – Annual report year: 1994

The Rose Spit Eddy in Dixon Entrance: Evidence for its existence and underlying dynamics
Publication: Research - peer-review › Journal article – Annual report year: 1992

Lagrangian tidal stress and basin-wide residual eddy dynamics in wide coastal sea straits
Publication: Research - peer-review › Journal article – Annual report year: 1991

Dynamics of tidally forced basin-wide coastal eddies
Publication: Research - peer-review › Book chapter – Annual report year: 1990

Experiences with the Brillinger spectral estimator applied to simulated irregularly observed processes
Publication: Research - peer-review › Journal article – Annual report year: 1987

Projects:
Trait-based modelling of copepod communities
Project: PhD

Vertical migration and the structure and function of pelagic ecosystems
Project: PhD

Mechanistic approach to ocean ecology (39427)
Project

Reduktion af lakseinfektioner
Project: PhD

Reconfigurable Modular Robotic System for Aquatic Environment
Project

Collaborative modular underwater robotic system for long-term autonomous operations (REMORA) (39341)
Project

Benefits, cost, and trade-off of defense mechanisms in marine phytoplankton
Project: PhD

Underwater time of flight image acquisition system (UTOFIA) (39240)
Project

Trait Ecology of Plankton in a Changing Marine Environment
Project: PhD

PhD Scholarship in Physical Oceanography
Project: PhD

Center for Ocean Life (COOL) - a Villum-Kahn Rasmussen Centre of excellence for the study of life in a changing ocean (38960)
Project

Fisheries Oceanography of Northern Pelagic Fish Populations
Project: PhD

PhD Scholarship in Marine Ecology and Climate
Project: PhD

Climate change on marine ecosystems and resource economics (NorMER) (38898)
Project

North Atlantic - Arctic coupling in a changing climate: Impacts on ocean circulation, carbon cycling and sea-ice (NAACOS) (38888)
Project

Modelling the competition between two closely-related copepod species in Arctic under climate change
Project: PhD
European basin-scale analysis, synthesis and integration (EURO-BASIN) (38899)
Project

Physical oceanography in Greenland waters under climate change (38767)
Project

Activities:

ICES - Working Group on Oceanic Hydrography - WGOH (External organisation)
Activity: Membership › Membership of committees, commissions, boards, councils, associations, organisations, or similar