



Overview of microalgae research in the European Atlantic area in 2019

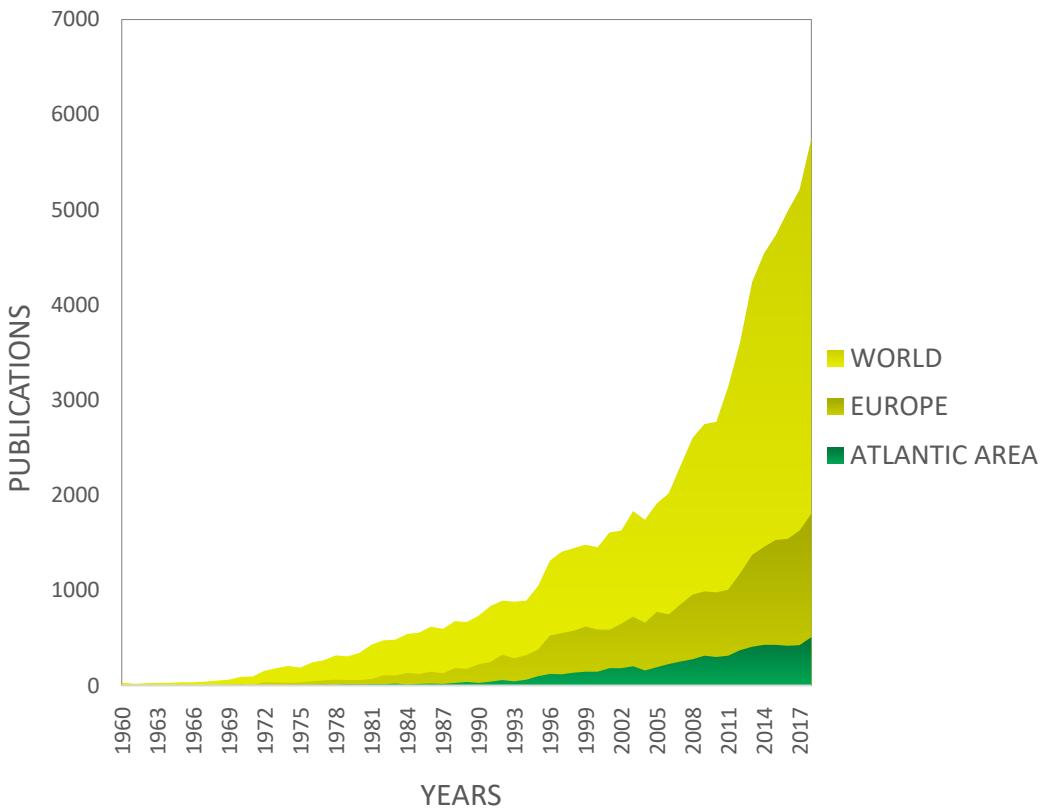
PUBLICATIONS DATABASE OF THE MICROALGAE SECTOR

University of La Rochelle – WP4



ENHANCE MICROALGAE

« MICROALGAE » SCIENTIFIC PUBLICATIONS



WORLD 79 020
EUROPE 26 137
ATLANTIC AREA 6 989

33%
27%



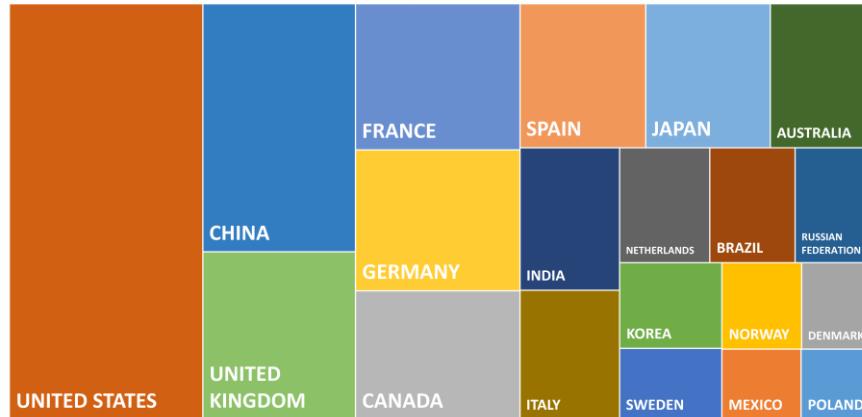
INTELLIXIR
Patent & Scientific Data Analysis



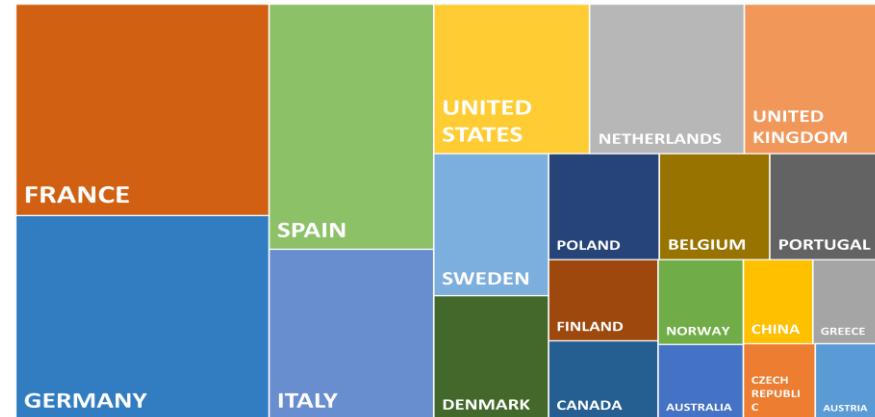
ENHANCE MICROALGAE

SCIENTIFIC PRODUCTION BY COUNTRY

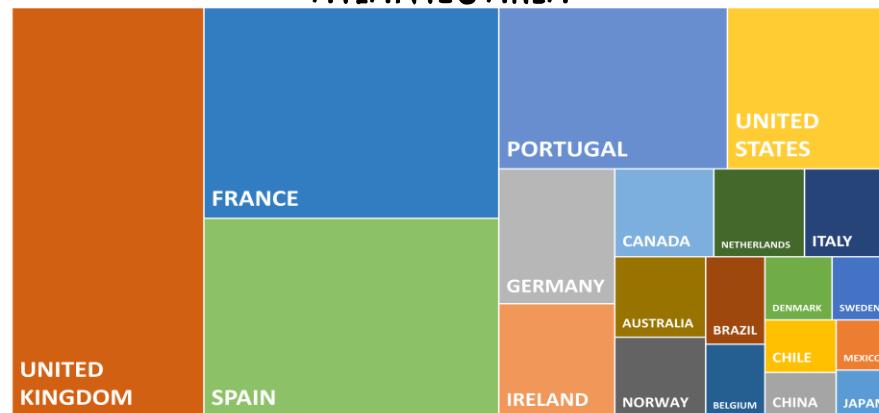
WORLD



EUROPE



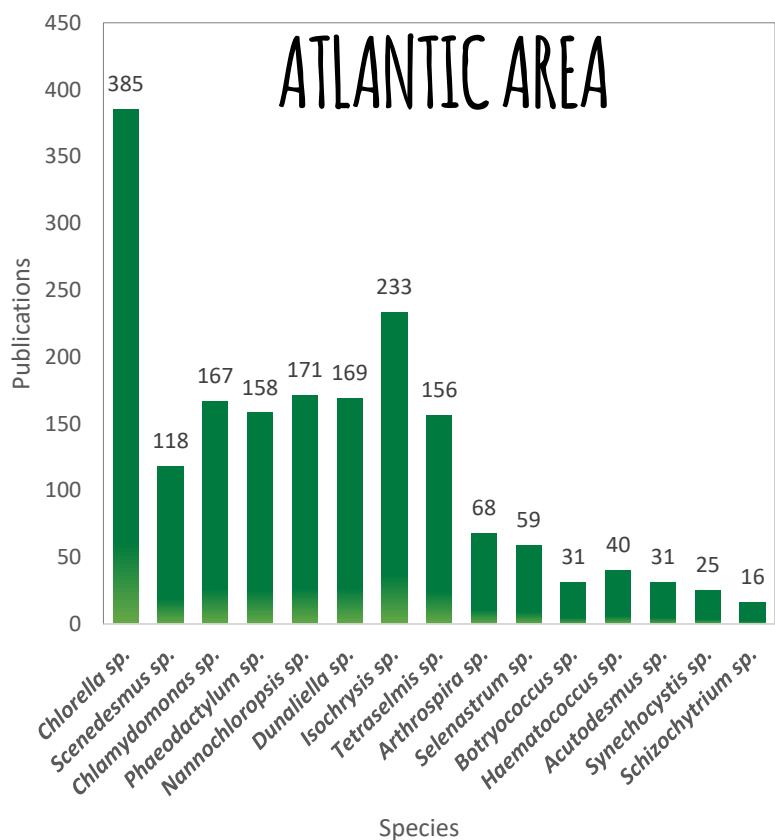
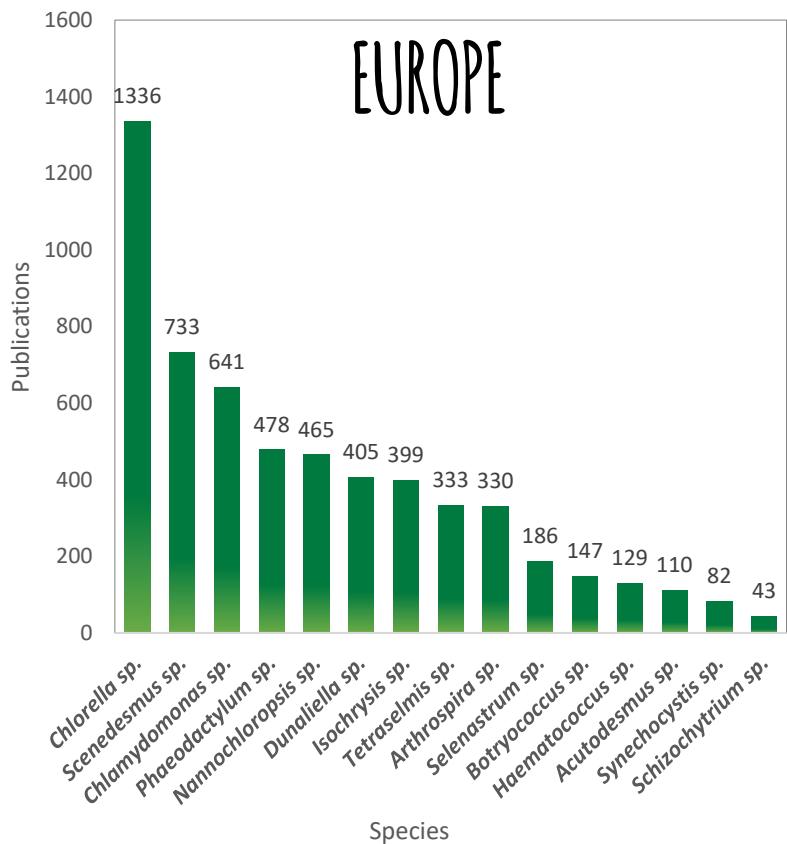
ATLANTIC AREA



MAIN COUNTRIES
IDENTIFIED AS SCIENTIFIC
COLLABORATORS IN THE AA
PUBLICATIONS



SCIENTIFIC PUBLICATIONS BY SPECIES IN THE ATLANTIC AREA





ENHANCE MICROALGAE

ANALYSIS OF “CONCEPTS” AND “DESCRIPTORS” INSIDE THE SCIENTIFIC PUBLICATIONS

Renewable and Sustainable Energy Reviews 35 (2014) 265–278



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Renewable and Sustainable Energy Reviews



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CONCEPTS

Morphology, composition, production, processing and applications of *Chlorella vulgaris*: A review

Carl Safi ^{a,b,*}, Bachar Zebib ^{a,b}, Othmane Merah ^{a,b}, Pierre-Yves Pontalier ^{a,b},
Carlos Vaca-Garcia ^{a,b,c}

^a Université de Toulouse, INP-ENSIACET, LCA (Laboratoire de Chimie Agro-industrielle), F-31030 Toulouse, France

^b INRA, UMR 1010 CAL, F-31030 Toulouse, France

^c King Abdulaziz University, Jeddah, Saudi Arabia

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Primary composition

Production

ABSTRACT

Economic and technical problems related to the reduction of petroleum resources require the valorisation of renewable raw material. Recently, microalgae emerged as promising alternative feedstock that represents an enormous biodiversity with multiple benefits exceeding the potential of conventional agricultural feedstock. Thus, this comprehensive review article spots the light on one of the most interesting microalgae *Chlorella vulgaris*. It assembles the history and a thorough description of its ultrastructure and composition according to growth conditions. The harvesting techniques are presented in relation to the novel algo-refinery concept, with their technological advancements and potential applications in the market.

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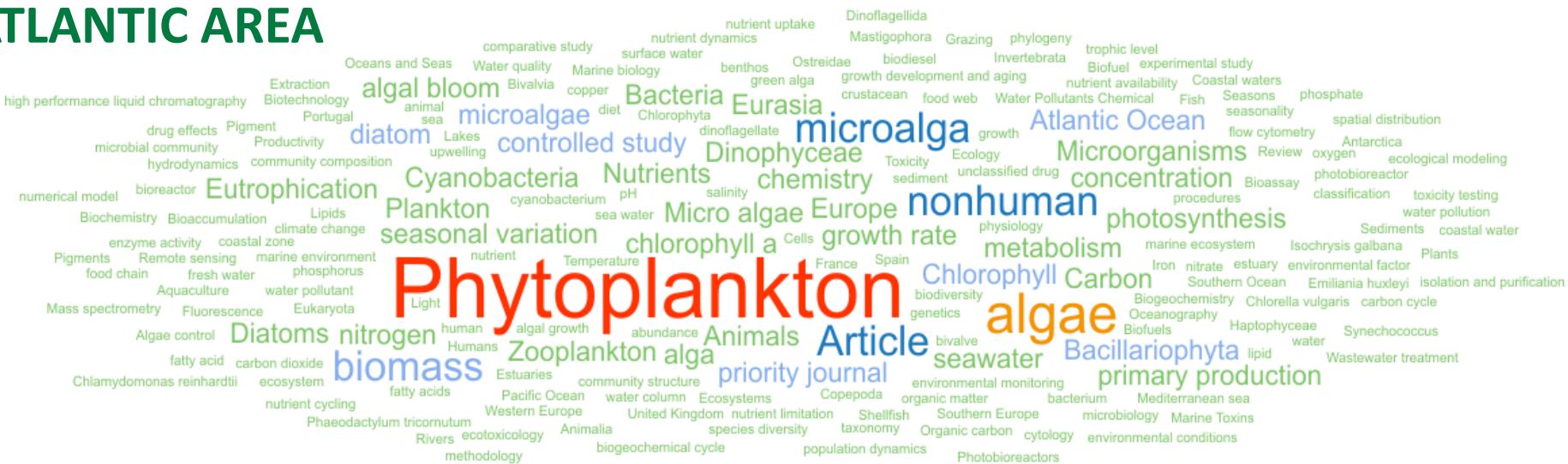
DESCRIPTORS





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DESCRIPTORS WORDCLOUD OF SCIENTIFIC PRODUCTION IN THE ATLANTIC AREA



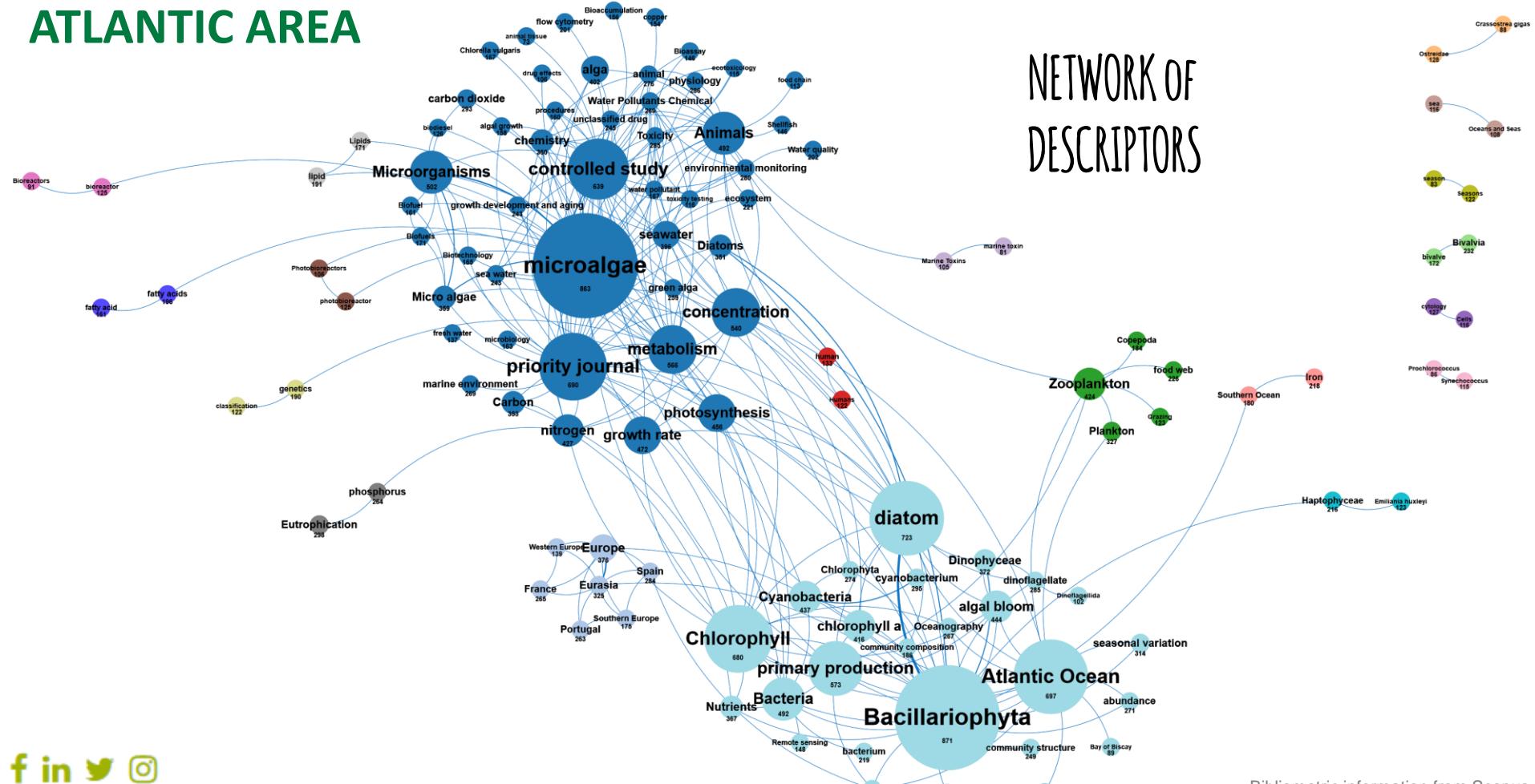
EMERGING DESCRIPTORS IN 2017-2019:

FEED – CELL – BOVINE – CATTLE - FATTY ACID ESTER – MARINE – SYMBIODINIUM – VETERINARY MEDECINE –
BLUE BIOTECHNOLOGY - CELL COMPONENT - CIRCULAR ECONOMY – CRYPTOPHYTES - DIETARY EXPOSURE

ENHANCE MICROALGAE

DESCRIPTORS NETWORK OF SCIENTIFIC PRODUCTION IN THE ATLANTIC AREA

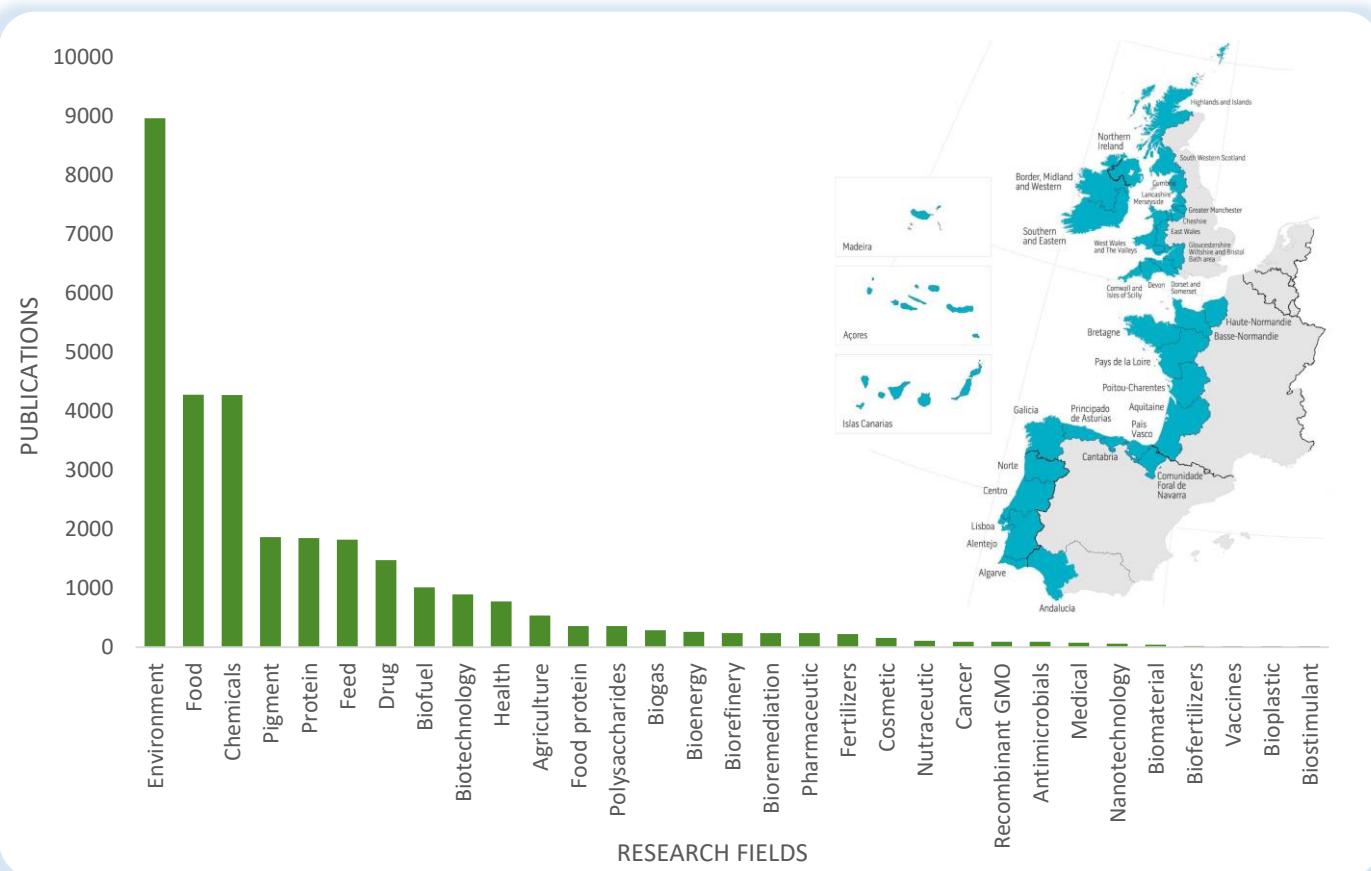
NETWORK OF
DESCRIPTORS





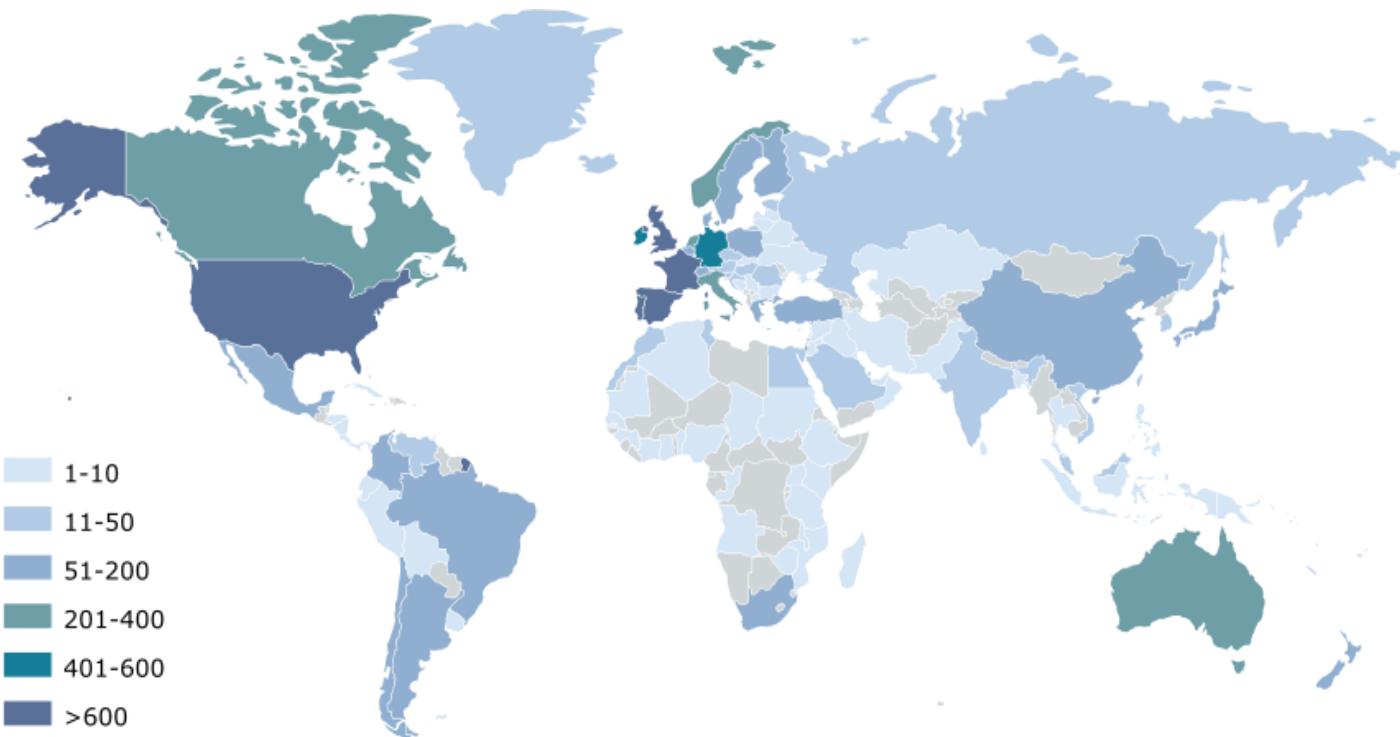
ENHANCE MICROALGAE

MAIN RESEARCH FIELDS OF THE SCIENTIFIC PRODUCTION IN THE ATLANTIC AREA





MAIN COUNTRIES IDENTIFIED AS SCIENTIFIC COLLABORATORS IN THE AA PUBLICATIONS

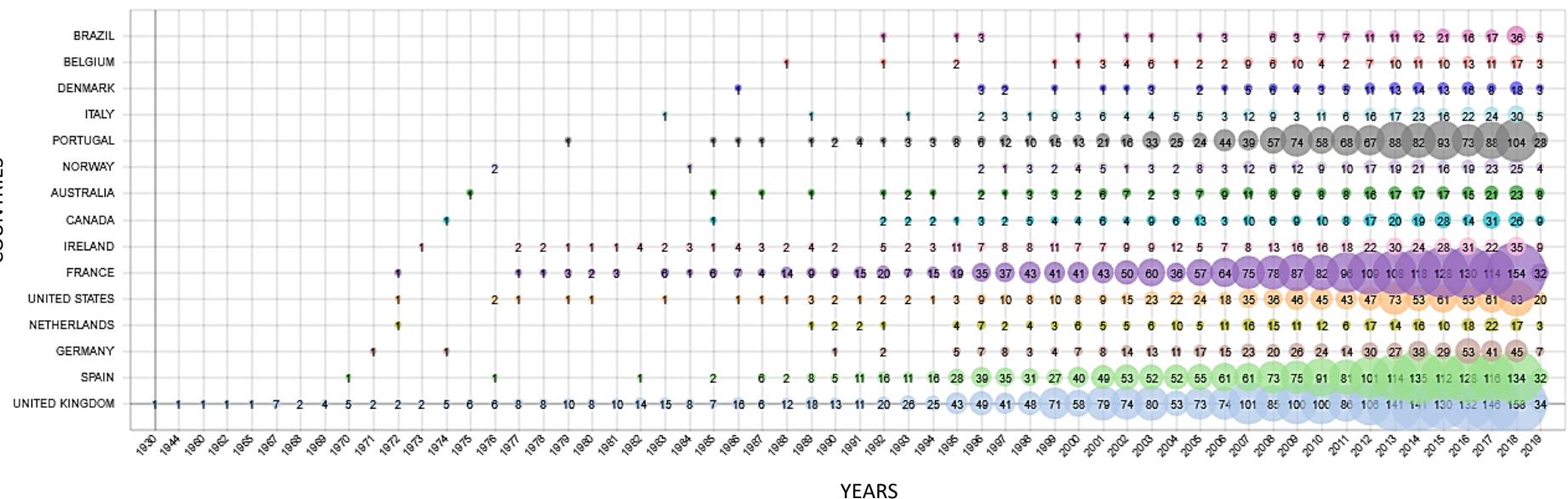
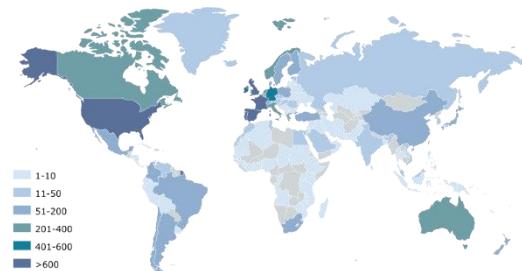


COUNTRIES	PUBLICATIONS
UK	2484
FRANCE	1961
SPAIN	1855
PORTUGAL	1164
UNITED STATES	836
GERMANY	494
IRELAND	416
CANADA	275
NETHERLANDS	252
ITALY	242
AUSTRALIA	231
NORWAY	230
BRAZIL	164
BELGIUM	137
DENMARK	134
SWEDEN	119



ENHANCE MICROALGAE

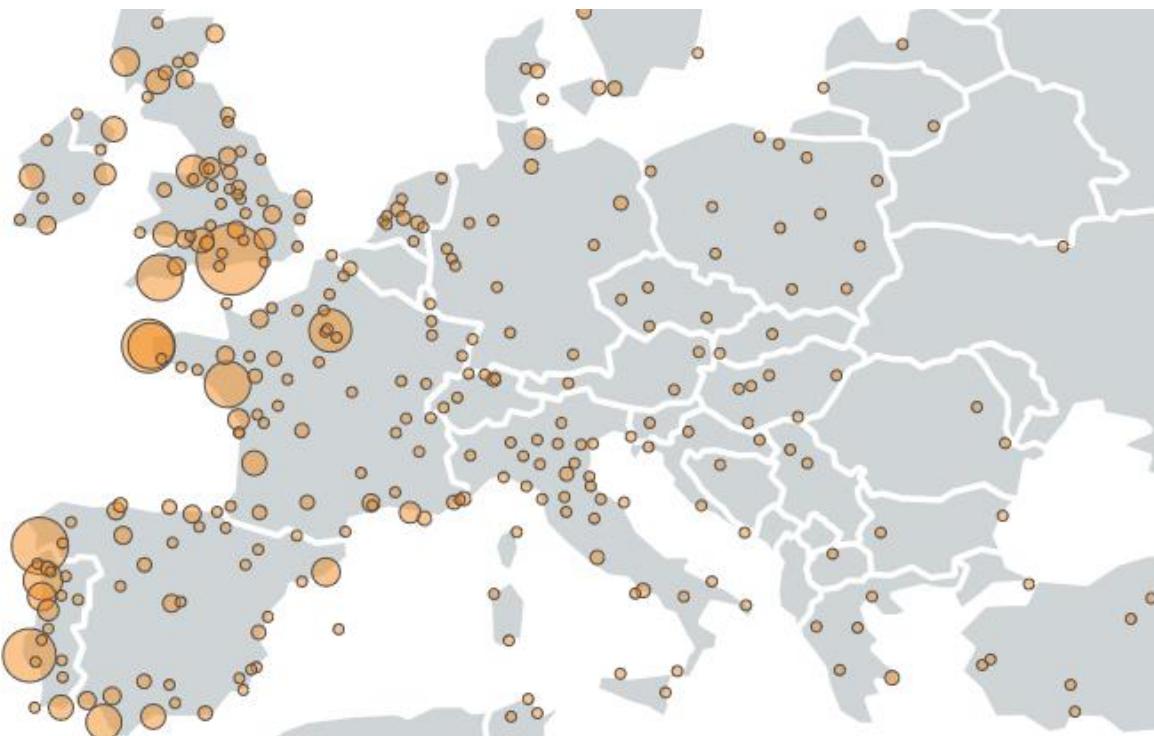
MAIN COUNTRIES IDENTIFIED AS SCIENTIFIC COLLABORATORS IN THE AA PUBLICATIONS





ENHANCE MICROALGAE

MAIN CITIES IDENTIFIED AS PUBLISHERS IN THE AA

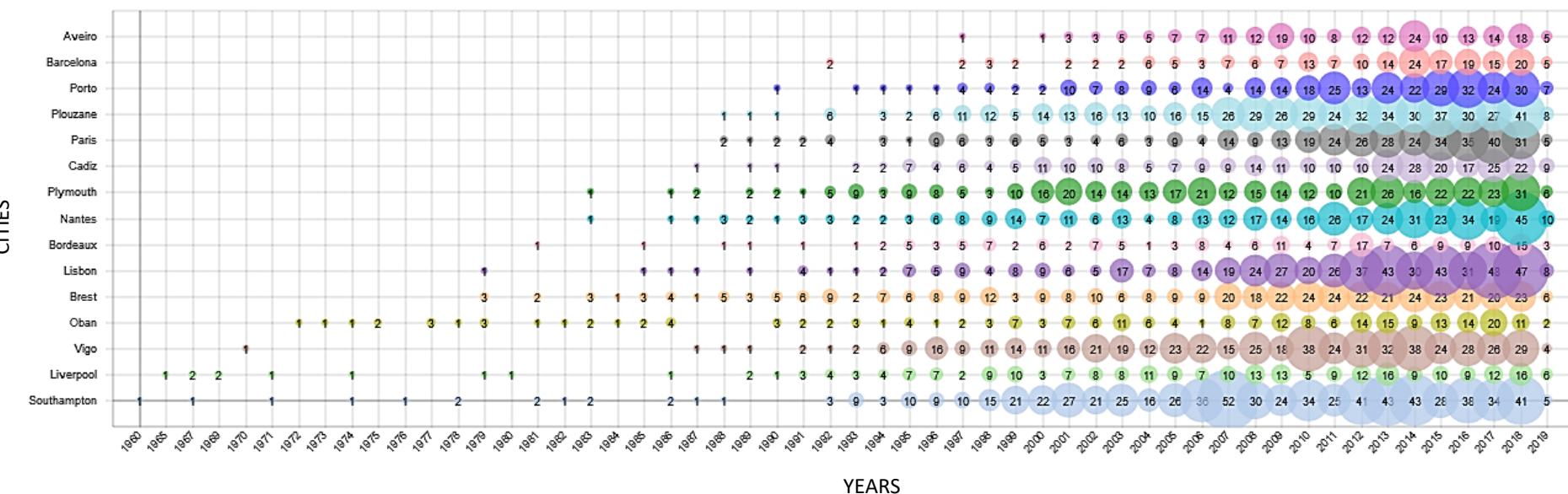
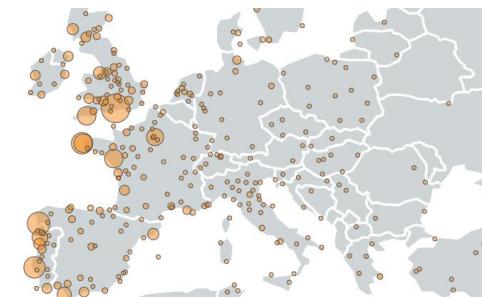


CITIES	PUBLICATIONS
Southampton	707
Vigo	530
Plouzane	518
Lisbon	515
Brest	419
Nantes	409
Plymouth	406
Paris	375
Porto	327
Cadiz	302
Liverpool	255
Oban	228
Aveiro	200
Barcelona	193
Bordeaux	170
Malaga	168
Faro	159
Bristol	157
Galway	154
Belfast	150



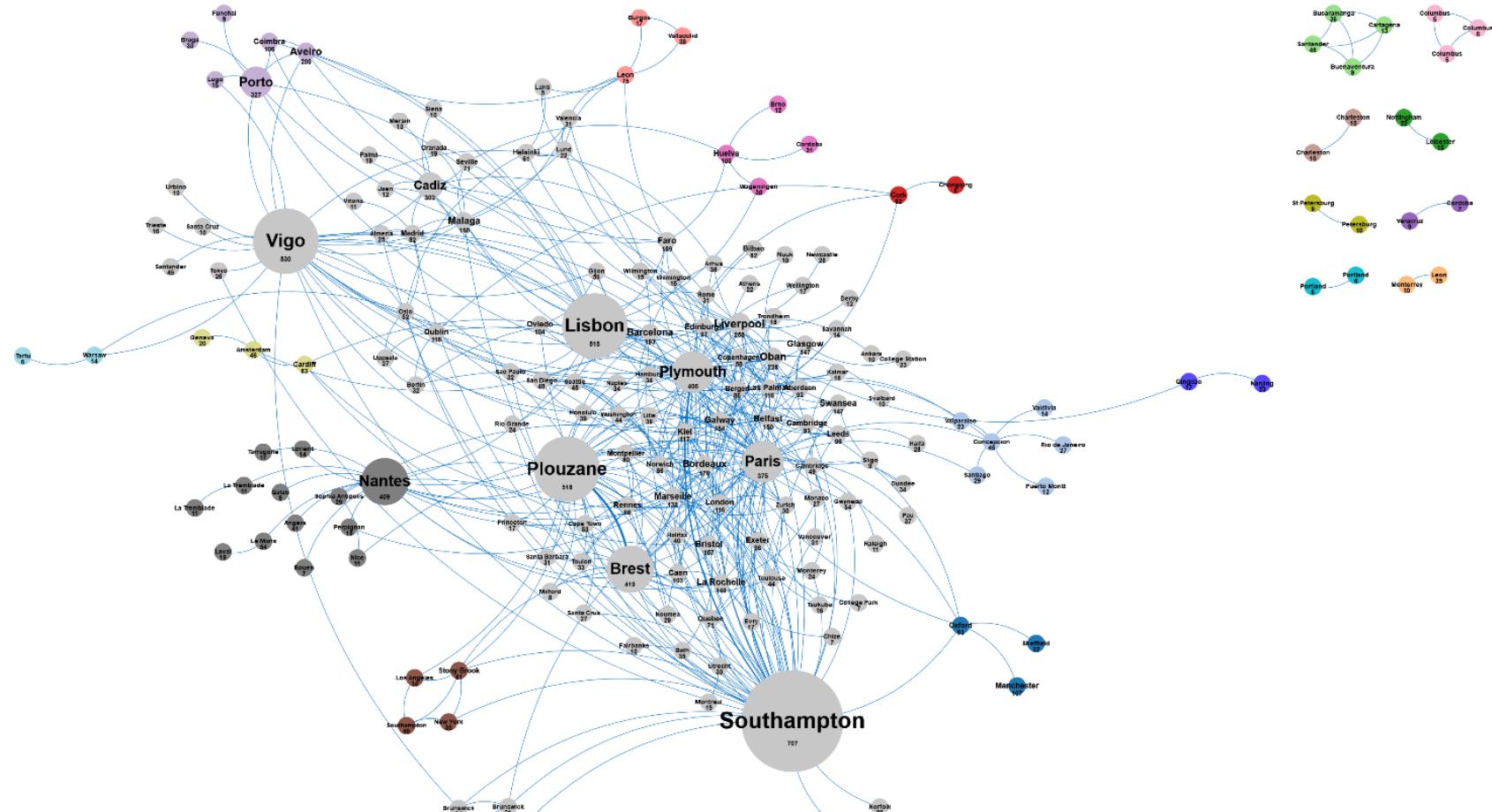
ENHANCE MICROALGAE

MAIN CITIES IDENTIFIED AS PUBLISHERS IN THE AA



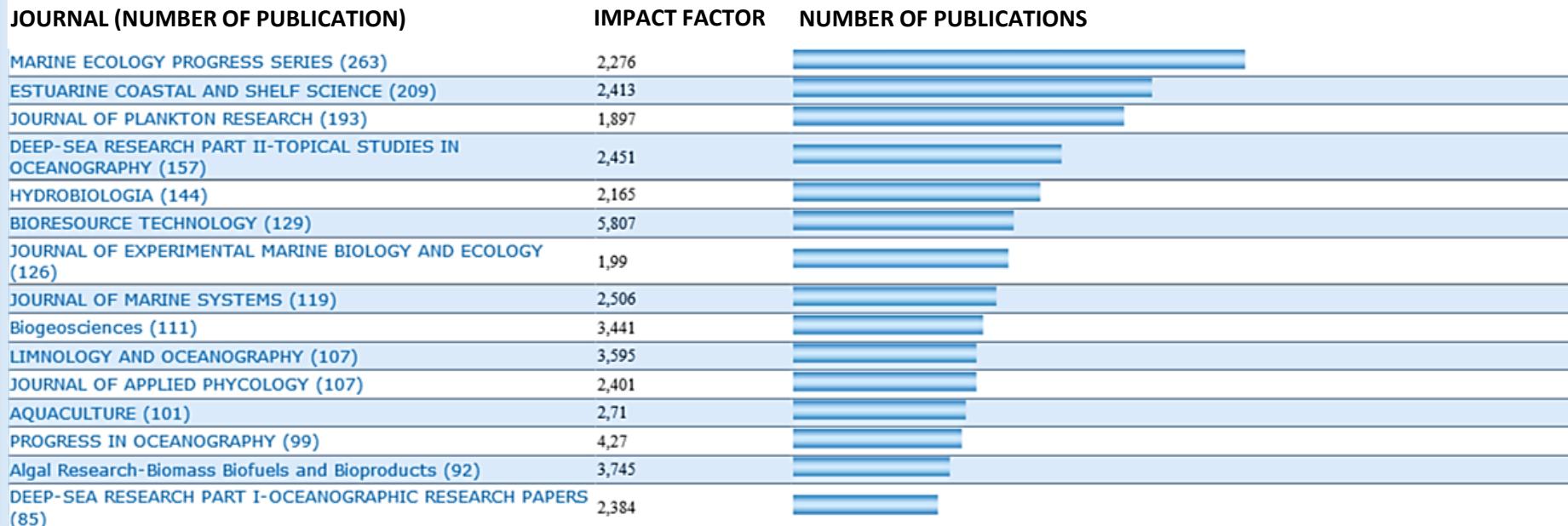
ENHANCE MICROALGAE

COLLABORATION NETWORK BETWEEN CITIES PUBLISHING IN THE AA





MAIN JOURNALS PUBLISHING MICROALGAE STUDIES FROM THE ATLANTIC AREA





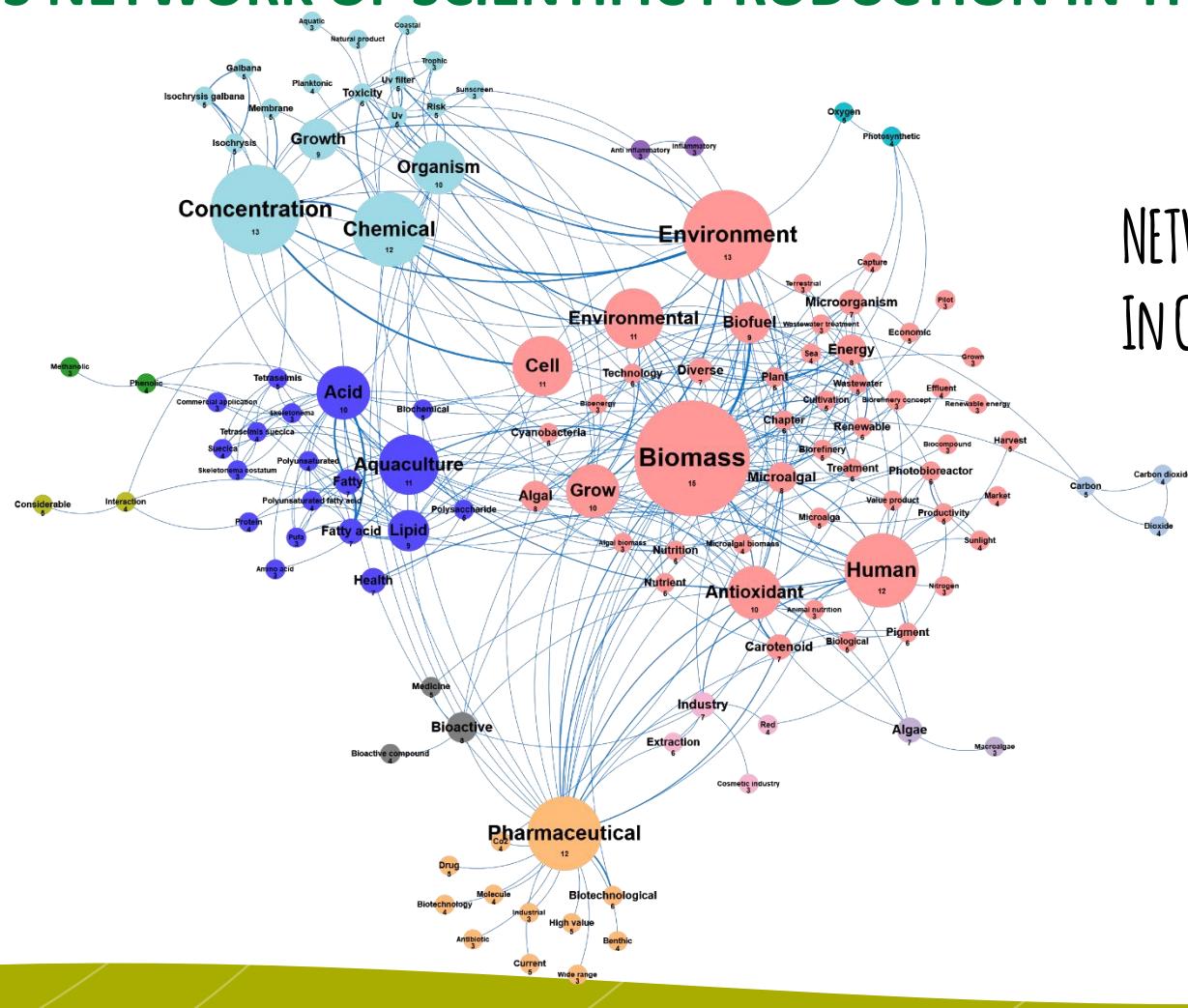
ENHANCE MICROALGAE

MAJOR CITED PUBLICATIONS FROM THE ATLANTIC AREA

TITLE OF PUBLICATIONS	NUMBER OF CITATIONS	DATE
Microalgae for biodiesel production and other applications: A review	2610	2010
Biofuels from microalgae-A review of technologies for production, processing, and extractions of biofuels and co-products	2124	2010
Microbial carbonates: The geological record of calcified bacterial-algal mats and biofilms	847	2000
Comparative toxicity of nanoparticulate ZnO, bulk ZnO, and ZnCl ₂ to a freshwater microalga (<i>Pseudokirchneriella subcapitata</i>): The importance of particle solubility	829	2007
The relative influences of nitrogen and phosphorus on oceanic primary production	827	1999
Mesoscale iron enrichment experiments 1993-2005: Synthesis and future directions	787	2007
The potential of sustainable algal biofuel production using wastewater resources	737	2011
Microalgae as a raw material for biofuels production	727	2009
Oceanic 18S rDNA sequences from picoplankton reveal unsuspected eukaryotic diversity	643	2001
Increase in Chlorella strains calorific values when grown in low nitrogen medium	623	2000
Microalgae as biodiesel & biomass feedstocks: Review & analysis of the biochemistry, energetics & economics	615	2010
Lake responses to reduced nutrient loading - An analysis of contemporary long-term data from 35 case studies	615	2005
Separation of chlorophylls and carotenoids from marine phytoplankton: A new HPLC method using a reversed phase C8 column and pyridine-containing mobile phases	555	2000
Processes and patterns of oceanic nutrient limitation	530	2013
North Pacific Gyre Oscillation links ocean climate and ecosystem change	527	2008

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CONCEPTS NETWORK OF SCIENTIFIC PRODUCTION IN THE ATLANTIC AREA



NETWORK OF CONCEPTS
IN COSMETIC

