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# OpenAIRE

## e-Infrastructure & Support for Open Access in FP7 and Horizon 2020

MedOANet Conference  
Athens, 17 October 2013





# Outline

- **Background to the project**
- **Services & user groups**
- **How to get involved**
- **Towards Horizon 2020**

**“Open access**

**IS A MUST**

**For the competitiveness of Europe”**

**Neelie Kroes, the EU Commissioner for Digital Agenda**

# European OA Mandate

At funding level

## Europe's Open Access Pilot Special Clause 39

- FP7 Funding scheme
- Seven thematic Areas (20%)
- Open access to publications
- System of deposit
- ... or pay Gold OA charges

**OA** to ‘results of publicly  
funded research’ 100%

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**Horizon 2020**

**EC’s Communication & Recommendation, July 2012**

It is not **IF** Open Access

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It is **HOW** Open  
Access

# OpenAIRE

Building an Infrastructure to support a policy



- Cross-discipline/Horizontal infrastructure
- Measuring impact

OpenAIRE 2009 – 2012

- Implementing the FP7 OA pilot (links to EC funding) Supporting the SC39 Mandate

OpenAIREplus 2011 – 2014

- Supporting OA in all Europe (links to national funding)
- Providing links to research data
- Working with 3 scientific communities

**OpenAIRE =**

**OPEN ACCESS**

**Publications/projects + data**



# Research Impact

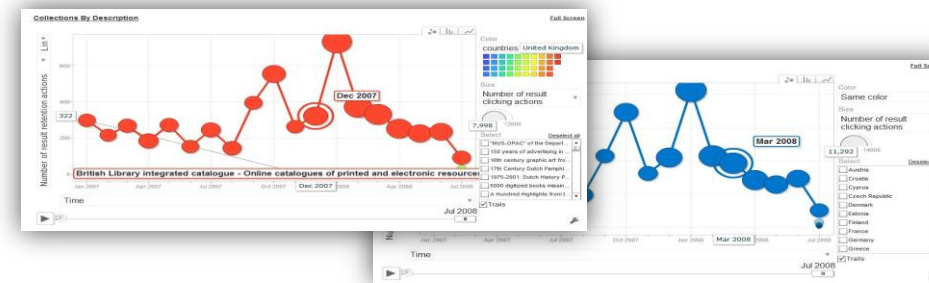
Download  
Rate

Funder

Researchers



OA repositories



FP7 Project  
Information

# Human infrastructure

Research is globalizing, policy implementation is at the local level



All EU member states

**Challenge - Aggregate at a global level  
this local information**

- 33 National Open Access Desks
- OA advocacy through targeted activities
- European network of people sharing experiences & best practices



Get support (NOADs)



Deposit Publications & data



Visualize - Manage Enhanced Publications



Search & Browse



Curate & collaborate

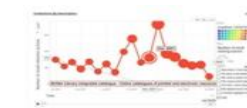


Linked Content Statistics



Research impact Citations, usage statistics

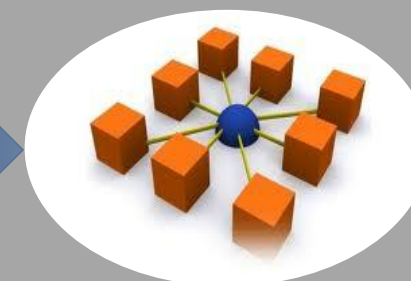
+++



OpenAIRE HUB



APIs



Metadata Usage data on publications

6,500,000 OA publications  
345 validated repositories

Guidelines for Publications



Publication repositories  
Institutional & Thematic  
Open Access Journals

Guidelines for Funding Info

CRIS Systems



ResearchID (ORCID, ..)

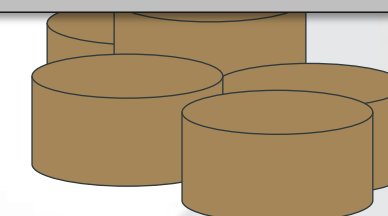
OpenDOAR

...

Metadata on data



Guidelines for Data Providers



Data repositories  
Data Journals



- [PARTICIPATE](#)  
DEPOSIT, JOIN
- [SEARCH](#)  
PUBLICATIONS, DATA, PROJECTS
- [STATISTICS](#)  
OA, PROJECTS, TOPICS
- [SUPPORT](#)  
FAQ, HELPDESK, GUIDES
- [OPEN ACCESS](#)  
IN EUROPE

Science. **Set free.**

6,041,204 Publications from 387 repositories and 53 OA journals

beta release

feedback

Search in repositories

**Researchers**

- > Deposit publications & data
- > Link research to funder/project
- > Download author's guide for OA

**Data Providers**

- > Register & validate content
- > Get guidelines for interoperability
- > Enrich repository content

**Research Managers**

- > Learn about EC & national policies
- > Create project reports
- > Get statistical information

**Funding Agencies**

- > Learn how to embrace OA
- > Participate in OpenAIRE
- > Find aggregated statistics

### Latest News

[OpenAIRE, LIBER and COAR make recommenda...](#)  
03-07-2013  
With digital data being declared as the 'new gold', the European Commission is developing a pilot to

### Mark your calendar

- Oct 15 Tue, 06:00AM - ODIN codesprint and conference
- Oct 16 Wed, 05:00AM - MedOANet European Conference

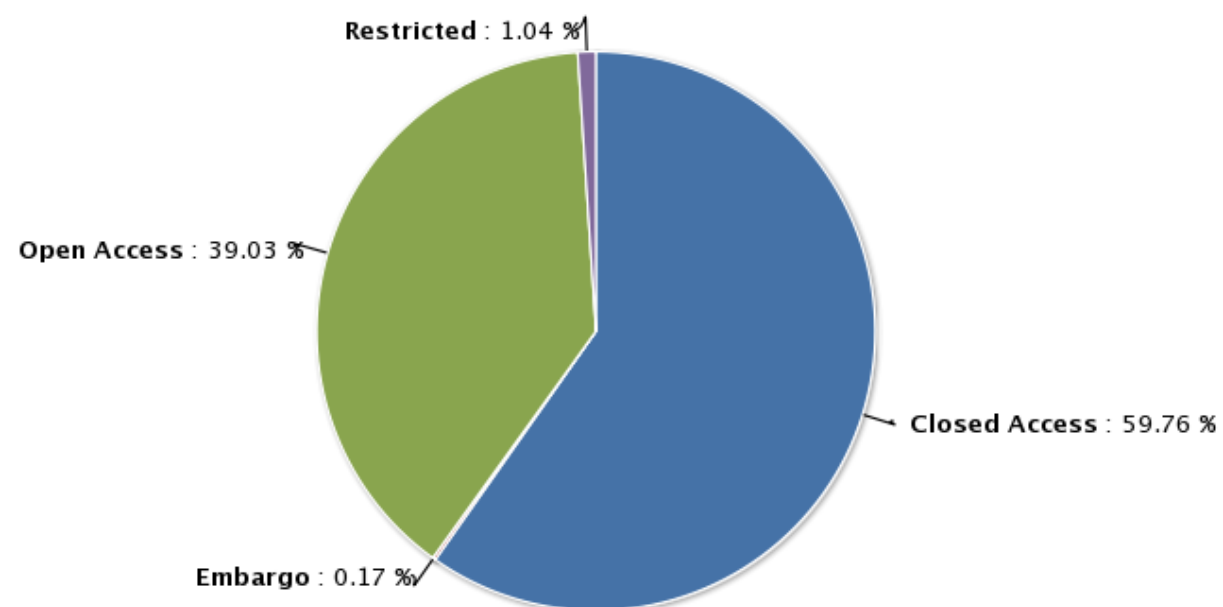
### Did you know?

[OpenAIRE Workshop: Legal and Sustainability Issues - Save the Date](#)

# Some numbers

Within our Portal and Infrastructure

FP7 publications breakdown by access mode



Percentage of FP7 OA Publications

- **Publications**
  - over 6,5 million OA + non-OA if related to a project
  - 56,700 from FP7
- **Persons**
  - ~ 60,000,000
- **Projects**
  - around 26,000 from FP7 and WT
  - + member states...
- **Organizations**
  - ~50,000 from OpenDOAR and CORDA



# ERC

- **OA share slightly higher: 41,5% (vs 39% for FP7)**
- **14,064 publications in 1,515 projects (total of 3,641 projects)**
- **Researchers are recommended to deposit in subject repositories, currently arXiv and Europe PMC**
- **Some open questions for SSH based on lack of subject repositories and different publication culture (books vs journal papers)**
- **On-going consultation with the community**

**Our**

**USERS**

**Who are they?**

# Project Coordinators

Tools to ease some workflows

- Dissemination of research output
- Reporting to the EC
- Embedding publications in CORDIS

Are you a  
Research  
Coordinator  
or Project  
Manager?

Report open access publications.  
Monitor, disseminate research  
results.



**PRIME-XS**

Home About PRIME-XS Research Access to Facilities Events Downloads News Intranet Links

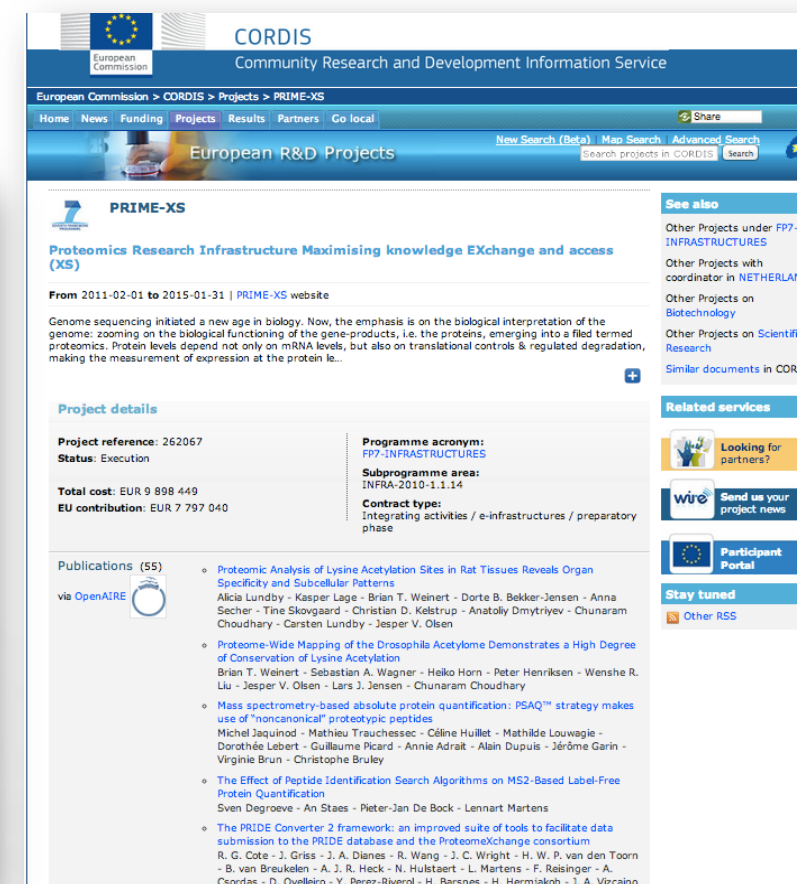
Quick Links: Homepage, Contact Us, Project submission

News Menu: Latest News, News Archive, PRIME-XS in the news, PRIME-XS on the web, Pictures, Publications, Publications (via OpenAIRE), Vacancies

Publication List (OpenAIRE): Below are all PRIME-XS publications that are currently in the OpenAIRE database:

**PRIME-XS publications**

- Proteomic Analysis of Lysine Acetylation Sites in Rat Tissues Reveals Organ Specificity and Subcellular Patterns  
Alicia Lundby - Kasper Lage - Brian T. Weinert - Dorte B. Bekker-Jensen - Anna Secher - Tine Skovgaard - Christian D. Kelstrup - Anatoly Dmytriyev - Chunaram Choudhary - Carsten Lundby - Jesper V. Olsen
- Proteome-Wide Mapping of the Drosophila Acetylome Demonstrates a High Degree of Conservation of Lysine Acetylation  
Brian T. Weinert - Sebastian A. Wagner - Heiko Horn - Peter Henriksen - Wenshe R. Liu - Jesper V. Olsen - Lars J. Jensen - Chunaram Choudhary
- Mass spectrometry-based absolute protein quantification: PSAQ™ strategy makes use of "noncanonical" proteotypic peptides  
Michel Jaquinod - Mathieu Trauchessec - Céline Hullett - Mathilde Louwagie - Dorothee Lebert - Guillaume Picard - Annie Adrait - Alain Dupuis - Jérôme Garin - Virginie Brun - Christophe Bruley
- The Effect of Peptide Identification Search Algorithms on MS2-Based Label-Free Protein Quantification  
Sven Degroeve - An Staes - Pieter-Jan De Bock - Lennart Martens
- The PRIDE Converter 2 framework: an improved suite of tools to facilitate data submission to the PRIDE database and the ProteomeXchange consortium  
R. G. Cote - J. Griss - J. A. Dianes - R. Wang - J. C. Wright - H. W. P. van den Toorn - B. van Breukelen - A. J. R. Heck - N. Hulstaert - L. Martens - F. Reisinger - A. Csordas - D. Ovelleiro - Y. Perez-Riverol - H. Barsnes - H. Hermjakob - J. A. Vizcaino
- Combining quantitative proteomics data processing workflows for greater sensitivity  
Niklaas Colaert - Christophe Van Huel - Sven Degroeve - An Staes - Joël Vandekerckhove - Kris Gevaert - Lennart Martens
- Applications of stable isotope dimethyl labeling in quantitative proteomics  
Duangnapa Kovanich - Salvatore Cappadona - Reinout Rajmakers - Shabaz Mohammed - Arjen Scholten - Albert J. R. Heck
- TOPPAS: A Graphical Workflow Editor for the Analysis of High-Throughput Proteomics Data  
Johannes Junker - Chris Bielow - Andreas Bertsch - Marc Sturm - Knut Reinert - Oliver Kohlbacher
- Targeted analysis of tyrosine phosphorylation by immuno-affinity enrichment of tyrosine phosphorylated peptides prior to mass spectrometric analysis  
Adja D. Zoumaro-Djayoon - Albert J.R. Heck - Javier Muñoz
- Improving Depth in Phosphoproteomics by Using a Strong Cation Exchange-Weak Anion Exchange-Reversed Phase Multidimensional Separation Approach  
Marco L. Hennrich - Vincent Groenewold - Geert J. P. L. Kops - Albert J. R. Heck - Shabaz Mohammed



**CORDIS**  
Community Research and Development Information Service

European Commission > CORDIS > Projects > PRIME-XS

Home News Funding Projects Results Partners Go local

New Search (Beta) Map Search Advanced Search

European R&D Projects

**PRIME-XS**  
Proteomics Research Infrastructure Maximising knowledge EXchange and access (XS)

From 2011-02-01 to 2015-01-31 | PRIME-XS website

Genome sequencing initiated a new age in biology. Now, the emphasis is on the biological interpretation of the genome: zooming on the biological functioning of the gene-products, i.e. the proteins, emerging into a field termed proteomics. Protein levels depend not only on mRNA levels, but also on translational controls & regulated degradation, making the measurement of expression at the protein level...

**Project details**

Project reference: 262067  
Status: Execution  
Total cost: EUR 9 898 449  
EU contribution: EUR 7 797 040

Programme acronym: FP7-INFRASTRUCTURES  
Subprogramme area: INFRA-2010-1.1.14  
Contract type: Integrating activities / e-infrastructures / preparatory phase

Publications (55)  
via OpenAIRE

- Proteomic Analysis of Lysine Acetylation Sites in Rat Tissues Reveals Organ Specificity and Subcellular Patterns  
Alicia Lundby - Kasper Lage - Brian T. Weinert - Dorte B. Bekker-Jensen - Anna Secher - Tine Skovgaard - Christian D. Kelstrup - Anatoly Dmytriyev - Chunaram Choudhary - Carsten Lundby - Jesper V. Olsen
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See also:  
Other Projects under FP7-INFRASTRUCTURES  
Other Projects with coordinator in NETHERLANDS  
Other Projects on Biotechnology  
Other Projects on Scientific Research  
Similar documents in CORDIS

Related services:  
Looking for partners?  
Send us your project news  
Participant Portal  
Stay tuned  
Other RSS



# Researchers

...We need to understand their workflows

Are you a  
**Researcher?**

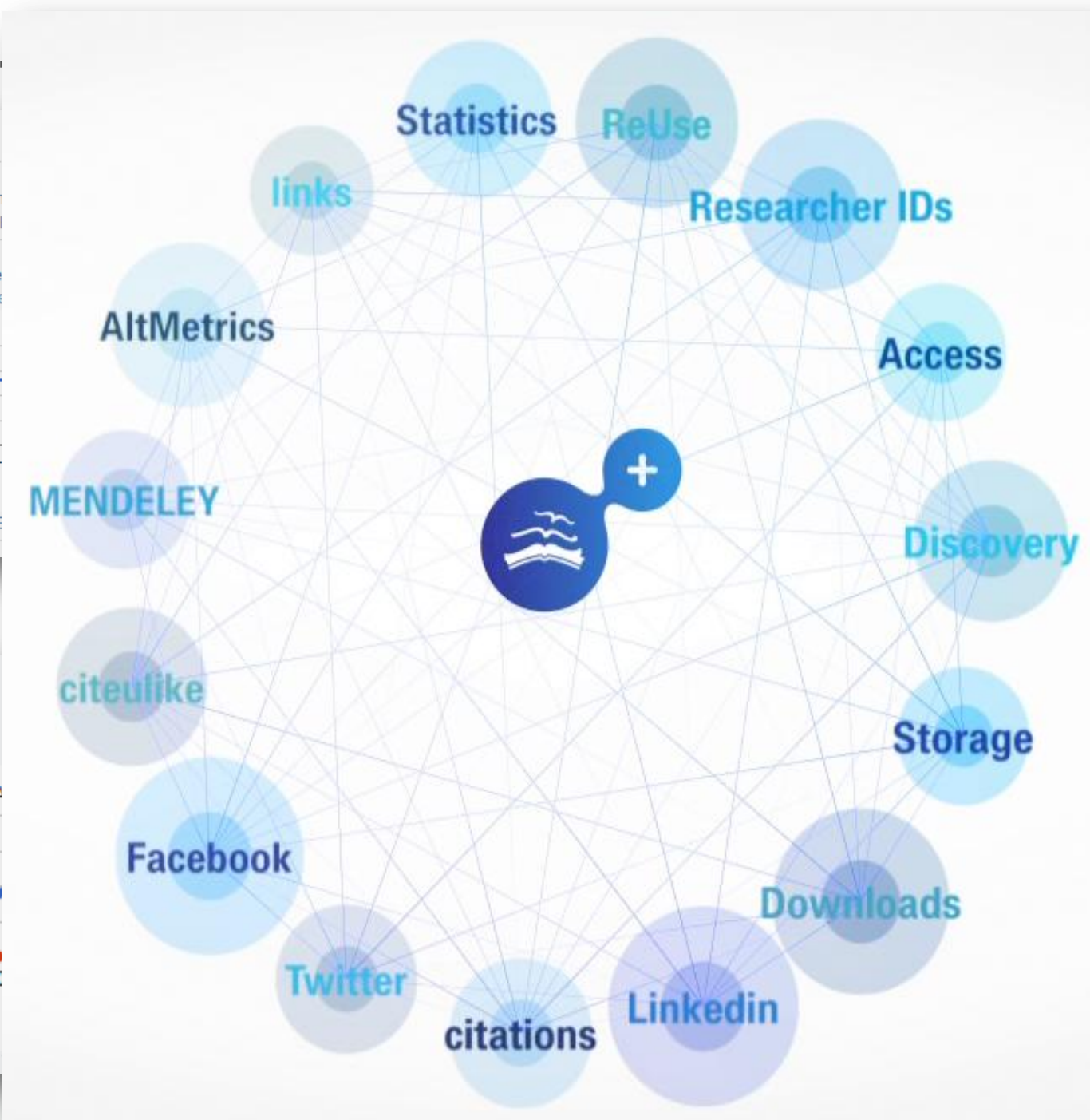
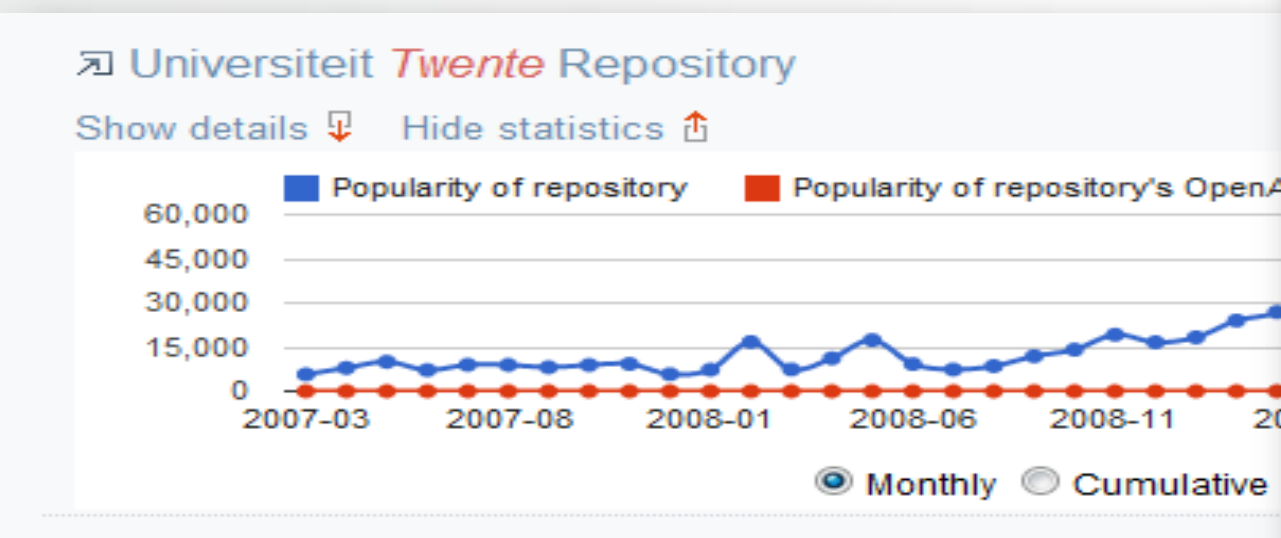
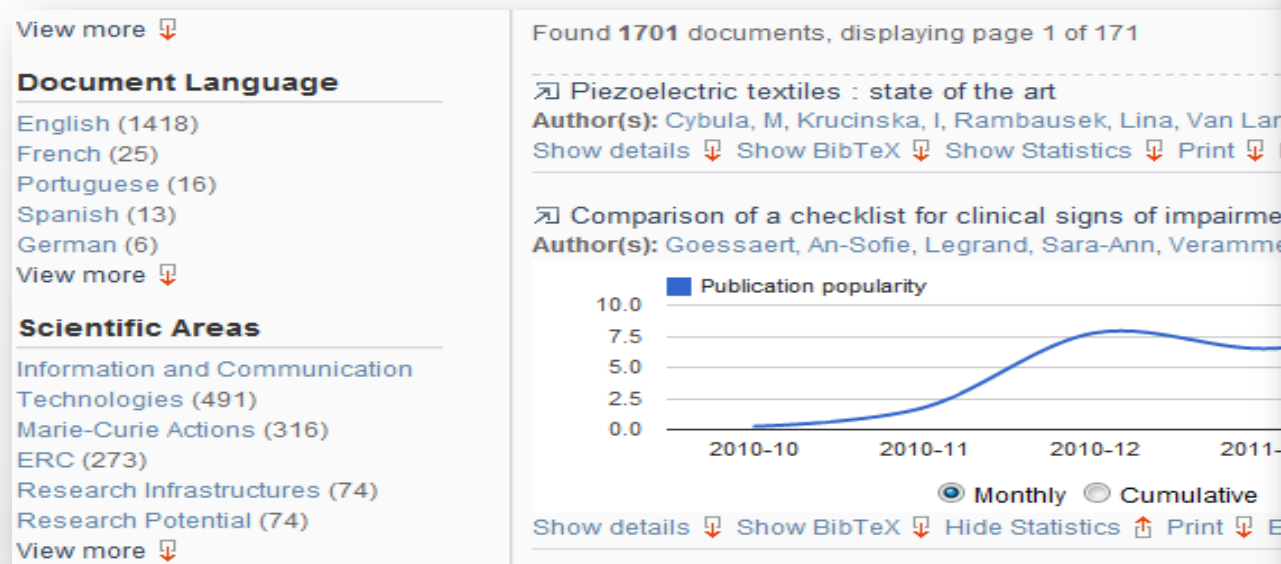
Deposit Open Access.  
Share results.  
Reuse research output.



- **Benefits of Open Access**
- **One stop-shop for deposition – publications & data**
- **Alerts and Notifications**
- **Online curation**
- **They have little time!**

# Usage statistics

... alternative measures of impact



# Funders

...Measuring Impact



- **Return on Investment**
  - The money invested can be measured with output
- **Tracking what they fund**
  - How is this output used?
- **Strengths in research areas**
  - What is used and how often?
- **Support for policies**

# Going beyond FP7 and EC

1 Select one or more projects    2 Identify & select Publications    3 Set copyright information    Finish

Start typing the **project title, acronym or grant agreement number**

EC/FP7  
 EC/H2020  
 Wellcome Trust  
 DFG

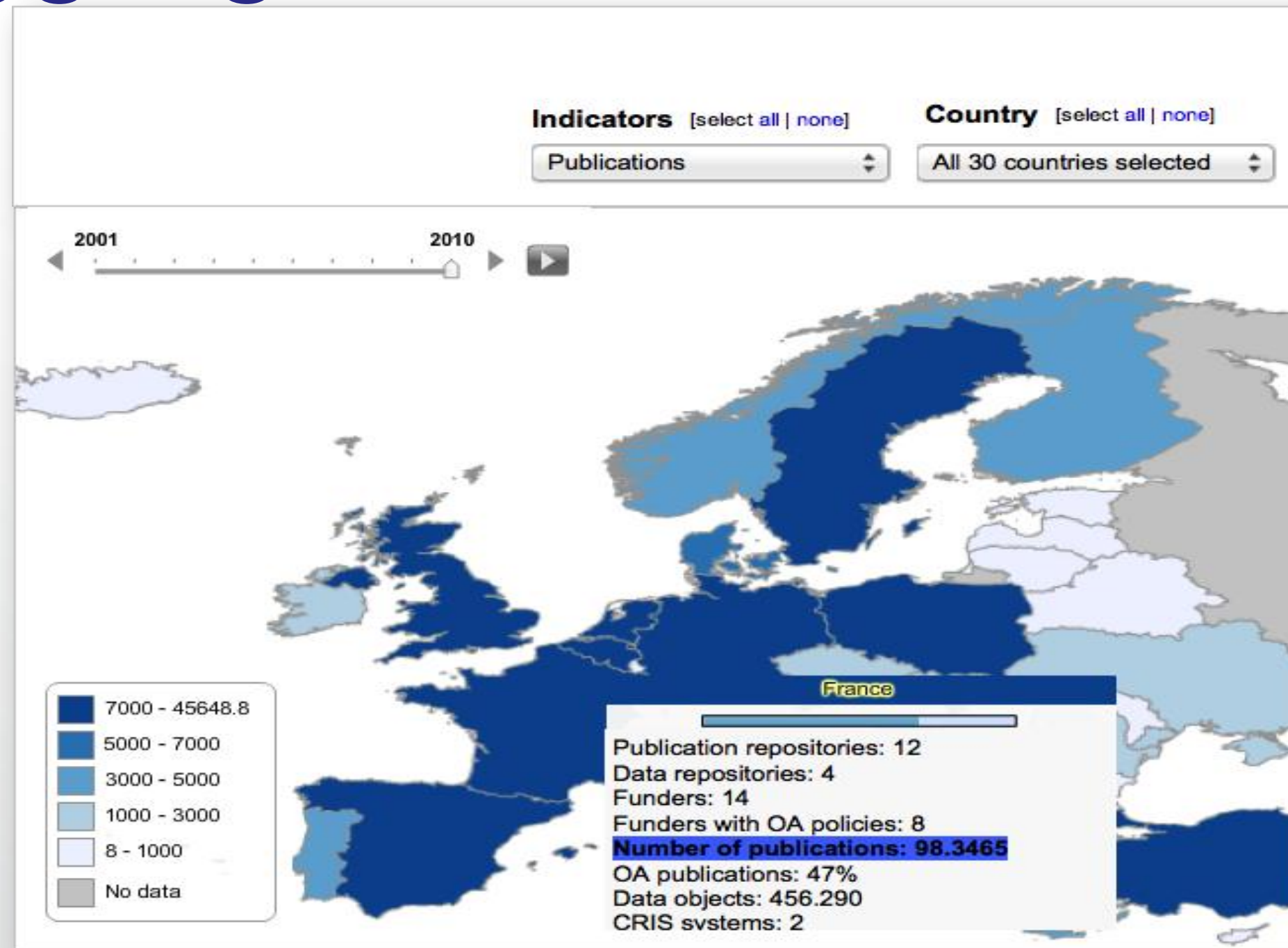
**Projects**

- EC/FP7/Elisa (347469)
- EC/FP7/Chess (598764)
- WT/Phys Med/Mitic (93687)

**Browse**

<b>Document Language</b>	<b>Project</b>	<b>Funder</b>
English (507823)	UNKNOWN (4072)	FP7 (43154)
Undetermined (372027)	HADRONPHYSICS2 (538)	Wellcome Trust (4012)
French (106177)	ELISA (435)	
Spanish (62690)	UNILHC (416)	
Italian (41170)	MASSTEV (302)	

# Aggregated, visual statistics



# Data Providers

... interoperation through internationally accepted guidelines



- **Different levels of compatibility**
  - Publication, funding, research data
  - Usage statistics (impact)
- **Get back enriched information**
  - Links to funding and research data
  - Aggregated statistics
- **Enrich content through notifications about publications in other repositories**

# OpenAIRE as OA e-Infrastructure

- **Openness**
  - Participatory design
  - Developing practices & standards together with communities
- **Serving stakeholders**
  - Easy workflows, reducing the admin burden
  - Discovery and (re)use of content, linking of publications & research data
- **Facilitating the infrastructure**
  - Guidelines as the glue for interoperability
  - Data curation services
- **Human support network**
  - Linking institutional, national and European levels, across stakeholders
  - Promoting policies, practices = change of behavior, and infrastructures for OA

**Linking**  
**DATA**  
**to publications**



# The “new” publication



But...no one size fits all for scientific communities

*Information in Context*

30 July 2013

[Download article](#)
[Open Access](#)

# Pelagic community production and carbon-nutrient stoichiometry under variable ocean acidification in an Arctic fjord

Silyakova, A.; Bellerby, R. G. J.; Schulz, K. G.; Czerny, J.; Tanaka, T.; Nondal, G.; Riebesell, U.; Engel, A.; De Lange, T.; Ludvig, A.

([show affiliations](#))

Net community production (NCP) and carbon to nutrient uptake ratios were studied during a large-scale mesocosm experiment on ocean acidification in Kongsfjorden, western Svalbard, during June–July 2010. Nutrient depleted fjord water with natural plankton assemblages, enclosed in nine mesocosms of 50m<sup>3</sup> in volume, was exposed to pCO<sub>2</sub> levels ranging initially from 185 to 1420 μatm. NCP estimations are the cumulative change in dissolved inorganic carbon concentrations after accounting for gas exchange and total alkalinity variations. Stoichiometric coupling between inorganic carbon and nutrient net uptake is shown as a ratio of NCP to a cumulative change in inorganic nutrients. Phytoplankton growth was stimulated by nutrient addition half way through the experiment and three distinct peaks in chlorophyll a concentration were observed during the experiment. Accordingly, the experiment was divided in three phases. Cumulative NCP was similar in all mesocosms over the duration of the experiment. However, in phases I and II, NCP was higher and in phase III lower at elevated pCO<sub>2</sub>. Due to relatively low inorganic nutrient concentration in phase I, C:N and C:P uptake ratios were calculated only for the period after nutrient addition (phase II and phase III). For the total post-nutrient period (phase II+phase III) ratios were close to Redfield, however they were lower in phase II and higher in phase III. Variability of NCP, C:N and C:P uptake ratios in different phases reflects the effect of increasing CO<sub>2</sub> on phytoplankton community composition and succession. The phytoplankton community was composed predominantly of haptophytes in phase I, prasinophytes, dinoflagellates, and cryptophytes in phase II, and haptophytes, rasinophytes, dinoflagellates and chlorophytes in phase III (Schulz et al., 2013). Increasing ambient inorganic carbon concentrations have also been shown to promote primary production and carbon assimilation. For this study, it is clear that the pelagic ecosystem response to increasing CO<sub>2</sub> is more complex than that represented in previous work, e.g. Bellerby et al. (2008). Carbon and nutrient uptake representation in models should, where possible, be more focused on individual plankton functional types as applying a single stoichiometry to a biogeochemical model with regard to the effect of increasing pCO<sub>2</sub> may not always be optimal. The phase variability in NCP and stoichiometry may be better understood if CO<sub>2</sub> sensitivities of the plankton's functional type biogeochemical uptake kinetics and trophic interactions are better constrained.

## Existing approvals

EURO-BASIN, North Atlantic Marine Ecosystem Research

[Reject](#)



See more details

Blogged by 1

0 readers on Mandelator

0 readers on CiteULike

SOCIAL MEDIA ATTENTION

THE MANUSCRIPT and DATA, FREE & NOW

## Publication date:

30 July 2013

## DOI:

10.5194/bg-10-4847-2013

## Report number(s):

OpenAIRE-EPOCA-2013-001 OpenAIRE-EURO-BASIN-2013-010 OpenAIRE-MEECE-2013-004

## Keyword(s):

[Ocean acidification](#) [carbon-nutrient stoichiometry](#)

## Published in:

Biogeosciences (Online): 10 (2013) pp. 4847–4859

## Grants:

EPOCA - European Project on Ocean CO<sub>2</sub> and Acidification (211384)  
EURO-BASIN - European Basin-scale Analysis of Ocean Acidification (EURO-BASIN)

EURO-BASIN - Marine Ecosystem Evolution in a Changing Environment (212085)

## Collections:

[Communities](#) > [EURO-BASIN, North Atlantic Marine Ecosystem Research](#)  
[Communities](#) > [European Commission Funded Research \(OpenAIRE\)](#)  
[Publications](#) > [Journal articles](#)  
[Open Access](#)

## Uploaded by:

Ivo Grigorov (on 03 September 2013)

Preview

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# Towards HORIZON 2020

# Opportunities & Challenges ahead

- **The How To's of Open Access to research data**
  - Same principle: think cross-Europe and combine infrastructure with support
  - Roles and responsibilities in the institutions – an evolving area
  - Combining activity strands – infra, support/training, policy: OpenAIRE, LIBER, RECODE, FOSTER, PASTEUR4OA, others
- **Further extension & sustainability planning**
  - On-going study analyzes stakeholders and will develop a business plan for OpenAIRE
  - Management of relationships with data providers and e-infras (formal agreements etc.)

# Open Data Pilot in Horizon 2020

Joint statement by OpenAIRE, LIBER, COAR – June 2013

- **Raise awareness among researchers about need for and benefits of RDM**
- **Encourage libraries, data centres, publishers and stakeholders to work with researchers throughout the data lifecycle**
- **Identify required expertise, knowledge, skills**
- **Support the creation & interoperability of reliable e-infras**
- **Mobilise libraries to support scientific communities**
- **Provide the EC with evidence for decision making**

# See you Again!

**Vilnius ICT 5<sup>th</sup> November: Networking Booth**


**Vilnius 5<sup>th</sup> November: Workshop on 'Legal and Sustainability' Issues**

 [www.openaire.eu](http://www.openaire.eu)

 @openaire\_eu

 facebook.com/groups/openaire





 linkedin.com/groups/OpenAIRE-3893548

 [bschmidt@sub.uni-goettingen.de](mailto:bschmidt@sub.uni-goettingen.de)  
[najla.rettberg@sub.uni-goettingen.de](mailto:najla.rettberg@sub.uni-goettingen.de)

# Project apps

Get all project publication in HTML or CSV to use in EC reporting

**App Box**

-  [Publication details](#)
-  [Dynamically incorporate publications in your site \(HTML\)](#)
-  [View EC progress report \(HTML\)](#)
-  [Download EC progress report \(CSV\)](#)



## Publications of Project ELISA

445 publications

Title	Author	Publisher	Publication Date	Permanent Identifier	Access Mode	Embargo End Date
Low-temperature fabrication of layered self organized ge clusters by RF-sputtering	Pinto, S. R. C.	Springer Verlag	2011-04-14	<a href="http://hdl.handle.net/1822/15689">http://hdl.handle.net/1822/15689</a>	OPEN	
The high-resolution structure of the extracellular domain of human CD69 using a novel polymer	Kolenko, Petr	WILEY-BLACKWELL PUBLISHING, INC	2009-01-01	<a href="http://dx.doi.org/10.1107/S1744309109043152">http://dx.doi.org/10.1107/S1744309109043152</a>	CLOSED	
Structural and magnetic study of the annealing of Fe-Co nanoparticles	Desvaux, Celine	ROYAL SOC CHEMISTRY	2010-01-01	<a href="http://dx.doi.org/10.1039/b916294a">http://dx.doi.org/10.1039/b916294a</a>	CLOSED	
Neuroprotective action of FK-506 (tacrolimus) after seizures induced with pilocarpine: quantitative and topographic elemental analysis of brain tissue	Chwiej, Joanna	SPRINGER	2010-01-01	<a href="http://dx.doi.org/10.1007/s00775-009-0597-2">http://dx.doi.org/10.1007/s00775-009-0597-2</a>	CLOSED	
Energy band structure and optical response function of isosahedral B(12)As(2): A spectroscopic ellipsometry and first	Bekolova, S.	AMER PHYSICAL SOC	2010-01-01	<a href="http://dx.doi.org/10.1103/PhysRevB.81.075114">http://dx.doi.org/10.1103/PhysRevB.81.075114</a>	CLOSED	