

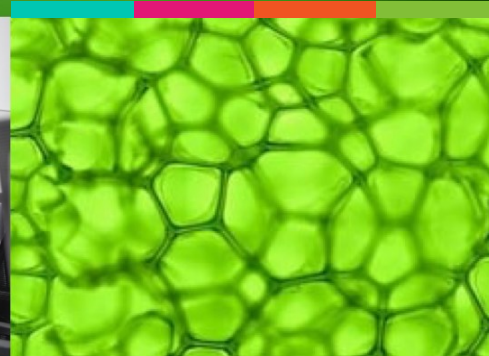
The Research Information Hub as an access point to Finnish research

Hanna-Mari Puuska, CSC – IT Center for Science

euroCRIS Membership Meeting 27-29 May, 2019, Helsinki



Background: Publication data collection in Finland



- Ministry of Education and Culture has collected bibliographic information on publications annually from
 - 14 universities and 5 university hospital districts (since 2011)
 - 23 universities of applied sciences (since 2012)
 - 12 state research institutes (gradually since 2014)
- Each organization has its own CRIS system
 - Pure, Converis or SoleCRIS
 - JUSTUS Publication Information Reporting Service for small organizations www.justus.csc.fi
- In total, ~50 000 publications per year
 - = books, journal articles, conference papers, non-scholarly publications
- The data are publicly available
 - Statistical data: www.vipunen.fi
 - Bibliographic data: www.juuli.fi

JUULI Julkaisutietoportaali Suomi Svenska English

All Fields Advanced ☒ Retain current filters

Search:

Showing 1 - 20 of 7,245 for search: "", query time: 0.16s Sort Title

1


NO IMAGE AVAILABLE

A 0.5-Mbp deletion on bovine chromosome 23 is a strong candidate for stillbirth in Nordic Red cattle
by: Sahana, Goutam; Iso-Touru, Terhi; Wu, Xiaoping; Sander Nielsen, Ulrik; de Koning, Dirk-Jan; Sandø Lund, Mogens; Vilkkii, Johanna; Guldbrandtsen, Bernt
Genetics Selection Evolution, BioMed Central, 2016
A1 Journal article (refereed), original research
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2


NO IMAGE AVAILABLE

1,25-Dihydroxyvitamin D(3) Influences Cellular Homocystine Levels in Murine Preosteoplastic MC3T3-E1 Cells by Directs Regulation of Cystathionine beta-Synthase
by: Kriebitzsch C; Verlinden L; Eelen G; van Schoor NM; Swart K; Lips P; Meyer MB; Pike JW; Boonen S; Carlberg C; Vitvitsky V; Bouillon R; Banerjee R; Verstuyf A
JOURNAL OF BONE AND MINERAL RESEARCH, 2011
A1 Journal article (refereed), original research
[Get full text](#)

3


NO IMAGE AVAILABLE

1,3-Dipolar cycloaddition of nitrones to a nitrile

Narrow Search

Remove Filters

Field of Science: Natural sciences ✕

Publication Forum Class: 3 ✕

Institution ▲

University 7,123

Research Institute 223

Health Care District 152

University of Applied Scien... 40

Author ▲

Juvela, M. 126

Vipunen statistics portal (www.vipunen.fi)



Filters



4 Main publication cate...



A Peer-reviewed scientif...

B Non-refereed scientifi...

C Scientific books (mon...

D Publications intende...

E Publications intended...

F Public artistic and des...

G Theses

H Patents and innovati...

▷ Publication Type

▷ Internationality of pub...

▷ Publication forum level

▷ Open access

▷ International co-publi...

▷ Field of education 95

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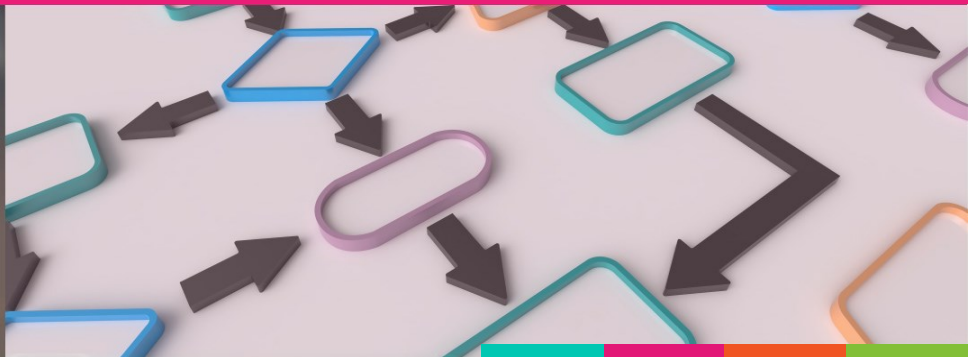
▷ Main discipline

▷ Discipline

Publications A–E

Publications	2011	2012	2013	2014	2015	2016	2017	2018
University	36,690	37,363	37,271	37,401	38,366	39,359	40,198	37,876
Aalto University	4,014	3,795	3,965	3,768	4,240	3,986	3,749	3,699
Hanken School of Economics	275	280	254	282	306	321	297	258
Lappeenranta-Lahden teknillinen yliopisto	922	871	961	999	1,011	967	961	958
Tampere University	4,271	4,408	4,306	4,397	4,551	4,682	4,708	4,468
University of Eastern Finland	2,962	3,167	2,944	3,156	3,150	3,234	3,229	3,061
University of Helsinki	11,157	11,591	11,486	11,450	11,483	12,054	12,618	11,310
University of Jyväskylä	2,976	2,937	3,024	2,982	3,115	3,174	3,257	3,026
University of Lapland	576	671	766	738	701	679	680	664
University of Oulu	2,938	3,157	2,671	2,687	2,885	3,036	2,996	2,863
University of the Arts Helsinki	207	192	207	181	168	150	263	269
University of Turku	4,181	4,452	4,829	4,973	4,930	5,151	5,438	5,460
University of Vaasa	563	504	513	512	403	436	397	423
Åbo Akademi University	1,648	1,338	1,345	1,276	1,423	1,489	1,605	1,417
University of Applied Sciences		3,548	4,472	5,525	6,014	5,830	6,365	7,029
Research institute			67	3,620	4,986	4,307	3,962	2,236
University Hospital	5,454	5,473	5,773	5,909	6,069	6,908	7,193	7,045
Grand total	42,144	46,384	47,583	52,455	55,435	56,404	57,718	54,186

VIRTA Publication Information Service



- Implemented in 2016
- The Finnish research organizations use VIRTA to store a copy of publication information in their institutional CRISes or other publication databases
- VIRTA publication information service is a data warehouse, “a data hub”, making publication information usable for various purposes services, e.g. funders or other researchers’ services

VIRTA Publication Information Service in a nutshell



Data sources	Master data in local CRISes of HEIs, university hospitals, state research institutes
Data format and transfer	XML files and SFTP
Data contents	Data collection manual + technical criteria (mandatory fields, correct form of ISSN etc.) https://tietomallit.suomi.fi/model/julkaisu/
Data validation	Duplicates, faults, inter-organizational co-publications and Publication forums (www.julkaisufoorumi.fi) identified automatically and real time.
Temporal coverage	2011->
Updates	Automatically from local CRISes e.g. once a day. Statistics compiled annually.
Data use and availability	Up-to-date metadata in JUULI: www.juuli.fi REST API and OAI-PMH for other use

Finnish Research Information Hub – project 2017-2020



Finnish Research Information Hub 2020:

” The Ministry of Education and Culture has set a goal, that in 2020 all information regarding all scientific research made in Finland will be easily accessible for various purposes.

Information filled in one system will be automatically translated to other systems, and the administrative workload will be alleviated. ”

Current situation in Finland: databases as silos

JUULI Julkaisutietoportaali

Search:

Showing 1 - 20 of 7,245 for search: "", query time:

- 1
- NO IMAGE AVAILABLE
- A 0.5-Mbp deletion on box candidate for stillbirth in 1**
by: Sahana, Goutam; Iso-To Nielsen, Ulrik; de Koning, Di Vilkki, Johanna; Guldbrandt; Genetics Selection Evolution A1 Journal article (refereed),
Get full text
Get full text

- 2
- NO IMAGE AVAILABLE
- 1,3-Dipolar cycloadd**
by: Kriebitzsch C; Verl Swart K; Lips P; Meye Vitvitsky V; Bouillon R JOURNAL OF BONE A A1 Journal article (refereed),
Get full text

- 3
- 1,3-Dipolar cycloadd

Fairdata.fi Etsin

HOME DATASETS

Help Add data

Search datasets

Search term

2328 results

Access

Organization

Creator

Research Infra

Project

Opinions on Security Policy and National Defence 2001: Autumn
The survey studied Finnish public opinion on foreign policy, security policy and military expenditure. The survey was conducted in 2001. Respondents assessed the country's foreign policy and relations with a number of other countries also join. Opinions on defence expenditure and the conscript army versus a professional army were surveyed. Respondents were asked whether Finland should participate in NATO.

Limited Liability Housing Companies Act's Functionality and Impact 2013: Property Managers
The survey investigated how the new Limited Liability Housing Companies Act 2010 (LHCA) had affected the functioning of limited liability housing companies (LLHCs) in Finland.

ORCID

Connecting Research and Researchers

Research Infrastructures

Infrastructures Services Service Locations About this service

Search for infrastructure, acronym, description, keyword, etc.

» Show filters

Found amount: 47

Acronym	Responsible organisations	International hosts	Service types
ESS (Finland)	University of Turku	United Kingdom	
CLARIN	University of Helsinki, CLARIN	Netherlands	

SUOMEN AKADEMIA

Päätösvuosi: 2018-2019
Hankkeiden lukumäärä: 1619
Hankkeiden rahoitus: 498 459 985 €

anisaatio	Tutkimusaihe
n yliopisto	Uusi... elektronisiirtokeihin: mahdollisuudet tehostaa hyödyll...
ingin yliopisto	...nanolääkehoitoa – lääkeaineiden kohdentaminen ja kuvantaminen iskem...
eyden ja hyvinvoinnin la...	Rokotteiden turvallisuusarviointi kansallisten rekistereiden avulla
ingin yliopisto	Ribosomin pelastusreitin molekyyliasta ihmisen mitokondriosairauden patogeneesissä
ingin yliopisto	RNA-virusten rakenne, toiminta ja inhibiitio
n yliopisto	ERBB-reseptoreita estävien syöpälääkkeiden vasteita ennustavat tekijät

Eriksson, John Turun yliopisto Välikokiset säikeet kudoshomöostaasin soluviestinnässä

ACADEMY OF FIN

Publications www.juuli.fi

Research data etsin.fairdata.fi/

Infrastructures avaa.tdata.fi/web/infrat

Projects – funders' registers

Researchers www.orcid.org

INTEROPERABILITY OF SERVICES

"Services have up-to-date information available"

INFORMATION PROVIDERS

"Once the information has been input it can be utilized in several systems"

UNIVERSITIES

UNIV. OF APPLIED SCIENCES

RESEARCH INSTITUTIONS

FUNDERS

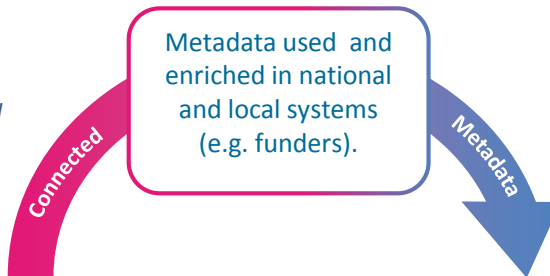
PUBLISHERS

INFRASTRUCTURES

REPOSITORIES

ORCID

Automated information flows



RESEARCH INFORMATION HUB 2020

Connected metadata for publications, research data and other research activities, research infrastructures, funding, researchers and organizations



INFORMATION RETRIEVAL

"Overview for research in Finland"

Research.fi portal will provide a comprehensive picture of the research being conducted in Finland.

Search criteria can be specified in, for example, field of science, thematic areas, ongoing projects or experts.

INFORMATION USERS

"Open access to public information"

STATISTICS AND VISUALIZATION

Up-to-date facts and figures about research

NEW APPLICATIONS

Open information to be utilized in new applications supporting the researchers work. Eg. CV-tools



www.research.fi

The National Research Information Hub makes the research metadata more *Findable* and *Accessible*



Components of the Research Information Hub – targeted schedule

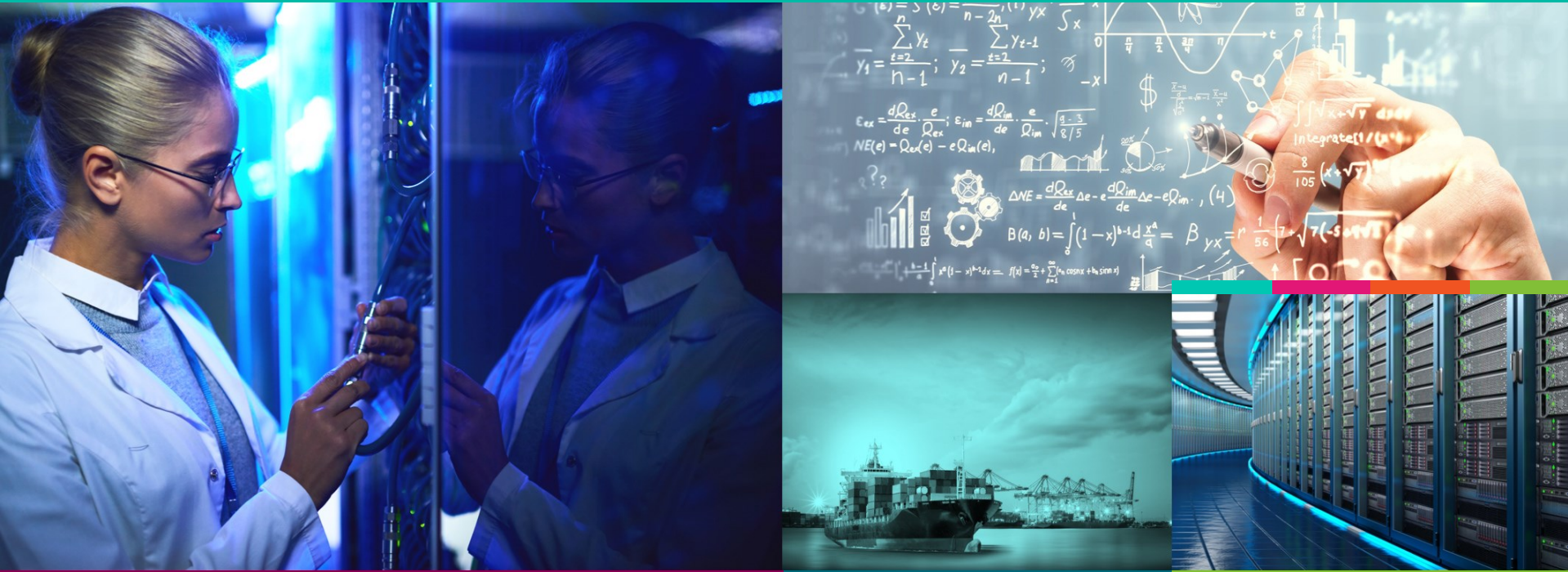
	2019				2020			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Publications (VIRTA)								
Funding decisions (from funders)								
Research infrastructures								
Research data								
Researchers								
Other research activities								

Planning and
piloting

Implementation

Information available in web portal and API

The National Research Information Hub enables *Interoperability* between systems and makes the research information *Re-usable* for various purposes and thereby lightens researchers' administrative workload



[Desktop](#) [Open calls](#) [My applications](#) **Reports** [Reviews](#) [Commitments](#) [My account](#) [Log out](#)
 [Reporting guidelines](#)
 [Questions and feedback](#)
 [Preview of report](#)

1. Personal data/CV
2. Basic project data
- ▲ 3. Rahoitus
4. Research personnel
- ▲ 5. Use of research infrastructure
- ▲ 6. Implementation of the research project
- ▲ 7. Research collaboration
- ▲ 8. Visits
- ▲ 9. Realisation of planned mobility plan
- ▲ 10. Interaction
- ▲ 11. Publications**
- ▲ 12. Degrees
- ▲ 13. Intellectual property rights
- ▲ 14. Other outputs
- ▲ 15. Data management plan
- ▲ 16. Continuation of research
- ▲ 17. Results
- ▲ 18. Nontechnical description of the project and its results
- ▲ 19. Impact beyond academia
20. Submit report

[<](#) Save and go back

Save

Save and continue [»](#)

Report publications that have been produced from the research within the project.

You can access the VIRT A service of the Finnish Ministry of Education and Culture via the Academy's online service. From VIRT A, you can import project-related publications to the report. If the publication in question is not available in the VIRT A service, you must enter its details manually. Publication data are also read by machines, so it is important that the data are in the requested format.

- How to select a publication: *Find publication*
- Manual input: *Enter publication*

- Only publications that meet the criteria set by the Ministry of Education and Culture are accepted as publications for the report (Ministry guidelines in Finnish: > Tiedonkeruun käsikirjat > Julkaisutiedonkeruun tutkijaohjeistukset)
- Only report publications that have been published at the time of reporting. Unpublished (e.g. accepted for publication, or in press) articles, works or other publications related to the project's results can be entered under *Results*.

Publications

☐ No publications

Lisää vähintään yksi julkaisu tai merkitse "Ei julkaisuja"

Year of publication	Type of publication	Authors of publication	Name of publication	Name of journal/series
---------------------	---------------------	------------------------	---------------------	------------------------

Find publication

Add publication

Reporter makes a search from VIRT A Publication Information Service by Name of author, selects relevant publications from the search result and clicks Move to form button



Preview of report

10. Interaction

11. Publications

12. Degrees

13. Intellectual property rights

14. Other outputs

15. Data management plan

16. Continuation of research

17. Results

18. Nontechnical description of the project and its results

19. Impact beyond academia

20. Submit report

Search for publications in the VIRT A publication information service

The search covers data on authors, that is, all authors that are listed in the original publication. The search will yield the same result when searching with *First name Surname* and *Surname First name*. You can also search with part of a name, e.g. *First Surn*.

Name of author

Search

Year of publication	Authors of publication	Name of publication	Name of journal/series	Name of host publication	Editors of host publication	Publisher	Organisation
☒ 2013	Karlstrom O; Brink A; Biagini E; Hupa M; Tognotti L	Comparing reaction orders of anthracite chars with bituminous coal chars at high temperature oxidation conditions	Proceedings of the Combustion Institute vol:34 nro:2			Elsevier	01903
☒ 2013	Huhtinen R, Sandeman S, Rose S, Fok E, Howell C, Fr\303\266berg L, Moritz N, Hupa L, Lloyd A	Examining porous bio-active glass as a potential osteo-odonto-keratoprosthetic skirt material.	Journal of Materials Science: Materials in Medicine vol:24 nro:5			Journal of Materials Science: Materials in Medicine	Turun yliopisto
☐ 2013	Outi Hupaniittu	Afgunden aka Kuilu in Finland - Nordiska Biograf Kompaniet, Exclusive Distribution and Newly Established Censorship	null vol:null nro:null	John Libbey Publishing	Martin Loiperdinger, Uli Jung	John Libbey Publishing	Turun yliopisto
☐ 2013	Outi Hupaniittu	Biografiliiketoiminnan valtakausi. Toimijuus ja kilpailu suomalaisella elokuva-alalla 1900-1920-luvulla	null vol:null nro:null				Turun yliopisto

Cancel

Move to form

Selected publications are shown on the report form

- ⚠ 10. Interaction
⚠ 11. Publications
⚠ 12. Degrees
⚠ 13. Intellectual property rights
⚠ 14. Other outputs
- ⚠ 15. Data management plan
⚠ 16. Continuation of research
⚠ 17. Results
- ⚠ 18. Nontechnical description of the project and its results
⚠ 19. Impact beyond academia
20. Submit report

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Publications

☐ No publications

Lisää vähintään yksi julkaisu tai merkitse "Ei julkaisuja"

Year of publication	Type of publication	Authors of publication	Name of publication	Name of journal/series	
2013	A1	Karlstrom O; Brink A; Biagini E; Hupa M; Tognotti L	Comparing reaction orders of anthracite chars with bituminous coal chars at high temperature oxidation conditions	Proceedings of the Combustion Institute	Delete
2013	A1	Huhtinen R, Sandeman S, Rose S, Fok E, Howell C, Fr303\266berg L, Moritz N, Hupa L, Lloyd A	Examining porous bio-active glass as a potential osteo-odonto-keratoprosthetic skirt material.	Journal of Materials Science: Materials in Medicine	Delete

[Find publication](#)
[Add publication](#)

Thank you!



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