Dimensions

Dimensions Analytics и API - практикум

28-29 ноября, 2019

ЮФУ

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Консультант по цифровым решениям
Digital Science Россия и СНГ

Данные в Dimensions - взаимосвязанные и контекстуализированные

Grants — Research — Conferences — Data sets — Publications — Tweets Blogs — Citations — Clinical Trials — Patents — Policy docs

Pre-publication	Post publication			
1-5 years from grant to publication	immediate	2-3 years	years	years	decades

Dimensions

dimensions.ai
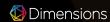
Экосистема поддержки производства знаний
Digital Science

DIMENSIONS
app.dimensions.ai

Данные в Dimensions и дорожная карта развития

	Q1 2018	Q2 2018	Q3 2018	Q4 2018	2019	End 2019
Publications	★ 89m	+3m	+3m	+3m	100m	+7m
Grants	★ 3.7m	+200k	+200k	+200k	4.5m	+600k
Patents	★ 35m	+500k	+500k	+2m	38m	+80m
Clinical trials	★ 380k	+20k	+20k	+25k	445k	+50k
Policy docs			★ 365k	+20k	422k	+50k
Data sets					★ 800k	

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Перейдем к практической части, открываем платформу Dimensions Analytics по ссылке app.dimensions.ai

Dimensions

e.g. plastic AND instrument

Save / Export | Workflow | Support | Kristina B...

FILTERS | FAVORITES

> MY GROUPS
> PUBLICATION YEAR
> RESEARCHER
> FUNDER
> FUNDER GROUP
> COUNTRY OF FUNDER
> RESEARCH ORGANIZATION
> LOCATION - RESEARCH ORGANI...
> RESEARCH CATEGORIES
> PUBLICATION TYPE
> SOURCE TITLE
> PUBLISHER
> JOURNAL LIST
> OPEN ACCESS

PUBLICATIONS 106,283,004 | GRANTS 5,013,984 | PATENTS 39,259,027 | CLINICAL TRIALS 505,412 | POLICY DOCUMENTS 445,485

Sort by: Publication Date

Title, Author(s), Bibliographic reference - About the metrics

See attention in ◎ Altmetric Explorer

Dissection of GTPase-activating proteins reveals functional asymmetry in the COPI coat of budding yeast

Eric C Arakel, Martina Huranova, Alejandro F Estrada, E-Ming Rau, Anne Spang, Blanche Schwappach

2020, Journal of Cell Science - Article

Citations 1 | Altmetric 6 | Open Access | Add to Library

Interneuron Types as Attractors and Controllers

Gord Fishell, Adam Kepecs

2020, Annual Review of Neuroscience - Article

Citations 4 | Altmetric 1 | Open Access | Add to Library

NKG2D/DAP10 Signaling recruits EVL to the cytotoxic synapse to generate F-actin and promote NK cell cytotoxicity

Katelynn M Wilton, Brittany L Overlee, Daniel D Billadeau

2020, Journal of Cell Science - Article

Altmetric 1 | Open Access | Add to Library

DDX56 inhibits type I interferon by disrupting assembly of IRF3–IPO5 to inhibit IRF3 nucleus import

< ANALYTICAL VIEWS

📁 RESEARCH CATEGORIES <

🚩 OVERVIEW ∨

| Citations | Citations (Mean) |
| 1.2 B | 10.89 |

● Publications (total)

🔓 OPEN ACCESS <

👥 RESEARCHERS <

📋 SOURCE TITLES <

📚 PUBLISHERS <

Dimensions | dimensions.ai

! Рекомендовано создать личную учетную запись в Dimensions для более эффективного использования платформы

Q   e.g. plastic AND instrument

Search in: ● Full data   ○ Title and abstract   ○ DOI   Abstract Search

106,283,004   5,013,984   39,259,027   505,412   445,485

Save / Export   **Workflow**   Support   ① Kristina B...

Save / Export   **Workflow**   Support   ①

Kristina Baksheeva
k.baksheeva@digital-science...
Digital Science, London, Unit...

My account

ⓘD Connect with ORCID

Export center

Logout

ALS   POLIC   GAL VIEWS   ESE

445,48

⊞ Coding support   H CATEGORIES   ical

                                                          neer

⚙ API   inica

Sort by: gica

e attention in ◎ Altmetric Explorer   11 Medical and Health Sciences   03 Chemica

ummetry in the CODL set   09 Engineering

⚑ OVERVIEW   ⌄

Dimensions   science

Как эффективно осуществлять поиск в Dimensions?

- Ввод ключевых слов в поиск - несколько видов поиска
- Full text - платформа осуществляет поиск по ключевым словам по всем массивам данных;
- Title and abstract - поиск по совпадениям ключевых слов только в названиях и описаниях статей, грантов, патентов и тд.
- DOI - поиск по DOI URL или по самому DOI статьи

- *Abstract Search - поиск осуществляется по наиболее близкому соответствию добавленного в поиск описания статьи или ее части (гранта, патента) с результатами поиска по всему массиву данных Dimensions*

Dimensions

- **Использовать логические операторы для поиска по нескольким ключевым словам**:
- And - возвращает значения, где содержатся все перечисленные слова, например - green and blue - в результатах поиска отобразятся варианты, где представлены оба значения;
- Or - возвращает значения, где содержится одно или другое ключевое слово, но не одновременно;
- Not - возвращает значения при условии отсутствия в них слова после not: например, green not blue - возвращает все данные со словом green при условии, что там нет слова blue

Dimensions

Методы усовершенствования поиска

Знак	Название	Описание
()	скобки	Если вы введете green AND blue OR purple, он вернет все элементы, которые имеют зеленый и синий плюс любые элементы, которые имеют фиолетовый. Но если вы введете green AND (blue OR purple), то он вернет любой элемент, который имеет зеленый и синий или зеленый и фиолетовый.
" "	Двойные кавычки	Если вы поместите текст в кавычки, он найдет только точное соответствие "зеленый синий" и вернет только те элементы, которые включают этот точный термин. Элементы, которые включают "синий зеленый" или где оба слова находятся в разных местах, не будут восстановлены. Обратите внимание: звездочка в двойных кавычках будет проигнорирована.
*	Звездочка	Звездочка-это очень полезная функция, которая позволяет искать однокорневые слова. Если вы введете green*, он будет искать любые слова, начинающиеся с зеленого, такие как greenery, greener, Greensmith и т. д. Будьте осторожны с этим, так как непродуманное использование может вернуть гранты по неожиданным направлениям. Например, поиск plac* в надежде найти "plastic", "plastics", "plasticity" и т. также вернет "plasmodium" и т. д..

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DIGITAL science

Методы усовершенствования поиска

Знак	Название	Описание
""~	Смысловой поиск	Использование данных символов ищет слова, расположенные в непосредственной близости друг от друга. Например, "яблочный пирог вкусный" ~3 будет искать слова "яблоко", "пирог" и "вкусный" с максимальным разделением между словами в 3 слова: • "apple delicious pie" (distance: 2) • "apple extra words here pie delicious" (distance: 3) • "apple some words pie separated delicious" (distance: 3). Но тем не менее, результаты не будут возвращены в случаях • "delicious apple pie" (distance: 4) • "apple too many extra words here pie delicious" (distance: 5) • "apple some words pie further separated delicious" (distance: 4)

Более подробная информация обо всех типах данных, источниках, классификаторах и категориях всегда доступна в центре поддержки пользователей Dimensions Analytics **по адресу**

https://support-analytics.dimensions.ai/support/home

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Ваши главные союзники - **фильтры**!
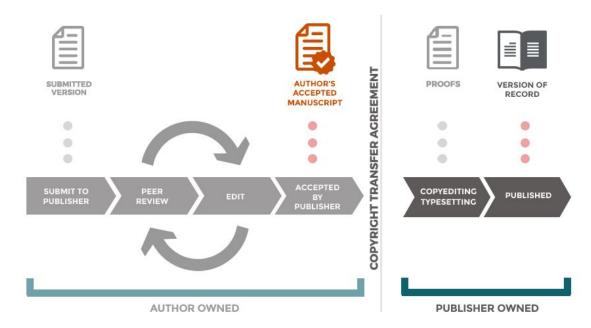
Publications -

- Глубина архива до 1665 года
- Общее количество публикаций - 106,3 млн.
- Researcher, Research organization, Location of Research organization
- Funder, Country of Funder, Funder Group
- Research Categories, incl. Fields of Research, Research, Condition, and Disease Categorization (RCDC), Health Research Classification System Health Categories (HCRC HC), Health Research Classification System Research Activity Classifications (HCRS RAC), Health Research Areas (HRA), Broad Research Areas (BRA)

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- Hybrid - статьи как журналов OA, так и подписных;
- Bronze - "отложенный" OA - сначала статьи доступны в данных журналах только по подписке, после эмбарго статьи свободны для чтения. Подписчики получают возможность раньше читать статьи, но не использовать их повторно.
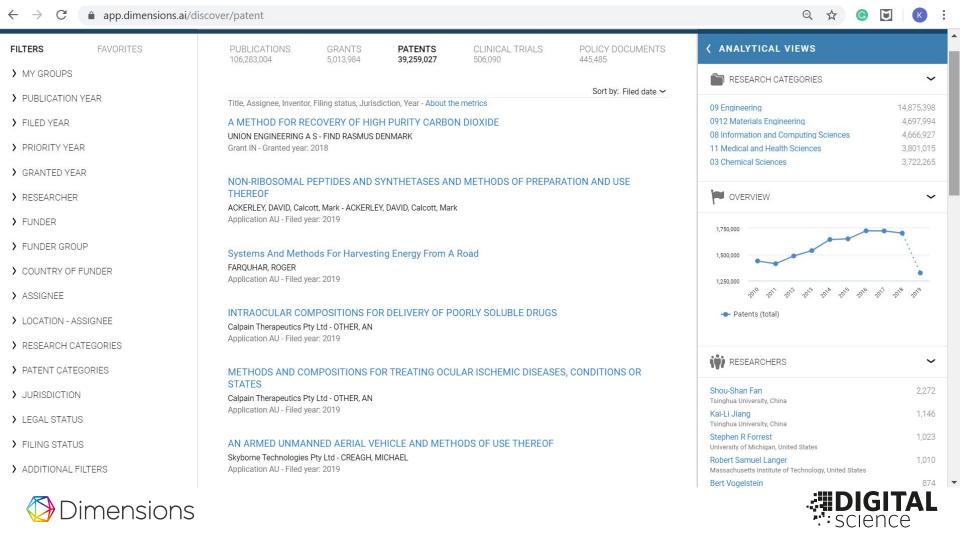
- Publication type - статья, книга, препринт, изданная книга и тд
- Source title - Название источника, журнала
- Publisher - издатель, издательский дом
- Journal list - журнальные списки, в т.ч. DOAJ, Norwegian Register, Nature Index Journal, PubMed и тд.
- Open access
- Pure Gold - статья размещена в журнале открытого доступа, может использоваться для научных исследований;
- Green Submitted - статьи, поданные на рассмотрение в журнал (не всегда последняя версия статьи - доредакционная версия), копия размещена в репозитории открытого доступа;
- Green Accepted - статья рецензированная и после редактуры, копия размещена в репозитории открытого доступа;
- Green Published - статья опубликованная в журнале, копия
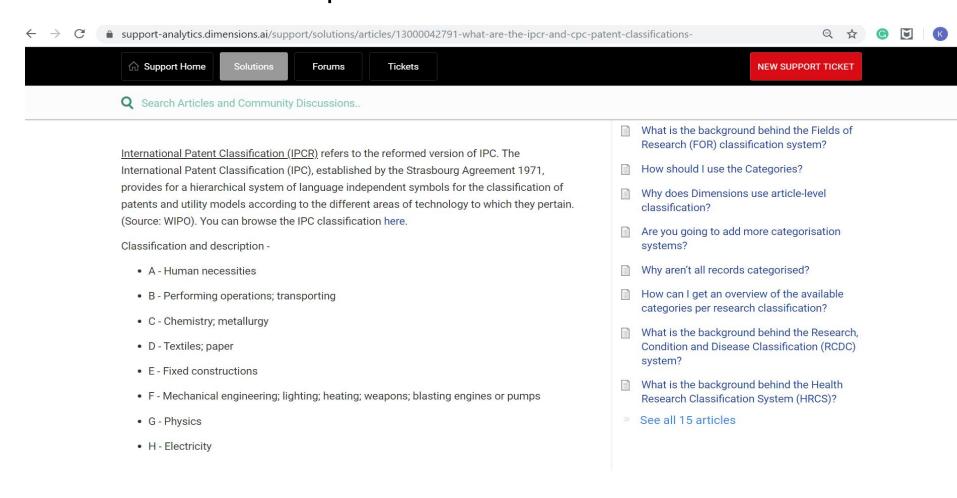
Dimensions

FILTERS	FAVORITES

PUBLICATIONS	**GRANTS**	PATENTS	CLINICAL TRIALS	POLICY DOCUMENTS
106,283,004	5,013,984	39,259,027	506,090	445,485

∨ MY GROUPS

Create a group by selecting multiple entities from one of the filters and click 'Add to group' at the bottom.

> START YEAR

> ACTIVE YEAR

> GRANT STATUS

> RESEARCHER

> FUNDER

> FUNDER GROUP

> COUNTRY OF FUNDER

> RESEARCH ORGANIZATION

> LOCATION - RESEARCH ORGANIZATION

> RESEARCH CATEGORIES

Sort by: Start Date ∨

Title, Funder, Investigator	Funding amount (USD), period

Verification-Aware Programming Language Concurrency Semantics
European Research Council
to Ori Lahav

1,658,484
2020 - 2025

Institut Curie EuReCa PhD Programme
European Commission

3,630,458
2020 - 2025

Health and economic impacts of urban heat islands and greenspace
Wellcome Trust
to Clare Helen Heaviside, James Grellier, Timothy James Taylor, Jonathon Taylor, Benedict Wiliiam Wheele...

661,818
2020 - 2023

How To Be Disabled: Shaping the Future for Everyone
National Endowment for the Humanities
to Rosemarie Garland-Thomson

60,000
2020 - 2021

Advanced EUV/soft X-ray microscopy in the ultrafast regime: imaging functionality of nanomaterials across length scales
European Research Council
to Giulia Fulvia Mancini

2,167,694
2020 - 2025

Waste to Wealth (W2W): A total solution for municipal solid waste incinerated ash in geopolymer concrete
European Commission

231,892
2020 - 2022

‹ ANALYTICAL VIEWS

📁 RESEARCH CATEGORIES	‹

🚩 OVERVIEW	∨

Aggregated funding amount
USD 1.6 T

Average funding amount
USD 403 K

- Active grants (total)
- Starting grants (total)

👥 RESEARCHERS	‹

🏛 FUNDERS	∨

European Commission (EC)   USD 139.5 B
Belgium

Federal Ministry of Education and Research (BMBF)   USD 99.4 B
Germany

National Cancer Institute (NCI)   USD 79.4 B

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app.dimensions.ai/discover/patent

PUBLICATIONS	GRANTS	**PATENTS**	CLINICAL TRIALS	POLICY DOCUMENTS
106,283,004	5,013,984	39,259,027	506,090	445,485

> MY GROUPS

> PUBLICATION YEAR

> FILED YEAR

> PRIORITY YEAR

> GRANTED YEAR

> RESEARCHER

> FUNDER

> FUNDER GROUP

> COUNTRY OF FUNDER

> ASSIGNEE

> LOCATION - ASSIGNEE

> RESEARCH CATEGORIES

> PATENT CATEGORIES

> JURISDICTION

> LEGAL STATUS

> FILING STATUS

> ADDITIONAL FILTERS

Sort by: Filed date ⌄

Title, Assignee, Inventor, Filing status, Jurisdiction, Year - About the metrics

A METHOD FOR RECOVERY OF HIGH PURITY CARBON DIOXIDE
UNION ENGINEERING A S - FIND RASMUS DENMARK
Grant IN - Granted year: 2018

NON-RIBOSOMAL PEPTIDES AND SYNTHETASES AND METHODS OF PREPARATION AND USE THEREOF
ACKERLEY, DAVID, Calcott, Mark - ACKERLEY, DAVID, Calcott, Mark
Application AU - Filed year: 2019

Systems And Methods For Harvesting Energy From A Road
FARQUHAR, ROGER
Application AU - Filed year: 2019

INTRAOCULAR COMPOSITIONS FOR DELIVERY OF POORLY SOLUBLE DRUGS
Calpain Therapeutics Pty Ltd - OTHER, AN
Application AU - Filed year: 2019

METHODS AND COMPOSITIONS FOR TREATING OCULAR ISCHEMIC DISEASES, CONDITIONS OR STATES
Calpain Therapeutics Pty Ltd - OTHER, AN
Application AU - Filed year: 2019

AN ARMED UNMANNED AERIAL VEHICLE AND METHODS OF USE THEREOF
Skyborne Technologies Pty Ltd - CREAGH, MICHAEL
Application AU - Filed year: 2019

< ANALYTICAL VIEWS

📁 **RESEARCH CATEGORIES** ⌄

09 Engineering	14,875,398
0912 Materials Engineering	4,697,994
08 Information and Computing Sciences	4,666,927
11 Medical and Health Sciences	3,801,015
03 Chemical Sciences	3,722,265

🚩 **OVERVIEW** ⌄

— Patents (total)

👥 **RESEARCHERS** ⌄

Shou-Shan Fan Tsinghua University, China	2,272
Kai-Li Jiang Tsinghua University, China	1,146
Stephen R Forrest University of Michigan, United States	1,023
Robert Samuel Langer Massachusetts Institute of Technology, United States	1,010
Bert Vogelstein	874

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Патентные категории - IPCR и CPC

🏠 Support Home   Solutions   Forums   Tickets   NEW SUPPORT TICKET

🔍 Search Articles and Community Discussions..

International Patent Classification (IPCR) refers to the reformed version of IPC. The International Patent Classification (IPC), established by the Strasbourg Agreement 1971, provides for a hierarchical system of language independent symbols for the classification of patents and utility models according to the different areas of technology to which they pertain. (Source: WIPO). You can browse the IPC classification here.

Classification and description -

- A - Human necessities

- B - Performing operations; transporting

- C - Chemistry; metallurgy

- D - Textiles; paper

- E - Fixed constructions

- F - Mechanical engineering; lighting; heating; weapons; blasting engines or pumps

- G - Physics

- H - Electricity

📄 What is the background behind the Fields of Research (FOR) classification system?

📄 How should I use the Categories?

📄 Why does Dimensions use article-level classification?

📄 Are you going to add more categorisation systems?

📄 Why aren't all records categorised?

📄 How can I get an overview of the available categories per research classification?

📄 What is the background behind the Research, Condition and Disease Classification (RCDC) system?

📄 What is the background behind the Health Research Classification System (HRCS)?

» See all 15 articles

Cooperative Patent Classification (CPC) is an extension of the IPC and is jointly managed by the EPO and the US Patent and Trademark Office. It is divided into nine sections, A-H and Y, which in turn are sub-divided into classes, sub-classes, groups and sub-groups. There are approximately 250 000 classification entries. The CPC is constantly being expanded as new technical fields emerge. (Source: EPO). You can browse the CPC classification here.

Classification and description:

- A - Human necessities

- B - Performing operations; transporting

- C - Chemistry; metallurgy

- D - Textiles; paper

- E - Fixed constructions

- F - Mechanical engineering; lighting; heating; weapons; blasting engines or pumps

- G - Physics

- H - Electricity

- Y - General tagging of new technological developments; general tagging of cross-sectional technologies spanning over several sections of the IPC; technical subjects covered by former USPC cross-reference art collections [XRACs] and digests.

🔍 e.g. plastic AND instrument

FILTERS FAVORITES

❯ <u>MY GROUPS</u>

❯ START YEAR

❯ ACTIVE YEAR

❯ CLINICAL TRIAL STATUS

❯ RESEARCHER

❯ COLLABORATING FUNDER

❯ FUNDER GROUP

❯ COUNTRY OF FUNDER

❯ SPONSOR/COLLABORATOR

❯ LOCATION - SPONSOR/COLLABORATOR

❯ RESEARCH CATEGORIES

❯ CONDITION

❯ PHASE

❯ GENDER

❯ REGISTRY

PUBLICATIONS	GRANTS	PATENTS	**CLINICAL TRIALS**	POLICY DOCUMENTS
106,283,004	5,013,984	39,259,027	**506,090**	445,485

Sort by: Start year ⌄

Title, Sponsor | Trial period

The effect of tongue cleaning on the pharyngeal circumference and the body | 2021 -
Kyushu Dental University - Kyushu Dental University

Measurement of the penetration effect of S-flurbiprofen into the knee joint cavity by epidermis-sticking external preparation for patients with osteoarthritis | 2021 -
Kindai University - Kindai University Hospital

Study of drainage treatment reduces the effect of media transformer tape use after liver resection | 2021 -
Yokohama City University Hospital - Yokohama City University Hospital

Systematically Testing the Effects of Promotion Techniques on Children's Fruit and Vegetables Intake. | 2021 - 2022
- Tilburg School of Humanities and Digital Sciences

Respect for Persons in the Genomics Research Enrollment Process: Incorporating Diverse Experiences and Attitudes | 2021 - 2022
Seattle Children's Hospital - Seattle Children's Hospital

Anti-inflammatory Activity of Yogurt Mediated by the Intestine | 2021 - 2021
University of Wisconsin–Madison - University of Wisconsin–Madison

‹ ANALYTICAL VIEWS

📁 **RESEARCH CATEGORIES** ⌄

11 Medical and Health Sciences	420,484
1103 Clinical Sciences	210,795
1117 Public Health and Health Services	94,947
1112 Oncology and Carcinogenesis	58,798
1102 Cardiorespiratory Medicine and Haematology	54,701

🚩 **OVERVIEW** ⌄

- Active clinical trials (total)
- Starting clinical trials (total)

👥 **RESEARCHERS** ⌄

Zatollah Asemi	190
Kashan University of Medical Sciences, Iran	
Boehringer Ingelheim	121
Noelyn Anne Hung	118
University of Otago, New Zealand	
Jason D Lickliter	89

FILTERS   FAVORITES

> MY GROUPS

> PUBLICATION YEAR

∨ PUBLISHING ORGANIZATION

○ Government of the United Kingdom   141,352
○ World Health Organization   70,406
○ Analysis & Policy Observatory   51,861
○ World Bank   23,111
○ Centers for Disease Control and Prev 21,781
○ National Bureau of Economic Resear 14,285
○ Food and Agriculture Organization of 14,197
○ Government of Netherlands   10,027
○ National Academies Press   9,712
○ Scottish Government   9,029
○ Parliament of United Kingdom   8,214

   More

> LOCATION - PUBLISHING ORGANIZATI...

> RESEARCH CATEGORIES

PUBLICATIONS	GRANTS	PATENTS	CLINICAL TRIALS	POLICY DOCUMENTS
106,283,004	5,013,984	39,259,027	506,090	445,485

Sort by: Publication Date ∨

Family Matters: New South Wales community resource 2019
2019, Analysis & Policy Observatory

Family Matters: Queensland community resource 2019
2019, Analysis & Policy Observatory

Federal Role in Responding to Potential Risks of Per- and Polyfluoroalkyl Substances (PFAS)
2019, United States Congress

The Law of Immigration Detention: A Brief Introduction
2019, United States Congress

Federal Emergency Management Agency (FEMA) Hazard Mitigation Assistance
2019, United States Congress

The Changing Landscape of Immigrant Investment Programs
2019, United States Congress

Congressional Access to Information in an Impeachment Investigation
2019, United States Congress

2018 Farm Bill (P.L. 115-334) Primer Series: A Guide to Omnibus Farm and Food Legislation
2019, United States Congress

Issues in Autonomous Vehicle Testing and Deployment

< ANALYTICAL VIEWS

📁 RESEARCH CATEGORIES   ∨

11 Medical and Health Sciences   122,309
16 Studies in Human Society   113,347
1117 Public Health and Health Services 110,998
14 Economics   96,171
1402 Applied Economics   95,354

🚩 OVERVIEW   ∨

50,000

25,000

0
2010 2011 2012 2013 2014 2015 2016 2017 2018 2019

━●━ Policy documents (total)

🏛 PUBLISHING ORGANIZATIONS   ∨

Government of the United Kingdom (HMG)   141,352
United Kingdom

World Health Organization (WHO)   70,406
Switzerland

Analysis & Policy Observatory (APO)   51,861
Australia

Dimensions

DIGITAL science

Профиль активных грантов NIH в 2025, 2026, 2027 году

Dimensions API - **это возможность более глубокого анализа данных**

- **Библиотека** *Dimensions Search Language* с подробными мануалами, примерами и описаниями данных всегда доступна по адресу https://docs.dimensions.ai/dsl/index.html

- **Лаборатория** *Dimensions API* с готовыми аналитическими запросами к системе хранистя в *Jupyter notebook* https://digital-science.github.io/dimensions-api-lab/

- В случае дополнительных вопросов о работе с *DImensions API* всегда можно обратиться в службу поддержки supportapi@dimensions.ai

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> ❗ **Todo**
>
> In this tutorial, suggested interactive exercises to build up your DSL knowledge will appear in boxes like this. This is the first one!

A simple query

Let's start with a simple query example. One of the most basic and commonly-used types of questions we could ask about Dimensions data is something like, "Which are the most recent scholarly works related to a specific research topic?".

We can answer such a question with a query like this, which asks: "Which are the most recent scientific publications related to malaria?"

```
search publications for "malaria" return publications
```

Whitespace is ignored in DSL queries, so feel free to use line breaks and indentation as you wish. The following query is exactly the same as the query above:

```
search publications
    for "malaria"
return publications
```

The anatomy of a query

Restrict the search with filters

We can restrict the set of documents matched by the `search` phrase by specifying certain filters that must apply to the retrieved documents, in other words certain properties these documents must have. We specify these as filter expressions in the `where` phrase, as follows:

```
search grants where start_year>=2010 and funders.acronym="DFG" for "attention deficit disorder" return grants
```

The query above only matches documents that were published in the year 2010 or later and where the supporting funder had the acronym "DFG".

> ❶ **Todo**
>
> Try to modify the query above to match documents published *only* in 2010 (not in later years), then to match documents published in 2010 *or earlier*. (You can probably guess what operators you'd need to use instead of `>=`, but consult the list of filter operators if you get stuck.)

Filters in the `where` phrase may also be used to retrieve one or more specific documents using an identifier such as a publication DOI, like so:

```
search publications
where doi in ["10.1186/s12888-017-1463-3", "10.1186/s40479-017-0057-5", "10.1186/s12888-017-1222-5"]
return publications
```

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The diagram above shows the ID fields that can be used to retrieve related source entities. ID fields provide relations between:

1. Publications ↔ Publications via `references_ids`
2. Publications ↔ Grants via `supporting_grant_ids`
3. Publications ↔ Researchers via `researchers`
4. Patents ↔ Patents via `reference_ids` and `cited_by_ids`
5. Patents ↔ Grants via `associated_grant_ids`
6. Patents ↔ Publications via `publication_ids`
7. Grants ↔ Publications via `resulting_publication_ids` . **Deprecated**: use the other direction of this connection: `supporting_grant_ids` in Publications
8. Grants ↔ Researchers via `researchers`
9. Clinical Trials ↔ Grants via `associated_grant_ids`
10. Clinical Trials ↔ Publications via `publication_ids`
11. Clinical Trials ↔ Researchers via `researchers`
12. Policy Documents ↔ Publications via `publication_ids`

User can retrieve related entities using two steps. First, retrieve the related IDs, such as for example, retrieving supporting grant IDs for publication:

```
search publications where id = "pub.1103155411"
return publications[supporting_grant_ids]
```

Примеры запросов - ПУБЛИКАЦИИ

docs.dimensions.ai/dsl/data-model.html

Dimensions
1.21.0

Search docs

A Tour of the DSL
Query Syntax
Functions Syntax

Data Model
  Sources
  Entities
  Literals
Cross Source Links
  Links to Publications
  Links to Grants
  Links to Patents
  Links to Researchers
Getting documentation
programmatically

Links to Publications

From Patents to Publications

Finding publications linked to patent ID US-7599561-B2:

```
search patents where id="US-7599561-B2" return patents[publication_ids]
```

Finding patents linked to publication ID pub.1061164293:

```
search patents where publication_ids in ["pub.1061164293"] return patents
```

From Clinical Trials to Publications

Finding publications linked to clinical trial ID NCT00249015:

```
search clinical_trials where id="NCT00249015" return clinical_trials[publication_ids]
```

Finding clinical trials linked to publication ID pub.1020801050:

```
search clinical_trials where publication_ids="pub.1020801050" return clinical_trials
```

Dimensions

science

```
search clinical_trials where id="NCT00249015" return clinical_trials[publication_ids]
```

Finding clinical trials linked to publication ID pub.1020801050:

```
search clinical_trials where publication_ids="pub.1020801050" return clinical_trials
```

From Policy Documents to Publications

Finding publications linked to policy document ID policy.101439:

```
search policy_documents where id="policy.101439" return policy_documents[publication_ids]
```

Finding policy documents linked to publication ID pub.1020516964:

```
search policy_documents where publication_ids="pub.1020516964" return policy_documents
```

From Publications to Publications via References

Finding publications that make reference to publication ID pub.1084716863:

```
search publications where reference_ids in ["pub.1084716863"] return publications
```

ГРАНТЫ

Dimensions
1.21.0

Search docs

A Tour of the DSL
Query Syntax
Functions Syntax

⊟ Data Model
　Sources
　Entities
　Literals
⊟ Cross Source Links
　Links to Publications
　Links to Grants
　Links to Patents
　Links to Researchers
　Getting documentation
　programmatically
Reasonable Use
Example Queries and Results

Links to Grants

From Publications to Grants

Finding grants linked to publication ID pub.1113176433:

```
search publications where id="pub.1113176433" return publications[title+supporting_grant_ids]
```

Finding publications linked to grant ID grant.5867140:

```
search publications where supporting_grant_ids="grant.5867140" return publications
```

From Clinical Trials to Grants

Finding grants linked to clinical trial ID NCT00249366:

```
search clinical_trials where id="NCT00249366" return clinical_trials[title+associated_grant_ids]
```

Finding clinical trials linked to grant ID grant.2417698:

```
search clinical_trials where associated_grant_ids="grant.2417698" return clinical_trials
```

From Patents to Grants

ПАТЕНТЫ

ИССЛЕДОВАТЕЛИ

docs.dimensions.ai/dsl/data-model.html

A Tour of the DSL
Query Syntax
Functions Syntax

⊟ Data Model

  Sources

  Entities

  Literals

⊟ Cross Source Links

    Links to Publications

    Links to Grants

    Links to Patents

    Links to Researchers

  Getting documentation
  programmatically

Reasonable Use

Example Queries and Results

API Access

Glossary

Release Notes and Deprecations

Other Resources

Links to Researchers

From Publications to Researchers

Finding researchers linked to publication ID pub.1107885938:

```
search publications where id="pub.1107885938" return researchers
```

Finding publications linked to researcher ID ur.011045667027.22:

```
search publications where researchers.id="ur.011045667027.22" return publications
```

From Grants to Researchers

Finding researchers linked to grant ID grant.7872115:

```
search grants where id="grant.7872115" return researchers
```

Finding grants linked to researcher ID ur.014665603100.22:

```
search grants where researchers.id="ur.014665603100.22" return grants
```

Продвинутый уровень работы с API Dimensions

В Jupyter Notebook содержится пополняемая база готовых практических запросов к аналитике, которые можно реализовать при помощи Python 3.

Далее полученные данные можно выгрузить в любом удобном формате (txt., cvs., excl.) и визуализировать при помощи любых удобных открытых и привычных инструментов (VOSviewer, Plotly, Excel и т.д.)

Dimensions

DIGITAL
science

digital-science.github.io/dimensions-api-lab/

Dimensions / API Lab: Reusable Code Solutions
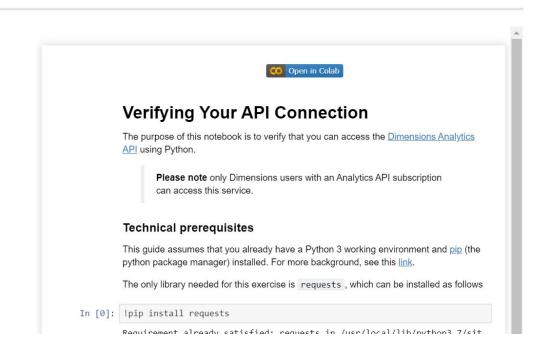
This site contains a collection of open source **Jupyter notebooks** showing how to carry out **common scholarly data analytics** tasks using the Dimensions Analytics API.

For more information about the **Dimensions API**, see the API homepage and the official documentation.

🔗 Getting Started

- Verifying your connection
  open in New Tab | Google Colab | Nbviewer | Github
- Using the Dimcli library to query the API
  open in New Tab | Google Colab | Nbviewer | Github
- Understanding query results
  open in New Tab | Google Colab | Nbviewer | Github
- Learning about Dimcli magic commands
  open in New Tab | Google Colab | Nbviewer | Github
- Using Dimcli to return pandas dataframes
  open in New Tab | Google Colab | Nbviewer | Github
- Researchers Search tips
  open in New Tab | Google Colab | Nbviewer | Github

🔗 Sample Applications: Calculating Indicators

- Calculating the H Index of a researcher
  open in New Tab | Google Colab | Nbviewer | Github

CO Open in Colab

Verifying Your API Connection

The purpose of this notebook is to verify that you can access the Dimensions Analytics API using Python.

> **Please note** only Dimensions users with an Analytics API subscription can access this service.

Technical prerequisites

This guide assumes that you already have a Python 3 working environment and pip (the python package manager) installed. For more background, see this link.

The only library needed for this exercise is `requests`, which can be installed as follows

In [0]: `!pip install requests`

Requirement already satisfied: requests in /usr/local/lib/python3.7/sit

CO Open in Colab

How to use the Dimensions DSL to build a citation graph

This notebook will demonstrate how to build a citation graph like the one below

In [1]:
```
from IPython.display import Image
#Process the graphml file in Gephi and you will get something like this
Image(filename='Chaomei20063degree.png', height=500, width=500)
```

Out[1]:

Практические кейсы применения API Dimensions

Используя Dimensions API, John **хотел ответить на следующие вопросы о Норвежском университете науки и технологий и связи с нанонаукой**:
- **Кто работает по направлению нанотехнологий**?
- **В каких конкретных областях они работаю**?
- **В каких областях они не представлены**? **Кто в текущий момент работает с ними в коллаборации**?
- **С кем они могут вступить в коллаборацию**?
- **Откуда** NTNU **получает финансирование на нанотехнологии**?
- **Есть ли другие варианты финансирования**?
- **Что** NTNU **опубликовал по нанотехнологиям в последние** 1/ **пять лет**?
- **Какие связанные с нанотехнологиями патенты он получил**?

Dimensions

An easy to use and powerful API for topic analysis
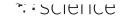
John de Mello, Head of Nano at Norwegian University of Science & Technology (NTNU), describes how he has used the Dimensions API to help his university understand what it does - and what it could do - in nanoscience and technology.

When John joined NTNU in September 2018, he was tasked with getting a handle on the breadth of nanoscience and nanotechnology-related research being conducted at the university. John says:

"At that stage, there were no detailed records within the university's three campuses on the topic."

John was asked to not only map the nano activity but figure out the university's respective research strengths and weaknesses in the area. John decided to take a bibliometric approach and was soon drawn to the Dimensions API because of the flexibility it offered to build and run highly customized queries.

Using the Dimensions API, John wanted to answer the following questions about NTNU and nanoscience:

John de Mello,
Head of Nano at
Norwegian University of
Science & Technology

"Dimensions provides a very easy to use and powerful package for interdisciplinary research topic analysis"

"The Dimensions API comes with great documentation and technical support"

Fig 1: Dimensions API search query

Using the Dimensions API to find nano publications published by NTNU in 2018

In this example, John was looking for all 2018 publications affiliated to NTNU that contained the keyword "nano" in the title, abstract or full text. He wanted to know:

- Publication type
- Citation numbers and Altmetric score
- Authors
- Funders
- Open Access status

He also wanted to obtain the publication DOIs so that he had a consistent identifier to find and acquire the resulting papers.

```
search publications
for "\"nano\""                                          "NTNU"
where year=2018 and research_orgs.id="grid.5947.f"
return publications
[year+type+times_cited+title+altmetric+author_affiliations+
journal+researchers+funders+doi+open_access]
```

John found that Dimensions did a very good job of collating all the nano-related publications authored by NTNU researchers. Dimensions even found papers NTNU was previously unaware of.

Dimensions

'As open as possible, as closed as necessary'

researchers   publishers   institutions

Digital Science Report

The State of Open Data 2018

A selection of analyses and articles about open data, curated by Figshare

Foreword by Ross Wilkinson

October 2018
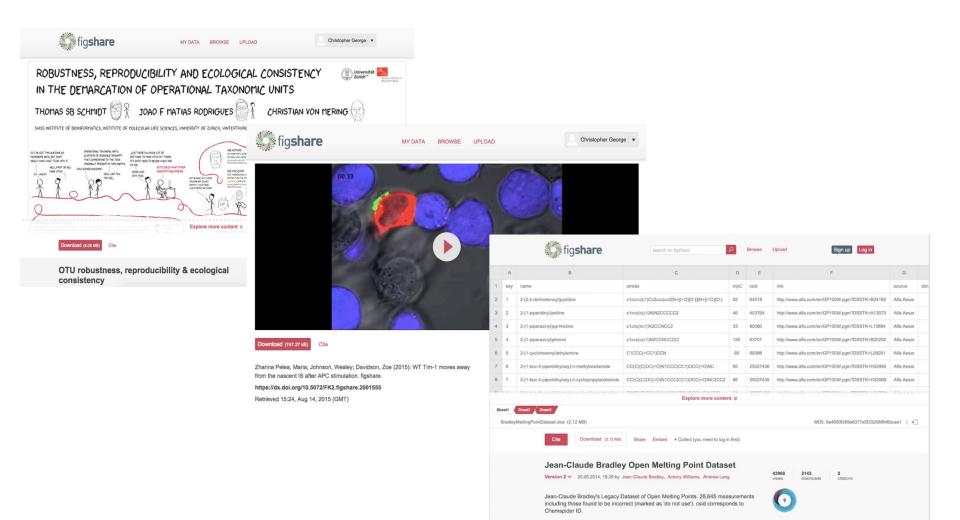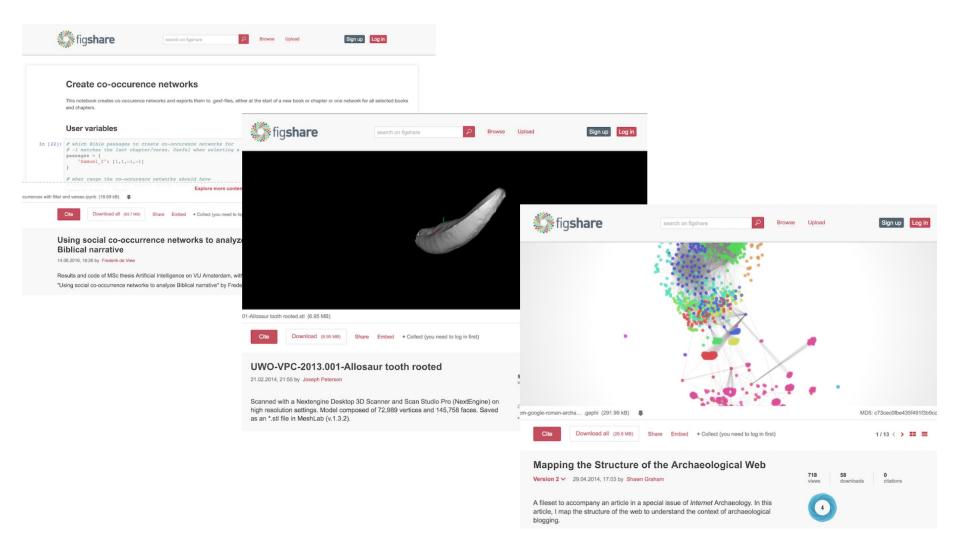
Key results:

- 64% of respondents revealed they made their data openly available in 2018, a 7% rise on 2016.

- Data citations are motivating more respondents to make data openly available, increasing 7% from 2017 to 46%.

- The percentage of respondents in support of national mandates for open data is higher at 63% than in 2017 (55%).

- Respondents who revealed that they had reused open data in their research continues to shrink. In 2018, 48% said they had done this, whereas in 2017, 50% had done so, with 57% in 2016.

- Most researchers felt that that they did not get sufficient credit for sharing data (58%), compared to 9% who felt they do.

- Respondents having lost research data has decreased from 2017 (36% versus 30% in 2018).

figshare

Christopher George

ROBUSTNESS, REPRODUCIBILITY AND ECOLOGICAL CONSISTENCY IN THE DEMARCATION OF OPERATIONAL TAXONOMIC UNITS

Universität Zürich
Swiss Institute of Bioinformatics

THOMAS SB SCHMIDT   JOAO F MATIAS RODRIGUES   CHRISTIAN VON MERING

SWISS INSTITUTE OF BIOINFORMATICS, INSTITUTE OF MOLECULAR LIFE SCIENCES, UNIVERSITY OF ZURICH, WINTERTHURE

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OTU robustness, reproducibility & ecological consistency

figshare

MY DATA   BROWSE   UPLOAD

Christopher George

00:33

Download (747.27 kB)   Cite

Zharina Pelea, Maria; Johnson, Wesley; Davidson, Zoe (2015): WT Tim-1 moves away from the nascent IS after APC stimulation. figshare.

https://dx.doi.org/10.5072/FK2.figshare.2001555

Retrieved 15:24, Aug 14, 2015 (GMT)

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	A	B	C	D	E	F	G	
1	key	name	smiles	mpC	csid	link	source	don
2	1	2-(2,4-dinitrobenzyl)pyridine	c1ccnc(c1)Cc2ccc(cc2[N+](=O](O-])[N+](=O)[O-]	92	64018	http://www.alfa.com/en/GP100W.pgm?DSSTK=B24192	Alfa Aesar	
3	2	2-(1-piperidinyl)aniline	c1ccc(c(c1)N)N2CCCCC2	46	403764	http://www.alfa.com/en/GP100W.pgm?DSSTK=A13073	Alfa Aesar	
4	3	2-(1-piperazinyl)pyrimidine	c1cnc(nc1)N2CCNCC2	33	80080	http://www.alfa.com/en/GP100W.pgm?DSSTK=L15884	Alfa Aesar	
5	4	2-(1-piperazinyl)phenol	c1ccc(c(c1)N2CCNCC2)O	125	63701	http://www.alfa.com/en/GP100W.pgm?DSSTK=B20252	Alfa Aesar	
6	5	2-(1-cyclohexenyl)ethylamine	C1CCC(=CC1)CCN	-55	69388	http://www.alfa.com/en/GP100W.pgm?DSSTK=L08261	Alfa Aesar	
7	6	2-(1-boc-4-piperidinyloxy)-n-methylacetamide	CC(C)(C)OC(=O)N1CCC(CC1)OCC(=O)NC	95	25027436	http://www.alfa.com/en/GP100W.pgm?DSSTK=H32990	Alfa Aesar	
8	7	2-(1-boc-4-piperidinyloxy)-n-cyclopropylacetamide	CC(C)(C)OC(=O)N1CCC(CC1)OCC(=O)NC2CC2	86	25027435	http://www.alfa.com/en/GP100W.pgm?DSSTK=H32069	Alfa Aesar	

Explore more content

Sheet1   Sheet2   Sheet3

BradleyMeltingPointDataset.xlsx (2.12 MB)   MD5: 6a4690f289e8377ef333208f846bcae1

Cite   Download (2.12 MB)   Share   Embed   + Collect (you need to log in first)

Jean-Claude Bradley Open Melting Point Dataset

Version 2   20.05.2014, 19:29 by Jean-Claude Bradley, Antony Williams, Andrew Lang

43968 views   2143 downloads   2 citations

Jean-Claude Bradley's Legacy Dataset of Open Melting Points. 28,645 measurements including those found to be incorrect (marked as 'do not use'). csid corresponds to Chemspider ID.

Create co-occurence networks

This notebook creates co-occurence networks and exports them to .gexf-files, either at the start of a new book or chapter or one network for all selected books and chapters.

User variables

```
In [22]:  # which Bible passages to create co-occurence networks for
          # -1 matches the last chapter/verse. Useful when selecting a
          passages = {
              "Samuel_I": [1,1,-1,-1]
          }

          # what range the co-occurence networks should have
```

Explore more conten...

...currences with filter and verses.ipynb (18.69 kB)

Cite   Download all (83.7 MB)   Share   Embed   + Collect (you need to log in...

Using social co-occurrence networks to analyze Biblical narrative

14.06.2016, 18:26 by Frederik de Vree

Results and code of MSc thesis Artificial Intelligence on VU Amsterdam, with...
"Using social co-occurrence networks to analyze Biblical narrative" by Frede...

01-Allosaur tooth rooted.stl (6.95 MB)

Cite   Download (6.95 MB)   Share   Embed   + Collect (you need to log in first)

UWO-VPC-2013.001-Allosaur tooth rooted

21.02.2014, 21:55 by Joseph Peterson

Scanned with a Nextengine Desktop 3D Scanner and Scan Studio Pro (NextEngine) on high resolution settings. Model composed of 72,989 vertices and 145,758 faces. Saved as an *.stl file in MeshLab (v.1.3.2).

...om-google-roman-archa... .gephi (291.99 kB)

MD5: c73cec0fbe435f491f3b9cc...

Cite   Download all (26.6 MB)   Share   Embed   + Collect (you need to log in first)   1 / 13

Mapping the Structure of the Archaeological Web

Version 2 ⌄   29.04.2014, 17:03 by Shawn Graham

718 views   58 downloads   0 citations

A fileset to accompany an article in a special issue of *Internet* Archaeology. In this article, I map the structure of the web to understand the context of archaeological blogging.

4

featured **apps**

a collection of apps developed to help with various types of interactions
and simplify workflows to make Figshare even easier to work with

Categories

Integrations

Applications

Lab notebooks

Top apps

GitHub: Client for Figshare API

in Applications

This is a simple client for the Figshare API in python. Currently the following actions are implemented: create_article, update_article, get_article_details, list_files, and get_file_details.

GitHub: Figshare Python Recommender
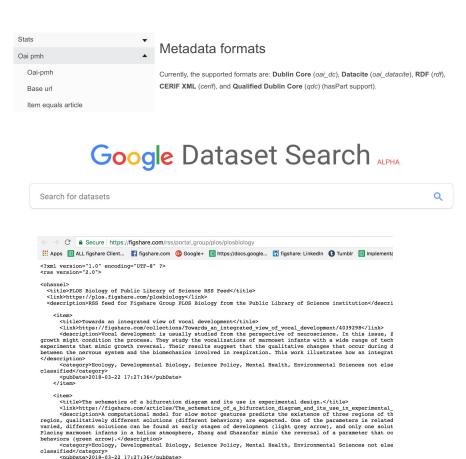
in Applications

A Python script that ingests Figshare's API data and transforms it into data suitable for loading into a recommendation engine. In our case, we save the recommendation data in Kafka but you can easily change this in ingest.py.

Pulls fields relevant for a recommendation engine from all research papers using the API, written in Python. Writes the events to a Kafka stream for further use by ML libs like FREQL.

Support for open standards and de facto standards

Type	Indexed in
Datasets	Google Dataset Search Datacite DataONE Dimensions OpenAire SHARE Clarivate Data Citation Index PubMed National metadata registries eg. Research Data Australia
Papers	Google Scholar
Preprints	Google Scholar Dimensions
Theses	Google Scholar Networked Digital Library of Theses and Dissertations

Stats

Oai pmh

Oai-pmh

Base url

Item equals article

Metadata formats

Currently, the supported formats are: **Dublin Core** (*oai_dc*), **Datacite** (*oai_datacite*), **RDF** (*rdf*), **CERIF XML** (*cerif*), and **Qualified Dublin Core** (*qdc*) (hasPart support).

Google Dataset Search ALPHA

Search for datasets

www.overleaf.com

Show all Gallery Items

Overleaf

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Here we provide a selection of academic journal templates for articles and papers which automatically format your manuscripts in the style required for submission to that journal. Thanks to the partnerships we're building within the publishing community, you can also now submit your paper directly to a number of journals and other editorial and review services via the publish menu in the editor.

Example of Elsevier article template with dummy text

This is the Elsevier article class with dummy text included to give an example of how the template looks when filled out. This example is provided by Vel, and was originally posted on LaTeXTemplates:

http://www.latextemplates.com/template/elsevier-elsarticle-document-class

Your Abstract

In addition to the guidelines provided in the example abstract above, your abstract should:

- provide a synopsis of the entire article;
- begin with the broad context of the study, followed by specific background for the study;
- describe the purpose, methods and procedures, core findings and results, and conclusions of the study;
- emphasize new or important aspects of the research;
- engage the broad readership of GENETICS and be understandable to a diverse audience (avoid using jargon);
- be a single paragraph of less than 250 words;
- contain the full name of the organism studied;
- NOT contain citations or abbreviations.

Introduction

For the introduction, authors should be mindful of the broad readership of the journal. The introduction should set the stage for the importance of the work to a generalist reader and draw the reader in to the specific study. The scope and impact of the work should be clearly stated.
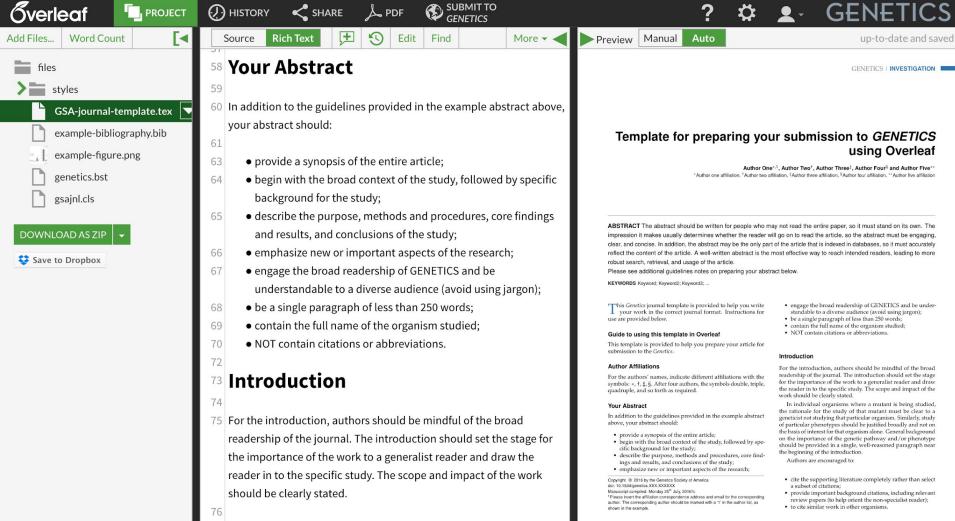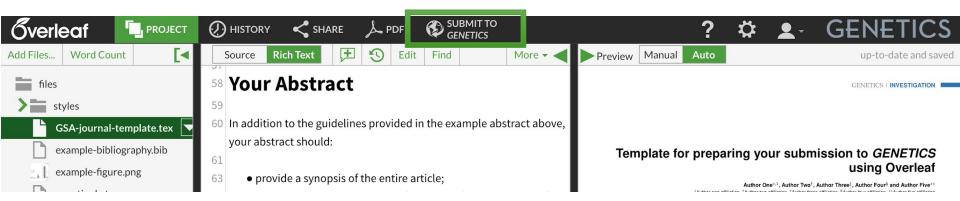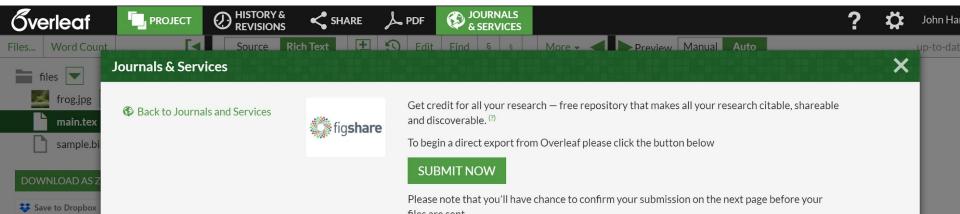
In individual organisms where a mutant is being studied, the

Прямая интеграция для подачи статей в журналы издательств

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https://overleaf.figshare.com/articles/Overleaf_at_CERN_Supporting_thousands_of_research_collaborations/10011974

Официальный сайт
Форума Digital Science

www.digitalscienceforum.ru

Благодарю за Ваше внимание!

k.baksheeva@digital-science.com

i.osipov@digital-science.com

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