



# Overview of Dimensions & the UN SDGs

Universidade de São Paulo | February 29, 2024

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# Announcements

- Today's webinar is being recorded
- Slides and the recording will be shared with attendees
- Attendees can ask questions using the “Q&A” function

# Today's Agenda

- Overview of Dimensions
- UN Sustainable Development Goals (SDGs)
- SDG classification in Dimension
- **Demonstration of Dimensions**
- Your time - Q&A!

# Dimensions is part of Digital Science

Every aspect of Digital Science is focused on helping game-changing businesses that rewire the world of research for the better.

Our portfolio is home to ....



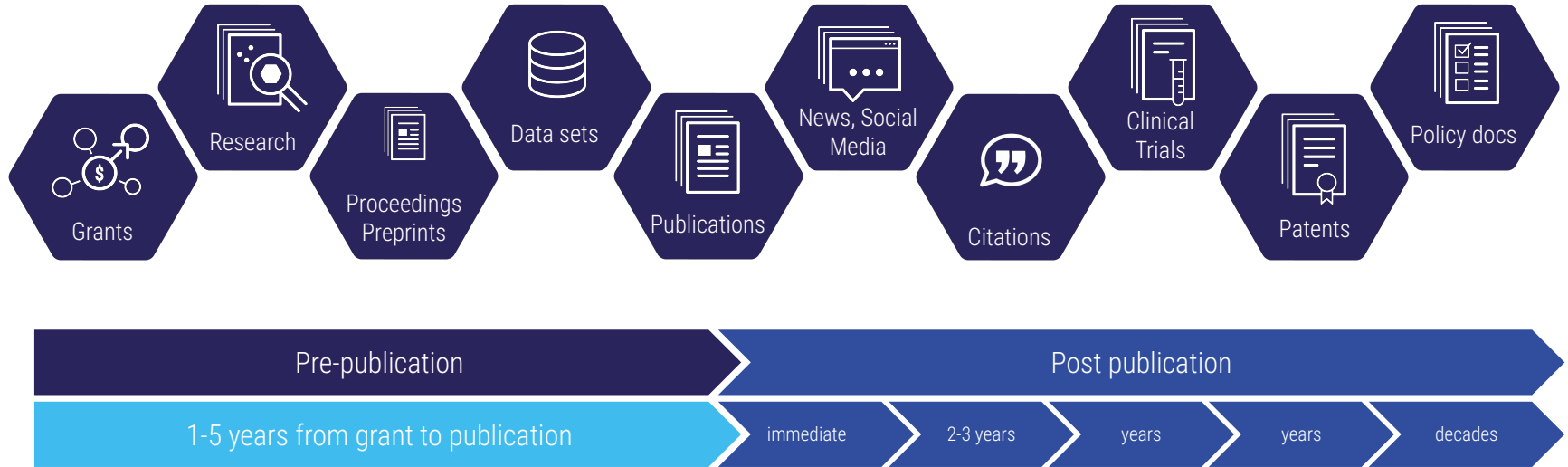
Part of **DIGITAL**science



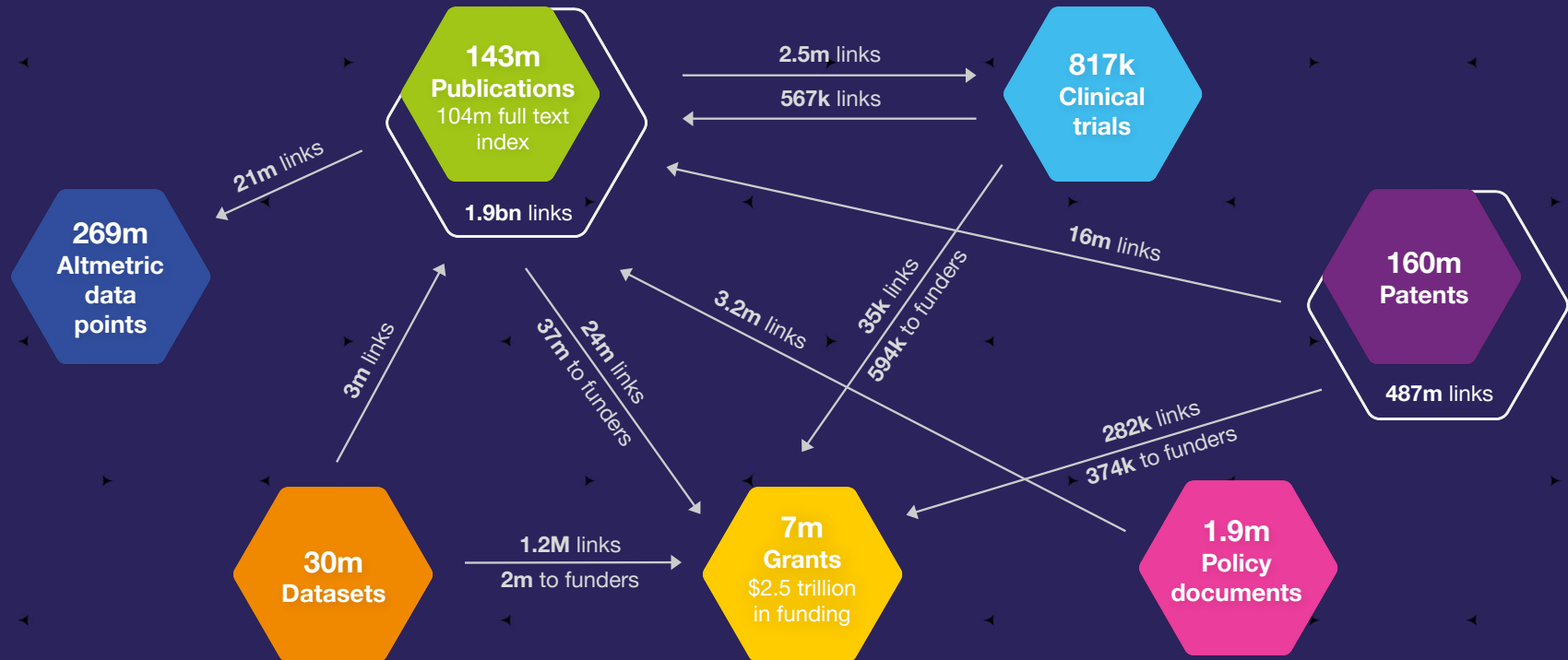
# What is Dimensions?

A “linked research knowledge system” (database) bringing multiple content types into a single place for improved global discovery and analysis

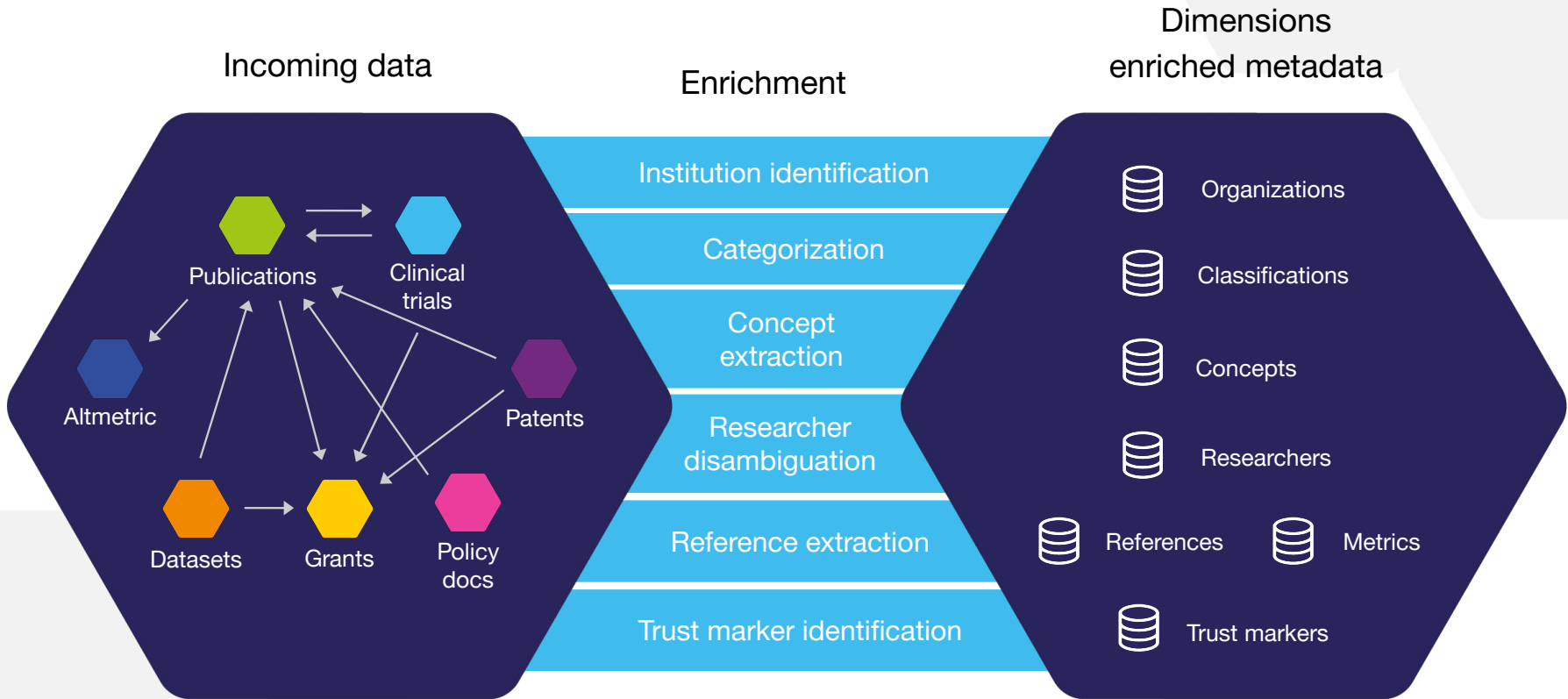
# Get the data and insights you need from a more comprehensive landscape



# Content and links in Dimensions



# We enrich and organize the data



# Basic navigation

The screenshot displays the Dimensions website interface. At the top, the logo and navigation options are visible. The main content area is divided into several sections:

- Filters:** A sidebar on the left lists various filters such as Groups, Publication Year, Researcher, Funder, Country of Funder, Research Organization, Location - Research Organization, Research Categories, Publication Type, Document Type, Source Title, Publisher, Journal List, and Open Access.
- Documents:** The central area shows a list of documents. The first document is titled "Joseph Needham's 'Motivations for Participation' and 'Major Roles' in the International Scientific Commission on Bacterial Warfare during the Korean War" by Taewoo Kim. The second document is "Medical Support Provided by the UN's Scandinavian Allies during the Korean War" by Sekwon Jeong, You-Ki Min, and Sangduk Lee. The third document is "Computational design of  $\alpha$ -amylase from *Bacillus licheniformis* to increase its activity and stability at high temperatures" by Shuai Fan, Xudong Lü, Xiyu Wei, Ruijie Lü, Cuiyue Feng, Yuanyuan Jin, Maocai Yan, and Zhaoyong Yang. The fourth document is "An Observational Study of Dialogue about Uncertainty in Clinician-Family Counseling Conversations Following Prenatal Diagnosis of Complex Congenital Heart Disease" by Kelly W. Harris, Kelsey Schweiberger, Ann Kavanaugh-McHugh, Robert M. Arnold, Jessica Merlin, Judy C. Chang, Nadine A. Kasp..., and 2024, PEC Innovation.
- Analytical Views:** A sidebar on the right provides a summary of research categories and an overview of citations. The research categories table shows the following data:

Research Category	Count
32 Biomedical and Clinical Sciences	32,109,234
40 Engineering	18,656,597
3202 Clinical Sciences	13,696,323
31 Biological Sciences	11,075,381
34 Chemical Sciences	9,228,785

The overview section includes a line graph showing Citations (Mean) from 2015 to 2024. The total citations are 1.9 B, and the mean citations are 13.22. The graph shows a steady increase in citations over the period, with a slight dip in 2024.

Year	Citations (Mean)
2015	~4,500,000
2016	~4,800,000
2017	~5,000,000
2018	~5,200,000
2019	~5,500,000
2020	~6,000,000
2021	~6,500,000
2022	~6,800,000
2023	~7,000,000
2024	~13,220,000

# Basic navigation

The screenshot shows the Dimensions website interface with several key navigation and content elements highlighted by orange boxes and labels:

- Search bar:** Located at the top center, containing the text "e.g. plastic AND instrum".
- Content switcher:** A horizontal bar below the search bar with tabs for "PUBLICATIONS" (128,537,076), "DATASETS" (11,580,506), "TRIALS", and "POLICY DOCUMENTS" (743,138).
- Filters:** A vertical sidebar on the left with categories like "GROUPS", "PUBLICATION YEAR", "RESEARCHER", "FUNDER", "COUNTRY OF FUNDER", "RESEARCH ORGANIZATION", "LOCALIZATION", "RESEARCH CATEGORIES", "PUBLICATION TYPE", "SOURCE TITLE", "PUBLISHER", "JOURNAL LIST", and "OPEN ACCESS".
- Results set:** The main content area displaying search results, including titles like "Impact of biotin supplemented diet on mouse pancreatic islet  $\beta$ -cell mass expansion and glucose induced electrical activity" and "Predictors of upgrading from low-grade cancer at prostatectomy in men with biparametric magnetic resonance imaging".
- Analytical views:** A section on the right titled "ANALYTICAL VIEWS" containing a table of "RESEARCH CATEGORIES" and a line graph showing "Citations" over time from 2013 to 2022.

Category	Count
11 Medical and Health Sciences	32,361,470
09 Engineering	13,333,809
1103 Clinical Sciences	11,922,688
06 Biological Sciences	9,661,623
03 Chemical Sciences	8,368,146

Year	Citations
2013	~4,000,000
2014	~4,500,000
2015	~4,800,000
2016	~5,000,000
2017	~5,500,000
2018	~6,000,000
2019	~6,500,000
2020	~7,000,000
2021	~7,000,000
2022	~3,500,000

# Accessing Dimensions at USP

## Dimensions Analytics USP

**Descrição:** A Plataforma Dimensions contempla itens de publicação bem mais amplos e conteúdos distintos que as outras plataformas analíticas de publicações científicas como Scival (Elsevier) e InCites (Clarivate Analytics), uma vez que se baseia em Digital Object Identifiers (DOIs) atribuídos a conteúdos digitais em geral tais como artigos, e-books, financiamentos, conjuntos de dados científicos, menções online, testes clínicos, patentes, documentos de políticas, independente de indexação nas bases de dados mencionadas, fornecendo links para os websites onde os conteúdos digitais efetivamente podem ser consultados. Metabusador estruturado pela Digital Science que congrega recursos sobre produção científica de mais de 100 fornecedores de informação. De pesquisadores a administradores de pesquisa, financiadores de P & D e editores corporativos - cada um tinha suas próprias ferramentas, conjuntos de dados, lentes nas quais visualizavam seus dados e fluxos de trabalho estruturados exclusivos. Permite realizar estudos e análises por país, por universidade, por agência de financiamento e por Publisher, incluindo a USP e suas publicações do Portal de Revistas e do Portal de Livros. É necessário utilizar uma conexão de IP autorizado e registrar-se para ter acesso a todas as funcionalidades do Dimensions Analytics.

**Site:** <https://app.dimensions.ai/discover/publication>

**Editor/Agregador:** Digital Science - Dimensions

**Assinatura:** USP (01/12/2023 a 30/11/2024)

**Assuntos:** Agência USP de Gestão da Informação Acadêmica, Agências de Fomento, Altmetrics, Análise Bibliométrica, Bibliometria, Crossref, Desenvolvimento de coleções, Dimensions, Dimensions Analytics, DOI, Editoras, Estudos bibliométricos, Financiamento da Pesquisa, Funders, Indicadores, Inovação, Métricas, Patentes, Pesquisa, Pesquisadores, Publishers, Revistas, Unpaywall, usp

**Área(s) de conhecimento:** Biológicas, Exatas, Humanas

Having trouble  
accessing  
Dimensions?

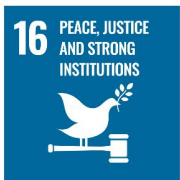
Contact:  
[support@dimensions.ai](mailto:support@dimensions.ai)

# UN Sustainable Development Goals (SDGs)





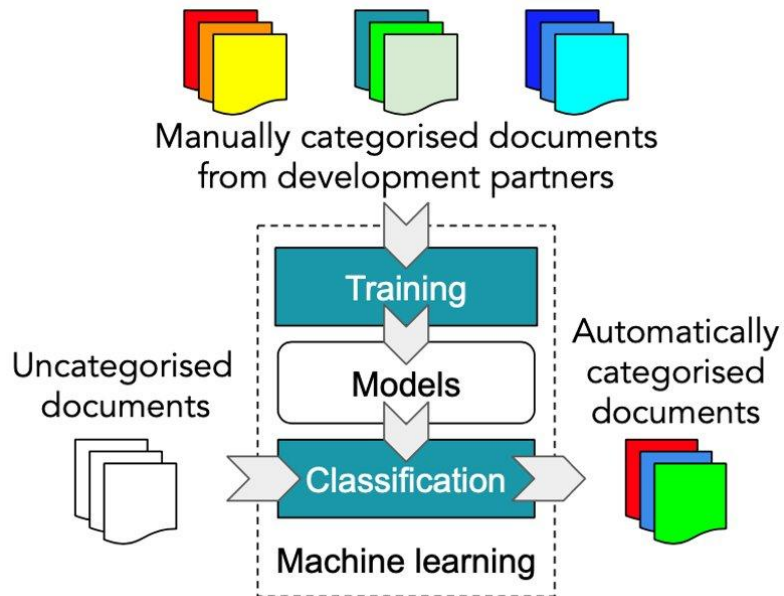
# SUSTAINABLE DEVELOPMENT GOALS



# The Sustainable Development Goals

- A set of **17 comprehensive goals** introduced by the United Nations to **tackle global challenges by 2030**.
- Provide guidelines for a sustainable development path aiming to balance **economy, society, and environmental development**.
- **Inclusive Approach:** Encourages universal participation and attention to marginalized groups, emphasizing equality and social inclusion.
- **Multidisciplinary Collaboration:** Calls for extensive cooperation across academia, governments, and industry for successful implementation.

# Dimensions AI-driven SDG Classification



## Sustainable Development Goals

- Goal 1. End poverty in all its forms everywhere
- Goal 2. End hunger, achieve food security and improved nutrition and promote sustainable agriculture
- Goal 3. Ensure healthy lives and promote well-being for all at all ages
- Goal 4. Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all
- Goal 5. Achieve gender equality and empower all women and girls
- Goal 6. Ensure availability and sustainable management of water and sanitation for all
- Goal 7. Ensure access to affordable, reliable, sustainable and modern energy for all
- Goal 8. Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all
- Goal 9. Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation
- Goal 10. Reduce inequality within and among countries
- Goal 11. Make cities and human settlements inclusive, safe, resilient and sustainable
- Goal 12. Ensure sustainable consumption and production patterns
- Goal 13. Take urgent action to combat climate change and its impacts\*
- Goal 14. Conserve and sustainably use the oceans, seas and marine resources for sustainable development
- Goal 15. Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss
- Goal 16. Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels
- Goal 17. Strengthen the means of implementation and revitalize the global partnership for sustainable development

**BROWSE CATEGORIES for Publications**
[Fields of Research \(ANZSRC 2020\)](#)
[Research, Condition, and Disease Cate...](#)
[Health Category \(HRCS\)](#)
[Research Activity Codes \(HRCS\)](#)
[Cancer Types](#)
[Common Scientific Outline \(CSO\)](#)
[Units of Assessment](#)
[Sustainable Development Goals](#)
[About Research Classifications](#)

## United Nations Sustainable Development Goals (SDGs)

We have implemented the UN Sustainable Development Goals ( [SDGs](#) ) as a classification scheme covering areas of research associated with one or more SDGs (the majority of the SDGs are interrelated). The scheme uses automated allocation of the 17 SDGs and their associated targets and indicators to all fitting documents in Dimensions thereby addressing research areas aligned to the goals.

[1 No Poverty](#)
[2 Zero Hunger](#)
[3 Good Health and Well Being](#)
[4 Quality Education](#)
[5 Gender Equality](#)
[6 Clean Water and Sanitation](#)
[7 Affordable and Clean Energy](#)
[8 Decent Work and Economic Growth](#)
[9 Industry, Innovation and Infrastructure](#)
[10 Reduced Inequalities](#)
[11 Sustainable Cities and Communities](#)
[12 Responsible Consumption and Production](#)
[13 Climate Action](#)
[14 Life Below Water](#)
[15 Life on Land](#)
[16 Peace, Justice and Strong Institutions](#)
[17 Partnerships for the Goals](#)

Give Feedback

## FILTERS FAVORITES

- > GROUPS
- > PUBLICATION YEAR
- > RESEARCHER
- > FUNDER
- > COUNTRY OF FUNDER
- > RESEARCH ORGANIZATION
- > LOCATION - RESEARCH ORGA...
- > RESEARCH CATEGORIES
- > PUBLICATION TYPE
- > DOCUMENT TYPE
- > SOURCE TITLE
- > PUBLISHER
- > JOURNAL LIST

<b>PUBLICATIONS</b> 4,329	DATASETS 68	GRANTS 550	PATENTS selected filter not applicable	CLINICAL TRIALS selected filter not applicable
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 POLICY DOCUMENTS  
 0

 Show abstract Sort by: Publication date

 Title, Author(s), Bibliographic reference - [About the metrics](#) See attention in [Altmetric Explorer](#)

### Pegada de CO2 da madeira nativa destinada à construção civil proveniente de diferentes tipos de exploração florestal

 Cássio Gomes de Oliveira, Katia Regina Garcia Punhagui, Lidiane Santana Oliveira, Fernanda Belizário ...  
 2024, Ambiente Construído - Article

 Resmo O uso da madeira é frequentemente apontado como uma estratégia de descarbonização para a construção. Entretanto, a pegada de CO2 da madeira nativa, ou seja, que são as emissões decorrentes da su... [more](#)
[View PDF](#) [Add to Library](#)

### Discrepancies between observation and ERA5 reanalysis in the Amazon deforestation context: A case study

 Queren Priscila da Silva, Demerval Soares Moreira, Helber Custódio de Freitas, Leonardo Moreno Dom...  
 2024, Dynamics of Atmospheres and Oceans - Article

 Deforestation in tropical areas is broadly reported to change the climate both locally and regionally. Warmer and drier conditions, as well as changes in precipitation patterns, are linked to deforest... [more](#)

 1 [Add to Library](#)

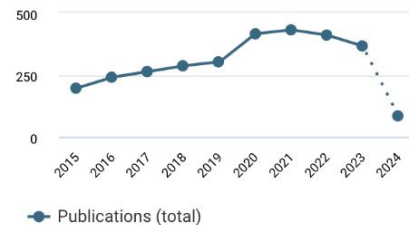
## ANALYTICAL VIEWS

## RESEARCH CATEGORIES

31 Biological Sciences	2,057
41 Environmental Sciences	1,742
3103 Ecology	1,602
30 Agricultural, Veterinary and Food Sciences	923
4102 Ecological Applications	583

## OVERVIEW

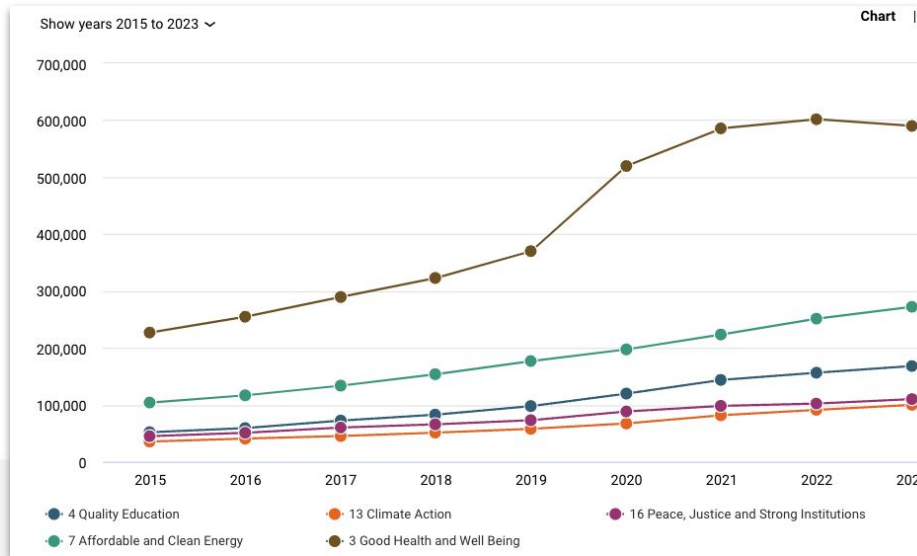
Citations 123 K Citations (Mean) 28.39



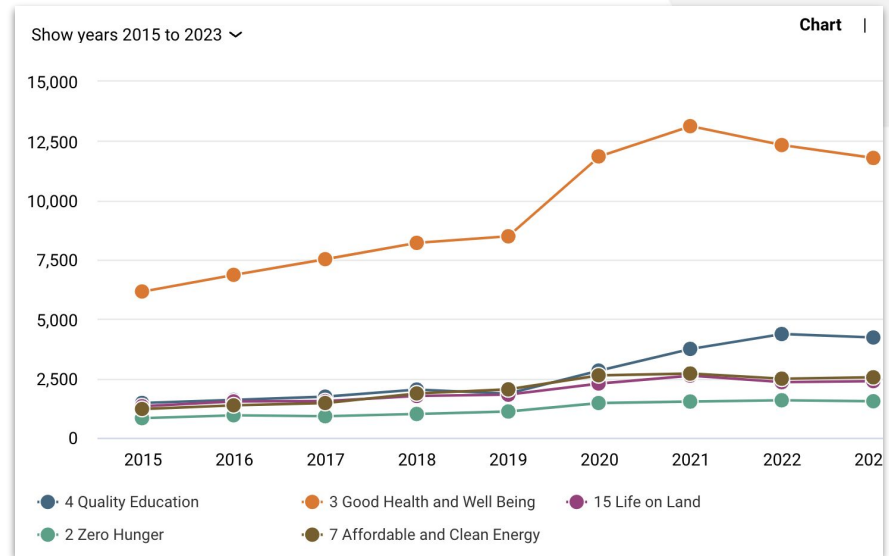
Give Feedback

# SDGs in Publications

## Global

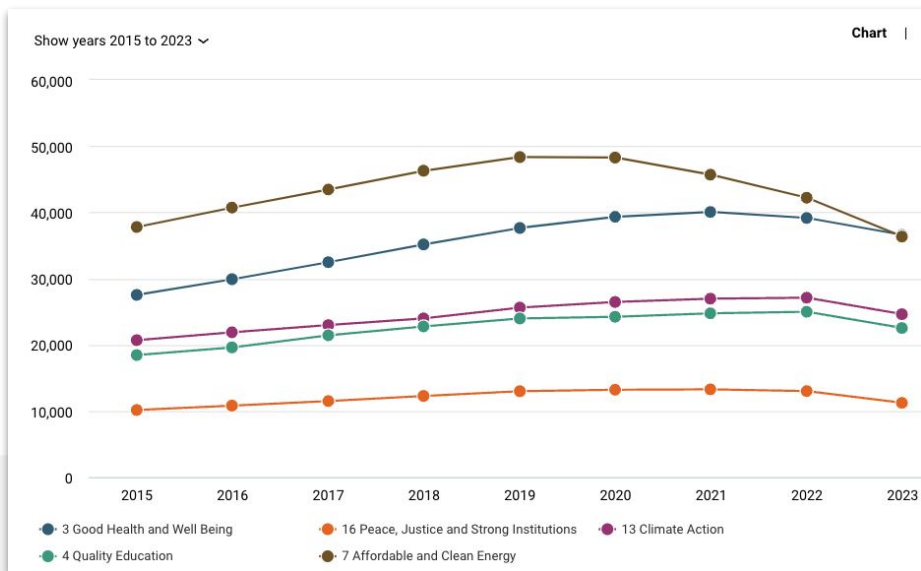


## Brazil

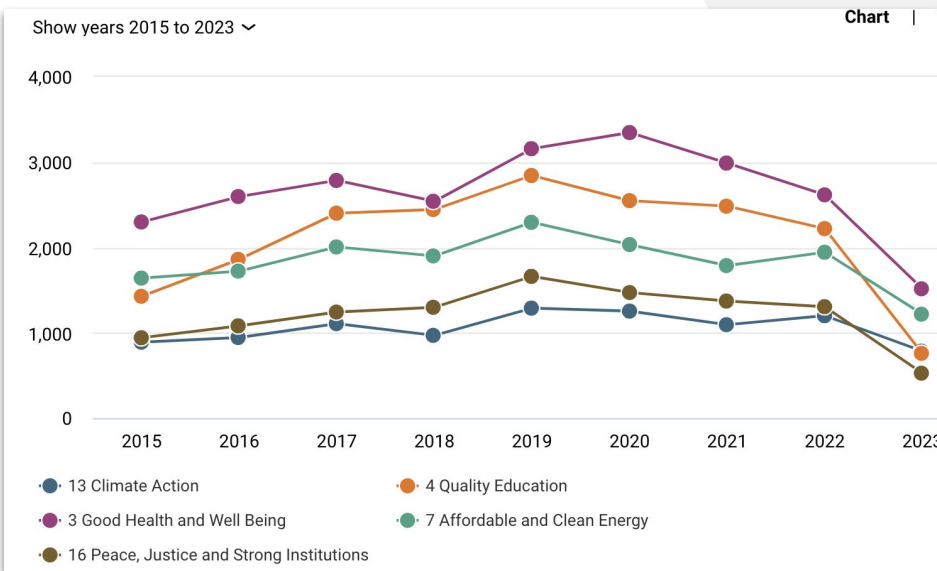


# SDGs in Research Grants

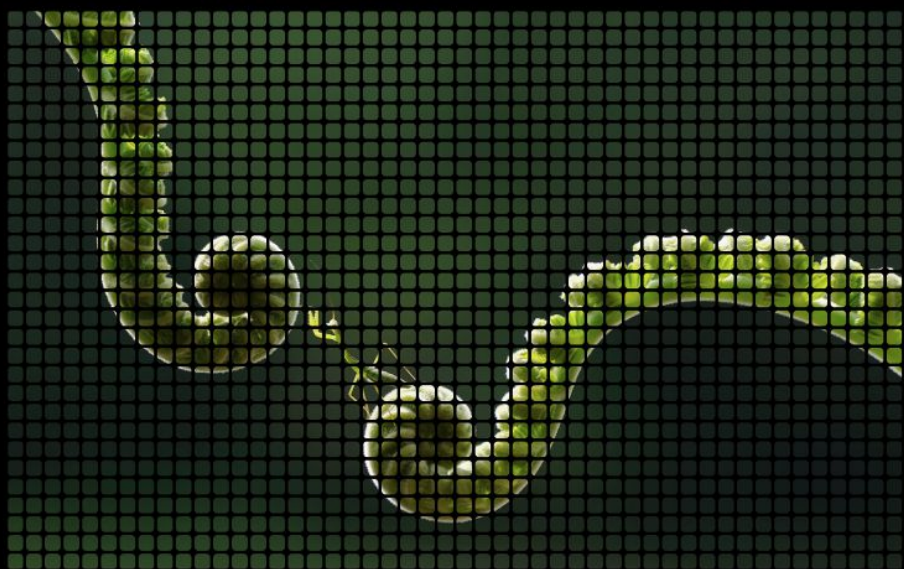
## Global



## Brazil







Digital Research Report

# Contextualizing Sustainable Development Research

Using Dimensions to explore the global landscape  
of research on Sustainable Development Goals

Foreword by Keith Webster

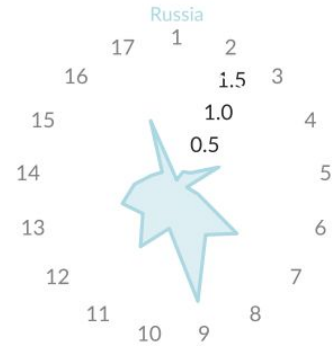
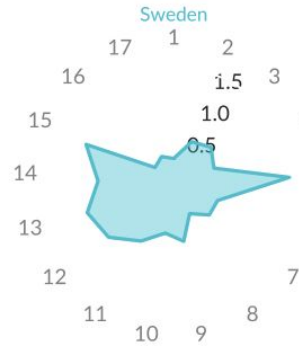
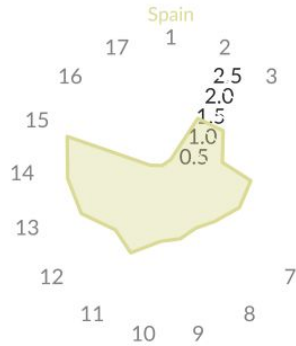
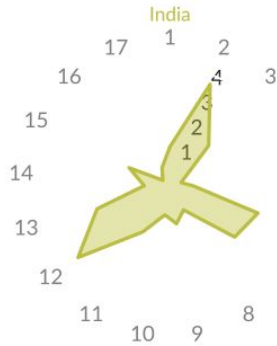
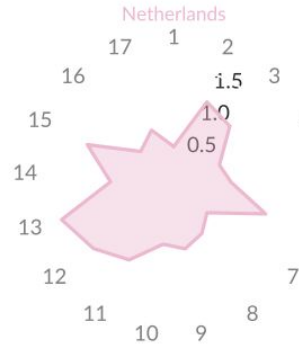
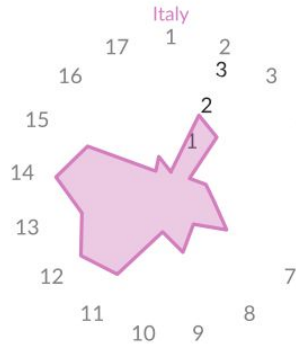
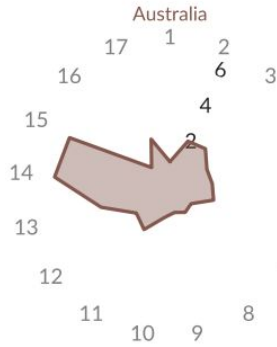
Juergen Wastl, Daniel W. Hook, Briony Fane, H el ene Draux and Simon J. Porter



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# Localization of SDG research



# How collaborative is SDG research

Country	International %	International SDG %	Variance %
Japan	27.18	40.85	13.67
France	55.18	65.72	10.54
China	27.71	35.50	7.79
Germany	51.96	58.91	6.95
Brazil	28.90	35.55	6.65
Netherlands	61.00	66.46	5.46
United Kingdom	54.73	59.25	4.53
India	22.86	27.11	4.25
United States	36.22	39.66	3.44
Australia	55.68	58.51	2.83
Spain	47.78	50.61	2.82
Italy	49.19	51.84	2.64
Canada	52.99	55.52	2.53
Sweden	65.49	65.12	-0.37
Russia	26.88	26.14	-0.74

*Table 2: Comparison of levels of international collaboration in SDG-aligned output and total research output for the top SDG-producing countries. International % column - percentage of total country publication output involving at least one co-author with an affiliation outside the country of focus; International SDG % - as previous column but restricted to SDG-aligned research across any of the 17 SDGs. Publication sample window includes all publications between 2015 and 2020.*

# Dimensions & SDG analysis in action

**DIGITAL science**

← See all posts

## Zooming in on zoonotic diseases

23rd March 2023 | Dr Briony Fane, Ann Campbell and Dr Juergen Wastl

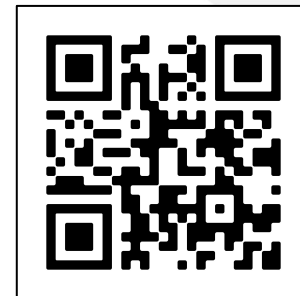
### Analysis reveals disparities in funding to combat global impacts of climate change on health

*"Climate change is one of the biggest threats to health."*

—Dr Beth Thompson, interim Director of Strategy, Wellcome Trust (7 February 2023).

Subscribe to our newsletter

Laboratory worker in the Rodolphe Mérieux laboratory of Bamako, Mali. This lab helps to diagnose Ebola virus, Zika virus and Lassa fever. Photo credit: Mérieux Foundation.



# Dimensions Demo



# Thank you!

Shannon O'Reilly

s.oreilly@digital-science.com

Keep up to date with the latest Dimensions news  
via our website at

[dimensions.ai](https://dimensions.ai)

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# Background on Dimensions data

# Publication indicators in Dimensions

## Publication citations

The publication citations value is the number of times that a publication has been cited by other publications in the database.

## Recent citations

The recent citations value is the number of citations that were received in the last two years. It is currently reset at the beginning of each calendar year.

## Field Citation Ratio (FCR)

The Field Citation Ratio (FCR) is an article-level metric that indicates the relative citation performance of an article, when compared to similarly-aged articles in its subject area. A value of more than 1.0 indicates higher than average citation, when defined by Field of Research Subject Code, publishing year and age. The FCR is calculated for all publications in Dimensions which are at least 2 years old and were published in 2000 or later.

## Altmetric Attention Score

The Altmetric Attention Score is a weighted count of all of the online attention Altmetric have found for an individual research output. This includes mentions in the mainstream news, social networks, Wikipedia, blogs and more.

## Relative Citation Ratio (RCR)

The Relative Citation Ratio (RCR), developed by the National Institutes of Health (US), indicates the relative citation performance of an article when comparing its citation rate to that of other articles in its area of research. A value of more than 1.0 shows a citation rate above average. The article's area of research is defined by the articles that have been cited alongside it. The RCR is calculated for all **PubMed publications** which are at least 2 years old.



## PUBLICATIONS

- Full text indexing for ~70% of publications
- Direct relationships with >130 publishers
- Journal articles, books, book chapters, proceedings, preprints
- Linked to:
  - publication references
  - citing publications
  - supporting grants
  - referencing clinical trials
  - referencing patent records
  - referencing MIT policy documents

					
					
					
					
					
					
					and 90+ other publishers





## DATASETS

- 29M+ datasets
- Sourced from DataCite and Figshare
- Linked to publications, supporting grants and funders
- Filters for research organizations, funders, researchers and more

### DATA CITE

				
				
				900+ more

### FIGSHARE & FIGSHARE HOSTED REPOSITORIES

				
				
				70+ more



## GRANTS

- Project funding
- Over 6M grants from 650+ funders globally
- Not limited to national/federal funding
- \$2 trillion of funding
- Sourcing
  - Direct relationships with funders
  - Data available via APIs
  - Data available via websites which we crawl

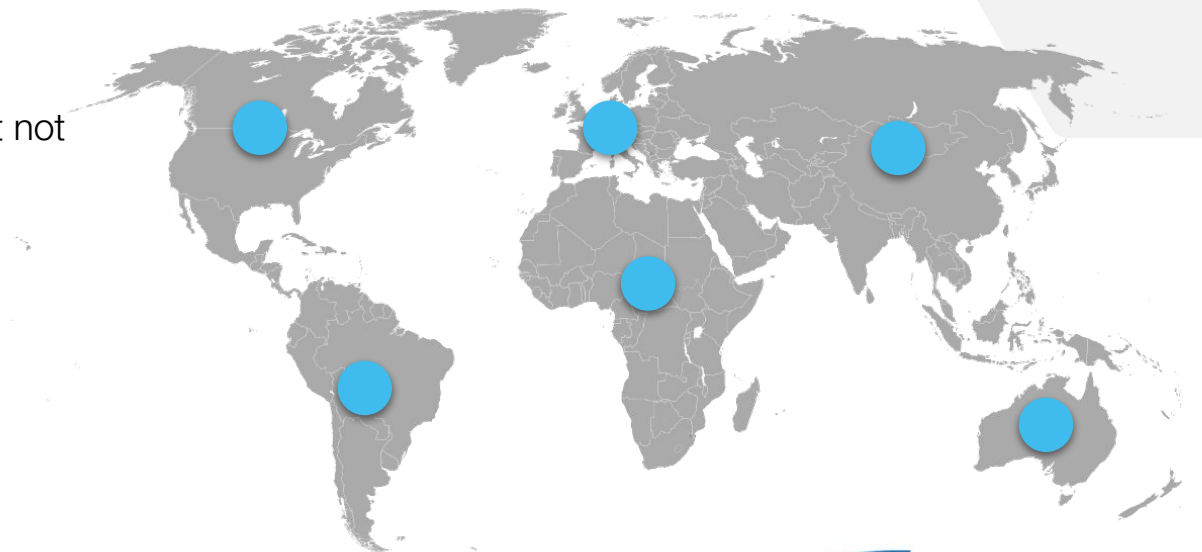
The screenshot shows a web browser window with the URL `app.dimensions.ai`. The page title is "Dimensions" and the main heading is "About the grants data". Below the heading, there is a paragraph: "Dimensions checks all sources of grant data for new data each month. The latest data update was in May 2019. Individual funder data is available in the current release. The grant data contained in the current release is detailed below." A table follows, listing various funding organizations with their corresponding GRID IDs and countries.

Funder	GRID ID	Country
Japan Society for the Promotion of Science (JSPS)	<a href="#">grid.54432.34</a>	Japan
National Natural Science Foundation of China (NSFC)	<a href="#">grid.419696.5</a>	China
Natural Sciences and Engineering Research Council (NSERC)	<a href="#">grid.452912.9</a>	Canada
National Research Foundation (NRF)	<a href="#">grid.425534.1</a>	South Africa
Russian Foundation for Basic Research (RFBR)	<a href="#">grid.452899.b</a>	Russia
Federal Ministry of Education and Research (BMBF)	<a href="#">grid.5586.e</a>	Germany
German Research Foundation (DFG)	<a href="#">grid.424150.6</a>	Germany
European Commission (EC)	<a href="#">grid.270680.b</a>	Belgium
Directorate for Mathematical & Physical Sciences (NSF MPS)	<a href="#">grid.457875.c</a>	United States
Social Sciences and Humanities Research Council (SSHRC)	<a href="#">grid.183804.6</a>	Canada
Directorate for Engineering (NSF ENG)	<a href="#">grid.457810.f</a>	United States
Swiss National Science Foundation (SNF)	<a href="#">grid.425888.b</a>	Switzerland
National Endowment for the Humanities (NEH)	<a href="#">grid.422239.c</a>	United States
National Science Foundation (NSF)	<a href="#">grid.431093.c</a>	United States



## PATENT RECORDS

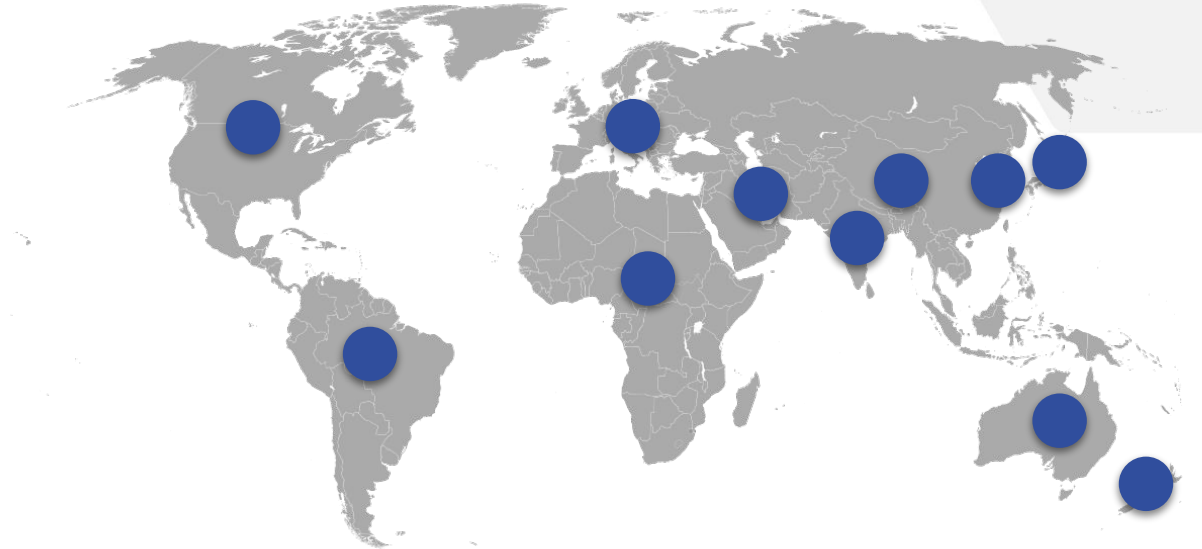
- 155M+ patent documents
- Global coverage
- 100+ jurisdictions, including but not limited to:
  - China
  - Japan
  - United States
  - Germany
  - European Union
  - South Korea





## CLINICAL TRIALS

- ANZCTR (Australia/New Zealand)
- CHICTR (China)
- ClinicalTrials.gov (United States)
- CRIS (Korea)
- CTRI (India)
- ENCePP (Netherlands)
- EU-CTR (EU)
- GCTR (Germany)
- IRCT (Iran)
- ISRCTN (International)
- jRCT (Japan)
- NTR (Netherlands)
- PACTR (Africa)
- ReBEC (Brazil)
- UMIN-CTR (Japan)





## POLICY DOCUMENTS

Over 1.7M policy document records,  
linked to publications

Including but not limited to:

- World Health Organization
- World Bank
- Centers for Disease Control & Prevention
- Government of the United Kingdom
- National Bureau of Economic Research

The screenshot shows the Dimensions database interface. At the top, there's a search bar with the text 'DOCUMENTS e.g. plastic AND instrument'. Below this, there's a navigation bar with tabs for FILTERS, FAVORITES, PUBLICATIONS (138,265,674), DATASETS (12,311,326), GRANTS (6,809,568), PATENTS (155,623,377), CLINICAL TRIALS (790,170), and POLICY DOCUMENTS (1,553,406). The main content area is divided into two columns. The left column shows a list of filters under 'PUBLISHING ORGANIZATION' with radio buttons and counts: Government of the United Kingdom (148,743), World Health Organization (146,157), United States Department of Transportation (57,207), Environmental Protection Agency (54,287), National Bureau of Economic Research (48,391), World Bank (41,450), Federal Energy Regulatory Commission (39,215), Scottish Government (38,472), Centers for Disease Control and Prevention (35,864), United States Department of Commerce (31,296), and Amnesty International (31,027). The right column shows a list of document titles with a 'Show abstract' button and a 'Sort by: Relevance' dropdown. The titles include: 'تقرير اللجنة الاستشارية الاقليمية - الاجتماع الخامس و الثلاثون 2011, World Health Organization', 'Times to key events in Zika virus infection and implications for blood donation: a systematic review 2016, World Health Organization', 'Weekly Epidemiological Record, 1931, vol. 06, 18 [full issue] 1931, World Health Organization', 'Intensification du Programme elargi de vaccination pour atteindre les cibles mondiales et regionales 2011, World Health Organization', and 'EPIDEMIC ENCEPHALITIS IN JAPAN = ENCÉPHALITE ÉPIDÉMIQUE AU JAPON 1929, World Health Organization'.