

WORLD SUMMIT
ON THE
INFORMATION
SOCIETY



WSIS
FORUM 2022

Identifying Topical Directions in the Current Body of Knowledge in ITDRR

The Role of the Curated *Disaster Information Reference Library (DIRL)*

Hans Jochen Scholl, University of Washington

April 1, 2022



Curated Reference Libraries in Science

- Chemical Abstracts Service (Registry) — predecessor in the 1830s
- Medical Research (PubMed) — predecessor Index Medicus (1951)
- Digital Government Reference Library — since 2005
- Disaster Information Reference Library — since 2018



The Disaster Information Reference Library

<https://faculty.washington.edu/jscholl/dirl/>

[Home](#) [Purpose](#) [History](#) [Criteria](#) [Download](#)



DIRL

Version 4.0 is the most recent semi-annual update of this reference library. It has been published as of **November 1, 2021**, about two weeks ahead of the original schedule (November 15). The library now contains **3,933** references of predominantly English-language, peer-reviewed work in the study domains of disaster information and information technologies and their uses in the context of disasters. This represents an increase over the previous version of **423** references, or **11.4%**.

The DIRL is intended to become an indispensable tool for Disaster Information and Technology-interested scholars. In particular, reviewers of paper submissions may want to rely on this reference library.

Packaged in a zip file, [bibTeX](#), [RIS](#) as well as an Endnote package (enlp) versions are available. [Mendeley](#) or Zotero versions can easily be created by importing from RIS or bibTeX files. Please get back to us in case of any errors or omissions. Thank you for your interest and cooperation.

Acknowledgement: No curator can do the work alone. Under the curator and editorship of Hans Jochen Scholl, the DIRL has been maintained and expanded over the years with the help of teams led by Jan Boyd and Galen Guffy and graduate student team members Andrea Leigh Berg, Andrew McKenna-Foster, Jessie Novotny, Marie Peebles, and Hannah Robinson.

Citation: Scholl, H. J. (2021). The Disaster information Reference Library (DIRL). Versions 3.5—4.0. Retrieved from: <http://faculty.washington.edu/jscholl/dirl/>

Please also note: The DIRL is provided on basis of self-service. Do not request any support.



The Disaster Information Reference Library

<https://faculty.washington.edu/jscholl/dirl/>

[Home](#)

[Purpose](#)

[History](#)

[Criteria](#)

[Download](#)

Criteria for inclusion in the DIRM

At minimum a paper or article must:

- Have passed an academic peer review process
- Be published in the proceedings of an academic conference or in an academic journal
- Be published in English (or, if published in another language, an English-language translation must be publicly available)
- Be of at least seven pages (or equivalently, 3,700 words) in length (including references) for a non-technical article
- Be of at least four pages (2,250 words) in length (including references) for a technical article

Search Terms (combined)*

Disaster

- emergency
- disaster
- catastrophe
- crisis

Information and Technology

- IS (information systems)
- IT (information technology)
- IT or ICT (information and technology; information communication technology) or IS in emergency and disaster mitigation, preparedness, response, and recovery management
- information management
- informatics
- knowledge management
- social media

*Also spelling and acronym variations



The Disaster Information Reference Library

<https://faculty.washington.edu/jscholl/dirl/>

[Home](#)

[Purpose](#)

[History](#)

[Criteria](#)

[Download](#)

Criteria for inclusion in the DIRM

Core Journals

- Journal of Homeland Security and Emergency Management
- Disasters
- Disaster Prevention and Management: An International Journal
- International Journal of Information Systems for Crisis Response and Management (IJISCRAM) (until journal's discontinuation in 2019)

Core Conferences

- ISCRAM (International Conference on Information Systems for Crisis Response and Management) and regional and topical ISCRAM conferences
- Disaster Information, Resilience, for Emergency and Crisis Technologies Minitrack @HICSS (Hawaii International Conference on System Sciences)
- ITTDR (Information Technology in Disaster Risk Reduction) Annual Conference

Non-core Journals and Other Outlets

- Journal of Contingencies and Crisis Management
- Australian Journal of Emergency Management
- International Journal of Emergency Management
- Safety Science
- International Journal of Disaster Resilience in the Built Environment
- Journal of Disaster Research
- Journal of Extreme Events
- International Journal of Disaster Risk Reduction
- Journal of Emergency Management
- (IDRC) International Disaster and Risk Conference
- IDRisk
- International Journal of Mass Emergencies and Disasters
- International Journal of Risk Science
- Natural Hazards



The Disaster Information Reference Library

<https://faculty.washington.edu/jscholl/dirl/>

[Home](#)

[Purpose](#)

[History](#)

[Criteria](#)

[Download](#)

History of the DIRL

Since the fall of 2017, an ongoing project has been chartered at the University of Washington to create and maintain a comprehensive reference library dedicated to academic disaster information and disaster information technology-related literature. [Criteria for inclusion](#) of an article or paper in the DIRL were established as a first step.

If you believe a reference is missing, please check that it meets all the required [criteria for inclusion](#). If the missing reference meets those criteria, please send an email with the reference information to the curator.

Release History

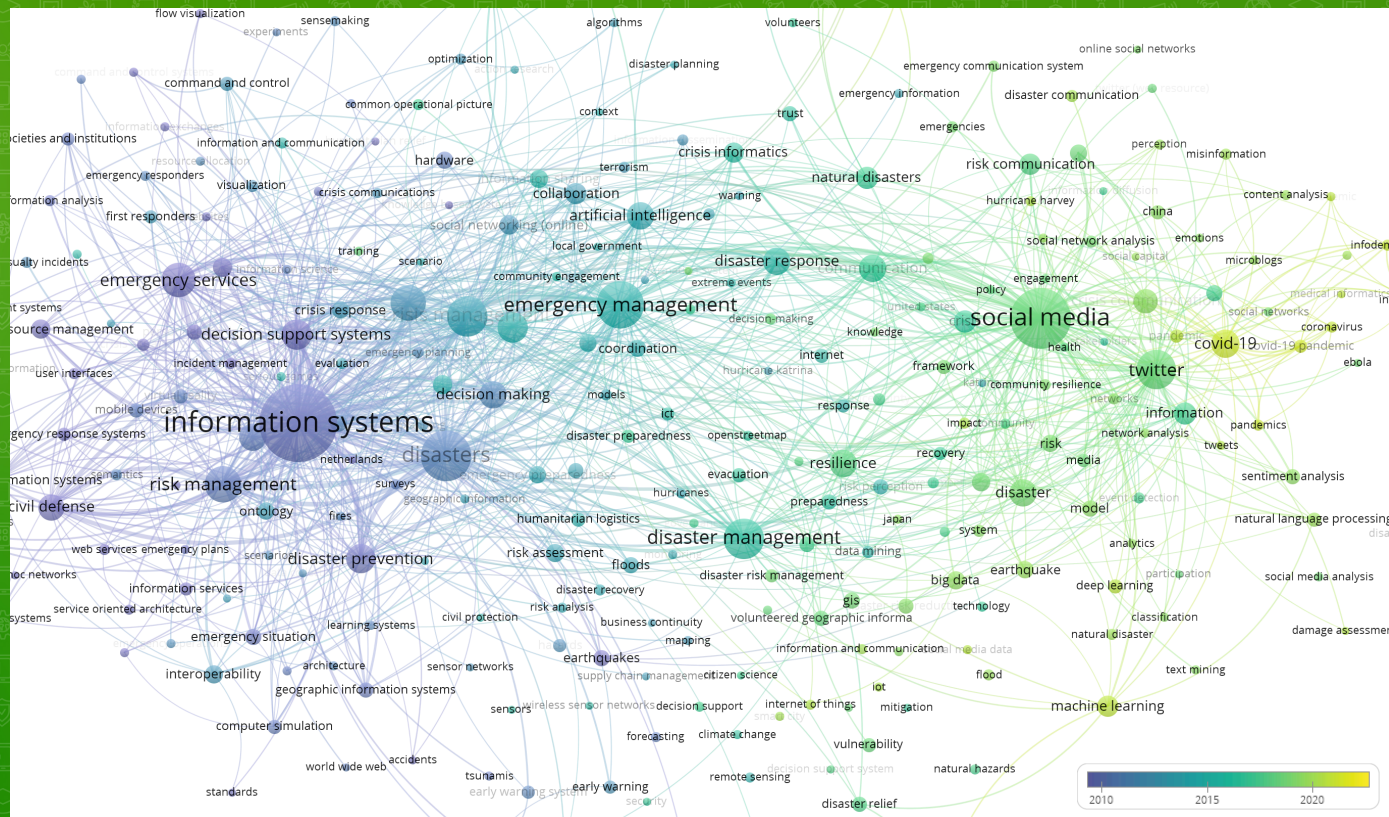
Beta Version 05 - March 15 2018	527 references	
Beta Version 07 - June 15 2018	1,102 references	+109.1%
Version 1.0 - November 1, 2018	2,109 references	+91.4%
Version 1.5 - May 15, 2019	2,533 references	+20.1%
Version 2.0 - November 15, 2019	2,881 references	+13.7%
Version 2.5 - May 15, 2020	3,009 references	+4.4%
Version 3.0 - November 15, 2020	3,360 references	+11.7%
Version 3.5 - April 6, 2021	3,510 references	+4.5%
Version 4.0 - November 1, 2021	3,933 references	+11.4%



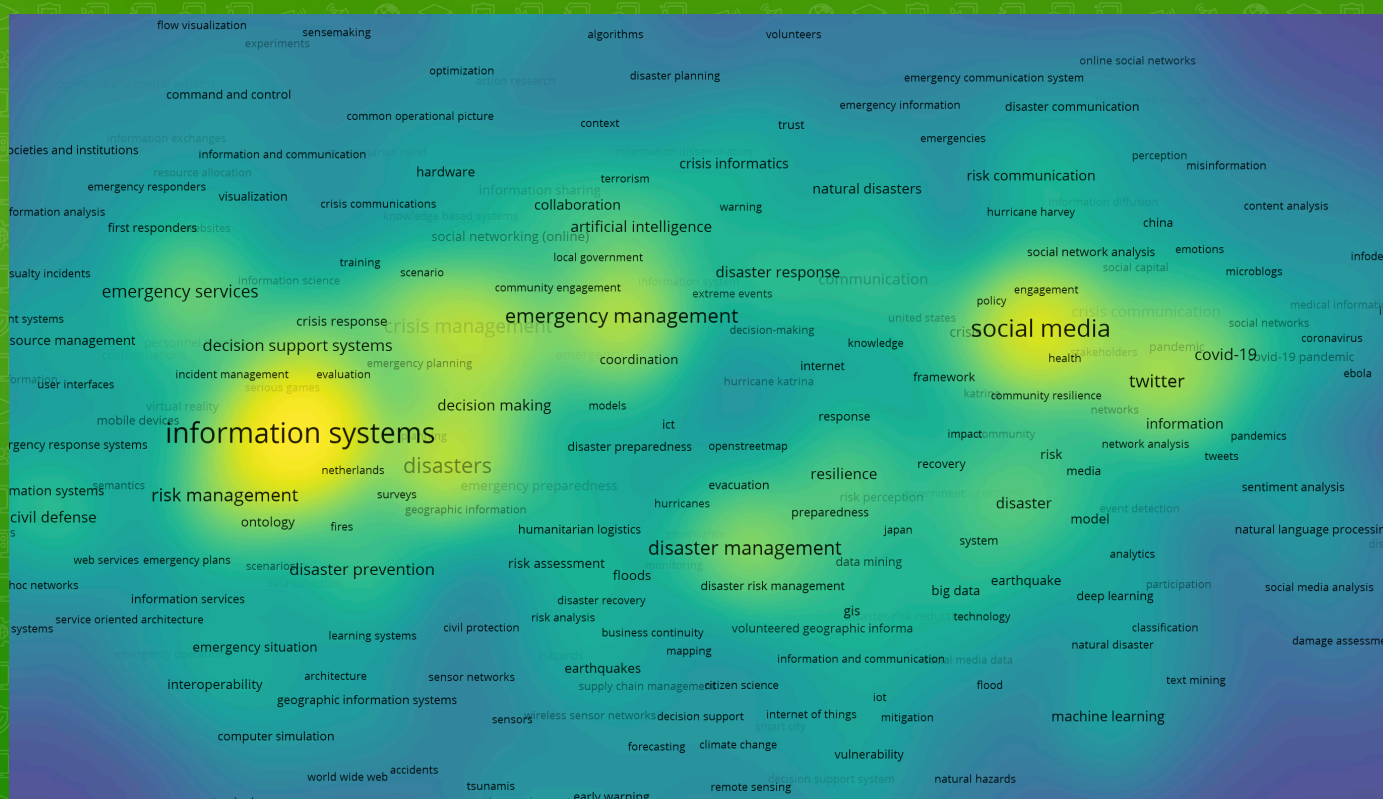
Reference Libraries Provide Input for Bibliometric Analyses Answering Questions such as

- What is in a field?
- What are topical foci?
- What are emerging trends?
- Who are the major contributors?
- How are the contributors connected to each other?

Topical Trends (DIRL, Keywords, 10 Occurrences)

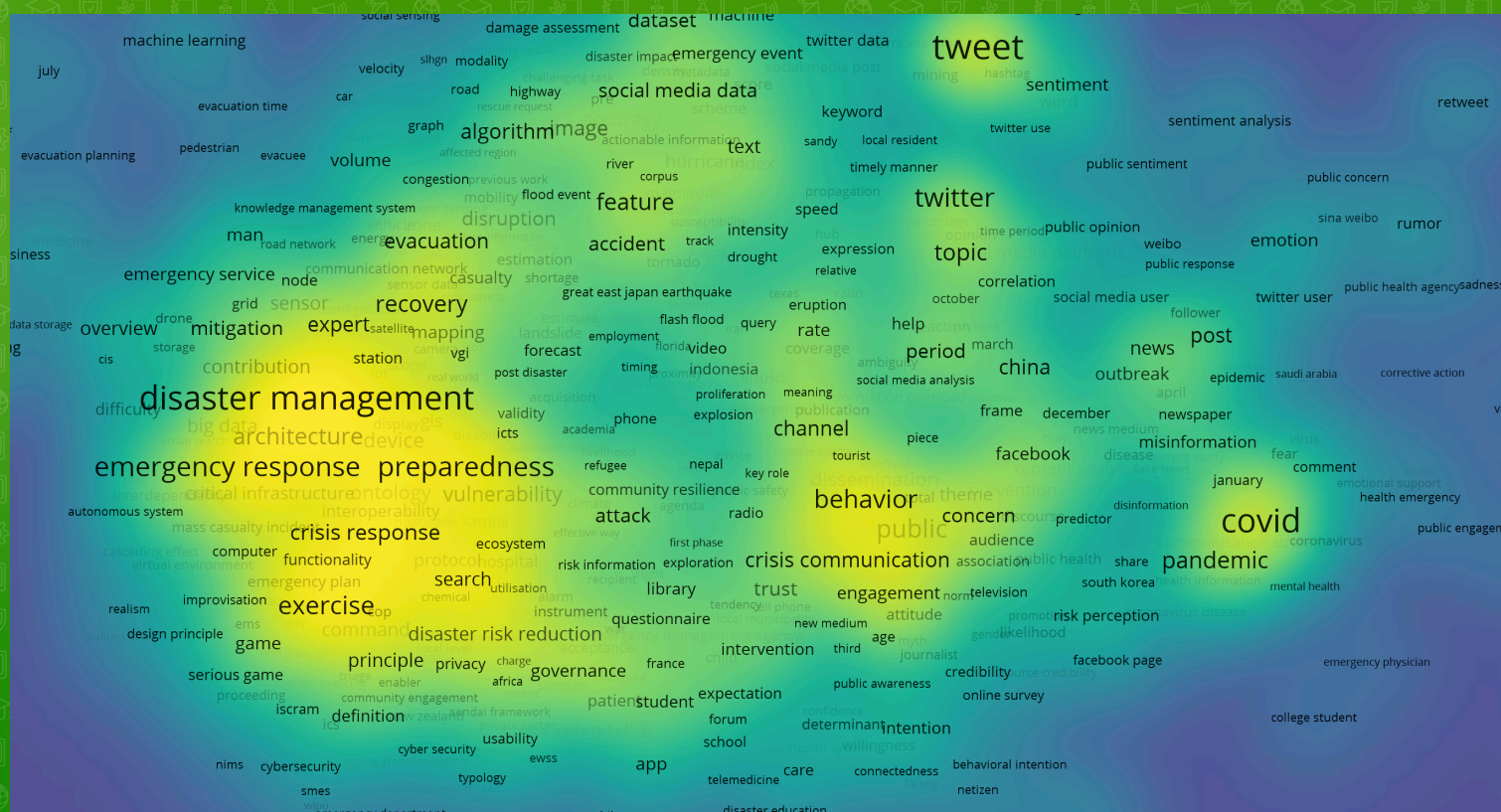


Topical Trends (DIRL, Keywords, 10 Occurrences)



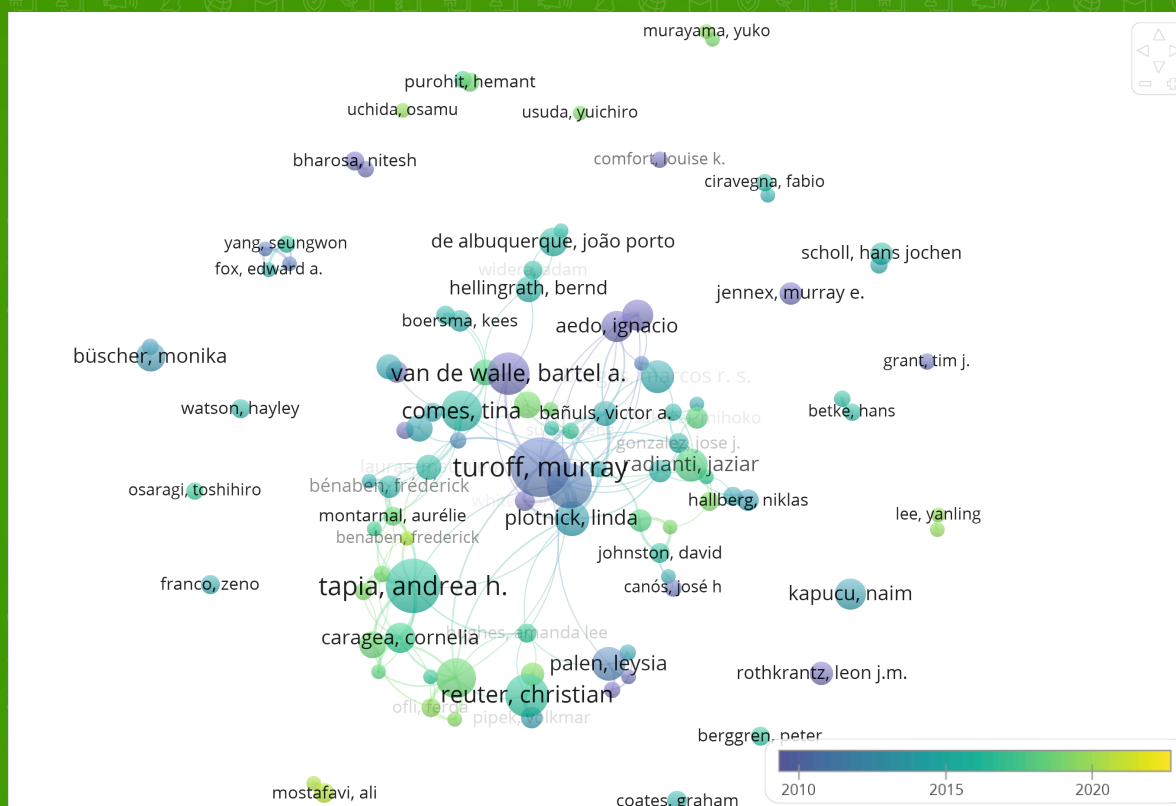
[illegible]

Topical Trends (DIRL, Title+Abstracts, 10 Occurrences)





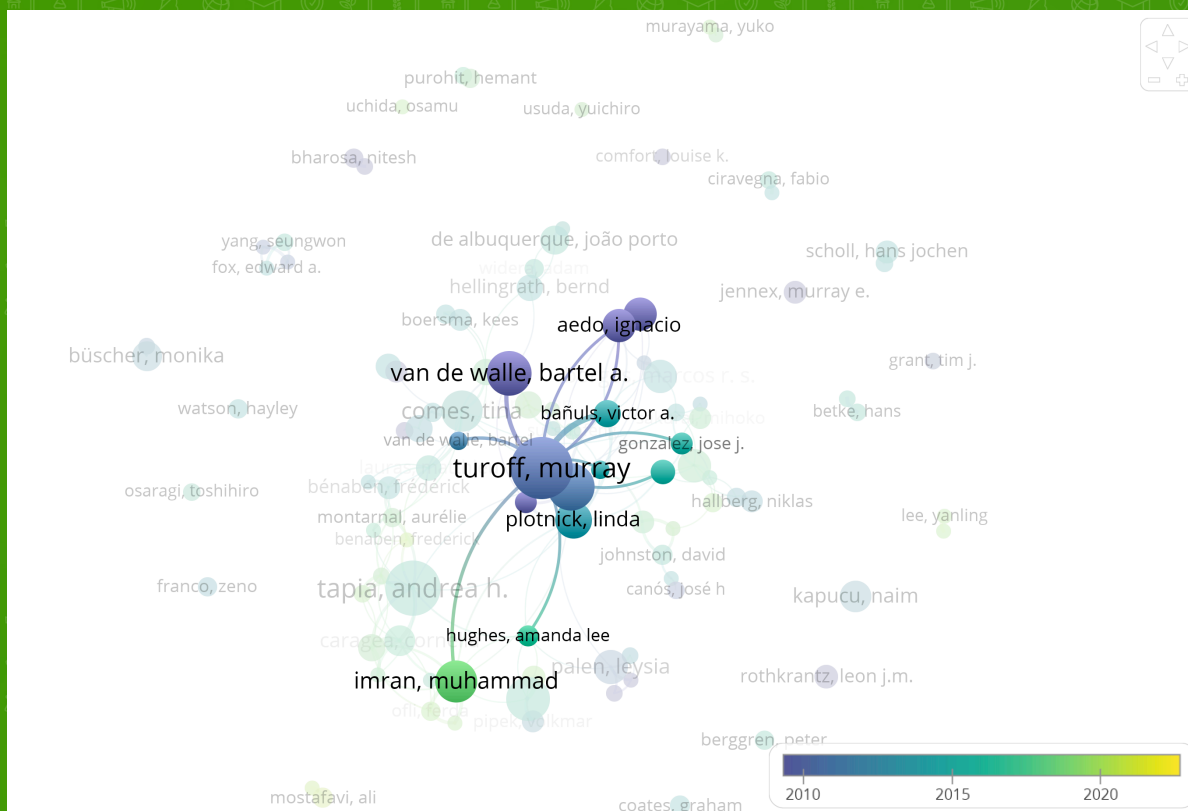
Collaborations (DIRL, Authors, 8 Occurrences)



Of 8,511
authors 104
meet the
threshold



Collaborations (DIRL, Authors, 8 Occurrences)



Of 8,511
authors 104
meet the
threshold



Conclusions

- Domain-specific Curated Reference Libraries help make a research domain more transparent with regard to topical trends, collaborative networks, topical gaps, network gaps, etc.
- Some prominent topical gaps include “situational awareness,” “common operating picture,” “DLT/Blockchain,” “IoT”, among others
- Overemphases on social media, easy-access datasets, and the Covid pandemic
- So far, the ITDRR and ISCRAM communities have only a few networking links
- Like curated reference libraries in other academic fields the DURL can play a formative role for the relatively young ITDRR domain