

# DATA CATALOGS: A SYSTEMATIC LITERATURE REVIEW AND GUIDELINES TO IMPLEMENTATION

## Results from the Literature Review

E. B. de M. Barbosa and G. de Sena, "Scientific data dissemination a data catalogue to assist research organizations," *Ci. Inf.*, vol. 37, no. 1, pp. 19–25, Apr. 2008, doi: [10.1590/S0100-19652008000100002](https://doi.org/10.1590/S0100-19652008000100002).

K. Czajkowski, C. Kesselman, and R. Schuler, "ERMRest: A Collaborative Data Catalog with Fine Grain Access Control," in *2017 IEEE 13th International Conference on e-Science (e-Science)*, Auckland, Oct. 2017, pp. 510–517. doi: [10.1109/eScience.2017.83](https://doi.org/10.1109/eScience.2017.83).

H. Dibowski, S. Schmid, Y. Svetashova, C. Henson, and T. Tran, "Using Semantic Technologies to Manage a Data Lake: Data Catalog, Provenance and Access Control," 2020.

S. Jensen, B. Plale, S. L. Pallickara, and Yiming Sun, "A Hybrid XML-Relational Grid Metadata Catalog," in *2006 International Conference on Parallel Processing Workshops (ICPPW'06)*, Columbus, OH, USA, 2006, pp. 15–24. doi: [10.1109/ICPPW.2006.10](https://doi.org/10.1109/ICPPW.2006.10).

C. Labadie, C. Legner, M. Eurich, and M. Fadler, "FAIR Enough? Enhancing the Usage of Enterprise Data with Data Catalogs," in *2020 IEEE 22nd Conference on Business Informatics (CBI)*, Antwerp, Belgium, Jun. 2020, pp. 201–210. doi: [10.1109/CBI49978.2020.00029](https://doi.org/10.1109/CBI49978.2020.00029).

H. J. Lee and M. Sohn, "Construction of Tag-Based Dynamic Data Catalog (TaDDCat) Using Ontology," in *2012 15th International Conference on Network-Based Information Systems*, Melbourne, Australia, Sep. 2012, pp. 697–702. doi: [10.1109/NBIS.2012.116](https://doi.org/10.1109/NBIS.2012.116).

E. Quimbert, K. Jeffery, C. Martens, P. Martin, and Z. Zhao, "Data Cataloguing," in *Towards Interoperable Research Infrastructures for Environmental and Earth Sciences*, vol. 12003, Z. Zhao and M. Hellström, Eds. Cham: Springer International Publishing, 2020, pp. 140–161. doi: [10.1007/978-3-030-52829-4\\_8](https://doi.org/10.1007/978-3-030-52829-4_8).

S. Shanmugam and G. Seshadri, "Aspects of Data Cataloguing for Enterprise Data Platforms," in *2016 IEEE 2nd International Conference on Big Data Security on Cloud (BigDataSecurity), IEEE International Conference on High Performance and Smart Computing (HPSC), and IEEE International Conference on Intelligent Data and Security (IDS)*, New York, NY, USA, Apr. 2016, pp. 134–139. doi: [10.1109/BigDataSecurity-HPSC-IDS.2016.52](https://doi.org/10.1109/BigDataSecurity-HPSC-IDS.2016.52).

T. Skopal, J. Klímek, and M. Nečaský, "Improving Findability of Open Data Beyond Data Catalogs," in *Proceedings of the 21st International Conference on Information Integration and Web-based Applications & Services*, Munich Germany, Dec. 2019, pp. 413–417. doi: [10.1145/3366030.3366095](https://doi.org/10.1145/3366030.3366095).

C. Vicknair, "Research issues in data provenance," in *Proceedings of the 48th Annual Southeast Regional Conference on - ACM SE '10*, Oxford, Mississippi, 2010, p. 1. doi: [10.1145/1900008.1900037](https://doi.org/10.1145/1900008.1900037).

X. Wang, "An analysis of the benefits and issues in the development of an Enterprise Data Catalogue By," 2014.