

Staying up to date with the literature

A guide for CDBB collaborators and partners

It can be hard to know how to stay up to date with the latest developments in a particular field. This guide aims to help you set up easy ways of receiving regular updates about BIM and related research, as well as pointing toward some of the journals, authors and blogs you might want to follow.

Journals

Identifying the journals that are most relevant to your topic is one of the best ways of keeping up to date, through receiving email alerts or RSS updates whenever new issues come out. Most publishers give you the option to receive alerts each time they publish a new volume, or when a new article is in press and becomes available online. Subscribing to new volume alerts will mean you get an email when each volume comes out. Subscribing to the Open Access article feed is a great option if you don't have institutional access to a journal.



1 An example of a journal home page, showing how to set alerts or feeds for new articles

Below are some of the highest ranked journals in fields related to Digital Built Britain. This isn't an exhaustive list and you may benefit from conducting your own search to find the two or three most relevant journals to your particular interests to follow.

- *Automation in Construction* (ISSN: 0926-5805)
- *Building Research and Information* (ISSN: 1466-4321)
- *Computer-Aided Civil and Infrastructure Engineering* (ISSN: 1467-8667)
- *Computer-Aided Design* (ISSN: 0010-4485)
- *Ecological Economics* (ISSN: 0921-8009)
- *Electronic Journal of Information Technology in Construction* (Open Access – ISSN: 1874-4753)
- *IEEE Internet of Things (IoT) Journal* (ISSN: 2327-4662)
- *Infrastructures* (Open Access – ISSN: 2412-3811)
- *Journal of Construction Engineering and Management – ASCE* (ISSN: 0733-9364)
- *Journal of Safety Research* (ISSN: 0022-4375)
- *Procedia Engineering* (ISSN: 1877-7058)
- *User Modelling and User-Adapted Interaction* (ISSN: 1573-1391)

Authors

The key authors to follow vary depending on the area you're interested in so you can identify who you would like to follow by using keyword searches on [Scopus](#) and set an alert from their profile page.

If you don't have access to Scopus, you can do something similar with

[Google Scholar](#). Many academics have a Google

Scholar profile page and you can set alerts to be emailed each time Scopus or Google Scholar add something they have published.



2 Author page on Scopus, highlighting how to follow the author.



Jennifer Whyte

Royal Academy of Engineering / Laing O'Rourke Professor of Systems Integration
Verified email at imperial.ac.uk - [Homepage](#)

[Built Infrastructure](#) [Design and Visualization](#) [Coordination and Manage...](#)
[Digital Delivery and Innovat...](#)

FOLLOW

3 An example of a Google Scholar profile page, highlighting how to receive alerts for an author.

Based on a search for all BIM literature, Scopus identified the following authors who are most prolific on the topic:

1. [Wang, X.](#) (Curtin University, Department of Construction Management)
2. [Issa, R.R.A.](#) (University of Florida, Rinker School of Construction Management)
3. [Sacks, R.](#) (Technion - Israel Institute of Technology, Faculty of Civil and Environmental Engineering)
4. [Borrmann, A.](#) (Technical University of Munich, Leonhard Obermeyer Center, Center of Digital Methods for the Built Environment)
5. [Eastman, C.M.](#) (Georgia Institute of Technology, College of Design)
6. [Teizer, J.](#) (RAPIDS Construction Safety and Technology Laboratory)
7. [Akinci, B.](#) (Carnegie Mellon University, Department of Civil & Environmental Engineering)
8. [Staub-French, S.](#) (The University of British Columbia, Department of Civil Engineering)
9. [Wang, J.](#) (Curtin University, Department of Construction Management)

Bibliometrics can be used to highlight leaders in other ways, including **Raphael Sacks** of the Israel Institute of Technology, who has the highest h-index of the top ten authors in BIM, [Jennifer Whyte](#) of Imperial College London who has the highest centrality metric, [Bilal Succar](#) of Change Agents and **Charles**

M. Eastman of Georgia Institute of Technology, who was the most frequently cited in a network of BIM authors¹.

Search Alerts

Do you want to find out what's happening across different journals and authors in a topic that interests you? Search alerts let you know when a new article is added to a database that would come up under a search you've already done. This enables you to stay up to date with very little effort once you have gone through a few steps to set them up. It's best suited to generalist databases, such as Scopus (<http://www.scopus.com>) and Web of Science (<http://apps.webofknowledge.com>), and you'll need a personal account (free) in order to set one up.

1. Find a great search

This works best with a search that retrieves a smaller number of articles with a high level of relevance to the topic. This may take a few tries, but some examples are provided below. If you'd like help developing a search on a specific topic, get in touch with Kirsten (kml38@cam.ac.uk).

2. Use the alert function

Whether you're on Scopus and Web of Science, you'll find both in the top left corner of your search results page. You can set as many alerts as you want, and unsubscribe from them if they're no longer useful.

(TITLE-ABS-KEY ("building information model") OR

 Edit  Save  Set alert  Set feed

Results: 372

(from Web of Science Core Collection)

You searched for: TOPIC: ("building information model") ...[More](#)

 [Create Alert](#)

3. Check your email!

You'll get an alert to your inbox with any new publications that fall under that search.

What if I'm not a member of a University?

You may have a more limited number of databases and articles you can access, but there are tools you can use to find resources that are open access. Dimensions (<http://www.dimensions.ai/>) is a new database that is free to use to help you identify articles you'd like to read. It doesn't let you set search alerts yet, but you can then search for them on your favourite search engine and use the Open Access Button (<http://openaccessbutton.org/>) to find a freely accessible version of an article, if one exists. You can also filter the results by Open Access so that you'll only see results that you can read freely online.

¹ Zhao, X. (2017). A scientometric review of global BIM research: Analysis and visualization. *Automation in Construction*, 80, 37–47. <https://doi.org/10.1016/j.autcon.2017.04.002>

The Directory of Open Access Journals (DOAJ - <http://doaj.org/>) is another source for finding journals and articles that you should be able to access.

Finally, Google Scholar can help you find versions of a paper you want to read if they're on an online institutional repository such as Apollo, the repository for Cambridge (<http://www.repository.cam.ac.uk/>).

Once you've identified journals or authors that are useful to you, you can follow them as discussed above.

Books

While books aren't the best way of staying up to date, they often represent a more mature overview of a topic. Below is a selection of recent books that consider data and the built environment:

- Dastbaz, Gorse and Moncaster, eds. (2017) *Building Information Modelling, Building Performance, Design and Smart Construction*. Springer.
- Mahmood, ed. (2018) *Connected Environments for the Internet of Things: Challenges and Solutions*. Springer.
- Thakuria, Tilahun and Zellner eds. (2016) *Seeing Cities Through Big Data: Research, Methods and Applications in Urban Informatics*. Springer.
- Wen and Mishra, eds. (2018) *Intelligent Building Control Systems: A Survey of Modern Building Control and Sensing Strategies*. Springer.

Accessing academic books may be more of a challenge for anyone not affiliated with a University. You may be able to access them through your nearest Legal Deposit library, e.g. the [Cambridge University Library](#), the [British Library](#) in London or the [National Library of Scotland](#) in Edinburgh.

Blogs and news sites

- Of course your first port of call should be the CDBB blog! Find our latest posts at <http://www.cdbb.cam.ac.uk/Blog>
- BIM+ from the Chartered Institute of Building is a source of news, project and technology updates, available at <http://www.bimplus.co.uk>
- Dan Rossiter is building an information model of his home using BIM standards. Follow along with his progress at <http://bimblog.house/>
- ConstrucTech blogs analysis of news stories related to BIM <http://constructech.com/blog/>
- AEC Magazine features the latest technology in the construction sector <http://aecmag.com/>

State of research in Automatic As-Built Modelling



View / Open Files

Patraucean et al 2015 32nd International Symposium on Automation and Robotics in Construction and Mining.pdf (PDF, 833KB)

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Description

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Abstract

Building Information Models (BIMs) are becoming the official standard in the construction industry for encoding, reusing, and exchanging information about structural assets. Automatically generating such representations for existing assets stirs up the interest of various industrial, academic, and governmental parties, as it is expected to have a high economic impact. The purpose of this paper is to provide a general overview of the as-built modelling process, with focus on the geometric modelling side. Relevant works from the Computer Vision, Geometry Processing, and Civil Engineering communities are presented and compared in terms of their potential to lead to automatic as-built modelling.

Keywords

Building Information Model (BIM), As-Built Modelling, As-Built BIM, As-Designed BIM

4 Example of an institutional repository record.