An ontology-based analysis of the industry foundation class schema for building information model exchanges

DOI: 10.1016/j.aei.2015.09.006
Advanced Engineering Informatics, 2015, 29, 940-957.

#	Paper	IF	Citations
46	Overview and Analysis of Ontology Studies Supporting Development of the Construction Industry. *Journal of Computing in Civil Engineering*, **2016**, 30, 04016026	5	29
45	Construction and facility management of large MEP projects using a multi-Scale building information model. *Advances in Engineering Software*, **2016**, 100, 215-230	3.6	34
44	Ontology-based semantic approach for construction-oriented quantity take-off from BIM models in the light-frame building industry. *Advanced Engineering Informatics*, **2016**, 30, 190-207	7.4	54
43	EXPRESS to OWL for construction industry: Towards a recommendable and usable ifcOWL ontology. *Automation in Construction*, **2016**, 63, 100-133	9.6	160
42	Bibliometric analysis and review of Building Information Modelling literature published between 2005 and 2015. *Automation in Construction*, **2017**, 80, 118-136	9.6	159
41	Mapping the knowledge domains of Building Information Modeling (BIM): A bibliometric approach. *Automation in Construction*, **2017**, 84, 195-206	9.6	130
40	DATA INTEROPERABILITY ASSESSMENT THOUGH IFC FOR BIM IN STRUCTURAL DESIGN □A FIVE-YEAR GAP ANALYSIS. *Journal of Civil Engineering and Management*, **2017**, 23, 943-954	3	17
39	Information Model Purposes in Building and Facility Design. *Journal of Computing in Civil Engineering*, **2017**, 31, 04017054	5	8
38	Semantic web technologies in AEC industry: A literature overview. *Automation in Construction*, **2017** , 73, 145-165	9.6	163
37	Automated Matching of Design Information in BIM to Regulatory Information in Energy Codes. **2018**,		5
36	Crowd simulation-based knowledge mining supporting building evacuation design. *Advanced Engineering Informatics*, **2018**, 37, 103-118	7.4	9
35	A scientometric analysis and critical review of construction related ontology research. *Automation in Construction*, **2019**, 101, 17-31	9.6	77
34	Integrating BIM with building performance analysis in project life-cycle. *Automation in Construction*, **2019**, 106, 102861	9.6	32
33	A Generalized Adaptive Framework (GAF) for Automating Code Compliance Checking. *Buildings*, **2019**, 9, 86	3.2	19
32	Integration of LCA and LCC analysis within a BIM-based environment. *Automation in Construction*, **2019**, 103, 127-149	9.6	109
31	Need for Interoperability to Enable Seamless Information Exchanges in Smart and Sustainable Urban Systems. *Journal of Computing in Civil Engineering*, **2019**, 33, 04019008	5	34
30	A framework for data-driven informatization of the construction company. *Advanced Engineering Informatics*, **2019**, 39, 269-277	7.4	26

29	OpenBIM: An Enabling Solution for Information Interoperability. *Applied Sciences (Switzerland)*, **2019**, 9, 5358	2.6	8
28	Interoperability aims in Building Information Modeling exchanges: a literature review. *IFAC-PapersOnLine*, **2019**, 52, 271-276	0.7	3
27	ND BIM-integrated knowledge-based building management: Inspecting post-construction energy efficiency. *Automation in Construction*, **2019**, 97, 13-28	9.6	17
26	Ontology-based knowledge representation for industrial megaprojects analytics using linked data and the semantic web. *Advanced Engineering Informatics*, **2020**, 46, 101164	7.4	11
25	Ontologies for observations and actuations in buildings: A survey. *Semantic Web*, **2020**, 11, 593-621	2.4	5
24	Semantics for linking data from 4D BIM to digital collaborative support. *Frontiers of Engineering Management*, **2020**, 1	2.7	3
23	Design of Railway Track Model with Three-Dimensional Alignment Based on Extended Industry Foundation Classes. *Applied Sciences (Switzerland)*, **2020**, 10, 3649	2.6	5
22	Towards a semantic Construction Digital Twin: Directions for future research. *Automation in Construction*, **2020**, 114, 103179	9.6	169
21	Construction and resource short-term planning using a BIM-based ontological decision support system. *Canadian Journal of Civil Engineering*, **2021**, 48, 75-88	1.3	2
20	Towards Future BIM Technology Innovations: A Bibliometric Analysis of the Literature. *Applied Sciences (Switzerland)*, **2021**, 11, 1232	2.6	6
19	Investigating the Critical Factors of ProfessionalsW BIM Adoption Behavior Based on the Theory of Planned Behavior. *International Journal of Environmental Research and Public Health*, **2021**, 18,	4.6	4
18	BIM-GIS-DCEs enabled vulnerability assessment of interdependent infrastructures A case of stormwater drainage-building-road transport Nexus in urban flooding. *Automation in Construction*, **2021**, 125, 103626	9.6	10
17	Ontology-based approach to data exchanges for robot navigation on construction sites. *Journal of Information Technology in Construction*, **2021**, 26, 546-565	2.5	4
16	The role of interoperability dimensions in building information modelling. *Computers in Industry*, **2021**, 129, 103444	11.6	5
15	A Survey About BIM Interoperability and Collaboration Between Design and Construction. *Studies in Computational Intelligence*, **2021**, 151-179	0.8	
14	Current practices and infrastructure for open data based research on occupant-centric design and operation of buildings. *Building and Environment*, **2020**, 177, 106848	6.5	13
13	A SYSTEMATIC REVIEW OF INFORMATION MODELLING OF INDIVIDUAL RESIDENTIAL BUILDINGS. *Engineering Structures and Technologies*, **2018**, 10, 58-71	0.2	1
12	A theoretical holistic decision-making framework supporting collaborative design based on common data analysis (CDA) method. *Journal of Building Engineering*, **2021**, 46, 103686	5.2	

11	Information-augmented exchange objects to inform facilities management BIM guidelines: introducing the level of semantics schema. *Journal of Facilities Management*, **2022**, ahead-of-print,	1.7	
10	BIM and Asset Management (AM) Interoperability Towards the Adoption of Digital Twins. *International Journal of Digital Innovation in the Built Environment*, **2022**, 11, 1-28	0.2	
9	Connecting research on semantic enrichment of BIM - review of approaches, methods and possible applications. *Journal of Information Technology in Construction*, **2022**, 27, 416-440	2.5	0
8	Submodel Comparison Method Based on IFC File Content. *Journal of Computing in Civil Engineering*, **2022**, 36,	5	
7	Extending IFC for multi-component subgrade modeling in a railway station. *Automation in Construction*, **2022**, 141, 104433	9.6	0
6	Transforming knowledge management in the construction industry through information and communications technology: A 15-year review. **2022**, 142, 104530		1
5	Semantic Web Technologies for Indoor Environmental Quality: A Review and Ontology Design. **2022**, 12, 1522		1
4	Examining the effect of interoperability factors on building information modelling (BIM) adoption in Malaysia.		0
3	Intelligent control of building fire protection system using digital twins and semantic web technologies. **2023**, 147, 104728		0
2	A Requirements Validation Framework for Major Infrastructure Projects. **2022**,		0
1	Ontology for experimentation of human-building interactions using virtual reality. **2023**, 55, 101903		0