Ian R Horrocks

List of Publications by Year in Descending Order

183 papers	7,808 citations	41 h-index	84 g-index
191 ext. papers	8,956 ext. citations	1.5 avg, IF	6.16 L-index

#	Paper	IF	Citations
183	The Complexity and Expressive Power of Limit Datalog. *Journal of the ACM*, **2022**, 69, 1-83	2	
182	Modular materialisation of Datalog programs. *Artificial Intelligence*, **2022**, 308, 103726	3.6	
181	The Dow Jones Knowledge Graph. *Lecture Notes in Computer Science*, **2022**, 427-443	0.9	
180	An assertion and alignment correction framework for large scale knowledge bases. *Semantic Web*, **2021**, 1-25	2.4	
179	OWL2Vec*: embedding of OWL ontologies. *Machine Learning*, **2021**, 110, 1813	4	10
178	Streaming Partitioning of RDF Graphs for Datalog Reasoning. *Lecture Notes in Computer Science*, **2021**, 3-22	0.9	1
177	Use of Semantic Technologies to Inform Progress Toward Zero-Carbon Economy. *Lecture Notes in Computer Science*, **2021**, 665-681	0.9	
176	Computing CQ Lower-Bounds over OWL 2 Through Approximation to RSA. *Lecture Notes in Computer Science*, **2021**, 200-216	0.9	
175	Pay-as-you-go consequence-based reasoning for the description logic SROIQ. *Artificial Intelligence*, **2021**, 298, 103518	3.6	1
174	Augmenting Ontology Alignment by Semantic Embedding and Distant Supervision. *Lecture Notes in Computer Science*, **2021**, 392-408	0.9	5
173	Correcting Knowledge Base Assertions **2020**,		6
172	Maintenance of datalog materialisations revisited. *Artificial Intelligence*, **2019**, 269, 76-136	3.6	12
171	An Efficient Index for RDF Query Containment **2019**,		2
170	Datalog Reasoning over Compressed RDF Knowledge Bases **2019**,		3
169	Satisfaction and Implication of Integrity Constraints in Ontology-based Data Access **2019**,		7
168	Learning Semantic Annotations for Tabular Data **2019**,		6
167	15 Years of Consequence-Based Reasoning. *Lecture Notes in Computer Science*, **2019**, 573-587	0.9	1

166	Datalog Materialisation in Distributed RDF Stores with Dynamic Data Exchange. *Lecture Notes in Computer Science*, **2019**, 21-37	0.9	2
165	Stratified Negation in Limit Datalog Programs **2018**,		3
164	Event-Enhanced Learning for KG Completion. *Lecture Notes in Computer Science*, **2018**, 541-559	0.9	12
163	**2018**,		5
162	OptiqueVQS: A visual query system over ontologies for industry. *Semantic Web*, **2018**, 9, 627-660	2.4	45
161	Semantic Diagnostics of Smart Factories. *Lecture Notes in Computer Science*, **2018**, 277-294	0.9	2
160	Diagnostics of Trains with Semantic Diagnostics Rules. *Lecture Notes in Computer Science*, **2018**, 54-71	0.9	6
159	Dynamic Data Exchange in Distributed RDF Stores. *IEEE Transactions on Knowledge and Data Engineering*, **2018**, 30, 2312-2325	4.2	4
158	Ontology-based end-user visual query formulation: Why, what, who, how, and which?. *Universal Access in the Information Society*, **2017**, 16, 435-467	2.5	25
157	RODI: Benchmarking relational-to-ontology mapping generation quality. *Semantic Web*, **2017**, 9, 25-52	2.4	24
156	Semantic Rules for Machine Diagnostics **2017**,		10
155	SemDia **2017**,		9
154	Foundations of Declarative Data Analysis Using Limit Datalog Programs **2017**,		4
153	The Bag Semantics of Ontology-Based Data Access **2017**,		4
152	Experiencing OptiqueVQS: a multi-paradigm and ontology-based visual query system for end users. *Universal Access in the Information Society*, **2016**, 15, 129-152	2.5	33
151	Ontology-Based Integration of Streaming and Static Relational Data with Optique **2016**,		28
150	Capturing Industrial Information Models with Ontologies and Constraints. *Lecture Notes in Computer Science*, **2016**, 325-343	0.9	34
149	Enabling semantic access to static and streaming distributed data with optique **2016**,		12

148	Distributed RDF Query Answering with Dynamic Data Exchange. *Lecture Notes in Computer Science*, **2016**, 480-497	0.9	9
147	Towards the Semantic Enrichment of Free-Text Annotation of Image Quality Assessment for UK Biobank Cardiac Cine MRI Scans. *Lecture Notes in Computer Science*, **2016**, 238-248	0.9	11
146	Using Semantic Technology to Tame the Data Variety Challenge. *IEEE Internet Computing*, **2016**, 20, 62-66	2.4	41
145	Towards Analytics Aware Ontology Based Access to Static and Streaming Data. *Lecture Notes in Computer Science*, **2016**, 344-362	0.9	14
144	Semantic Technologies for Data Analysis in Health Care. *Lecture Notes in Computer Science*, **2016**, 400-417	0.9	8
143	RDFox: A Highly-Scalable RDF Store. *Lecture Notes in Computer Science*, **2015**, 3-20	0.9	65
142	Ontology Based Access to Exploration Data at Statoil. *Lecture Notes in Computer Science*, **2015**, 93-112	0.9	35
141	BootOX: Practical Mapping of RDBs to OWL 2. *Lecture Notes in Computer Science*, **2015**, 113-132	0.9	45
140	Ontology-Based Visual Query Formulation: An Industry Experience. *Lecture Notes in Computer Science*, **2015**, 842-854	0.9	14
139	Consequence-based and fixed-parameter tractable reasoning in description logics. *Artificial Intelligence*, **2014**, 209, 29-77	3.6	10
138	HermiT: An OWL 2 Reasoner. *Journal of Automated Reasoning*, **2014**, 53, 245-269	1	255
137	Description Logics. *IEEE Intelligent Systems*, **2014**, 29, 12-19	4.2	21
136	Why not simply Google? **2014**,		3
135	A rule-based ontological framework for the classification of molecules. *Journal of Biomedical Semantics*, **2014**, 5, 17	2.2	7
134	(mathcal{EL})-ifying Ontologies. *Lecture Notes in Computer Science*, **2014**, 464-479	0.9	7
133	Pushing the Boundaries of Tractable Ontology Reasoning. *Lecture Notes in Computer Science*, **2014**, 148-163	0.9	4
132	Towards Exploiting Query History for Adaptive Ontology-Based Visual Query Formulation. *Communications in Computer and Information Science*, **2014**, 107-119	0.3	11
131	Evolution of Semantic Systems **2013**,		5

130   Reasoning Web. Semantic Technologies for Intelligent Data Access. *Lecture Notes in Computer Science*, **2013**,   0.9   3

129   OptiqueVQS **2013**,   27

128   What Are Ontologies Good For? **2013**, 175-188   13

127   Order matters! Harnessing a world of orderings for reasoning over massive data. *Semantic Web*, **2013**, 4, 219-231   2.4   19

126   Making the most of your triple store **2013**,   8

125   Scalable End-User Access to Big Data **2013**, 205-244   17

124   A Preliminary Approach on Ontology-Based Visual Query Formulation for Big Data. *Communications in Computer and Information Science*, **2013**, 201-212   0.3   11

123   Optique: Towards OBDA Systems for Industry. *Lecture Notes in Computer Science*, **2013**, 125-140   0.9   24

122   Optique: OBDA Solution for Big Data. *Lecture Notes in Computer Science*, **2013**, 293-295   0.9   10

121   Publishing the Norwegian Petroleum Directorate's FactPages as Semantic Web Data. *Lecture Notes in Computer Science*, **2013**, 162-177   0.9   26

120   The Energy Management Adviser at EDF. *Lecture Notes in Computer Science*, **2013**, 49-64   0.9   7

119   Concrete Results on Abstract Rules. *Lecture Notes in Computer Science*, **2013**, 414-426   0.9   1

118   Complete Query Answering over Horn Ontologies Using a Triple Store. *Lecture Notes in Computer Science*, **2013**, 720-736   0.9   3

117   Semantics ? scalability ? ??. *Journal of Zhejiang University: Science C*, **2012**, 13, 241-244   2

116   A novel approach to ontology classification. *Web Semantics*, **2012**, 14, 84-101   2.9   41

115   Delta-reasoner **2012**,   25

114   Modelling Structured Domains Using Description Graphs and Logic Programming. *Lecture Notes in Computer Science*, **2012**, 330-344   0.9   5

113   MORe: Modular Combination of OWL Reasoners for Ontology Classification. *Lecture Notes in Computer Science*, **2012**, 1-16   0.9   19

112	Logic-based assessment of the compatibility of UMLS ontology sources. *Journal of Biomedical Semantics*, **2011**, 2 Suppl 1, S2	2.2	25
111	Tractable Extensions of the Description Logic ({mathcal{EL}}) with Numerical Datatypes. *Journal of Automated Reasoning*, **2011**, 47, 427-450	1	7
110	Supporting concurrent ontology development: Framework, algorithms and tool. *Data and Knowledge Engineering*, **2011**, 70, 146-164	1.5	29
109	KR and Reasoning on the Semantic Web: OWL **2011**, 365-398		18
108	Tool Support for Ontology Engineering **2011**, 103-112		7
107	SPARQL Query Answering over OWL Ontologies. *Lecture Notes in Computer Science*, **2011**, 382-396	0.9	30
106	Repairing Ontologies for Incomplete Reasoners. *Lecture Notes in Computer Science*, **2011**, 681-696	0.9	8
105	Tractable query answering and rewriting under description logic constraints. *Journal of Applied Logic*, **2010**, 8, 186-209		62
104	Optimized Description Logic Reasoning via Core Blocking. *Lecture Notes in Computer Science*, **2010**, 457-471		13
103	Tractable Extensions of the Description Logic (cal EL) with Numerical Datatypes. *Lecture Notes in Computer Science*, **2010**, 61-75	0.9	2
102	Optimising Ontology Classification. *Lecture Notes in Computer Science*, **2010**, 225-240	0.9	16
101	Completeness Guarantees for Incomplete Reasoners. *Lecture Notes in Computer Science*, **2010**, 747-763	0.9	2
100	Bridging the gap between OWL and relational databases. *Web Semantics*, **2009**, 7, 74-89	2.9	91
99	Representing ontologies using description logics, description graphs, and rules. *Artificial Intelligence*, **2009**, 173, 1275-1309	3.6	32
98	Description Logics **2009**, 21-43		22
97	Extracting Modules from Ontologies: A Logic-Based Approach. *Lecture Notes in Computer Science*, **2009**, 159-186	0.9	15
96	Ontology Integration Using Mappings: Towards Getting the Right Logical Consequences. *Lecture Notes in Computer Science*, **2009**, 173-187	0.9	45
95	Efficient Query Answering for OWL 2. *Lecture Notes in Computer Science*, **2009**, 489-504	0.9	37

94	Exploiting Partial Information in Taxonomy Construction. *Lecture Notes in Computer Science*, **2009**, 569-584		7
93	Ontologies and the semantic web. *Communications of the ACM*, **2008**, 51, 58-67	2.5	160
92	Rewriting Conjunctive Queries over Description Logic Knowledge Bases. *Lecture Notes in Computer Science*, **2008**, 199-214	0.9	5
91	Chapter 3 Description Logics. *Foundations of Artificial Intelligence*, **2008**, 135-179		87
90	OWL 2: The next step for OWL. *Web Semantics*, **2008**, 6, 309-322	2.9	459
89	Semantic Web. *Human-computer Interaction Series*, **2008**, 315-330	0.6	1
88	Individual Reuse in Description Logic Reasoning. *Lecture Notes in Computer Science*, **2008**, 242-258	0.9	2
87	OWL Datatypes: Design and Implementation. *Lecture Notes in Computer Science*, **2008**, 307-322	0.9	12
86	A comparison of two modelling paradigms in the Semantic Web. *Web Semantics*, **2007**, 5, 240-250	2.9	34
85	Hybrid Logics and Ontology Languages. *Electronic Notes in Theoretical Computer Science*, **2007**, 174, 3-14	0.7	9
84	Optimizing Terminological Reasoning for Expressive Description Logics. *Journal of Automated Reasoning*, **2007**, 39, 277-316	1	38
83	A Tableau Decision Procedure for (mathcal{SHOIQ}). *Journal of Automated Reasoning*, **2007**, 39, 249-276	1	111
82	Bridging the gap between OWL and relational databases **2007**,		53
81	Just the right amount **2007**,		80
80	RDFS(FA): Connecting RDF(S) and OWL DL. *IEEE Transactions on Knowledge and Data Engineering*, **2007**, 19, 192-206	4.2	32
79	Semantic web **2007**,		9
78	4 Computational modal logic. *Studies in Logic and Practical Reasoning*, **2007**, 3, 181-245		24
77	Optimized Reasoning in Description Logics Using Hypertableaux. *Lecture Notes in Computer Science*, **2007**, 67-83	0.9	39

58	A Little Semantic Web Goes a Long Way in Biology. *Lecture Notes in Computer Science*, **2005**, 786-800	0.9	17
57	Reducing OWL Entailment to Description Logic Satisfiability. *SSRN Electronic Journal*, **2004**,	1	9
56	A proposal for an owl rules language **2004**,		124
55	A Software Framework for Matchmaking Based on Semantic Web Technology. *International Journal of Electronic Commerce*, **2004**, 8, 39-60	5.4	109
54	Reducing OWL entailment to description logic satisfiability. *Web Semantics*, **2004**, 1, 345-357	2.9	137
53	OWL-QL a language for deductive query answering on the Semantic Web. *Web Semantics*, **2004**, 2, 19-29	2.9	83
52	Decidability of . *Artificial Intelligence*, **2004**, 160, 79-104	3.6	64
51	Using Vampire to Reason with OWL. *Lecture Notes in Computer Science*, **2004**, 471-485	0.9	25
50	Three theses of representation in the semantic web **2003**,		28
49	Description logic programs **2003**,		266
48	A software framework for matchmaking based on semantic web technology **2003**,		307
47	Reducing OWL Entailment to Description Logic Satisfiability. *Lecture Notes in Computer Science*, **2003**, 17-29	0.9	76
46	Description Logic Programs: Combining Logic Programs with Description Logic. *SSRN Electronic Journal*, **2003**,	1	120
45	From SHIQ and RDF to OWL: the making of a Web Ontology Language. *Web Semantics*, **2003**, 1, 7-26	2.9	777
44	RDFS(FA) and RDF MT: Two Semantics for RDFS. *Lecture Notes in Computer Science*, **2003**, 30-46	0.9	21
43	Web Ontology Reasoning with Datatype Groups. *Lecture Notes in Computer Science*, **2003**, 47-63	0.9	9
42	A Semantic Infosphere. *Lecture Notes in Computer Science*, **2003**, 882-896	0.9	10
41	OILing the way to machine understandable bioinformatics resources. *IEEE Transactions on Information Technology in Biomedicine*, **2002**, 6, 129-34		17

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40	Building a bioinformatics ontology using OIL. *IEEE Transactions on Information Technology in Biomedicine*, **2002**, 6, 135-41		35
39	Ontology-based knowledge management. *Computer*, **2002**, 35, 56-59	1.6	64
38	Enabling knowledge representation on the Web by extending RDF Schema. *Computer Networks*, **2002**, 39, 609-634	5.4	20
37	Combinations of Modal Logics. *Artificial Intelligence Review*, **2002**, 17, 1-20	9.7	26
36	Evaluating Optimized Decision Procedures for Propositional Modal K (m) Satisfiability. *Journal of Automated Reasoning*, **2002**, 28, 173-204	1	3
35	DAML+OIL: A Reason-Able Web Ontology Language. *Lecture Notes in Computer Science*, **2002**, 174-174	0.9	3
34	Abox Satisfiability Reduced to Terminological Reasoning in Expressive Description Logics. *Lecture Notes in Computer Science*, **2002**, 435-449	0.9	1
33	Extending Datatype Support in Web Ontology Reasoning. *Lecture Notes in Computer Science*, **2002**, 1067-1081	0.9	7
32	Reasoning with Expressive Description Logics: Theory and Practice. *Lecture Notes in Computer Science*, **2002**, 1-15	0.9	13
31	DAML+OIL: A Reason-able Web Ontology Language. *Lecture Notes in Computer Science*, **2002**, 2-13	0.9	24
30	Querying the Semantic Web: A Formal Approach. *Lecture Notes in Computer Science*, **2002**, 177-191	0.9	45
29	Enabling knowledge representation on the Web by extending RDF schema **2001**,		34
28	. *IEEE Intelligent Systems*, **2001**, 16, 38-45	4.2	318
27	OilEd: A Reason-able Ontology Editor for the Semantic Web. *Lecture Notes in Computer Science*, **2001**, 396-408	0.9	88
26	The Semantic Web: the roles of XML and RDF. *IEEE Internet Computing*, **2000**, 4, 63-73	2.4	280
25	Reasoning with Individuals for the Description Logic (mathcal{SHIQ}). *Lecture Notes in Computer Science*, **2000**, 482-496	0.9	68
24	Benchmark Analysis with FaCT. *Lecture Notes in Computer Science*, **2000**, 62-66	0.9	8
23	How to Decide Query Containment under Constraints Using a Description Logic **2000**, 326-343		23

22	Optimizing description logic subsumption. *Journal of Logic and Computation*, **1999**, 9, 267-293	0.4	90
21	A description logic with transitive and inverse roles and role hierarchies. *Journal of Logic and Computation*, **1999**, 9, 385-410	0.4	132
20	Practical Reasoning for Expressive Description Logics. *Lecture Notes in Computer Science*, **1999**, 161-180	0.9	139
19	Feasibility of Optimised Disjunctive Reasoning for Approximate Matching. *Lecture Notes in Computer Science*, **1999**, 328-339	0.9	1
18	DLP and FaCT. *Lecture Notes in Computer Science*, **1999**, 19-23	0.9	8
17	The FaCT System. *Lecture Notes in Computer Science*, **1998**, 307-312	0.9	78
16	Optimising propositional modal satisfiability for description logic subsumption. *Lecture Notes in Computer Science*, **1998**, 234-246	0.9	9
15	FaCT and DLP. *Lecture Notes in Computer Science*, **1998**, 27-30	0.9	17
14	The GRAIL concept modelling language for medical terminology. *Artificial Intelligence in Medicine*, **1997**, 9, 139-71	7.4	176
13	OIL and DAML + OIL: Ontology Languages for the Semantic Web11-31		1
12	Hypertableau Reasoning for Description Logics. *Journal of Artificial Intelligence Research*,36, 165-228	4	162
11	Completeness Guarantees for Incomplete Ontology Reasoners: Theory and Practice. *Journal of Artificial Intelligence Research*,43, 419-476	4	15
10	PAGOdA: Pay-As-You-Go Ontology Query Answering Using a Datalog Reasoner. *Journal of Artificial Intelligence Research*,54, 309-367	4	18
9	Module Extraction in Expressive Ontology Languages via Datalog Reasoning. *Journal of Artificial Intelligence Research*,55, 499-564	4	15
8	From SHIQ and RDF to OWL: The Making of a Web Ontology Language. *SSRN Electronic Journal*,	1	8
7	Owl Rules: A Proposal and Prototype Implementation. *SSRN Electronic Journal*,	1	4
6	OWL2: The Next Step for OWL. *SSRN Electronic Journal*,	1	3
5	Bridging the Gap Between OWL and Relational Databases. *SSRN Electronic Journal*,	1	1

4	OWL-Eu: Adding Customised Datatypes Into OWL. *SSRN Electronic Journal*,	1	1
3	A Comparison of Two Modelling Paradigms in the Semantic Web. *SSRN Electronic Journal*,	1	2
2	Modular Materialisation of Datalog Programs. *Proceedings of the AAAI Conference on Artificial Intelligence*,33, 2859-2866	5	2
1	A Novel Approach to Ontology Classification. *SSRN Electronic Journal*,	1	2