

S Barry Cooper

List of Publications by Year in descending order

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54
papers

524
citations

933264

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713332

21
g-index

57
all docs

57
docs citations

57
times ranked

141
citing authors

#	ARTICLE	IF	CITATIONS
1	The d.r.e. degrees are not dense. <i>Annals of Pure and Applied Logic</i> , 1991, 55, 125-151.	0.3	70
2	Emergence as a computability-theoretic phenomenon. <i>Applied Mathematics and Computation</i> , 2009, 215, 1351-1360.	1.4	68
3	Weak density and cupping in the d-r.e. degrees. <i>Israel Journal of Mathematics</i> , 1989, 67, 137-152.	0.4	46
4	Enumeration reducibility, nondeterministic computations and relative computability of partial functions. <i>Lecture Notes in Mathematics</i> , 1990, , 57-110.	0.1	46
5	On minimal pairs of enumeration degrees. <i>Journal of Symbolic Logic</i> , 1985, 50, 983-1001.	0.4	38
6	Incomputability in Nature. , 2003, , 137-160.		28
7	The jump is definable in the structure of the degrees of unsolvability. <i>Bulletin of the American Mathematical Society</i> , 1990, 23, 151-159.	0.8	23
8	There is No Low Maximal D.C.E. Degree. <i>Mathematical Logic Quarterly</i> , 2000, 46, 409-416.	0.2	19
9	The density of the low ₂ n-r.e. degrees. <i>Archive for Mathematical Logic</i> , 1991, 31, 19-24.	0.2	17
10	Clockwork or Turing U/universe? - Remarks on Causal Determinism and Computability. , 1999, , 63-116.		14
11	Turing Definability in the Ershov Hierarchy. <i>Journal of the London Mathematical Society</i> , 2002, 66, 513-528.	0.5	12
12	Turing's Titanic machine?. <i>Communications of the ACM</i> , 2012, 55, 74-83.	3.3	12
13	There is no low maximal d. c. e. degreeâ€“ Corrigendum. <i>Mathematical Logic Quarterly</i> , 2004, 50, 628-636.	0.2	10
14	Computability and Emergence. , 2006, , 193-231.		10
15	Non-Uniformity and Generalised Sacks Splitting. <i>Acta Mathematica Sinica, English Series</i> , 2002, 18, 327-334.	0.2	8
16	Bounding and nonbounding minimal pairs in the enumeration degrees. <i>Journal of Symbolic Logic</i> , 2005, 70, 741-766.	0.4	8
17	Definability as hypercomputational effect. <i>Applied Mathematics and Computation</i> , 2006, 178, 72-82.	1.4	8
18	How enumeration reductibility yields extended Harrington non-splitting. <i>Journal of Symbolic Logic</i> , 2008, 73, 634-655.	0.4	8

#	ARTICLE	IF	CITATIONS
19	On a Conjecture of Kleene and Post. <i>Mathematical Logic Quarterly</i> , 2001, 47, 3-33.	0.2	7
20	Initial Segments of Recursive Linear Orders. <i>Order</i> , 1997, 14, 101-105.	0.3	6
21	Splitting and nonsplitting, II: A low ₂ c.e. degree above which 0^{Δ^2} is not splittable. <i>Journal of Symbolic Logic</i> , 2002, 67, 1391-1430.	0.4	6
22	The mathematics of nature at the Alan Turing centenary. <i>Interface Focus</i> , 2012, 2, 393-396.	1.5	6
23	Local Degree Theory* *Preparation of this paper partially supported by E.P.S.R.C. research grants nos. GR/H91213 and GR/H02165, and by EC Human Capital and Mobility network "Complexity, Logic and Recursion Theory". <i>Studies in Logic and the Foundations of Mathematics</i> , 1999, 140, 121-153.	0.2	5
24	Noncappable enumeration degrees below 0^{Δ^2} . <i>Journal of Symbolic Logic</i> , 1996, 61, 1347-1363.	0.4	4
25	Properly Σ^1_1 minimal degrees and $0^?$ complementation. <i>Mathematical Logic Quarterly</i> , 2005, 51, 274-276.	0.2	4
26	On Lachlan's major sub-degree problem. <i>Archive for Mathematical Logic</i> , 2008, 47, 341-434.	0.2	4
27	The Mathematician's Bias and the Return to Embodied Computation. , 2012, , 125-142.		4
28	The machine as data: a computational view of emergence and definability. <i>Synthese</i> , 2015, 192, 1955-1988.	0.6	4
29	The Incomputable Alan Turing. , 0, , .		4
30	A Splitting Theorem for the N-R.E. Degrees. <i>Proceedings of the American Mathematical Society</i> , 1992, 115, 461.	0.4	3
31	Automorphisms of $\hat{\Sigma}^1_1$ -like computable linear orderings and Kierstead's conjecture. <i>Mathematical Logic Quarterly</i> , 2016, 62, 481-506.	0.2	3
32	On the distribution of Lachlan nonsplitting bases. <i>Archive for Mathematical Logic</i> , 2002, 41, 455-482.	0.2	2
33	Definability and elementary equivalence in the Ershov difference hierarchy. , 0, , 1-17.		2
34	The discontinuity of splitting in the recursively enumerable degrees. <i>Archive for Mathematical Logic</i> , 1995, 34, 247-256.	0.2	1
35	A characterisation of the jumps of minimal degrees below 0^{Δ^2} . , 1996, , 81-92.		1
36	Strong Minimal Covers for Recursively Enumerable Degrees. <i>Mathematical Logic Quarterly</i> , 1996, 42, 191-196.	0.2	1

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37	Preface to Special Issue: Theory and Applications of Models of Computation (TAMC). Mathematical Structures in Computer Science, 2009, 19, 5-7.	0.5	1
38	Computability at Logic Colloquium 2009. Journal of Logic and Computation, 2012, 22, 667-667.	0.5	1
39	The foundations of computation, physics and mentality: the Turing legacy. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2012, 370, 3273-3276.	1.6	1
40	There exists a maximal 3-C.E. enumeration degree. Israel Journal of Mathematics, 2003, 137, 285-320.	0.4	0
41	Mathematics of computing at CiE 2005. Mathematical Structures in Computer Science, 2006, 16, 735.	0.5	0
42	Theory of Computation at CiE 2005. Theory of Computing Systems, 2007, 41, 1-2.	0.7	0
43	Computation and Logic in the Real World: CiE 2007. Theory of Computing Systems, 2009, 45, 647-649.	0.7	0
44	Extending and interpreting Post's programme. Annals of Pure and Applied Logic, 2010, 161, 775-788.	0.3	0
45	Introduction: computability of the physical. Mathematical Structures in Computer Science, 2012, 22, 723-728.	0.5	0
46	From natural philosophy to computation, and back again. , 2012, , .		0
47	The incomputable. Journal of Logic and Computation, 2013, 23, 1143-1144.	0.5	0
48	"Real" information is not flat and why it matters. Journal of Experimental and Theoretical Artificial Intelligence, 2015, 27, 3-11.	1.8	0
49	Linearisations and the Ershov hierarchy. Computability, 2018, 7, 143-169.	0.3	0
50	Splitting and jump inversion in the Turing degrees. Computability, 2018, 7, 133-142.	0.3	0
51	The Extended Turing Model as Contextual Tool. Lecture Notes in Computer Science, 2009, , 18-28.	1.0	0
52	Definability in the Real Universe. , 2011, , 131-167.		0
53	Mathematics, Metaphysics and the Multiverse. Lecture Notes in Computer Science, 2012, , 252-267.	1.0	0
54	The discontinuity of splitting in the recursively enumerable degrees. Archive for Mathematical Logic, 1995, 34, 247-256.	0.2	0