

# John Rhodes

## List of Publications by Year in descending order

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57  
papers

1,195  
citations

394421

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395702

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g-index

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all docs

57  
docs citations

57  
times ranked

136  
citing authors

#	ARTICLE	IF	CITATIONS
1	Algebraic theory of machines. I. Prime decomposition theorem for finite semigroups and machines. Transactions of the American Mathematical Society, 1965, 116, 450-464.	0.9	253
2	ASH'S TYPE II THEOREM, PROFINITE TOPOLOGY AND MALCEV PRODUCTS: PART I. International Journal of Algebra and Computation, 1991, 01, 411-436.	0.5	85
3	The kernel of monoid morphisms. Journal of Pure and Applied Algebra, 1989, 62, 227-268.	0.6	64
4	Complexity of Finite Semigroups. Annals of Mathematics, 1968, 88, 128.	4.2	63
5	Improved lower bounds for the complexity of finite semigroups. Journal of Pure and Applied Algebra, 1972, 2, 13-71.	0.6	52
6	Undecidability of the identity problem for finite semigroups. Journal of Symbolic Logic, 1992, 57, 179-192.	0.5	51
7	Some results on finite semigroups. Journal of Algebra, 1966, 4, 471-504.	0.7	38
8	Lower bounds for complexity of finite semigroups. Journal of Pure and Applied Algebra, 1971, 1, 79-95.	0.6	34
9	Group theory via global semigroup theory. Journal of Algebra, 1989, 120, 284-300.	0.7	33
10	UNDECIDABILITY, AUTOMATA, AND PSEUDOVARITIES OF FINITE SEMIGROUPS. International Journal of Algebra and Computation, 1999, 09, 455-473.	0.5	30
11	Infinite iteration of matrix semigroups II. Structure theorem for arbitrary semigroups up to aperiodic morphism. Journal of Algebra, 1986, 100, 25-137.	0.7	28
12	A homomorphism theorem for finite semigroups. Mathematical Systems Theory, 1967, 1, 289-304.	0.5	24
13	Chapter 4. Synthesis of the classical and modern theory of finite semigroups. Advances in Mathematics, 1973, 11, 238-266.	1.1	23
14	Decidability of complexity one-half for finite semigroups. Semigroup Forum, 1982, 24, 55-66.	0.6	23
15	Kernel systems – A global study of homomorphisms on finite semigroups. Journal of Algebra, 1977, 49, 1-45.	0.7	22
16	PROFINITE SEMIGROUPS, VARIETIES, EXPANSIONS AND THE STRUCTURE OF RELATIVELY FREE PROFINITE SEMIGROUPS. International Journal of Algebra and Computation, 2001, 11, 627-672.	0.5	22
17	APERIODIC POINTLIKES AND BEYOND. International Journal of Algebra and Computation, 2010, 20, 287-305.	0.5	21
18	Algebraic principles for the analysis of a biochemical system. Journal of Computer and System Sciences, 1967, 1, 119-136.	1.2	20

#	ARTICLE	IF	CITATIONS
19	The fundamental lemma of complexity for arbitrary finite semigroups. Bulletin of the American Mathematical Society, 1968, 74, 1104-1110.	3.9	20
20	Methods of the algebraic theory of machines. Journal of Computer and System Sciences, 1967, 1, 55-85.	1.2	18
21	MONOIDS ACTING ON TREES: ELLIPTIC AND WREATH PRODUCTS AND THE HOLONOMY THEOREM FOR ARBITRARY MONOIDS WITH APPLICATIONS TO INFINITE GROUPS. International Journal of Algebra and Computation, 1991, 01, 253-279.	0.5	18
22	Characters and complexity of finite semigroups. Journal of Combinatorial Theory, 1969, 6, 67-85.	0.4	17
23	Prime decomposition theorem for arbitrary semigroups: general holonomy decomposition and synthesis theorem. Journal of Pure and Applied Algebra, 1988, 55, 127-172.	0.6	17
24	Subsemigroups and complexity via the Presentation Lemma. Journal of Pure and Applied Algebra, 1995, 101, 245-289.	0.6	17
25	Realizing complex boolean functions with simple groups. Information and Control, 1966, 9, 190-195.	1.1	16
26	Proof of the Fundamental Lemma of Complexity (weak version) for arbitrary finite semigroups. Journal of Combinatorial Theory - Series A, 1971, 10, 22-73.	0.8	16
27	Closed subgroups of free profinite monoids are projective profinite groups. Bulletin of the London Mathematical Society, 2008, 40, 375-383.	0.8	15
28	Symmetry structure in discrete models of biochemical systems: natural subsystems and the weak control hierarchy in a new model of computation driven by interactions. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2015, 373, 20140223.	3.4	15
29	Proof of the fundamental Lemma of complexity (strong version) for arbitrary finite semigroups. Journal of Combinatorial Theory - Series A, 1974, 16, 209-214.	0.8	13
30	Infinite iteration of matrix semigroups I. Structure theorem for torsion semigroups. Journal of Algebra, 1986, 98, 422-451.	0.7	12
31	A PROFINITE APPROACH TO STABLE PAIRS. International Journal of Algebra and Computation, 2010, 20, 269-285.	0.5	12
32	Representation theory of finite semigroups over semirings. Journal of Algebra, 2011, 336, 139-157.	0.7	11
33	Complexity of ideals in finite semigroups and finite-state machines. Mathematical Systems Theory, 1967, 1, 59-66.	0.5	9
34	Finite binary relations have no more complexity than finite functions. Semigroup Forum, 1974, 7, 92-103.	0.6	9
35	A reduction theorem for complexity of finite semigroups. Semigroup Forum, 1975, 10, 96-114.	0.6	8
36	Monoids and Semigroups with Applications. , 1991, , .		8

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37	COMPLEXITY PSEUDOVARITIES ARE NOT LOCAL: TYPE II SUBSEMIGROUPS CAN FALL ARBITRARILY IN COMPLEXITY. International Journal of Algebra and Computation, 2006, 16, 739-748.	0.5	7
38	Krohn-Rhodes complexity pseudovarieties are not finitely based. RAIRO - Theoretical Informatics and Applications, 2005, 39, 279-296.	0.5	6
39	Complexity of grammars by group theoretic methods. Journal of Combinatorial Theory, 1968, 4, 222-239.	0.4	5
40	Chapter 2. Axioms for complexity for all finite semigroups. Advances in Mathematics, 1973, 11, 210-214.	1.1	4
41	On the cantor-dedekind property of the Tilson order on categories and graphs. Journal of Pure and Applied Algebra, 1987, 48, 55-82.	0.6	4
42	Turing machines and bimachines. Theoretical Computer Science, 2008, 400, 182-224.	0.9	4
43	Random walks on semaphore codes and delay de Bruijn semigroups. International Journal of Algebra and Computation, 2016, 26, 635-673.	0.5	4
44	FURTHER RESULTS ON MONOIDS ACTING ON TREES. International Journal of Algebra and Computation, 2012, 22, 1250034.	0.5	3
45	On the topology of a boolean representable simplicial complex. International Journal of Algebra and Computation, 2017, 27, 121-156.	0.5	3
46	On the subsemigroup complex of an aperiodic Brandt semigroup. Semigroup Forum, 2018, 97, 7-31.	0.6	3
47	A new notion of vertex independence and rank for finite graphs. International Journal of Algebra and Computation, 2015, 25, 123-167.	0.5	2
48	The semaphore codes attached to a Turing machine via resets and their various limits. International Journal of Algebra and Computation, 2016, 26, 675-704.	0.5	2
49	On the Dowling and Rhodes lattices and wreath products. Journal of Algebra, 2021, 578, 55-91.	0.7	2
50	Survey of Global Semigroup Theory. , 1990, , 243-269.		2
51	Transformations, Semigroups, and Metabolism. , 1968, , 130-140.		2
52	The kernel of a homomorphism on a finite semigroup. Semigroup Forum, 1974, 7, 153-163.	0.6	1
53	The lattice of flats of a boolean representable simplicial complex. International Journal of Algebra and Computation, 2018, 28, 1677-1691.	0.5	1
54	Degree 2 transformation semigroups as continuous maps on graphs: Foundations and structure. International Journal of Algebra and Computation, 2021, 31, 1065-1091.	0.5	1

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55	Truncated boolean representable simplicial complexes. International Journal of Algebra and Computation, 2020, 30, 1399-1435.	0.5	1
56	Holonomy theorem for finite semigroups. International Journal of Algebra and Computation, 0, , 1-18.	0.5	1
57	BRET TILSON: HIS LIFE AND WORK. International Journal of Algebra and Computation, 2010, 20, vii-xvii.	0.5	0