

# Valerie Berthe

## List of Publications by Year in descending order

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68  
papers

856  
citations

471061

17  
h-index

552369

26  
g-index

72  
all docs

72  
docs citations

72  
times ranked

184  
citing authors

#	ARTICLE	IF	CITATIONS
1	Tilings and rotations on the torus: a two-dimensional generalization of Sturmian sequences. <i>Discrete Mathematics</i> , 2000, 223, 27-53.	0.4	73
2	On an involution of Christoffel words and Sturmian morphisms. <i>European Journal of Combinatorics</i> , 2008, 29, 535-553.	0.5	43
3	Acyclic, connected and tree sets. <i>Monatshefte Fur Mathematik</i> , 2015, 176, 521-550.	0.5	42
4	Initial powers of Sturmian sequences. <i>Acta Arithmetica</i> , 2006, 122, 315-347.	0.2	41
5	Dynamical directions in numeration. <i>Annales De L'Institut Fourier</i> , 2006, 56, 1987-2092.	0.2	41
6	Discrete planes, $\mathbb{Z}^2$ -actions, Jacobi-Perron algorithm and substitutions. <i>Annales De L'Institut Fourier</i> , 2002, 52, 305-349.	0.2	35
7	Recognizability for sequences of morphisms. <i>Ergodic Theory and Dynamical Systems</i> , 2019, 39, 2896-2931.	0.4	30
8	Boundary of central tiles associated with Pisot beta-numeration and purely periodic expansions. <i>Monatshefte Fur Mathematik</i> , 2008, 155, 377-419.	0.5	26
9	Balance properties of multi-dimensional words. <i>Theoretical Computer Science</i> , 2002, 273, 197-224.	0.5	25
10	Two-dimensional iterated morphisms and discrete planes. <i>Theoretical Computer Science</i> , 2004, 319, 145-176.	0.5	24
11	Maximal bifix decoding. <i>Discrete Mathematics</i> , 2015, 338, 725-742.	0.4	23
12	Triangle de Pascal, complexité et automates. <i>Bulletin of the Belgian Mathematical Society - Simon Stevin</i> , 1997, 4, .	0.1	22
13	The finite index basis property. <i>Journal of Pure and Applied Algebra</i> , 2015, 219, 2521-2537.	0.3	18
14	Functional stepped surfaces, flips, and generalized substitutions. <i>Theoretical Computer Science</i> , 2007, 380, 251-265.	0.5	17
15	Purely periodic $\hat{\mathbb{I}}^2$ -expansions in the Pisot non-unit case. <i>Journal of Number Theory</i> , 2007, 127, 153-172.	0.2	17
16	Brun expansions of stepped surfaces. <i>Discrete Mathematics</i> , 2011, 311, 521-543.	0.4	16
17	Fractal tiles associated with shift radix systems. <i>Advances in Mathematics</i> , 2011, 226, 139-175.	0.5	16
18	On substitution invariant Sturmian words: an application of Rauzy fractals. <i>RAIRO - Theoretical Informatics and Applications</i> , 2007, 41, 329-349.	0.5	16

#	ARTICLE	IF	CITATIONS
19	Geometry, dynamics, and arithmetic of $S$ -adic shifts. Annales De L'Institut Fourier, 2019, 69, 1347-1409.	0.2	16
20	Bifix codes and interval exchanges. Journal of Pure and Applied Algebra, 2015, 219, 2781-2798.	0.3	15
21	Suites doubles de basse complexité. Journal De Theorie Des Nombres De Bordeaux, 2000, 12, 179-208.	0.0	15
22	Covering numbers: Arithmetics and dynamics for rotations and interval exchanges. Journal D'Analyse Mathematique, 1999, 79, 1-31.	0.4	14
23	Fractal representation of the attractive lamination of an automorphism of the free group. Annales De L'Institut Fourier, 2006, 56, 2161-2212.	0.2	14
24	BALANCE PROPERTIES OF ARNOUX-RAUZY WORDS. International Journal of Algebra and Computation, 2013, 23, 689-703.	0.4	13
25	Connectedness of fractals associated with Arnoux-Rauzy substitutions. RAIRO - Theoretical Informatics and Applications, 2014, 48, 249-266.	0.5	13
26	Smooth words over arbitrary alphabets. Theoretical Computer Science, 2005, 341, 293-310.	0.5	11
27	Odometers on Regular Languages. Theory of Computing Systems, 2007, 40, 1-31.	0.7	10
28	Rigidity and Substitutive Dendric Words. International Journal of Foundations of Computer Science, 2018, 29, 705-720.	0.8	10
29	Automates et valeurs de transcendance du logarithme de Carlitz. Acta Arithmetica, 1994, 66, 369-390.	0.2	9
30	Critical Connectedness of Thin Arithmetical Discrete Planes. Lecture Notes in Computer Science, 2013, , 107-118.	1.0	9
31	An Arithmetic and Combinatorial Approach to Three-Dimensional Discrete Lines. Lecture Notes in Computer Science, 2011, , 47-58.	1.0	8
32	Balancedness and coboundaries in symbolic systems. Theoretical Computer Science, 2019, 777, 93-110.	0.5	8
33	Lattices and multi-dimensional words. Theoretical Computer Science, 2004, 319, 177-202.	0.5	7
34	Linear Combinations of $\hat{\pi}(s)/\hat{\pi}$ Over $F_q(x)$ , where $1 \leq s \leq q-2$ . Journal of Number Theory, 1995, 53, 272-299.	0.2	6
35	Discrete rotations and symbolic dynamics. Theoretical Computer Science, 2007, 380, 276-285.	0.5	6
36	On some applications of generalized functionality for arithmetic discrete planes. Image and Vision Computing, 2007, 25, 1671-1684.	2.7	6

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37	Probabilistic analyses of the plain multiple gcd algorithm. <i>Journal of Symbolic Computation</i> , 2016, 74, 425-474.	0.5	6
38	Fonction $\zeta$ de Carlitz et automates. <i>Journal De Theorie Des Nombres De Bordeaux</i> , 1993, 5, 53-77.	0.0	6
39	Complexité et automates cellulaires linéaires. <i>RAIRO - Theoretical Informatics and Applications</i> , 2000, 34, 403-423.	0.5	5
40	Specular sets. <i>Theoretical Computer Science</i> , 2017, 684, 3-28.	0.5	5
41	Return words of linear involutions and fundamental groups. <i>Ergodic Theory and Dynamical Systems</i> , 2017, 37, 693-715.	0.4	5
42	Generating Discrete Planes with Substitutions. <i>Lecture Notes in Computer Science</i> , 2013, , 58-70.	1.0	5
43	A combinatorial approach to products of Pisot substitutions. <i>Ergodic Theory and Dynamical Systems</i> , 2016, 36, 1757-1794.	0.4	5
44	Selfdual substitutions in dimension one. <i>European Journal of Combinatorics</i> , 2012, 33, 981-1000.	0.5	4
45	Numeration and discrete dynamical systems. <i>Computing (Vienna/New York)</i> , 2012, 94, 369-387.	3.2	4
46	Some constructions for the higher-dimensional three-distance theorem. <i>Acta Arithmetica</i> , 2018, 184, 385-411.	0.2	4
47	A study of Jacobi's Perron boundary words for the generation of discrete planes. <i>Theoretical Computer Science</i> , 2013, 502, 118-142.	0.5	3
48	Fine costs for Euclid's algorithm on polynomials and Farey maps. <i>Advances in Applied Mathematics</i> , 2014, 54, 27-65.	0.4	3
49	The S-adic Pisot conjecture on two letters. <i>Topology and Its Applications</i> , 2016, 205, 47-57.	0.2	3
50	Specular Sets. <i>Lecture Notes in Computer Science</i> , 2015, , 210-222.	1.0	3
51	Uniformly balanced words with linear complexity and prescribed letter frequencies. <i>Electronic Proceedings in Theoretical Computer Science, EPTCS</i> , 0, 63, 44-52.	0.8	3
52	The Brun gcd algorithm in high dimensions is almost always subtractive. <i>Journal of Symbolic Computation</i> , 2018, 85, 72-107.	0.5	2
53	Arithmetic Discrete Planes Are Quasicrystals. <i>Lecture Notes in Computer Science</i> , 2009, , 1-12.	1.0	2
54	Asymptotic behavior of the number of solutions for non-Archimedean Diophantine approximations with restricted denominators. <i>Finite Fields and Their Applications</i> , 2008, 14, 849-866.	0.6	1

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55	Preface to the special issue on automatic sequences, number theory, and aperiodic order. <i>Indagationes Mathematicae</i> , 2017, 28, 1-2.	0.2	1
56	The carry propagation of the successor function. <i>Advances in Applied Mathematics</i> , 2020, 120, 102062.	0.4	1
57	Abstract Numeration Systems and Tilings. <i>Lecture Notes in Computer Science</i> , 2005, , 131-143.	1.0	1
58	Recurrence Function on Sturmian Words: A Probabilistic Study. <i>Lecture Notes in Computer Science</i> , 2015, , 116-128.	1.0	1
59	Effective S-adic Symbolic Dynamical Systems. <i>Lecture Notes in Computer Science</i> , 2016, , 13-23.	1.0	1
60	Arithmetic distributions of convergents arising from Jacobi-Perron algorithm. <i>Indagationes Mathematicae</i> , 2006, 17, 169-185.	0.2	0
61	Preface to the special issue dedicated to combinatorics, automata and number theory. <i>Theoretical Computer Science</i> , 2008, 391, 1-2.	0.5	0
62	About thin arithmetic discrete planes. <i>Theoretical Computer Science</i> , 2011, 412, 4757-4769.	0.5	0
63	Analysis of the Brun Gcd Algorithm. , 2016, , .		0
64	General Framework. <i>Trends in Mathematics</i> , 2018, , 1-36.	0.1	0
65	Analysis of generalized continued fraction algorithms over polynomials. <i>Finite Fields and Their Applications</i> , 2021, 73, 101849.	0.6	0
66	Discrete geometry and numeration. <i>Actes Des Rencontres Du CIRM</i> , 2009, 1, 17-22.	0.0	0
67	Convergence and Factor Complexity for the Arnoux-Rauzy-Poincaré Algorithm. <i>Lecture Notes in Computer Science</i> , 2013, , 71-82.	1.0	0
68	On Decision Problems for Substitutions in Symbolic Dynamics. <i>Lecture Notes in Computer Science</i> , 2020, , 3-19.	1.0	0