Rafael H Villarreal

List of Publications by Year
in descending order

87 papers	1,702 citations	394421 19 h-index	345221 36 g-index
89 all docs	89 docs citations	89 times ranked	295 citing authors

#	Article	IF	Citations
1	Rees algebras of filtrations of covering polyhedra and integral closure of powers of monomial ideals. Research in Mathematical Sciences, 2022, 9, 1.	1.0	4
2	The v-number of edge ideals. Journal of Combinatorial Theory - Series A, 2021, 177, 105310.	0.8	6
3	Evaluation codes and their basic parameters. Designs, Codes, and Cryptography, 2021, 89, 269-300.	1.6	7
4	The dual of an evaluation code. Designs, Codes, and Cryptography, 2021, 89, 1367-1403.	1.6	8
5	Unmixed and Cohen–Macaulay Weighted Oriented Kőnig Graphs. Studia Scientiarum Mathematicarum Hungarica, 2021, 58, 276-292.	0.1	1
6	Induced Matchings and the v-Number of Graded Ideals. Mathematics, 2021, 9, 2860.	2.2	4
7	Bounds for the minimum distance function. Analele Stiintifice Ale Universitatii Ovidius Constanta, Seria Matematica, 2021, 29, 229-242.	0.3	1
8	Generalized minimum distance functions and algebraic invariants of Geramita ideals. Advances in Applied Mathematics, 2020, 112, 101940.	0.7	12
9	Generalized Hamming weights of projective Reed–Muller-type codes over graphs. Discrete Mathematics, 2020, 343, 111639.	0.7	3
10	Linear codes over signed graphs. Designs, Codes, and Cryptography, 2020, 88, 273-296.	1.6	7
11	Joins, ears and Castelnuovo–Mumford regularity. Journal of Algebra, 2020, 560, 67-88.	0.7	3
12	Regularity of the vanishing ideal over a parallel composition of paths. Journal of Commutative Algebra, 2020, 12, .	0.3	1
13	On the generalized Hamming weights of certain Reed–Muller-type codes. Analele Stiintifice Ale Universitatii Ovidius Constanta, Seria Matematica, 2020, 28, 205-217.	0.3	0
14	Vanishing Ideals over Finite Fields. Mathematical Notes, 2019, 105, 429-438.	0.4	2
15	The dual of a constacyclic code, self dual, reversible constacyclic codes and constacyclic codes with complementary duals over finite local Frobenius non-chain rings with nilpotency index 3. Discrete Mathematics, 2019, 342, 2283-2296.	0.7	3
16	Indices of normalization of ideals. Journal of Pure and Applied Algebra, 2019, 223, 3681-3694.	0.6	1
17	Depth and Regularity of Monomial Ideals via Polarization and Combinatorial Optimization. Acta Mathematica Vietnamica, 2019, 44, 243-268.	0.4	8
18	Edge ideals of oriented graphs. International Journal of Algebra and Computation, 2019, 29, 535-559.	0.5	16

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19	Generalized minimum distance functions. Journal of Algebraic Combinatorics, 2019, 50, 317-346.	0.8	10
20	Complete Intersection Vanishing Ideals on Sets of Clutter Type over Finite Fields. Bulletin of the Malaysian Mathematical Sciences Society, 2018, 41, 81-89.	0.9	0
21	Minimum distance functions of complete intersections. Journal of Algebra and Its Applications, 2018, 17, 1850204.	0.4	8
22	Symbolic Powers of Monomial Ideals and Cohen-Macaulay Vertex-Weighted Digraphs. , 2018, , 491-510.		9
23	The second generalized Hamming weight of some evaluation codes arising from a projective torus. Finite Fields and Their Applications, 2018, 52, 370-394.	1.0	8
24	Minimum distance functions of graded ideals and Reed–Muller-type codes. Journal of Pure and Applied Algebra, 2017, 221, 251-275.	0.6	34
25	On complete monomial ideals. Journal of Commutative Algebra, 2016, 8, .	0.3	4
26	Direct products in projective Segre codes. Finite Fields and Their Applications, 2016, 39, 96-110.	1.0	2
27	Vanishing Ideals Over Graphs and Even Cycles. Communications in Algebra, 2015, 43, 1050-1075.	0.6	11
28	Binomial vanishing ideals. Journal of Algebra Combinatorics Discrete Structures and Applications, 2015, 2, .	0.3	1
29	Regularity and algebraic properties of certain lattice ideals. Bulletin of the Brazilian Mathematical Society, 2014, 45, 777-806.	0.8	11
30	Degree and Algebraic Properties of Lattice and Matrix Ideals. SIAM Journal on Discrete Mathematics, 2014, 28, 394-427.	0.8	16
31	Affine cartesian codes. Designs, Codes, and Cryptography, 2014, 71, 5-19.	1.6	43
32	Computing the degree of a lattice ideal of dimension one. Journal of Symbolic Computation, 2014, 65, 15-28.	0.8	6
33	Complete intersection vanishing ideals on degenerate tori over finite fields. Arabian Journal of Mathematics, 2013, 2, 189-197.	0.9	6
34	The Degree and Regularity of Vanishing Ideals of Algebraic Toric Sets Over Finite Fields. Communications in Algebra, 2013, 41, 3376-3396.	0.6	9
35	COMPLETE INTERSECTIONS IN BINOMIAL AND LATTICE IDEALS. International Journal of Algebra and Computation, 2013, 23, 1419-1429.	0.5	6
36	Toric Ideals Generated by Circuits. Algebra Colloquium, 2012, 19, 665-672.	0.2	7

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37	Parameterized affine codes. Studia Scientiarum Mathematicarum Hungarica, 2012, 49, 406-418.	0.1	7
38	ON THE VANISHING IDEAL OF AN ALGEBRAIC TORIC SET AND ITS PARAMETRIZED LINEAR CODES. Journal of Algebra and Its Applications, 2012, 11, 1250072.	0.4	8
39	Associated primes of powers of edge ideals. Collectanea Mathematica, 2012, 63, 361-374.	0.9	56
40	Combinatorics of Cremona monomial maps. Mathematics of Computation, 2012, 81, 1857-1867.	2.1	11
41	Edge Ideals: Algebraic and Combinatorial Properties. , 2012, , 85-126.		64
42	Algebraic and combinatorial properties of ideals andÂalgebras of uniform clutters of TDI systems. Journal of Combinatorial Optimization, 2011, 21, 269-292.	1.3	10
43	The minimum distance of parameterized codes on projective tori. Applicable Algebra in Engineering, Communications and Computing, 2011, 22, 249-264.	0.5	33
44	Algebraic methods for parameterized codes and invariants of vanishing ideals over finite fields. Finite Fields and Their Applications, 2011, 17, 81-104.	1.0	43
45	Ring graphs and complete intersection toric ideals. Discrete Mathematics, 2010, 310, 430-441.	0.7	43
46	Systems with the integer rounding property in normal monomial subrings. Anais Da Academia Brasileira De Ciencias, 2010, 82, 801-811.	0.8	4
47	Ehrhart Clutters: Regularity and Max-Flow Min-Cut. Electronic Journal of Combinatorics, 2010, 17, .	0.4	6
48	Edge ideals of clique clutters of comparability graphs and the normality of monomial ideals. Mathematica Scandinavica, 2010, 106, 88.	0.2	8
49	Cohen-Macaulay clutters with combinatorial optimization properties and parallelizations of normal edge ideals. Sao Paulo Journal of Mathematical Sciences, 2009, 3, 61.	0.4	5
50	Cohen-Macaulay admissible clutters. Journal of Commutative Algebra, 2009, 1, .	0.3	11
51	Blowup Algebras of Square-Free Monomial Ideals and Some Links to Combinatorial Optimization Problems. Rocky Mountain Journal of Mathematics, 2009, 39, .	0.4	29
52	Rees algebras and polyhedral cones of ideals of vertex covers of perfect graphs. Journal of Algebraic Combinatorics, 2008, 27, 293-305.	0.8	16
53	Shellable graphs and sequentially Cohenâ€"Macaulay bipartite graphs. Journal of Combinatorial Theory - Series A, 2008, 115, 799-814.	0.8	61
54	Rees cones and monomial rings of matroids. Linear Algebra and Its Applications, 2008, 428, 2933-2940.	0.9	14

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55	Cohenâ€"Macaulay, shellable and unmixed clutters with a perfect matching of KÃ¶nig type. Journal of Pure and Applied Algebra, 2008, 212, 1770-1786.	0.6	28
56	Normalization of monomial ideals and Hilbert functions. Proceedings of the American Mathematical Society, 2008, 136, 1933-1943.	0.8	1
57	Ring graphs and toric ideals. Electronic Notes in Discrete Mathematics, 2007, 28, 393-400.	0.4	10
58	A note on the Rees algebra of a bipartite graph. Journal of Pure and Applied Algebra, 2005, 201, 17-24.	0.6	10
59	Normality of semigroups with some links to graph theory. Discrete Mathematics, 2005, 302, 267-284.	0.7	4
60	Linear syzygies and birational combinatorics. Resultate Der Mathematik, 2005, 48, 326-343.	0.2	8
61	Torsion freeness and normality of blowup rings of monomial ideals. Lecture Notes in Pure and Applied Mathematics, 2005, , 69-84.	0.1	17
62	Relative volumes and minors in monomial subrings. Linear Algebra and Its Applications, 2003, 374, 275-290.	0.9	15
63	Canonical modules of certain edge subrings. European Journal of Combinatorics, 2003, 24, 471-487.	0.8	11
64	Monomial algebras and polyhedral geometry. Handbook of Algebra, 2003, , 257-314.	0.4	0
65	Constraints for the normality of monomial subrings and birationality. Proceedings of the American Mathematical Society, 2002, 131, 2043-2048.	0.8	18
66	On the normality of Rees algebras associated to totally unimodular matrices. Resultate Der Mathematik, 2002, 41, 258-264.	0.2	5
67	ON THE NORMALITY OF MONOMIAL IDEALS OF MIXED PRODUCTS. Communications in Algebra, 2001, 29, 3571-3580.	0.6	30
68	On systems of binomials in the ideal of a toric variety. Proceedings of the American Mathematical Society, 2001, 130, 345-351.	0.8	17
69	A note on affine toric varieties. Linear Algebra and Its Applications, 2000, 318, 173-179.	0.9	12
70	Monomial Algebras. Pure and Applied Mathematics, 2000, , .	0.0	59
71	Rees algebras of complete bipartite graphs.. Matematica Contemporanea, 1999, 16, .	0.0	2
72	The Integral Closure of Subrings Associated to Graphs. Journal of Algebra, 1998, 199, 281-289.	0.7	64

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73	On the equations of the edge cone of a graph¶and some applications. Manuscripta Mathematica, 1998, 97, 309-317.	0.6	20
74	Generic Gaussian ideals. Journal of Pure and Applied Algebra, 1998, 125, 117-127.	0.6	21
75	Cohen-macaulay bipartite graphs. Archiv Der Mathematik, 1997, 68, 124-128.	0.5	23
76	Degree bounds in monomial subrings. Illinois Journal of Mathematics, 1997, 41, .	0.1	14
77	A note on generators of least degree in Gorenstein ideals. Proceedings of the American Mathematical Society, 1996, 124, 377-382.	0.8	5
78	Normality of subrings generated by square free monomials. Journal of Pure and Applied Algebra, 1996, 113, 91-106.	0.6	19
79	Rees algebras of edge ideals. Communications in Algebra, 1995, 23, 3513-3524.	0.6	108
80	Critical binomials of monomial curves. Communications in Algebra, 1994, 22, 3037-3052.	0.6	10
81	On the Ideal Theory of Graphs. Journal of Algebra, 1994, 167, 389-416.	0.7	210
82	Koszul Homology of Cohen-Macaulay Rings with Linear Resolutions. Proceedings of the American Mathematical Society, 1992, 115, 51.	0.8	3
83	Koszul homology of Cohen-Macaulay rings with linear resolutions. Proceedings of the American Mathematical Society, 1992, 115, 51-58.	0.8	3
84	Cohen-macaulay graphs. Manuscripta Mathematica, 1990, 66, 277-293.	0.6	182
85	Rees algebras and Koszul homology. Journal of Algebra, 1988, 119, 83-104.	0.7	5
86	On Gorenstein ideals of codimension four. Proceedings of the American Mathematical Society, 1986, 98, 205-205.	0.8	9
87	Explicit representations of the edge cone of a graph. International Journal of Contemporary Mathematical Sciences, 0, , 53-66.	0.3	8