

## LIST OF PUBLICATIONS

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- (1) Buchsbaumness and Castelnuovo-Mumford regularity of non-smooth monomial curves. *J. Algebra* 590 (2022), 313337 (with T.T.G. Lam)
- (2) Depth functions and symbolic depth functions of homogeneous ideals. *Commutative algebra*, 429443, Springer, 2021 (with H.T. Ha)
- (3) Depth functions of powers of homogeneous ideals,  
*Proc. Amer. Math. Soc.* 149 (2021), 1837–1844 (with H.T. Ha, H.D. Nguyen, T.N. Trung)
- (4) Multiplicity sequence and integral dependence,  
*Math. Ann.* 378 (2020), 951–969 (with C. Polini, B. Ulrich, J. Validashti)
- (5) Symbolic powers of sums of ideals,  
*Math. Z.* 294 (2020), 1499–1520 (with H.T. Ha, H.D. Nguyen, T.N. Trung)
- (6) Depth functions of symbolic powers of homogeneous ideals,  
*Invent. Math.* 218 (2019), 779–827 (with H.D. Nguyen)
- (7) Associated primes of powers of edge ideals and ear decompositions of graphs,  
*Trans. Amer. Math. Soc.* 372 (2019), 3211–3236 (with H.M. Lam)
- (8) Membership criteria and containments of powers of monomial ideals,  
*Acta Math. Vietnam.* 44 (2019), 117–139 (with H. T. Ha)
- (9) Depth and regularity modulo a principal ideal,  
*J. Alg. Comb.* 49 (2019), 1–20 (with G. Caviglia, H.T. Ha, J. Herzog, M. Kummini, N. Terai)
- (10) Toward a theory of monomial preorders,  
*Math. Comp.* 87 (2018), 2513–2537 (with G. Kemper and N.T. Van Anh)
- (11) Castelnuovo-Mumford regularity and Ratliff-Rush closure,  
*J. Algebra* 504 (2018), 568–586 (with M.E. Rossi, D.T. Trung).
- (12) Depth and regularity of powers of sums of ideals,  
*Math. Z.* 282 (2016), 819–838 (with H.T. Ha, T.N. Trung)
- (13) Saturation and associated primes of powers of edge ideals,  
*J. Algebra* 439 (2015), 225–244 (with H.T.T. Hien, H.M. Lam)
- (14) The Bhattacharya function of complete monomial ideals in two variables,  
*Commun. Algebra* 43 (2015), No. 7, 2875–2886 (with H.N. Binh)
- (15) Krull dimension and monomial orders,  
*J. Algebra* 399 (2014), 782–800 (with G. Kemper).
- (16) On the associated primes and the depth of the second power of squarefree monomial ideals,  
*J. Pure Appl. Algebra* 218 (2014), 1117–1129 (with N. Terai).
- (17) Cohen-Macaulayness of large powers of Stanley-Reisner ideals,  
*Advances in Math.* 229 (2012), 711–730 (with N. Terai)
- (18) Equality of ordinary and symbolic powers of Stanley-Reisner ideals,  
*J. Algebra* 328 (2011), 77–93 (with T.M. Tuan).
- (19) Cohen-Macaulayness of monomial ideals and symbolic powers of Stanley-Reisner ideals,  
*Advances in Math.* 226 (2011), 1285–1306 (with N.C. Minh).
- (20) Hilbert functions of multigraded algebras, mixed multiplicities of ideals and their applications,  
*J. Commut. Algebra* 2 (2010), 515–565 (with J.K. Verma).
- (21) Vertex cover algebras of unimodular hypergraphs,  
*Proc. Amer. Math. Soc.* 137, No. 2, 409–414 (2009) (with J. Herzog, T. Hibi).
- (22) Cohen-Macaulayness of powers of two-dimensional squarefree monomial ideals,  
*J. Algebra* 322 (2009), 4219–4227 (with N.C. Minh).

- (23) Standard vertex cover algebras, cycles and leaves,  
*Trans. Amer. Math. Soc.* 360 (2008), 6231–6249 (with J. Herzog, T. Hibi, X. Zheng)
- (24) Kruskal-Katona type theorems for clique arising from chordal and strongly chordal graphs,  
*Combinatorica* 28 (2008), 315–323 (with J. Herzog, T. Hibi, S. Murai, X. Zheng)
- (25) Mixed multiplicities of ideals versus mixed volumes of polytopes,  
*Trans. Amer. Math. Soc.* 359 (2007), 4711–4727 (with J. Verma)
- (26) On the regularity of products and intersections of ideals,  
*Proc. Amer. Math. Soc.* 135 (2007), 1597–1606 (with M. Chardin, N.C. Minh)
- (27) Symbolic powers of monomial ideals and vertex power algebras,  
**Advances in Math.** 210 (2007), 304–322 (with J. Herzog, T. Hibi)
- (28) Castelnuovo-Mumford regularity and related invariants,  
in: Commutative Algebra, Lecture Notes Series 4, Ramanujan Mathematical Society, 2007, 157–180
- (29) Uniform bounds in generalized Cohen-Macaulay rings,  
*J. Algebra* 304 (2006), 1147–1159 (with C. H. Linh).
- (30) Integral closures of monomial ideals and Fulkersonian hypergraphs,  
*Vietnam J. Math.* 34 (2006), 489–494
- (31) Castelnuovo-Mumford regularity and finiteness of Hilbert functions,  
in: Commutative algebra, 193–209, Lect. Notes Pure Appl. Math., 244, Chapman & Hall/CRC, Boca Raton, FL, 2006 (with M. Rossi, G. Valla)
- (32) On the asymptotic linearity of Castelnuovo-Mumford regularity,  
*J. Pure Appl. Algebra* 201 (2005), 42–48 (with H.J. Wang)
- (33) On the core of ideals,  
**Compositio Math.** 141 (2005), 1–18. (with C. Huneke).
- (34) Asymptotic behaviour of arithmetic Cohen-Macaulay blow-ups,  
*Trans. Amer. Math. Soc.* 357 (2005), no. 9, 3655–3672 (with H.T. Ha)
- (35) Borel-fixed ideals and reduction number,  
*J. Algebra* 259 (2003), 127–146 (with L.T. Hoa)
- (36) Hilbert polynomials of non-standard bigraded algebras,  
*Math. Z.* 245 (2003), 309–334 (with N.D. Hoang)
- (37) Constructive characterization of the reduction numbers,  
**Compositio Math.** 137 (2003), 99–113
- (38) Castelnuovo-Mumford regularity and extended degree,  
*Trans. Amer. Math. Soc.* 355 (2003), 1773–1786 (with M. Rossi, G. Valla)
- (39) Regularity of Rees algebras of homogeneous ideals,  
*J. London Math. Soc.* 65 (2002), 320–338 (with J. Herzog, D. Popescu)
- (40) Evaluations of the initial ideal and Castelnuovo-Mumford regularity,  
*Proc. Amer. Math. Soc.* 130 (2002), 1265–1274
- (41) Asymptotic linear bounds for the Castelnuovo-Mumford regularity,  
*Trans. Amer. Math. Soc.* 354 (2002), 1793–1809 (with J. Herzog, L. T. Hoa).
- (42) Problems and algorithms for affine semigroups,  
*Semigroup Forum* 64 (2) (2002), 180–212 (with W. Bruns, J. Gubeladze)
- (43) Gröbner bases, local cohomology and reduction number,  
*Proc. Amer. Math. Soc.* 129 (2001), 9–18
- (44) Koszul property for points in projective space,  
*Math. Scand.* 89 (2) (2001), 201–216 (with A. Conca, G. Valla)
- (45) Positivity of mixed multiplicities,  
**Math. Ann.** 319 (2001), 33–63
- (46) Diagonal subalgebras and blow-ups of projective spaces,  
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- (47) Castelnuovo-Mumford regularity and analytic deviation of ideals,  
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- (48) Specialization of modules over a local ring,  
*J. Pure Appl. Algebra* 152 (2000), 275–288 (with D.V. Nhi)
- (49) Specialization of modules,  
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- (50) Asymptotic behaviour of Castelnuovo-Mumford regularity,  
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- (51) The largest non-vanishing degree of graded local cohomology modules,  
*J. Algebra* 215 (1999), 481–499
- (52) The diagonal subalgebras of a blow-up ring,  
*J. Pure Appl. Algebra* 125 (1998), 305–328 (with A. Simis, G. Valla)
- (53) The Castelnuovo regularity of the Rees algebra and the associated graded ring,  
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- (54) On the Castelnuovo-Mumford regularity and the arithmetic degree of monomial ideals,  
*Math. Z.* 229 (1998), 519–537 (with L.T. Hoa)
- (55) Normal polytopes, triangulations and Koszul algebras,  
**J. Reine Angew. Math.** 485 (1997), 123–160 (with W. Bruns, J. Gubeladze)
- (56) Diagonal subalgebras and embeddings of blow-ups of projective spaces,  
**Amer. J. Math.** 119 (1997), 859–901 (with A. Conca, J. Herzog, G. Valla)
- (57) The lifting of determinantal ideals,  
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- (58) When is the Rees algebra Gorenstein?,  
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- (59) On multi-Rees algebras (Appendix),  
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- (60) Upper bounds for the regularity index of fat points with uniform position property,  
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- (61) On zero-dimensional subschemes of complete intersections,  
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- (62) Reduction numbers, Briancon-Skoda theorem and the depth of Rees rings,  
**Compositio Math.** 97 (1995), 403–434 (with J. Aberbach and C. Huneke)
- (63) Bounds on degrees of projective schemes,  
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- (64) Hyperplane sections of reduced irreducible varieties of low codimension,  
*J. Math. Kyoto Univ.* 34 (1994), 47–72 (with J. Herzog, G. Valla)
- (65) An algebraic approach to the regularity index of fat points in  $\mathbb{P}^n$ ,  
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- (66) Reduction number,  $a$ -invariant, and Rees algebras of ideals having small analytic deviation,  
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- (69) A sharp bound for the regularity index of fat points in general position,  
*Proc. Amer. Math. Soc.* (1993), 717–724 (with M.V. Catalisano, G. Valla)
- (70) Gröbner bases and multiplicity of determinantal and Pfaffian ideals,  
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- (71) On the multiplicity of Rees algebras and associated graded rings of d-sequences,  
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- (72) On the Cohen-Macaulay and Gorenstein property of Rees algebras of non-singular equimultiple prime ideals,  
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- (74) Bounds for the multiplicity of almost complete intersections,  
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- (76) Blow-ups of straightening closed ideals in ordinal Hodge algebras,  
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- (77) Sur la fonction de Hilbert-Samuel des clôtures intégrales des puissances d'idéaux engendrés par un système de paramètres,  
*J. Algebra* 129 (1990), 96–102 (with M. Morales, O. Villamayor)
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- (79) The Cohen-Macaulay type of points in generic position,  
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- (80) The divisor class group of ordinary and symbolic blow-ups,  
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- (81) Degree bounds for the defining equations of arithmetically Cohen-Macaulay varieties,  
*Math. Ann.* 281 (1988), 479–491 (with G. Valla)
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- (83) Reduction exponent and degree bounds for the defining equations of graded rings,  
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- (86) Maximum number of independent elements and dimension of prime divisors in completions of local rings,  
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- (88) Bounds for the minimum number of generators of generalized Cohen-Macaulay ideals,  
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- (91) Projections of one-dimensional Veronese varieties, *Math. Nachr.* 118 (1984), 47–67
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- (97) A class of imperfect prime ideals having the equality of ordinary and symbolic powers,  
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- (103) Spezialisierungen allgemeiner Hyperflächenschnitte und Anwendungen,  
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- (104) Some criteria for Buchsbaum modules,  
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- (105) Über die Übertragung der Ringeigenschaften zwischen  $R$  und  $R[u]/(F)$ ,  
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- (107) Über verallgemeinerte Cohen-Macaulay-Moduln,  
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