

PUBLICATIONS

Books

- 1. **The Rings of Dimension Two**, Lecture Notes in Math. Series, Vol. **22**, Marcel Dekker, New York, 1976.
- 2. **Divisor Theory in Module Categories**, Studies in Math. Series, Vol. **14**, North-Holland, Amsterdam, 1974.
- 3. **Introducción a la Teoría de Siciyas**, VI Escuela Latinoamericana de Matemática, Ed. Instituto Politécnico Nacional, Mexico, 1982.
- 4. **Arithmetic of Blowup Algebras**, London Mathematical Society, Lecture Note Series **195**, Cambridge University Press, 1994.
- 5. **Computational Methods in Commutative Algebra and Algebraic Geometry**, Springer-Verlag, Heidelberg, 1998. Paperback edition, 2004.
- 6. **Integral Closure**, Springer Monographs in Mathematics, Springer, Heidelberg, 2005.

Journals

- 1. On local and stable cancellation, *Anais da Academia Brasileira de Ciências* **37** (1966), 389–393.
- 2. Ideals generated by R-sequences, *J. Algebra* **6** (1967), 309–316.
- 3. R-sequences and the homology of Macaulay rings, *Anais da Academia Brasileira de Ciências* **38** (1966), 249–252.
- 4. Extensions of Macaulay rings, *Anais da Academia Brasileira de Ciências* **39** (1967), 212–214.
- 5. Homological dimensions and Macaulay rings, (with G. Levin), *Pacific J. Math.* **25** (1968), 315–324.
- 6. Ideals and cancellation, *Math. Z.* **102** (1967), 353–355.
- 7. Reflexive modules and Gorenstein rings, *Proc. Amer. Math. Soc.* **15** (1968), 1949–1955.

- 8. A note on normality and the module of differentials, *Math. Z.* **105** (1968), 291-293.
- 9. On finitely generated flat modules, *Trans. Amer. Math. Soc.* **138** (1969), 505-512.
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- 11. Derivations of commutative Noetherian rings, *Math. Z.* **112** (1969), 229-233.
- 12. Quasi-normal rings, *Illinois J. Math.* **14** (1970), 268-273.
- 13. On finitely generated flat modules.II, *Anais da Academia Brasileira de Ciencias* **41** (1969), 503-504.
- 14. Injective endomorphisms of finitely generated modules, *Proc. Amer. Math. Soc.* **25** (1970), 900-901.
- 15. Simple flat extensions, *J. Algebra* **16** (1970), 105-107.
- 16. Flat modules over commutative Noetherian rings, *Trans. Amer. Math. Soc.* **152** (1970), 137-144.
- 17. Remarks on descent of flat modules, *Indian J. Math.* **34** (1970), 25-30.
- 18. Commutative endomorphism rings, *Pacific J. Math.* **35** (1970), 795-798.
- 19. Regular endomorphisms of finitely generated modules, *J. London Math. Soc.* **4** (1971), 27-32.
- 20. Annihilators of modules with a finite free resolution, *Proc. Amer. Math. Soc.* **29** (1971), 440-442.
- 21. Finiteness in projective ideals, *J. Algebra* **25** (1973), 269-278.
- 22. Local rings of global dimension two, *Proc. Amer. Math. Soc.* **25** (1972), 381-386.
- 23. Simple flat extensions.II, *Math. Z.* **129** (1972), 157-161.
- 24. Conductor, projectivity and injectivity, *Pacific J. Math.* **46** (1973), 603-608.
- 25. Stable rings and a problem of Bass, (with J. Sally), *Bull. Amer. Math. Soc.* **79** (1973), 574-576.

- 26. Coherence of one polynomial ring, Proc. Amer. Math. Soc. **41** (1973), 449–456.
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- 28. Flat ideals, (with J. Sally), Comm. Algebra **3** (1975), 531–543.
- 29. Coherence of polynomial rings, (with B. Greenberg), Proc. Amer. Math. Soc. **54** (1976), 59–64.
- 30. Super-regularity in local rings, J. Pure & Applied Algebra **7** (1976), 231–233.
- 31. Lüroth’s problem for rings, (with S. Glaz and J. Sally), J. Algebra **43** (1976), 699–708.
- 32. Bounding the number of generators of a module, (with R. Wiegand), Math. Z. **164** (1978), 1–7.
- 33. Flat ideals.II, (with S. Glaz), Manuscripta Math. **22** (1977), 325–341.
- 34. On the homology of I/I^2 , Comm. Algebra **6** (1978), 1801–1809.
- 35. Projective ideals in rings of dimension one, (with J. Carrig), Proc. Amer. Math. Soc. **71** (1978), 169–173.
- 36. Regular sequences and powers of ideals, Proc. Amer. Math. Soc. **77** (1979), 165–166.
- 37. Remarks on the pole-shifting problem over rings,(with R. Bumby, E. Sontag and H. Sussmann), J. Pure Applied Algebra **20** (1981), 113–127.
- 38. Projective summands in generators, (with D. Eisenbud and R. Wiegand), Nagoya Math. J. **86** (1982), 203–209.
- 39. On the dimension and integrality of symmetric algebras, (with A. Simis), Math. Z. **177** (1981), 341–358.
- 40. The syzygies of the conormal module, (with A. Simis), Amer. J. Math. **103** (1981), 203–224.
- 41. Approximation complexes of blowing-up rings, (with J. Herzog and A. Simis), J. Algebra **74** (1982), 466–493.
- 42. On the grade of some ideals, (with J.F. Andrade and A. Simis), Manuscripta Math. **34** (1981), 241–254.

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- 44. Flat ideals.III, (with S. Glaz), *Comm. Algebra* **12** (1984), 199–227.
- 45. On the arithmetic and homology of algebras of linear type, (with J. Herzog and A. Simis), *Trans. Amer. Math. Soc.* **283** (1984), 661–683.
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- 47. Ideals with sliding depth, (with J. Herzog and R. Villarreal), *Nagoya Math. J.* **99** (1985), 159–172.
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- 49. The complete intersection locus of certain ideals, *J. Pure and Applied Algebra* **38** (1985), 367–378.
- 50. On linear complete intersections, *J. Algebra* **111** (1987), 306–315.
- 51. On Gorenstein ideals of codimension four, (with R. Villarreal), *Proc. Amer. Math. Soc.* **98** (1986), 205–210.
- 52. Normal Rees algebras, (with P. Brumatti and A. Simis), *J. Algebra* **112** (1988), 26–48.
- 53. BCS rings, (with C.A. Weibel), *J. Pure and Applied Algebra* **52** (1988), 173–185.
- 54. Koszul homology and the structure of low codimension Cohen-Macaulay ideals, *Trans. Amer. Math. Soc.* **301** (1987), 591–613.
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- 60. On the equations of Rees algebras, *J. reine angew. Math.* **418** (1991), 189–218.
- 61. Computing the integral closure of an affine domain, *Proc. Amer. Math. Soc.* **113** (1991), 633–638.
- 62. Jacobian dual fibrations, (with A. Simis and B. Ulrich), *American J. Math.* **115** (1993), 47–75.
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- 64. Direct methods for primary decomposition, (with D. Eisenbud and C. Huneke), *Invent. math.* **110** (1992), 207–235.
- 65. On the ideal theory of graphs, (with A. Simis and R. Villarreal), *J. Algebra* **167** (1994), 389–416.
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- 67. The equations of Rees algebras of ideals with linear presentation, (with B. Ulrich), *Math. Z.* **214** (1993), 79–92.
- 68. On the structure of Gorenstein ideals of deviation two, (with C. Huneke and B. Ulrich), *Results in Mathematics* **29** (1996), 90–99.
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- 70. Effective computation of the integral closure of a morphism, (with J. Brennan), *J. Pure & Applied Algebra* **86** (1993), 125–134.
- 71. Links of prime ideals, (with Alberto Corso and Claudia Polini), *Math. Proc. Camb. Phil. Soc.* **115** (1994), 431–436.
- 72. Cohen–Macaulay Rees algebras and degrees of polynomial relations, (with A. Simis and B. Ulrich), *Math. Annalen* **301** (1995), 421–444.
- 73. Symbolic powers, Serre conditions and Cohen–Macaulay Rees algebras, (with S. Morey and S. Noh), *Manuscripta Math.* **86** (1995), 113–124.

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- 75. The content of Gaussian polynomials, (with S. Glaz), *J. Algebra* **202** (1998), 1–9.
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- 80. The integral closure of subrings associated to graphs, (with A. Simis and R. Villarreal), *J. Algebra* **199** (1998), 281–289.
- 81. The homological degree of a module, *Trans. Amer. Math. Soc.* **350** (1998), 1167–1179.
- 82. Cohomological degrees and Hilbert functions of graded modules, (with L. R. Doering and T. Gunston), *American J. Math.* **120** (1998), 493–504.
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- 85. Reduction numbers of ideals, *J. Algebra* **216** (1999), 652–664.
- 86. Codimension, multiplicity and integral extensions, (with A. Simis and B. Ulrich), *Math. Proc. Camb. Phil. Soc.* **130** (2001), 237–257.
- 87. Divisorial extensions and the computation of integral closures, *J. Symbolic Computation* **30** (2000), 595–604.
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- 89. On the Buchsbaum–Rim polynomial of a module, (with J. Brennan and B. Ulrich), *J. Algebra* **241** (2001), 379–392.

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- 107. Cohen-Macaulayness versus the vanishing of the first Hilbert coefficient of parameter ideals, (with L. Ghezzi, S. Goto, J. Hong, K. Ozeki and T.T. Phuong), *J. London Math. Soc.* **81** (2010), 679–695.
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- 111. Variation of Hilbert coefficients (with L. Ghezzi, S. Goto and J. Hong), *Proc. Amer. Math. Soc.* **141** (2013), 3037–3048.
- 112. The homology of parameter ideals (with S. Goto and J. Hong), *J. Algebra* **368** (2012), 271–299.

Conference Proceedings/Special Volumes

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- 11. Symmetric Algebras, in *Commutative Algebra*, Proceedings, Salvador 1988 (W. Bruns and A. Simis, Eds.), Lecture Notes in Mathematics **1430**, Springer-Verlag, Berlin-Heidelberg-New York, 1990, 115–160.
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- 20. Monomial ideals and the computation of multiplicities, (with D. Delfino, A. Taylor, R. Villarreal and N. Weininger), in *Commutative Ring Theory and Applications* (M. Fontana, S.-E. Kabbaj and S. Wiegand, Eds.), Lecture Notes in Pure and Applied Mathematics **231**, Marcel Dekker, New York, 2002, 87–107.
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- 24. Cohomological Degrees and Applications, in *Commutative Algebra*, Expository papers dedicated to David Eisenbud on the occasion of his 65th birthday, (I. Peeva, editor), Springer, 2013, 667-707.

Preprints

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- 2. On the radical of endomorphism rings of local modules, Preprint, 2011, 12 pgs.
- 3. Complexity Degrees of Algebraic Structures, in preparation, 2013, 291 pgs.
- 4. The vanishing and the boundedness of the Chern coefficients of modules (with L. Ghezzi, S. Goto, J. Hong, K. Ozeki and T. T. Phuong), 2010, 24 pgs.