BRUCE OLBERDING

Curriculum Vitae

December 2022

School Address   *Home Address*
Department of Mathematical Sciences   2486 Picacho Peak View
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RESEARCH INTERESTS

- Commutative Algebra
- Module Theory
- Algebraic Geometry

EDUCATION

Ph.D. in Mathematics, 1996, Wesleyan University, Middletown, Connecticut.
Advisor: Professor James D. Reid.
Dissertation title: *Torsion-Free Modules over Prüfer Domains.*

B.S. in Mathematics with Honors with Distinction, 1990, Baylor University, Waco, Texas.

POSITIONS HELD

Professor August 2009 – present.
Department of Mathematical Sciences, New Mexico State University, Las Cruces, New Mexico.

Associate Professor August 2004 – August 2009.
Department of Mathematical Sciences, New Mexico State University, Las Cruces, New Mexico.

Assistant Professor August 2002 – August 2004.
Department of Mathematical Sciences, New Mexico State University, Las Cruces, New Mexico.

Assistant Professor August 1997 – May 2002.
Department of Mathematics, The University of Louisiana at Monroe, Monroe, Louisiana.

Visiting Assistant Professor August 1996 – June 1997.
Department of Mathematics, Wesleyan University, Middletown, Connecticut.

TEACHING EXPERIENCE

New Mexico State University, August 2002 – present.
Modern Algebra I and II, Homological Algebra, Algebraic Geometry, Introduction to Modern Algebra, Matrix Algebra, Linear Algebra, Advanced Linear Algebra, Algebraic Number Theory, Algebraic Coding Theory, Applied Abstract Algebra, Liberal Arts Mathematics, Calculus I, Calculus II, Calculus III, Calculus for the Biological and Management Sciences, Survey of Geometry, Introduction to Higher Mathematics, Foundations of Geometry, MAT Fundamentals of Middle School Mathematics, MAT Geometry for Elementary School Teachers, Great Theorems: the Art of Mathematics, College Algebra, Intermediate Algebra.

The University of Louisiana at Monroe, August 1997 – Spring 2002.
History of Mathematics, Modern Algebra for Secondary Teachers, Real Analysis, Differential Equations, Linear Algebra, Calculus Sequence, Honors Mathematics, Precalculus, Elementary Statistics, Algebra for Management Science, College Algebra, Liberal Arts Mathematics.

Wesleyan University, August 1996 – June 1997.
Coordinator for reform calculus, Calculus, Multivariable Calculus, Linear Algebra.

PhD STUDENTS

- Olivier Heubo-Kwegna, 2009
- Alice Fabbri (Universita degli Studi "Roma Tre"), 2010
- David Hren, 2012
- Simplice Tchama, 2013
- Lokendra Paudel, 2015

JOURNAL EDITOR

- *Journal of Commutative Algebra*
- *Journal of Algebra and its Applications*
- *Communications in Algebra,* guest editor for issue in honor of Marco Fontana

SELECTED INVITED RESEARCH TALKS

1. Plenary lecture (50 minutes), Rings and Polynomials, University of Graz, Austria, July 2021, Title: Quadratic transforms and valuation rings.

2. Recent advances in Commutative Ring Theory and Module Theory, sponsored by Universita di Roma Tre and Universita di Padova, Bressanone, Italy, June 2016. **Title:** Compact sets and holomorphy rings in the space of rank one valuation rings.

3. Plenary lecture (50 minutes), Arithmetic and ideal theory of commutative rings and semigroups, University of Graz, Austria, September 2014. **Title:** Geometric and topological applications to intersections of valuation rings.

4. Main speaker (50 minutes), Commutative rings and their modules, sponsored by Universita di Roma, Bressanone, Italy, June 2012. **Title:** Topological and geometrical properties of the Zariski-Riemann space of valuation rings.

5. Colloquium (1 hour), University of Texas at El Paso, February 2012. **Title:** The concept of a Noetherian ring.

6. Colloquium (1 hour), Universita degli Studi di Padova, Padova, Italy, March 2011. **Title**: Noetherian rings from a non-Noetherian perspective.

7. Seminar (1 hour), Universita degli Studi "Roma Tre," Rome, Italy, February 2011. **Title:** Intersections of valuation rings over projective surfaces.

8. Commutative Ring Theory Days, Universita degli Studi "Roma Tre," Rome, Italy, May 2010. **Title**: Integrally closed overrings in birational extensions of two-dimensional Noetherian domains.

9. Southwest Local Algebra Meeting, University of Texas at Arlington, March 2010. **Title:** Non-Noetherian perspectives on a class of Noetherian domains, 50 minute talk.

10. Seminar (1 hour), Universita degli Studi Roma Tre, Rome, Italy, May 2009. **Title:** Derivations, generic formal fibers and bad Noetherian rings.

11. Seminar (2 hours), Universita degli Studi di Padova, Padova, Italy, May 2009. **Title**: Matlis domains and Prufer sections of Noetherian domains.

12. Workshop on Commutative Rings and their Modules, Brixen, Italy (sponsored by Universita degli Studi di Padova), September 2007. **Title**: Commutative rings having many divisorial ideals, 50 minute lecture.

13. Abelian groups, Modules and Commutative Rings, University of Connecticut, Storrs, Connecticut. **Title**: Commutative rings having many stable ideals, 50 minute lecture.

14. International Algebra Conference, Universita degli Studi di Padova, Padova, Italy, June 2006. **Title**: Colon and injective properties of ideals of integral domains, 50 minute lecture.

15. Workshop on Commutative Rings, Cortona, Italy, June 2006. **Title**: Representations of integrally closed domains as intersections of valuation rings, series of four 45 minute lectures.

16. Special Session on Multiplicative Arithmetic of Integral Domains and their Monoids, Joint Meeting of AMS, DMS, OMS, Mainz, Germany, June 2005. **Title**: *Intersections of valuation rings in function fields*, 50 minute plenary address.

17. Commutative Rings and their Modules, Cortona, Italy, June 2004. **Title**: *Ideal decompositions in commutative rings,* 50 minute plenary address.

18. Southeast Regional Algebra Conference, Florida Atlantic University, led NSF panel discussion on recent trends in commutative ring theory, October 2003.

19. Joint AMS-UMI Meeting, University of Pisa, Pisa, Italy, June 2002. **Title:** *Reflexive Prüfer overrings of Noetherian domains.*

20. Venezia 2002 Algebra Conference, Venice International University, Venice, Italy, June 2002. **Title:** *Prüfer rings associated to some non-algebraic sets of points,* 50 minute plenary address.

21. Second Honolulu Conference on Abelian Groups and Modules, University of Hawaii, July 2001. **Title:** *Applications of the study of torsion-free modules to commutative algebra*, 50 minute plenary address.

22. Conference in Honor of James D. Reid, Wesleyan University, Middletown, Connecticut, May 2001. **Title:** *Applications of Warfield duality to commutative algebra.*

23. Colloquium, Auburn University, Auburn, Alabama, December 2000. **Title:** Arithmetic when numbers won't suffice: *Factorization of ideals in commutative rings.*

24. Second International Encounter on Integer-Valued Polynomials, CIRM, Marseilles, France, May, 2000. **Title**: *Extension of ideal-theoretic properties to submodules of the quotient field of a domain*.

25. Centennial Conference on Commutative Algebra, University of Nebraska, Lincoln, Nebraska, April, 2000. **Title**: *The Krull-Schmidt Property for ideals and modules.*

26. Workshop on Rings and Modules, Universitá di Padova, Padova, Italy, December 1999. **Title**: *Stable domains and decomposition of modules*, 50 minute plenary address

27. Seminar, Universitá di Padova, Padova, Italy, June 1999. **Title:** *Almost maximal Prüfer domains*, 2 one-hour seminars.

28. Workshop on Commutative Algebra, Universitá di Roma, Rome, Italy, June 1999. **Title:** *H-local Prüfer domains*.

29. Conference on Algebra, Tulane University, New Orleans, Louisiana, March 1999. **Title:** *Warfield duality, stability and two-generated ideals*.

30. Colloquium, Baylor University, Waco, Texas, October 1998. **Title:** *Variations on the Jordan-Hölder Theorem*.

OTHER INVITED CONFERENCE RESEARCH PRESENTATIONS

1. AMS Central Sectional Meeting, University of Texas El Paso, September 2022. **Title:** Local rings and connectedness.

2. AMS Western Sectional Meeting (virtual), May 2022. **Title:** Intersections of integrally closed overrings of a two-dimensional regular local ring.

3. AMS Midwest Sectional Meeting (virtual), March 2022. **Title:** Finitely generated algebras over zero-dimensional rings.

4. Special Session on Commutative Ring Theory, AMS Western Sectional Meeting (virtual), October 2021. **Title:** The tree of quadratic transforms of a regular local ring.

5. Algebra seminar, Ohio State University (virtual), February 2021. **Title**: Zariski-Riemann space of valuation rings

6. Special Session on Commutative Ring Theory, AMS Southwest Sectional Meeting (virtual), September 2020. **Title:** Unmixedness and height theorems in complete intersections over zero-dimensional rings.

7. Algebra seminar, Ohio State University, Columbus, Ohio, March 2018. **Title**: Local rings as points in topological spaces.

8. Special Session on Commutative Ring Theory, AMS Central Sectional Meeting, Ohio State University, March 2018. **Title**: De-noetherianizing Cohen-Macaulay rings.

9. Special Session on Commutative Ring Theory, AMS Sectional Meeting, State University of New York at Stony Brook, March 2016. **Title:** Intersections of rank one valuation rings.

10. Special Session on Advances in Valuation Theory, AMS Sectional Meeting, Rutgers University, New Jersey, November 2015. Title: Intersection valuation rings in the Zariski-Riemann space of a field.

11. Special Session on Closure Operations in Commutative Algebra, AMS Sectional Meeting, Georgetown University, March 2015. **Title:** Ringed space structures on spaces of valuation rings.

12. Special Session on Associative Rings, AMS Spring Western Sectional Meeting, University of Colorado-Boulder, April 2013. **Title**: Integrally closed rings and the Zariski-Riemann space of valuation rings.

13. Special Session on Commutative Rings, AMS Spring Central Sectional Meeting, Iowa State University, April 2013. **Title**: Prufer domains and the projective line.

14. Special Session on Commutative Algebra, AMS Sectional Meeting, University of Akron, Akron, Ohio, October 2012. **Title:** Integrally closed rings in birational extensions of two-dimensional regular local rings.

15. Special Session on Commutative Algebra, AMS Sectional Meeting, University of Arizona, Tuscon, Arizona, October 2012. **Title:** Irreducible components of the closed fiber of a modification of a two-dimensional regular local ring.

16. Special Session on Commutative Algebra, AMS Sectional Meeting, University of Nebraska, Lincoln, Nebraska, October 2011. **Title:** *Geometrical and topological criteria for irredundance of intersections of valuation rings.*

17. Special Session on Commutative Rings, AMS Sectional Meeting, University of Iowa, Iowa City, Iowa, March 2011. **Title:** *Intersections of valuation rings over projective surfaces.*

18. Special Session on Commutative Rings, AMS Sectional Meeting, Macalester College, Minneapolis, Minnesota, April 2010. **Title:** Embedding dimension, multiplicity and Cohen-Macaulayness of subintegral extensions of local Noetherian domains.

19. Special Session on Commutative Algebra, AMS Sectional Meeting, University of New Mexico, Albuquerque, NM, April 2010. **Title**: Embedding dimension, multiplicity and Cohen-Macaulayness of subintegral extensions of local Noetherian domains.

20. Special Session on Commutative Rings and Monoids, AMS Sectional Meeting, Florida Atlantic University, Boca Raton, Florida, October 2009. **Title**: Generic formal fibers and bad stable domains.

21. BLAST 2009 Conference, New Mexico State University, August 2009. **Title:** Some applications of Boolean algebras to commutative ideal theory.

22. Special Session on Commutative Rings and Monoids, AMS Sectional Meeting, North Carolina State University, Raleigh, North Carolina, April 2009. **Title:** Sparse intersections of valuation overrings of two-dimensional Noetherian domains.

23. Special Session on Commutative Rings and Monoids, AMS National Meeting, Washington, DC, January 2009. **Title:** Derivations, generic formal fibers and bad Noetherian rings.

24. Special Session on Commutative Rings and Monoids, AMS Sectional Meeting, Davidson College, Charlotte, North Carolina, March 2007. **Title:** *Overrings of two-dimensional Noetherian domains represented by Noetherian spaces of valuation overrings*.

25. Special Session on Representations of Noetherian Rings, AMS Sectional Meeting, University of Nebraska, Lincoln, Nebraska, October 2005. **Title:** *Integrally closed overrings of two-dimensional Noetherian domains.*

26. Special Session on Commutative Ring Theory, AMS Sectional Meeting, East Tennessee State University, Johnson City, Tennessee, October 2005. **Title:** *Holomorphy rings in function fields*.

27. Special Session on Commutative Ring Theory, AMS Sectional Meeting, Eastern Kentucky University, Bowling Green, Kentucky, March 2005. **Title:** *Prime ideals of injective dimension one.*

28. Southeastern Regional Algebra Conference, University of Southeastern Louisiana, Hammond, Louisiana, November 2004. **Title:** *Factorization into radical ideals*.

29. Special Session in Commutative Rings and Monoids in honor of Robert Gilmer and Joe Mott, AMS Sectional Meeting, Florida State University, Jacksonville, Florida, March 2004. **Title:** *Prime ideals in ultraproducts of commutative rings*.

30. Special Session in Commutative Rings and Monoids, AMS Sectional Meeting, University of North Carolina, Chapel Hill, North Carolina, October 2004. **Title:** *An exceptional class of stable rings.*

31. Special Session on Commutative Rings and Monoids, AMS Sectional Meeting, Louisiana State University, Baton Rouge, Louisiana, March 2003. **Title**: *Maximal prime divisors in arithmetical rings.*

32. Thirty-Third Annual Lloyd Roeling Mathematics Conference, University of Louisiana at Lafayette, Lafayette, Louisiana, October 2002. **Title**: *Commutative ideal theory without finiteness conditions: primal ideals.*

33. Southwest Regional Algebra Conference, Loyola University, New Orleans, Louisiana, April 2002. **Title:** *Intersections of valuation overrings of affine domains.*

34. Special Session on Commutative Rings, AMS Sectional Meeting, University of Tennessee-Chattanooga, October 2001. **Title:** *Intersections of valuation overrings of affine algebras*.

35. Special Session on Commutative Algebra, AMS Sectional Meeting, Ohio State University, Columbus, Ohio, September 2001. **Title:** *Determinative sets of valuations for affine algebras*.

36. Southwest Regional Algebra Conference, University of Southern Mississippi, Hattiesburg, Mississippi, April 2001. **Title:** *A module-theoretic approach to some diverse examples in commutative algebra.*

37. Special Session on Commutative Rings and Monoids, AMS-MAA National Meeting, New Orleans, Louisiana, January, 2001. **Title:** *Non-standard commutative rings*.

38. Blue-Gray Conference on Abelian Groups and Modules, Auburn University, Auburn, Alabama, March 2000. **Title:** *The Krull-Schmidt property for ideals and modules.*

39. Southwest Regional Algebra Conference, Baylor University, Waco, Texas, April 1999. **Title:** *Modules over stable domains*.

40. Conference on Algebra, University of Louisiana at Lafayette, October 1999. **Title**: *Stable domains*.

41. Special Session on Commutative Rings, AMS Sectional Meeting, University of North Carolina-Charlotte, October 1999. **Title**: *Stability, duality and 2-generated ideals*.

42. Southeast Regional Algebra Conference, University of Southern Mississippi, Hattiesburg, Mississippi, April 1998. **Title:** *Direct sums of ideals of Prüfer domains*.

43. Special Session on Commutative Rings, AMS Sectional Meeting, Wake Forest University, October 1998. **Title:** *Integral domains for which every non-zero ideal is stable*.

44. Blue-Gray Conference on Abelian Groups, Auburn University, Auburn, Alabama, December 1996. **Title:** *Almost maximal Prüfer domains*.

45. Special Session on Commutative Algebra, Seattle Mathfest, University of Washington, Seattle, Washington, August 1996. **Title:** *Submodules of the quotient field of a Prüfer domain.*

46. Blue-Gray Conference on Abelian Groups, University of Connecticut, Storrs, Connecticut, October 1995. **Title:** *Warfield Domains*.

Research Publications

1. *Rectangles conformally inscribed in lines,* with E. Walker, Journal of Geometry 113 (2022), paper no. 9, 26 pp.

2. *The Zariski-Riemann space of valuation rings,* Commutative algebra, 639-667, Springer, Cham, 2021.

3. *A new approach to the Katětov-Tong theorem,* with G. Bezhanishvili and P. Morandi, American Mathematical Monthly 129 (2022), 66-74.

4. *Height theorems and unmixedness for finitely generated algebras over zero-dimensional rings*, Proceedings of American Math Society 149 (2021), 4515--4526.

5. *The conic geometry of rectangles inscribed in lines*, with E. Walker, Proceedings of American Math Society 149 (2021), 2625--2638.

6. *Paths of rectangles inscribed in lines*, with E. Walker, Beitrage zur Algebra und Geometrie, to appear.

7. *A generalization of Gelfand-Naimark-Stone duality to completely regular spaces*, with G. Bezhanishvili and P. Morandi, Topology and its Applications 274 (2020), 107123, 26 pp.

8. *Gelfand-Naimark-Stone duality for normal spaces and insertion theorems*, with G. Bezhanishvili and P. Morandi, Topology and its Applications 280 (2020), 107256, 28 pp.

9. *Specker algebras: a survey*, with G. Bezhanishvili and P. Morandi, in Hung Nguyen and Vladik Kreinovich (Ed.), Algebraic Techniques and Their Use in Describing and Processing Uncertainty. To the Memory of Professor Elbert A. Walker. (pp. 1--19), Springer, 2020.

10. *The ideal theory of intersections of prime divisors dominating a normal Noetherian local domain of dimension two*, with W. Heinzer, *Rendiconti del Seminario Matematico della Universita di Padova* 144 (2020), 145-158.

11. *An extension of de Vries duality to normal spaces and locally compact Hausdorff spaces*, with G. Bezhanishvili and P. Morandi, Journal of Pure and Applied Algebra 224 (2020), no. 2, 703-724.

12. *Radical factorization in finitary ideal systems*, with A. Reinhart, Communications in Algebra 48 (2020), no. 1, 228-253.

13. *De-noetherianzing Cohen-Macaulay rings*, with L. Fuchs, Pacific Journal of Mathematics, 303 (2019), no. 1, 133-164.

14. *Krull's principal ideal theory in non-Noetherian settings*, Mathematical Proceedings of the Cambridge Philosophical Society, 168 (2020), no. 1, 13-27.

15. *Noetherian intersections of regular local rings of dimension two*, with W. Heinzer, Journal of Algebra, 559 (2020), 320-345.

16. *The tree of quadratic transforms of a regular local ring of dimension two*, with W. Heinzer and K.A. Loper, Journal of Algebra, 560 (2020), 383-415.

17. *De Vries duality for compactifications and completely regular spaces*, with G. Bezhanishvili and P. Morandi, Topology and its Applications*, 257*, 85-105.

18. *An extension of de Vries duality to normal spaces and locally compact Hausdorff spaces*, with G. Bezhanishvili and P. Morandi, Journal of Pure and Applied Algebra*, 224 (2020), no. 2, 703–724.

19. *Radical factorization in commutative rings, monoids and multiplicative lattices, with A. Reinhart*, Algebra Universalis 80 (2019), no. 2, Art. 24, 29 pp.

20. *An extension of de Vries duality to completely regular spaces and compactifications,* with G. Bezhanishvili and P. Morandi, Topology Appl. 257 (2019), 85–105.

21. *Finite intersections of Prüfer overrings*, Advances in Commutative Algebra: articles in honor of David F. Anderson. Birkhauser, 2019.

22. *Generators of reductions of ideals in a local Noetherian ring with finite residue field,* with L. Fouli, Proceedings of the American Mathematical Society, 146 (2018), no. 12, 5051–5063.

23. *Pierce sheaves and commutative idempotent generated algebras*, with G. Bezhanishvili and P. Morandi, Fundamenta Mathematicae 240 (2018), no. 2, 105-136.

24. *Directed unions of local quadratic transforms of regular local rings and pullbacks*, with W. Heinzer, L. Guerrieri and M. Toeniskoetter, in edited volume *Rings, Polynomials, and Modules*. Springer, 2017, 257-280.

25. *Canonical extensions of bounded archimedean vector lattices*, with G. Bezhanishvili and P. Morandi, Algebra Universalis 79 (2018), Art. 12, 17 pp.

26. *On the topology of valuation-theoretic representations of integrally closed domains*, Journal of Pure and Applied Algebra 222 (2018), no. 8, 2267-2287.

27. *A principal ideal theorem for compact sets of rank one valuation rings*. Journal of Algebra 489 (2017) 399-426.

28. *Asymptotic properties of infinite directed unions of quadratic transforms*, with W. Heinzer and M. Toeniskoetter, Journal of Algebra 479 (2017), 216-243.

29. *Ideal theory of infinite directed unions of local quadratic transforms*, with K. A. Loper, H. Schoutens, W. Heinzer and M. Toeniskoetter, Journal of Algebra, 474 (2017) 213-239.

30. *A functorial approach to Dedekind completions and the representation of vector lattices and l-algebras by normal functions*, with G. Bezhanishvili and P. Morandi, Theory and Applications of Categories, 31 (2016), 1095-1133.

31. *Topological aspects of irredundant intersections of ideals and valuation rings*, in edited volume, *Multiplicative Ideal Theory and Factorization Theory*, vol 170. Springer, 2016, 277-307.

32. *Group-theoretic and topological invariants of completely integrally closed Prüfer domains,* with O. Heubo-Kwegna and A. Reinhart. Journal of Pure and Applied Algebra 220 (2016), no. 12, 3927–3947.

33. *One-dimensional stable rings*. Journal of Algebra 456 (2016), 93–122.

34. *De Vries powers: a generalization of Boolean powers for compact Hausdorff spaces*, with G. Bezhanishvili, V. Marra and P. Morandi, Journal of Pure and Applied Algebra, 219 (2015), no. 9, 3958–3991.

35. *Idempotent generated algebras and Boolean powers of commutative rings*, with G. Bezhanishvili, V. Marra and P. Morandi, Algebra Universalis, 73 (2015), no. 2, 183-204.

36. *Affine schemes and topological closures in the Zariski-Riemann space of valuation rings*, Journal of Pure and Applied Algebra, 219 (2015), 1720-1741.

37. *On the geometry of Prufer intersections of valuation rings*, Pacific Journal of Mathematics, 273 (2015), 353-368.

38. *László Fuchs's contributions to commutative ring theory*, with Kulumani Rangaswamy, Periodica Mathematica Hungarica, 69 (2014), 2-8.

39. *One-dimensional bad Noetherian domains*, Transactions of the American Mathematical Society, 366 (2014), 4067-4095.

40. *Finitely stable rings*, in Commutative Algebra: Recent advances in Commutative rings, integer-valued polynomials, and polynomial functions, Springer, 2014, 269-291.

41. *Prescribed subintegral extensions of local Noetherian domains*, Journal of Pure and Applied Algebra, 218 (2013), 506-521.

42. *Bounded Archimedean l-algebras and Gelfand-Neumark-Stone duality*, with G. Bezhanishvilli and P. Morandi, Theory and Applications of Categories, 28 (2013), 435-

475.

43. *Dedekind completions of bounded Archimedean l-algebras*, with G. Bezhanishvilli and P. Morandi, Journal of Algebra and its Applications 12 (2012), 16 pages.

44. *Generic formal fibers and analytically ramified stable rings*, Nagoya Journal of Mathematics 211 (2012), 109-135.

45. *Integrally closed rings in birational extensions of two-dimensional regular local rings*, with Francesca Tartarone, Mathematical Proceedings of Cambridge Philosophical Society 155 (2013), 101-127.

46. *A counterpart to Nagata idealization*, Journal of Algebra 365 (2012), 199–221.

47. *Noetherian rings without finite normalization*, in Progress in Commutative Algebra 2, 171–203, Walter de Gruyter, Berlin, 2012.

48. *Noetherian spaces of integrally closed rings with an application to intersections of valuation rings,* Communications in Algebra 38 (2010), 3318-3332.

49. *Intersections of valuation overrings of two-dimensional Noetherian domains*, in Commutative Algebra: Noetherian and non-Noetherian perspectives, Springer, 2010, 335-362.

50. *On Matlis domains and Prüfer sections of Noetherian domains*, in Commutative algebra and its applications, 321-332, Walter de Gruyter, Berlin, 2009.

51. *Factorization into prime and invertible ideals II*, Journal of the London Mathematical Society, 80 (2009), no. 1, 155-170.

52. *Characterizations and construction of h-local domains*, in Models, modules and abelian groups, 385-406, Walter de Gruyter, Berlin, 2008.

53. *Integrally closed overrings of two-dimensional Noetherian domains representable by Noetherian spaces of valuation rings,* Journal of Pure and Applied Algebra 212 (2008) 1791-1821.

54. *Pure submodules of completely decomposable modules*, with H. P. Goeters, Houston Journal of Mathematics 34 (2008), no. 2, 373-382.

55. *Irredundant intersections of valuation overrings of two-dimensional Noetherian domains*, Journal of Algebra 318 (2007) 834-855.

56. *Injective and colon properties of ideals of integral domains*, Forum Mathematicum 19 (2007), no. 6, 1047-1074.

57. *Holomorphy rings of function fields*, in Multiplicative Ideal Theory in Commutative Algebra, 331-348, Springer-Verlag, 2006.

58. *The minimal number of generators of an invertible ideal*, with Moshe Roitman, in Multiplicative Ideal Theory in Commutative Algebra, 349-368, Springer-Verlag, 2006.

59. *Commutative ideal theory without finiteness conditions: irreducibility in the quotient field*, with Laszlo Fuchs and William Heinzer, in Abelian groups, rings, modules, and homological algebra, 121-145, Lecture Notes in Pure and Applied Mathematics, 249, Chapman & Hall/CRC, Boca Raton, FL, 2006.

60. *Commutative ideal theory without finiteness conditions: completely irreducible ideals* with Laszlo Fuchs and William Heinzer, Transactions of the American Mathematical Society, 358 (2006), no. 7, 3113-3131.

61. *Unique irredundant intersections of completely irreducible ideals*, with William Heinzer, Journal of Algebra 287 (2005), no. 2, 432-448.

62. *Ultrapowers, valuations and completions of Noetherian domains*, with Serpil Saydam and Jay Shapiro, Journal of Pure and Applied Algebra, 197 (2005), no. 1-3, 213-237.

63. *Prime ideals in ultraproducts of commutative rings*, with Jay Shapiro, Journal of Algebra, 285 (2005), no. 2, 768-794.

64. *Factorization into radical ideals*, in Arithmetical properties of commutative rings and monoids, 363-377, Lecture Notes in Pure and Applied Mathematics, 241, Chapman & Hall/CRC, Boca Raton, FL, 2005.

65. *Projective presentations of finitely generated modules with large annihilators*, with Serpil Saydam, Communications in Algebra, 33 (2005), no. 1, 201-212.

66. *Commutative ideal theory without finiteness conditions: primal ideals*, with Laszlo Fuchs and William Heinzer, Transactions of the American Mathematical Society, 357 (2005), no. 7, 2771-2798.

67. *Maximal prime divisors in arithmetical rings,* with Laszlo Fuchs and William Heinzer, Rings, modules, algebras, and abelian groups, 189-203, Lecture Notes in Pure and Applied Mathematics, 236, Marcel Dekker, New York, 2004.

68. *The Krull-Schmidt property for ideals and modules over integral domains,* with H. P. Goeters, Rocky Mountain Journal of Mathematics, 32 (2002), 1409-1429.

69. *A geometric setting for some properties of torsion-free modules*, Rocky Mountain Journal of Mathematics, 32 (2002), 1281-1297.

70. *On the structure of stable domains*, Communications in Algebra, 30 (2002), 877-895.

71. *Ultraproducts of commutative rings*, with Serpil Saydam, Commutative ring theory and applications, Lecture Notes in Pure and Applied Mathematics 231, Marcel Dekker, 2002, 369-387.

72. *Unique decompositions into ideals of Noetherian domains*, with H. P. Goeters, Journal of Pure and Applied Algebra, 165 (2001), 169-182.

73. *On locally isomorphic torsion-free modules*, with H. P. Goeters, International Journal of Commutative Rings, 1 (2001), 83-94.

74. *Stability, duality, 2-generated ideals and a canonical decomposition of modules,* Rendiconti del Seminario Matematico della Università di Padova, 106 (2001), 261-290.

75. *On the classification of stable domains*, Journal of Algebra, 243 (2001), 177-197.

76. *Stability of ideals and its applications*, in Ideal-Theoretic Methods in Commutative Algebra, edited by I. Papick and D.D. Anderson, Marcel Dekker, 2001.

77. *Homomorphisms and duality for torsion-free modules,* Proceedings of the AGRAM Conference, Perth, Australia, 2000, Contemporary Mathematics, 2001, 17-38.

78. *Extension of ideal-theoretic properties of a domain to submodules of its quotient field*, with H. P. Goeters, Journal of Algebra, 237 (2001), 14-31.

79. *Factorization into prime and invertible ideals*, Journal of the London Mathematical Society (2), 62 (2000), 336-344.

80. *Modules of injective dimension one over Prüfer domains*, Journal of Pure and Applied Algebra 153 (2000), pp. 263-287.

81. *On the multiplicative properties of submodules of the quotient field of an integral domain*, with H. P. Goeters, Houston Journal of Mathematics 26 (2000), pp. 241-254.

82. *Faithfulness and cancellation over Noetherian domains*, with H.P. Goeters, Rocky Mountain Journal of Mathematics 30 (2000), pp. 185-194.

83. *Almost maximal Prüfer domains*, Communications in Algebra 27 (1999), pp. 4433-4458.

84. *Prüfer domains and pure submodules of direct sums of ideals*, Mathematika, 46 (1999), 425-432.

85. *Composition series of modules over Prüfer domains*, Proceedings of the American Mathematical Society **127** (1999), pp. 1917-1921.

86. *Globalizing local properties of Prüfer domains*, Journal of Algebra **205** (1998), pp. 480-504.

87. *E-uniserial groups*, with M. Dugas, Methods in Module Theory, New York: Marcel Dekker, 1993, pp. 75-86.

Books edited

1. *Advances in Rings, Modules and Factorizations*, with A. Facchini, M. Fontana and A. Geroldinger, Springer, 2020.

2. *Multiplicative Ideal Theory and Factorization: Commutative and Non-Commutative Perspectives*, with S. Chapman, M. Fontana and A. Geroldinger, Springer-Verlag, 2016.

3. *Commutative Algebra: Noetherian and Non-Noetherian Perspectives,* with M. Fontana, S. Kabbaj and I. Swanson, Springer-Verlag, 2010.

4. *Commutative Algebra and its Applications,* with M. Fontana, S. Kabbaj and I. Swanson, De Gruyter, 2009.

5. *Multiplicative Ideal Theory in Commutative Algebra*, with J. Brewer, W. Heinzer and S. Glaz, Springer-Verlag, 2006.