ROGER WIEGAND
January 2016

Education:

A.B. (Mathematics)	1964	Princeton University
M.S. (Mathematics)	1966	University of Washington
Ph.D. (Mathematics)	1967	University of Washington

Professional Experience:

Willa Cather Professor Emeritus	2011–present	University of Nebraska
Willa Cather Professor	2002–2011	University of Nebraska
Professor, Mathematics	1976–present	University of Nebraska
Assoc. Prof., Mathematics	1972–76	University of Nebraska
Asst. Prof., Mathematics	1967–72	University of Wisconsin
General Member	Fall 2012	Math. Sci. Research Inst.
General Member	Spring 2003	Math. Sci. Research Inst.
Visiting Professor	Spring 1998	Purdue University
Visiting Professor	1992–93	Purdue University
Visiting Professor	1985–86	University of Wisconsin
Visiting Professor	1978–79	University of Connecticut
Teaching Asst., Mathematics	1964–65	University of Washington
NSF Graduate Fellow	1965–67	University of Washington
Vice-Chair, Math/Stat	1991–92	University of Nebraska

Research Interests: Commutative algebra, representation theory

Grants, Contracts, Fellowships, Leaves (this millennium):

- NSF Grant DMS-0071008, $45,936, 2000 (three years): Topics in Commutative Algebra and Algebraic Geometry (group infrastructure support–no salary).
- NSA Grant 01G-144, $41,995, 2001 (two years): Tensor Products and Representations.
- Support from Istituto Nazionale di Alta Matematica for one-month research visit to Università di Padova, May 2002.
- NSF, $40,000 for Joint Summer Research Conference, Summer 2003, under the auspices of AMS, IMS and SIAM; I wrote the proposal; PI's were Juergen Herzog, Craig Huneke and I.
- MSRI, $10,172 in support for Spring 2003 at MSRI.
- Faculty Development Leave, Spring 2003
- GAANN Grant (support for graduate students), US Department of Education (2003–2006), $463,272. (I was the PI, but Judy Walker wrote the proposal.)
- NSF, Nebraska Commutative Algebra Conference (May 2005), $12,000. (A. Li and L. Avramov were the PIs, but I wrote much of the proposal.)
- NSA Grant 04G-080, $98,756, April 2005 – April 2007: Representation Theory of Local Rings.

- US Department of Education, GAANN grant (support for graduate students), 2006–2009, $633,360.
- NSF Conference Grant, $8545, KUMUNU 2007. Harbourne was PI. Avramov, Marley and I were co-PI's.
- NSF Conference Grant, $25,000, Commutative Algebra: Connections with Algebraic Topology and Representation Theory.
- US Department of Education, GAANN grant (support for graduate students), $522,624, 2009–2012.
- UNL, UCARE (support for Zach Norwood).
- UNL Research Council, $1675, for support of 2011 Rowlee Lecture.
- Simons Foundation, Collaboration Grant, $35,000, 2011–2016.

Professional Society Memberships:

American Mathematical Society
American Association of University Professors
Association for Women in Mathematics
Mathematical Association of America

Honors:

- AMS-MAA Invited Address, Annual Joint Meetings, Orlando, FL, 1996.
- *Distinguished Recognition for Excellence in Graduate Education* from UNL Graduate College, 1999.
- *Excellence in Graduate Education Award* (University-wide award from the Nebraska Alumni Association), 2001.
- *Willa Cather Professorship*, 2002–present.
- *ORCA* (Outstanding Research and Creativity Award), UNL College of Arts and Sciences, 2005.
- *Certificate of Recognition for Contributions to Students*, Parents Association and Teaching Council of UNL, 2011.
- *Roger Wiegand Award* (selected by graduate students for contributions to graduate students), 2011.
- Fellow of the American Mathematical Society, 2012–present

PhD Students (all UNL):

Thomas S. Fischer 1977	Kaiser Permanente (now retired)
Bette G. Midgarden 1978	Prof., Minnesota State University–Moorhead
William W. Krauter 1980	Software Engineer, Lockheed Martin
Bao Ping Jia 1990	Assoc. Prof., Maryville University
Nuri Çimen 1994	Assoc. Prof., Hacettepe University
Kurt Herzinger 1996	Prof., US Air Force Academy
David Jorgensen 1996	Prof., Univ. Texas–Arlington
Darren Holley 1997	Faculty, Omaha North High School
Graham Leuschke 2000	Prof., Syracuse University
Karl Kattchee 2001	Assoc. Prof., Univ. Wisconsin–LaCrosse

Ryan Karr 2002	Assoc. Prof., Univ. of Wisconsin–Parkside
Nicholas Baeth 2005	Prof., University of Central Missouri
Andrew Crabbe 2008	Postdoctoral Scholar, Syracuse University
(now attending Perelman School of Medicine)	
Olgur Celikbas 2010	Postdoctoral Scholar, University of Connecticut
(co-advised by Mark Walker)	
Silvia Saccon 2010	Dean's Fellow, University of Texas–Dallas
Micah Leamer 2011	Postdoc. Scholar, Chennai Math. Inst., 2011–12
(co-advised by Srikanth Iyengar)	
Courtney Gibbons 2013	Assistant Professor, Hamilton College
(co-advised by Luchezar Avramov)	
Katharine Shultis	Assistant Professor, Gonzaga University
(co-advised by Srikanth Iyengar)	

Current PhD Students:

Mohsen Gheibi (co-advised by Mark Walker)
Neil Steinburg (co-advised by Tom Marley)

Service Activities (this millennium):

Departmental:

Graduate Chair; 1998–2004
Graduate Recruiting Chair; 2004–2005
Graduate Exams Coordinator; Fall 2007
Graduate Advisory Committee; 2007–2008
Executive Committee; 1999–2001, 2010–2011
Co-organizer of Commutative Algebra Days; 2002
Chair, Algebra & Discrete Math Search Committee, 2003–2004
Chair, Carnegie Initiative on the Doctorate Committee, 2005–2006
(In 2003 I wrote the proposal for the Department's participation in CID.)
Chair, GAANN Steering Committee, 2003–present
Co-organizer (with S. Wiegand) of Bill Leavitt's 90^{th} birthday celebration)
Academic Program Review Committee, 2006–2007
Co-organizer of conference *Commutative Algebra: Connections with Algebraic Topology and Representation Theory* (in honor of Lucho Avramov's 60th birthday), 2007–2008
Scientific Advisory Committee; 2007–2011
Nominator of Srikanth Iyengar for ORCA Award; 2008
Letter of support for Jim Lewis for Pound-Howard Award; 2008
Nominator of Srikanth Iyengar for ORCA Award; 2009
Chair, Search Committee for Department Chair; 2011
Nominator of Srikanth Iyengar for Cather/Bessey Professorship; 2011
Ghost-writer of new GAANN Proposal; 2012

College:

Executive Committee; 2006–2007

University:

UNL Research Council; 2002–2005

Evaluator of nominations for Excellence in Graduate Education Award; 2008

External:

AMS Evaluation Panel for ICM travel grants; 2001

AMS Committee on Academic Freedom, Tenure and Employment Security (Member, 02/01/01 – 01/31/04; Chair, 02/01/02 – 01/31/04)

Organizer of Snowbird JSRC Conference, Summer 2003

AMS Advisory Committee for continuation of CID, 2006–2007

AMS Committee to Select the Winner of the Prize for Exemplary Program or Achievement by a Mathematics Department, Feb 1, 2007 – Jan 31, 2010

External Review Team for Univ. of Cincinnati APR; 2008

Scientific Committee for "Troisieme Encontre Internationale autour des Polynômes a Valeurs Entieres et Problèmes d'Algèbre Commutative", Luminy, Nov–Dec 2010

Invited Talks at Professional Meetings (this millennium):

- "Direct sums of modules over local rings", 20-minute talk, Special Session in Commutative Algebra, AMS Meeting, Washington, DC (2000).
- "The Hilbert basis theorem", 20-minute talk, "Great Theorems" Session, AMS Meeting, Washington, DC (2000).
- "Vanishing theorems for complete intersections", Special Session on Syzygies, AMS Meeting, Lowell, MA (2000).
- "Direct sum decompositions over local rings", 20-minute talk, Special Session in Commutative Algebra, AMS Meeting, New York (2000).
- "The Krull-Schmidt uniqueness theorem (not!)", 20-minute talk, Regional Workshop in the Mathematical Sciences (2000).
- "Realizing monoids as isomorphism classes of modules", 20-minute talk, Special Session on Commutative Algebra and Monoids, AMS Meeting, New Orleans (2001).
- "The Tor Game", 20-minute talk, Special Session on Commutative Algebra, AMS Meeting, Lawrence, KS (2001).
- "Monoids and direct-sum decompositions", 50 minutes, Antalya Algebra Days, Turkey (2001).
- "The Tor Game", 40 minutes, International Conference on Commutative Algebra and Applications, Fès, Morocco (2001).
- "Torsion in the tensor product of an ideal and its inverse", 20-minute talk, Special Session on Commutative Algebra, AMS Meeting, Chattanooga, TN (2001).
- "Bounded versus finite representation type", 20-minute talk, Special Session on Commutative Algebra, AMS Meeting, Williamstown, MA (2001).
- "Depths of higher Tors", 20-minute talk, Special Session on Commutative Algebra and Algebraic Geometry, AMS Meeting, San Diego (2002).
- "Brauer-Thrall theorems for maximal Cohen-Macaulay modules", 30-minute talk, Commutative Algebra Days, Lincoln, NE (2002).

- "Direct-sum decompositions of modules", Algebra Conference, Venice, Italy, May 2002.
- "Bounded Cohen-Macaulay type", 45-minute talk, Current Trends in Commutative Algebra, Levico Terme (Trento, Italy), May 2002.
- "One-dimensional rings with bounded but infinite Cohen-Macaulay type", 20-minute talk, Orlando AMS Meeting, November 2002.
- "Local rings of bounded Cohen-Macaulay type", 20-minute talk, Special Session on Commutative Algebra, San Francisco AMS Meeting, May 2003.
- "Direct-sum cancellation for mixed modules", 50-minute talk, JSRC Conference on Commutative Algebra, Snowbird, UT, July 2003.
- "Representation theory of Cohen-Macaulay rings", 60-minute talk, Workshop on Homological Algebra and Representation Theory, MSRI, March 2003.
- "Representation theory of Cohen-Macaulay rings", 17 one-hour lectures, Scuola Matematica Interunversitaria, Cortona, Italy, August 2003.
- "Direct-sum decompositions of non-Cohen-Macaulay modules", 40-minute talk, Commutative Algebra Day (KUMUNU V), Lawrence, KS, September 2003.
- "Representation Theory of Orders: Direct-Sum Cancellation", 50-minute talk, Number Theory Conference, Orono, ME, October 2003.
- "Indecomposable modules of large rank over double points", 20-minute talk, Special Session on Commutative Algebra, Tallahassee AMS Meeting, March 2004.
- "Indecomposable modules of large rank over one-dimensional local domains", 50-minute talk, International Conference on Commutative Rings and their Modules, Cortona, Italy, June 2004.
- "Monoids and modules", 60-minute talk, International Symposium on Commutative Rings and Monoids, Graz, Austria, October 2004.
- "The monoid of finitely generated modules over a one-dimensional local domain", 20-minute Special Session talk, Joint meeting of AMS and DFM, Mainz, Germany, June 2005.
- "Big indecomposable mixed modules", 20-minute talk, Special Session on Resolutions, Eugene AMS Meeting, November 2005.
- "Direct-sum relations among modules over a one-dimensional local ring", 20-minute talk, Special Session on Commutative Rings and Monoids, AMS Annual Meeting, San Antonio, TX, January 2006.
- "Indecomposable mixed modules of large rank", 20-minute talk, Special Session on Commutative Algebra and Algebraic Geometry, Notre Dame AMS Meeting, April, 2006.
- "Direct-sum behavior of finitely generated modules over one-dimensional Noetherian domains", one-hour talk, International Algebra Conference, dedicated to the 60th birthday of Luigi Salce, Padova, Italy, June 2006.
- "Constructions of indecomposable modules — old and new", 30-minute talk, Workshop on Commutative Rings, Cortona, Italy, June 2006.
- "Factoring algebraic numbers", Regional Workshop in the Mathematical Sciences, Lincoln, NE, October 2006.

- "Extended modules", 20-minute talk, Special Session on Commutative Algebra and Algebraic Geometry, Annual Meeting of AMS, New Orleans, January 2007.
- "Monoids of modules over one-dimensional local rings", 20-minute talk, Special Session on Commutative Rings and Monoids, AMS Meeting, Davidson, NC, March, 2007.
- "Constructing big indecomposable modules over local rings", 60 minutes, Conference on Abelian Groups and Modules over Commutative Rings, Storrs, CT, June 2007.
- "Constructing large indecomposable finitely generated modules", 45-minute talk, International Conference on Homological and Combinatorial Aspects in Commutative Algebra, Busteni, Romania, July, 2007.
- "Ascent of module structures, vanishing of Ext, and extended modules", 20 minutes, Special Session on Progress in Commutative Algebra, Annual AMS Meeting, San Diego, CA, January 2008.
- "Monoids of modules", 40-minute plenary talk, Fez Conference on Commutative Algebra and Applications, Ifrane, Morocco, June 2008.
- "Extended modules", 45-minute plenary talk, International Conference on Ring and Module Theory, Ankara, Turkey, August 2008.
- "Extended modules", 60 minutes, Interactions between commutative algebra and representation theory, Barcelona, Spain, September 2008.
- "New constructions of indecomposable modules over local rings", 30 minutes, Commutative algebra and its interactions with algebraic geometry, Luminy, France, October 2008.
- "Semigroups of torsion-free modules", 20 minutes, Special Session on Commutative Rings, Annual AMS Meeting, Washington, DC, January 2009.
- "Brauer-Thrall II for one-dimensional local rings", 20 minutes, Special Session Commutative Algebra: Ideal and Module Theory, AMS Meeting, WACO, TX, October 2009.
- "Extended modules relative to a flat local homomorphism", 20 minutes, Special Session on Commutative Ring Theory, Boca Raton, FL, October 2009.
- "The partially ordered set of prime ideals in a two-dimensional Noetherian domain", 20 minutes, Special Session on Commutative Ring Theory, St. Paul AMS Meeting, April, 2009.
- "The second Brauer-Thrall conjecture for totally reflexive modules", 20 minutes, Special Session: Trends in Commutative Algebra, Albuquerque AMS Meeting, April 2010.
- "Exact zero divisors and totally acyclic complexes", 20 minutes, Special Session on Commutative Algebra and its Interactions with Algebraic Geometry, Notre Dame AMS Meeting, November 2010.
- "Brauer-Thrall theorems and conjectures for commutative local rings", 20 minutes, Special Session on Local Commutative Algebra, Annual AMS Meeting, New Orleans, LA, January 2011.
- "Building lots of big indecomposable modules", 60 minutes, SLAM (Southern Local Algebra Meeting), Las Cruces, NM, March 2011.

- "Some open questions in the representation theory of Cohen-Macaulay modules", 30 minutes, Special Session on Commutative Algebra, Fourth International Congress on Mathematical Sciences, Al Ain, UAE, March 2012.
- "Vanishing of Tor over local rings", Special Session on Commutative Algebra, AMS Meeting, Akron, OH, October 2012.
- "Factorization theory and decompositions of modules", 20 minutes, Special Session on Arithmetic and Ideal Theory of Integral Domains and Monoids, Joint Meetings, San Diego, January 2013.
- "Torsion in tensor products of modules over local domains", 50-minutes, Special Session on Commutative Algebra, Joint Meeting of AMS and Romanian Mathematical Society, Alba Iulia, Romania, June 2013.
- "Torsion in the tensor product $M \otimes_R M^*$", 20 minutes, Special Session on Commutative Rings, Ideals, and Modules, AMS Meeting, Louisville, KY, October 2013.
- "Rigid modules over complete intersections", 20 minutes, Special Session on Commutative Algebra, AMS Meeting, Saint Louis, MO, October 2013.
- "Lots of questions, and a few answers, about spectra of commutative rings of dimension two", 20 minutes, Special Session on Interactions in Commutative Algebra, AMS Meeting, Albuquerque, NM, April 2014.
- "Semigroups of modules", 55 minutes, Algebraic Structures and their Applications, Abbazia di Spineto, Italy, June 2014.
- "Direct-sum decompositions of modules over one-dimensional local rings", Arithmetic and Ideal Theory of Rings and Semigroups, Graz, Austria, September 2014.
- "Koszul modules over short graded rings", Special Session on Factorization Theory and its Applications, Annual AMS Meeting, San Antonio, TX, January 2015.
- "Vanishing of Tor over complete intersections", 50-minute talk, Workshop on Homological Bonds between Commutative Algebra and Representation Theory, CRM, Bellaterra, Spain, February 2015.
- "Vanishing of Tor over complete intersections", 20-minute talk, Special Session on Commutative Algebra and Its Applications, Second International Conference on Mathematics and Statistics (sponsored by Amer. Math. Soc.), Sharjah, UAE, April 2015.
- "Betti diagrams and Hilbert functions of Koszul modules over short Gorenstein rings", 20-minute talk, joint meeting ofAMS, EMS and SPM, Porto, Portugal, June 2015.

Other Meetings Attended (since 2014):

- Joint Mathematics Meetings, Baltimore, MD, January 2014.
- SLAM (Southwest Local Algebra Meeting), Texas A & M University, March 2014.
- KUMUNU (commutative algebra conference), University of Missouri – Columbia, September 2014.
- Groups, Representations and Cohomology (on the occasion of Dave Benson's 60^{th} birthday, Isle of Skye, Scotland, June 2015.

- KUMUNU (commutative algebra conference), University of Missouri – Columbia, September 2015.

Selected Colloquia and Seminar Talks (this millennium):

Purdue University (2000)
University of Oregon (2001)
Università di Padova (2001)
Rutgers University (2001)
University of Texas–Austin (2002)
Università di Padova (2002; 7 lectures on representation theory)
University of California–Berkeley (2000)
University of Texas–Austin (April 2005)
University of Connecticut (April 2005)
Purdue University (January 2007)
Central Florida University (March 2007)
Florida Atlantic University (March 2007)
Università di Padova (June 2007)
Reed College (November 2007)
Michigan State University (April 2008)
Syracuse University (April 2009, December 2009)
Universitá di Padova (September 2009)
University of Texas–Arlington (October 2009)
Texas Tech University (October 2009)
Université de Provence (November 2009)
University of Kansas (September 2010)
New Mexico State University (March 2011)
Universidad de Granada (November 2011)
Università degli Studi di Padova (November 2011)
Universität Bielefeld (November 2011)
University of Missouri (February 2012)
IMSc; Chennai (March 2012)
IISER; Thiruvananthapuram (March 2012)
Purdue University (April 2012)
MSRI, Berkeley, CA (September 2012)
Charles University, Czech Republic (December 2012)
Sheffield University (October 2013)
Charles University, Czech Republic (November 2013)
Exeter University, UK (November 2014)
Università degli Studi di Verona (November 2013)
Hamilton College, Clinton, NY (March 2014)
Indian Institute of Technology–Mumbai (April 2014)
Tribhuvan University, Kathmandu, Nepal (April 2014)
Sheffield University (November 2014)
Charles University, Czech Republic (November 2014)

Tribhuvan University, Kathmandu, Nepal (April 2015)
Charles University, Czech Republic (November 2015)
UC–Berkeley (February 2015)
University of Utah (October 2015)

Other Professional Activities (this millennium):

- Presentation and panel discussion at Michigan Undergraduate Mathematics Conference, 2000.
- Co-organizer (with Sylvia Wiegand) of Rowlee Lecture and Centennial Celebration of Commutative Algebra, 2000.
- Two presentations on graduate education at Michigan Undergraduate Mathematics Conference, 2001.
- Co-organizer (with Sylvia Wiegand), Special Session on Representation Theory of Noetherian Rings, Lincoln AMS meeting, October 2005.
- Associate Editor, International Electronic Journal of Algebra, 2007–present.
- Associate Editor, Journal of Commutative Algebra, 2007–present.
- Associate Editor, Communications in Algebra, 2007–2011.
- Associate Editor, Hacettepe Journal of Math. and Stat., 2008–present.
- Associate Editor, Transactions on Algebra and its Applications, 2013–present.
- Associate Editor, Journal of Algebra and Its Applications, 2014–present.

Refereed Publications:

1. The cohomological dimension of Stone spaces, Bull. Amer. Math. Soc. 74 (1968), 944–945.
2. Sheaf cohomology of locally compact totally disconnected spaces, Proc. Amer. Math. Soc. 20 (1969), 533–538.
3. Endomorphism rings of ideals in a commutative regular ring, Proc. Amer. Math. Soc. 23 (1969), 442–449.
4. Some topological invariants of Stone spaces, Michigan Math. J. 16 (1969), 289–296.
5. Globalization theorems for locally finitely generated modules, Pacific J. Math. 39 (1971), 269–274.
6. Modules over universal regular rings, Pacific J. Math. 39 (1971), 807–819.
7. Vanishing tensor powers of modules, Math. Z. 129 (1972), 351–358 (with S. Wiegand).
8. Generators of modules over commutative rings, J. Algebra 27 (1973), 454–461.
9. Descent of projectivity for locally free modules, Proc. Amer. Math. Soc. 41 (1973), 342–348.
10. Decompositions of modules and matrices, Bull. Amer. Math. Soc. 79 (1973), 1277–1280 (with T. S. Shores).
11. Some criteria for Hermite rings and elementary divisor rings, Canadian Math. J. 26 (1974), 1380–1383 (with T. S. Shores).
12. Rings whose finitely generated modules are direct sums of cyclics, J. Algebra 21 (1974), 152–172 (with T. S. Shores).

13. Dimension functions on the prime spectrum, Comm. Algebra 3 (1975), 459–480.
14. Finitely generated modules over Bezout rings, Pacific J. Math 58 (1975), 655–664 (with S. Wiegand).
15. The maximal ideal space of a Noetherian ring, J. Pure & Appl. Algebra 8 (1976), 129–141 (with S. Wiegand).
16. Prime ideal structure in Noetherian rings, Proc. 1976 Oklahoma Ring Theory Conference, Marcel Dekker, New York (expository).
17. Reduced rings whose finitely generated modules decompose, Comm. in Algebra 6 (1978), 195–201 (with W. Brandal).
18. Commutative rings whose finitely generated modules are direct sums of cyclics, Springer Lecture Notes in Mathematics 616 (1977), 406–423, (mostly expository) (with S. Wiegand).
19. Bounding the number of generators of a modules, Math. Z. 164 (1978), 1–7 (with W. Vasconcelos).
20. Homeomorphisms of affine surfaces over a finite field, J. London Math. Soc. (2) 18 (1978), 28–32.
21. Rings of bounded module type, Springer Lecture Notes in Math 700 (1979), 143–150.
22. Projective surfaces over a finite field, Proc. Amer. Math. Soc. 83 (1982), 233–237 (with W. Krauter).
23. Projective summands in generators, Nagoya J. Math 86 (1982), 203–209 (with D. Eisenbud and W. Vasconcelos).
24. Descent of projectivity, Comm. Algebra 10 (14) (1982), 1537–1545.
25. Cancellation over commutative rings of dimension one and two, J. Algebra 88 (1984), 438–459.
26. Dedekind–like behavior of rings with two-generated ideals, J. Pure Appl. Algebra 37 (1985), 41–58 (with L. S. Levy).
27. Direct sum cancellation over commutative rings, Proc. Udine Conference on Abelian Groups and Modules, CISM 287 (1985), 241–266.
28. The prime spectrum of a two-dimensional affine domain, J. Pure Appl. Algebra 40 (1986), 209–214.
29. Stable isomorphism of modules over one-dimensional rings, J. Algebra 107 (1987), 425–435 (with S. Wiegand).
30. Decompositions of torsionfree modules over affine curves, Amer. Math. Soc. Proc. Symp. Pure Math. 46, Part 2 (1987), 503–513 (with S. Wiegand).
31. Nilpotent elements in Grothendieck rings, Illinois J. Math. 32 (1988), 246–262.
32. Noetherian rings of bounded representation type, in Commutative Algebra, Math. Sci. Res. Inst. Publ. 15 (1989), 497–516.
33. Picard groups of singular affine curves over a perfect field, Math. Z. 200 (1989), 497–516.
34. Curve singularities of finite Cohen-Macaulay type, Arkiv Mat. 29 (1991), 339–357.
35. Direct sums of ideals, Linear Algebra Appl. 157 (1991), 21–36 (partly expository, with R. Heitmann).

36. Galois groups and the multiplicative structure of field extensions, Trans. Amer. Math. Soc, 331 (1992), 563–584 (with R. Guralnick).
37. Torsion-free modules over regular domains of dimension two, Contemp. Math. 124 (1992), 291–298.
38. One-dimensional local rings with finite Cohen-Macaulay type, in Algebraic Geometry and Applications, C. L. Bajaj ed., Springer-Verlag, New York, 1994.
39. Local-global theory of regular domains of dimension two, J. Algebra 155 (1993), 529–544.
40. Modules approximated by projectives, in Methods in Module Theory, G. Abrams, J. Haefner and K. M. Rangaswamy eds., Marcel Dekker, 1992, New York, 311–325.
41. Torsion in Picard groups of affine rings, Contemp. Math. 159 (1994), 433–444.
42. Bounds for one-dimensional rings of finite Cohen-Macaulay type, J. Pure Appl. Algebra 93 (1994), 311–342 (with S. Wiegand).
43. Tensor products of modules and the rigidity of Tor, Math. Ann. 299 (1994), 449–476 (with C. Huneke).
44. Torsion in quotients of the multiplicative group of a number field, Contemp. Math. 171 (1994), 201–204 (with D. Holley).
45. Multiplicative groups of fields modulo products of subfields, J. Pure Appl. Algebra 106 (1996), 233–262 (with J.-L. Colliot-Thélène and R. Guralnick).
46. Picard groups, cancellation and the multiplicative structure of fields, in "Zero-Dimensional Commutative Rings", D. Anderson and D. Dobbs eds., Dekker, 1995, pp. 65–79 (with R. Guralnick) (expository).
47. One-dimensional rings of finite representation type, in "Abelian Groups and Modules", A. Facchini and C. Menini eds., Kluwer, 1995 (with N. Cimen and S. Wiegand) (mostly expository).
48. On the Picard group: torsion and the kernel induced by a faithfully flat map, J. Algebra 183 (1996), 420–435 (with R. Guralnick, D. Jaffe and W. Raskind).
49. Tensor products of modules, rigidity and local cohomology, Math. Scand. 81 (1997), 161–183 (with C. Huneke).
50. The Picard group of a certain pullback domain: a non-commutative approach, in "Commutative Ring Theory", P.-J. Cahen, M. Fontana, E. Houston, S.-E. Kabbaj, eds., Dekker, New York, 1997, 339–347 (with R. Guralnick) (expository).
51. The residue fields of a zero-dimensional ring, J. Pure Appl. Algebra 129 (1998), 67–85 (with W. Heinzer and D. Lantz).
52. Genus class groups and separable base change, in "Factorization in Integral Domains", D. Anderson, ed., Dekker, New York, 1997, 333–347 (with R. Guralnick).
53. Local rings of finite Cohen-Macaulay type, J. Algebra 203 (1998), 156–168.
54. Failure of Krull-Schmidt for direct sums of copies of a module, in "Advances in Commutative Ring Theory", D. Dobbs, M. Fontana and S.-E. Kabbaj, eds., Marcel Dekker, 1999, pp. 541–547.
55. Indecomposable Gorenstein modules of odd rank, J. Algebra 214 (1999), 122–127 (with C. Rotthaus and D. Weston).

56. Singularities and direct-sum decompositions, in "Proceedings of the Conference on Singularities in Algebraic and Analytic Geometry", R. Michler and C. Melles, eds., Contemp. Math. 266 (2000), pp. 29–43 (mostly expository).
57. Prime ideals and decompositions of modules, in "Non-Noetherian Commutative Ring Theory", Scott Chapman and Sarah Glaz, eds., Kluwer, 2000, pp. 403–428 (with S. Wiegand) (mostly expository).
58. Ascent of finite Cohen-Macaulay type, J. Algebra 228 (2000), 674–681 (with G. Leuschke).
59. Direct-sum decompositions over local rings, J. Algebra 240 (2001), 83–97.
60. Vanishing theorems for complete intersections, J. Algebra 238 (2001), 684–702 (with C. Huneke and D. Jorgensen).
61. The Tor Game, in "Commutative Ring Theory and Applications", 289–300, M. Fontana, S.-E. Kabbaj and S. Wiegand eds., Lecture Notes in Pure and Appl. Math. 231, Marcel Dekker, New York, 2003 (with C. Huneke).
62. Hypersurfaces of bounded Cohen-Macaulay type, J. Pure Appl. Algebra 201 (2005), 204–217 (with G. Leuschke).
63. Local rings of bounded Cohen-Macaulay type, Algebr. Represent. Theory 8 (2005), 225 – 238 (with G. Leuschke).
64. Direct-sum decompositions of modules with semilocal endomorphism rings, J. Algebra 274 (2004), 689–707 (with A. Facchini).
65. Direct-sum decompositions over one-dimensional Cohen-Macaulay rings, 16 pp., in "Multiplicative Ideal Theory in Commutative Algebra: a tribute to the work of Robert Gilmer" J. Brewer, S. Glaz, W. Heinzer, eds., Springer, 2006 (with A. Facchini, W. Hassler and L. Klingler).
66. Direct-sum cancellation for modules over one-dimensional rings, J. Algebra 283 (2005), 93–124 (with W. Hassler).
67. Indecomposable modules of large rank over Cohen-Macaulay local rings, Trans. Amer. Math. Soc. 360 (2008), 1391–1406 (with W. Hassler, R. Karr and L. Klingler).
68. Big indecomposable mixed modules over hypersurface singularities, in "Abelian Groups, Rings, and Modules", P. Goeters and O. Jenda eds., Lecture Notes in Pure and Appl. Math. 249, CRC/Taylor & Francis Books, 2006 (with W. Hassler).
69. Large indecomposable modules over local rings, J. Algebra 303 (2006), 202–215 (with W. Hassler, R. Karr and L. Klingler).
70. What is ... a syzygy?, Notices Amer. Math. Soc. 53 (2006), 456–457 (expository).
71. Big indecomposable modules and direct-sum relations, Illinois J. Math. 51 (2007), 99–122 (with W. Hassler, R. Karr and L. Klingler).
72. Ascent of module structures, vanishing of Ext, and extended modules, Michigan Math. J. 57 (2008), 321–337 (with A. J. Frankild and S. Sather-Wagstaff).
73. Semigroups of modules: a survey, in "Rings, Modules and Representations", Contemp. Math. 480 (2009), Amer. Math. Soc., 335–349 (mostly expository, with S. Wiegand).

74. Extended modules, J. Commutative Algebra 1 (2009), 481–506 (about 40% expository, with Wolfgang Hassler).
75. Direct-sum behavior of modules over one-dimensional rings,in "Commutative Algebra", M. Fontana, S. Kabbaj, B. Olberding and I. Swanson eds., Springer-Verlag, 2010, 251–275 (about 40% expository, with Ryan Karr).
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83. A construction of totally reflexive modules, to appear in Algebr. Represent. Theory (with Hamid Rahmati and Janet Striuli).

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Papers in Preparation:

1. Representation theory and Betti diagrams over short Gorenstein graded algebras (with Luchezar Avramov and Courtney Gibbons).
2. Rigid ideals over complete intersections (with Craig Huneke and Srikanth Iyengar).
3. Pure-projective modules over one-dimensional local rings (with Dolors Herbera and Pavel Prihoda).