

ROGER WIEGAND'S CV

October 2011

Education:

A.B. (Mathematics)	1964	Princeton University
M.S. (Mathematics)	1965	University of Washington
Ph.D. (Mathematics)	1967	University of Washington

Professional Experience:

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	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

Research Interests: Commutative algebra, representation theory

Grants, Contracts, Fellowships, Leaves:

- NSF Grants, 1968 to 1972: two 2-year contracts, one 1-year contract.
- NSF Grant, 1973, \$5,500.
- Maude Hammond Fling Fellowship, 1975.
- NSF Grant, 1976, \$6,500.
- NSF Grant, 1977, \$16,500 (two years).
- Faculty Development Leave, 1978-79 (University of Connecticut).
- NSF Grant, 1980, \$10,700 (two years).
- NSF Grant MCS-8102400, 1981, \$24,998 (two years).
- NSF Grant MCS-8401600, 1984, \$32,600 (two years).
- Faculty Development Leave, 1985-86 (University of Wisconsin).
- NSF Grant DMS-8701243, 1987, \$20,800 (two years): Torsionfree Modules over Affine Coordinate Rings.
- NSF Grant DMS-8909612, 1989, \$20,000 (three years): Midwest/Great Plains Workshops in Commutative Algebra.
- NSF Grant DMS-9106739, \$17,050, 1991 (two years): Topics in Commutative Algebra and Algebraic Geometry.
- NSF Grant DMS-9215003, \$32,550, 1992 (one year): Field Theory and Picard Groups.

- Faculty Development Leave, 1992-93 (Purdue University).
- NSF Grant DMS-9307289, \$25,000, 1993 (three years): Topics in Commutative Algebra and Algebraic Geometry (group infrastructure support–no salary).
- NSF Grant DMS-9401416, \$42,000, 1994 (three years): Modules over Local Rings.
- NSF Grant DMS-9709757, \$30,010, 1997 (three years): Topics in Commutative Algebra and Algebraic Geometry (group infrastructure support–no salary).
- NSF Grant DMS-9801309, \$57,084, 1998 (three years): Depth Properties of Modules over Local Rings.
- \$2000 REU supplement to grant above.
- 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.
- *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.

PhD Students (all UNL):

Thomas S. Fischer 1977	Kaiser Permanente (now retired)
Bette G. Midgarden 1978	VPAA, 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	Assoc. Prof., Univ. Texas–Arlington
Darren Holley 1997	Faculty, Omaha North High School
Graham Leuschke 2000	Assoc. Prof., Syracuse University
Karl Kattchee 2001	Assoc. Prof., Univ. Wisconsin–LaCrosse
Ryan Karr 2002	FAU, UCF (now on the job market)
Nicholas Baeth 2005	Assoc. Prof., University of Central Missouri
Andrew Crabbe 2008	Postdoctoral Scholar, Syracuse University (now Univ. Penn. Pre-Med Program)
Olgur Çelikbas 2010 (co-advised by Mark Walker)	Postdoctoral Scholar, University of Missouri
Silvia Saccon 2010	Postdoctoral Scholar, University of Arizona
Micah Leamer 2011 (co-advised by Srikanth Iyengar)	Postdoctoral Scholar, Chennai Math. Institute

Current PhD Student:

Courtney Gibbons (co-advised by Luchezar Avramov)

Service Activities (this millennium):

Departmental:

- Graduate Chair; 2000–2004
- Graduate Recruiting Chair, 2004–2005
- Graduate Exams Coordinator, Fall 2007
- Graduate Advisory Committee, 2007–2008
- Executive Committee, 2000–2001, 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 90th birthday
celebration, 2006
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–present
Chair, Search Committee for Department Chair, 2011

College:

Executive Committee; 2006–2007

University:

Faculty Advisor for UNL Climbing Club
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, 2001–2004; Chair, 2002–2004)
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, 2007–2010
External Review Team for Univ. of Cincinnati APR, 2008
Scientific Committee for “Troisieme Rencontre Internationale autour des
Polynomes a Valeurs Entieres et Problèmes d’Algèbre Commutative”,
Luminy, 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 Interuniversitaria, 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.

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 degli Studi di Padova (2002; 7 lectures on representation theory)
 University of California–Berkeley (2003)
 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 degli Studi di Padova (June 2007)
 Reed College (November 2007)
 Michigan State University (April 2008)
 Syracuse University (April 2009, December 2009)
 Università degli Studi 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)

Forthcoming seminar/colloquium talks:

Universidad de Granada (November 2011)
 Università degli Studi di Padova (November 2011)
 Universität Bielefeld (November 2011)

Other Professional Activities (this millennium):

- 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.

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).
76. Prime ideals in Noetherian rings: a survey, “Ring and Module Theory”, T. Albu, G. F. Birkenmeier, A. Erdoğan and A. Tercan, eds., Birkhäuser, Boston, MA, 2010, 175–193 (mostly expository, with S. Wiegand).
77. Brauer-Thrall for totally reflexive modules, 34 pp. (with Lars Winther Christensen, David A. Jorgensen, Hamid Rahmati and Janet Striuli), *J. Algebra*, to appear.

Book: Cohen-Macaulay Representations, 514 pp., accepted, pending revisions, by Math. Surveys Monogr., Amer. Math. Soc. (with Graham Leuschke).

Paper submitted for publication:

78. Factorization theory and decompositions of modules, 23 pp. (mostly expository, with Nicholas Baeth).

Paper in preparation:

79. A criterion for the vanishing of homology, 12 pp. (with Olgur Celikbas and Greg Piepmeyer).