

CURRICULUM VITA

AVNER FRIEDMAN

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Math Tower 532
Born: November 19, 1932
Birthplace: Israel; Citizenship: USA
Marital Status: Married, Four Children

RESEARCH INTERESTS

Partial differential equations, mathematical biology, stochastic differential equations, and control theory.

EDUCATION

M.Sc. (Major in Mathematics, minor in Physics), Hebrew University 1954
Ph.D. in Mathematics, Hebrew University 1956

WORK EXPERIENCE

Research Associate, University of Kansas 1956 - 1957
Lecturer, Indiana University 1957 - 1958
Visiting Assistant Professor, University of California, Berkeley 1958 - 1959
Associate Professor, University of Minnesota 1959 - 1961
Visiting Associate Professor Stanford University 1961 - 1962
Professor, Northwestern University 1962 - 1985
(Noyes Professor of Mathematics 1984--85)
Visiting Professor, Tel Aviv University 1966 - 1967
Visiting Professor, Tel Aviv University 1970 - 1971
Duncan Distinguished Professor of Mathematics, Purdue University 1985 - 1987
Director, Institute for Mathematics and its Applications and 1987 - 1997
Professor, School of Mathematics, University of Minnesota 1987 - 2001
(Regents Professor 1996 -- 2001)
Director, Minnesota Center for Industrial Mathematics (MCIM) 1994 – 2001
Distinguished Professor of Mathematical and Physical Science,
The Ohio State University 2001 – 2007
Director, Mathematical Biosciences Institute,
The Ohio State University 2002 – 2008
Distinguished University Professor 2007 –
The Ohio State University

RESEARCH SUPPORT

Research funds (mostly from NSF) have been awarded continuously since 1958 - 2010

NATIONAL BOARDS

Board of Mathematical Sciences	1990--1996
Chair of Board on Mathematical Sciences	1994--1997
Board of Trustees of SIAM	1990--1995
President of SIAM	1993--1995
NRC Commission on the Physical Sciences, Mathematics and Applications	1992--1994
President of Society of Mathematical Biology	2007--2009

SCIENTIFIC ADVISORY COMMITTEES

NIST	1989--1996
DIMACS (Chair of the Advisory Committee)	1989--1999
NISS	1991--1997
Fields Institute	1997--2000
Mathematics Across the Curriculum, Indiana University	1996--1999
Theoretical Physics Institute, University of Minnesota	1995--1999
Institute for Mathematical Sciences, Singapore	2001--

ACADEMIC HONORS/AWARDS/RECOGNITIONS

Sloan Fellowship	1962--1965
Guggenheim Fellowship	1966--1967
Recipient of Stampacchia Prize	1982
National Science Foundation Special Creativity Award	1983--85, 1991--93
American Academy of Arts and Sciences	1987--
National Academy of Sciences	1993--
Real Academia de Ciencias Exactas, Físicas y Naturales (Spain)	1998--
Honorary Professorship, Fudan University, Shanghai	2002

VISITING FELLOW

1. Oxford University, one month each summer	1982--1988
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EDITORIAL BOARD

Proceedings of the AMS,	1962--1965
Journal of Differential Equations	1969--
SIAM J. Control	1970--1986
Royal Society of Edinburgh Proc. Sec. A.	1974--1983
Mathematics Operations Research	1976--1982
Comm. in Partial Differential Equations	1976--1995
J. Nonlinear Analysis, Theor., Meth., Appl.	1976--83, 1991--
Stochastic Analysis & Applications	1983--
J. of Mathematical Anal. and its Appl.	1986--
European Journal of Applied Mathematics	1989--2004
Dynamics Systems and Applications	1991--
Surveys on Mathematics in Industry	1992--
Russian Journal of Mathematical Physics	1993--
Nonlinear Differential Equations and Applications	1994--
Communications on Applied Nonlinear Analysis	1994--

Discrete and Continuous Dynamic Systems	1995--1997
Journal of Inverse and Ill-Posed Problems	1998--
Chinese Annals of Mathematics	1998 -
Interfaces and Free Boundaries	1999-
Journal of Engineering Mathematics	2000--2001
Chinese Journal of Engineering Mathematics	2002--
Mathematical Biosciences and Engineering	2004 --
Differential Equations and Nonlinear Mechanics	2005 –
Ukrainian Mathematical Bulletin	2007--
Journal of Advanced Researches on Differential Equations	2009 --
Journal of Partial Differential Equations	2010 –
Journal of Royal Academy of Science (Madrid)	2010 –
Journal of Mathematics in Industry	2010 –
Archives of Control Science	2011 –
Tamkan Journal of Mathematics	2014-

SERVICES AS ADVISOR

Shin-Sheng Tai, Ph.D., Northwestern U., Evanston, IL	1967
Kuang-Ho Chen, Ph.D., Northwestern U., Evanston, IL	1970
Zeev Schuss, Ph.D., Northwestern U., Evanston, IL	1970
William Vesely, Ph.D., Northwestern U., Evanston, IL	1970
Ronald Jay Stern, Ph.D., Northwestern U., Evanston, IL	1972
Richard Carmen Scalzo, Ph.D., Northwestern U., Evanston, IL	1973
Leon Carl Stecher, Ph.D., Northwestern U., Evanston, IL	1973
Emmanuel Nicholas Barron, Ph.D., Northwestern U., Evanston, IL	1973
Robert Ronald Jensen, Ph.D., Northwestern U., Evanston, IL	1975
Pauline Marie Melanson Ippolito, Ph.D., Northwestern U., Evanston, IL	1976
Barry Franklin Knerr, Ph.D., Northwestern U., Evanston, IL	1976
Randal Stephen Beck, Ph.D., Northwestern U., Evanston, IL	1979
Daniel Yaniro, Ph.D., Northwestern U., Evanston, IL	1984
Sara Cohen, Ph.D., Northwestern U., Evanston, IL	1985
Srdjan Stojanovic, Ph.D., Northwestern U., Evanston, IL	1986
Hamid Bellout, Ph.D., Purdue U., West Lafayette, IN	1986
Arthur Guetter, Ph.D., Northwestern U., Evanston, IL	1987
Jong-Shenq Guo, Ph.D., University of Minnesota	1989
Bei Hu, Ph.D., University of Minnesota	1990
Xinfu Chen, Ph.D., University of Minnesota	1991
Fernando Reitich, Ph.D., University of Minnesota	1991
Wenxiong Liu, Ph.D., University of Minnesota	1992
Chaocheng Huang, Ph.D., University of Minnesota	1995
Yong Liu, Ph.D., University of Minnesota	1995
Jianhua Zhang, Ph.D., University of Minnesota	1995
Scott Shald, Ph.D. University of Minnesota	1999

BOOKS

1. Generalized Functions and Partial Differential Equations. Prentice-Hall (1963).

2. Partial Differential Equations of Parabolic Type. Prentice-Hall (1964).
3. Partial Differential Equations. Holt, Rinehart, and Winston, New York (1969).
4. Foundations of Modern Analysis. Holt, Rinehart, and Winston, New York (1970).
5. Advanced Calculus. Holt, Rinehart, and Winston, New York (1971).
6. Differential Games. John Wiley, Interscience Publishers (1971).
7. Stochastic Differential Equations and Applications. Vol. 1, Academic Press (1975).
8. Stochastic Differential Equations and Applications. Vol. 2, Academic Press (1976).
9. Variational Principles and Free Boundary Problems, Wiley & Sons (1983).
10. Mathematics in Industrial Problems, IMA Volume 16, Springer-Verlag (1988).
11. Mathematics in Industrial Problems, Part 2, IMA Volume 24, Springer-Verlag (1989).
12. Mathematics in Industrial Problems, Part 3, IMA Volume 31, Springer-Verlag (1990).
13. Mathematics in Industrial Problems, Part 4, IMA Volume 38, Springer-Verlag (1991).
14. Mathematics in Industrial Problems, Part 5, IMA Volume 49, Springer-Verlag (1992).
15. Mathematics in Industrial Problems, Part 6, IMA Volume 57, Springer-Verlag (1993).
16. (with W. Littman) Problems in Industrial Mathematics, SIAM, Philadelphia (1994).
17. Mathematics in Industrial Problems, Part 7, IMA Volume 67, Springer-Verlag (1994).
18. Mathematics in Industrial Problems, Part 8, IMA Volume 83, Springer-Verlag (1996).
19. Mathematics in Industrial Problems, Part 9, IMA Volume 88, Springer-Verlag (1997).
20. Mathematics in Industrial Problems, Part 10, IMA Volume 100, Springer-Verlag (1998).
21. (with D. Ross) Mathematical Models in Photographic Science, Springer-Verlag (2002).
22. (with B. Aguda) Models of Cellular Regulation, Oxford, 2008.
23. (with C. Y. Kao) Mathematical Modeling of Biological Processes, Springer (2014).
24. (with C. S. Chou) Introduction to Mathematical Biology, Springer (2016).
25. Mathematical Biology: Modeling and Analysis, CBMS #127, American Mathematical Society, (2018).

PUBLISHED REPORTS

- Chair of the report "Applications of the Mathematical Sciences to Materials Science," National Research Council, 1991.
- Chair of the report "Mathematical Foundations of High-Performance Computing and Communications," National Research Council, 1991.
- Member of the committee of the report "Doctoral Study and the Postdoctoral Experience in the United States," National Research Council, 1992.
- Friedman, J. Glimm and J. Lavery, "The Mathematical and Computational Sciences in Emerging Manufacturing Technologies and Management Practices," SIAM Reports on Issues in the Mathematical Sciences, Philadelphia 1992.
- Chair of the report "Mathematical Research in Materials Sciences," National Research Council, 1993.
- Friedman and J. Lavery, "How to Start an Industrial Mathematics Program in the University," SIAM, Philadelphia 1993.
- Chair of the report "Preserving Strength while meeting Challenge," National Research Council, 1998.
- Member of the committee for the report: "Mathematical Institutes," National Research Council, 1999

LECTURES IN CONFERENCES

LECTURES: 1985

Invitation for a one week visit at the Institute for Applied Mathematics in Minneapolis, Minnesota, March 1985.

Invitation to conference on "Nonlinear Parabolic Equations," Rome, Italy, April 1-6, 1985.

Invitation to "Stochastic Differential Systems," Bad Honnef, West Germany, June 4-7, 1985.

Invitation to be one of the organizers of "International Symposium on Mathematical Theory of Networks and Systems," Stockholm, Sweden, June 10-14, 1985.

Invitation to be a main lecturer in "Fifth Czechoslovak Conference on Differential equations and Their Applications," August 26-30, 1985.

Workshop in Partial Differential Equations and Applications, Tsinghua University, Peking, May 3-7, 1985.

Invitation to Symposium on Nonlinear Partial Differential Equations, MRC, Madison, Wisconsin, October 28-30, 1985.

LECTURES: 1986

Invitation for a Lecture Series at the University of Madrid, Madrid, Spain, May 1986.

Invitation to International Conference on Calculus of Variations and Optimal Control, Pisa, Italy, March 24-26, 1986.

Invitation to "Control of partial differential equations," Gainesville, Florida, February 2-6, 1986.

Conference on free boundary problems in Pavia (3 talk series), June 7-14, 1986.

LECTURES: 1987

Invited talk in a 3-day conference on nonlinear problem in evolution model, Los Alamos, February, 19, 1987.

A talk in "geometric design" conference, Wayne University, May, 1987.

Invited talk in a conference at Irsee, Germany, on free boundary problems, June 10-20, 1987.

LECTURES: 1988

Invited talk in a symposium on Inverse Problems, University of Maryland, March 1988.

RPI workshop on Mathematical Problems in Industry, June, 1988.

Invited talk in Conference on Nonlinear Evolution Equations, Nancy, France, March 1988.

Smith Associates lecture at Oxford University, November 1988.

LECTURES: 1989

Invited talks to workshop on Blow up of Solution of Evolution Equations, Edinburgh, May 1989.

LECTURES: 1990

Invited talk in conference on Numerical and Asymptotic Methods in Differential Equation, Argonne National Laboratories, February 1990.

Invited talk in Browder,s Conference, Rutgers University, May 1990.

Invited talk in Free Boundary Conference, Montreal, June 1990.

Invited talk in joint U.S. - Brazil Conference in PDE, at IMPA, Rio de Janeiro, October, 1990.

LECTURES: 1991

Invited talk, Conference in Metz (France) on Nonlinear Elliptic and Parabolic Equation, June 1991.
Invited talk, Conference in Bath, England on Nonlinear Analysis, July 1991.
Invited talk, Carnegie Mellon Conference in Nonlinear Analysis, September 1991.

LECTURES: 1992

Invited talk at the Opening of Fields Institute in Canada, June 1992.
Invited talk in Rome, Conference on Nonlinear Equations, June 1992.
Two invited talks in Nonlinear World, Tampa, Florida, August 1992.

LECTURES: 1993

Talk at SPIE meeting in materials science, Albuquerque, New Mexico, February 1993.
Invited talk in Conference on Waves, Delaware, June 1993.
Invited talk at ARO Conference at Carnegie Mellon, June 1993.
Invited talk in Free Boundary Conference, Toledo, Spain, June 1993
Invited talk at AMS/Canada Conference in Vancouver, August 1993.
University of Manitoba, Industrial Mathematics Conference, December 1993.

LECTURES: 1994

Southwest SIAM Chapter, Wake Forest, N.C. March 1994.

LECTURES: 1995

AMS Annual Meeting, January.
Glimm,s Conference, Stonybrook, April.
Yamaguti Conference, Kyoto, May.
Conference on Free Boundary Problem, Poland, June.
ICIAM, Hamburg, July.
Conference on Nonlinear PDE, Rome, October.

LECTURES: 1996

Present and Future Directions in Applied Mathematics, Notre Dame, April.
AMS-SIAM Summer School in Manufacturing, Williamstown, June.

LECTURES: 1997

Conference in PDE honor of Barenblatt, Rome, May.
Conference on Navier Stokes Equation, St. Petersburg, Russia, October.
Conference of Phase Transition, Weierstrass Institute, Berlin, November.

LECTURES: 1998

Free Boundary Problems and Application, Madeira, Portugal, January.
Conference in Partial Differential Equation, Northwestern University, March.
Conference on Industrial Mathematics, Northeastern University, April.
Conference in honor of Joel Smoller, University of California-Davis, April.
International Conference in Applied and Industrial Mathematics, Venice, Italy, June.
Conference on Phase Transition, Hangzoh, China, June
International Conference in Differential Equations, Prague, August
Workshop on Material Sciences, Munich, Germany, December

LECTURES: 1999

Conference in Differential Equations, Karmiel, Israel, May
Conference in Material Science in Honor of K.H. Hoffman, Munich, June
Plenary Talk in ICIAM (International Congress of Industrial & Applied Mathematics), Edinburgh, June
International Conference in PDE, Shanghai, July
Society of Engineering Science, Austin, Texas, October
Conference in Honor of J.L. Lions, Houston, Texas, October
Workshop on Multiscale Problems, Heidelberg, Germany, November
International Conference on Free Boundary Problems, Chiba, Japan, November

LECTURES: 2000

Conference "Mathematics & its Role in Civilization", University of Macau, January
University of Notre Dame, April
International Conference on "Nonlinear Parabolic Equations", Tel Aviv, Israel, June
SIAM Workshop on Industrial Mathematics, University of Washington, Seattle, October
Conference on Nonlinear Analysis, Heidelberg, October
RPI "Days of Applied Mathematics", October
Workshop on Nonlinear Analysis, Kyoto, Japan, December

LECTURES: 2001

Serrin's Conference, Minneapolis, November
Joint Taiwan – AMS conference in Taiwan, December

LECTURES: 2002

Midwest PDE Seminar, October
Conference on Cancer Models, Vanderbilt, April
Conference in Partial Differential Equations, Netherlands, March

LECTURES: 2003

International Conference in Nonlinear Evolution Equations, Rome, Italy, January
Dynamical Systems, Snow Bird, Utah, May
International Conference in Partial Differential Equations, Haifa, Israel, June
Conference on Applications of Partial Differential Equation, Sdeh Boker, Israel, June
Symposium on Application of PDE and Biocomplexity, Notre Dame, Indiana, August

LECTURES: 2004

Petrowski Conference, Moscow, May
Nonlinear Analysis, Florida, June
SIAM Life Science, Portland, July
Conference in Mathematical Biology, Notre Dame, October
SIAM regional conference, Dayton, OH, October

LECTURES: 2005

British Applied Mathematics Conference, Liverpool, April

Conference on Applied Mathematics and Mathematical Biology, NJIT, New Jersey, April
Workshop on Cancer, University of Michigan, April
Conference on Mathematical Biology and Cancer, Banach Institute, Bodrewo, Poland, May
Conference in Partial Differential Equations, Stockholm, May
International Conference in Free Boundary Problems, Portugal, June
Symposium on Mathematical Biology, Paris, September

LECTURES: 2006

PDE conference in honor of Kinderlehrer, Carnegie Mellon, October
Conference in Mathematical Biology, Nairobi, Kenya, December

LECTURES: 2007

Conference on Cancer, Dundee Scotland, March
Conference on Public Health, Phoenix, Arizona, March
ICIAM, Zurich, Switzerland, July
4th Danish Conference in Applied Mathematics, Copenhagen, August
MII Symposium, Philadelphia, October
K.H. Hoffman Conference, Munich, Germany, October
Future of Mathematics Education in Europe, Lisbon, Portugal, December

LECTURES: 2008

International Conference in Biomathematics, Marrakesh, Morocco, January
Conference on Pattern Formation in Developmental Biology, Linz, Austria, January
10th International Conference on Molecular System Biology, Manila, Philippines, February
International Symposium on ICT for Health, Manila, Philippines, March
International Conference in Nonlinear Analysis, Orlando, Florida, July
Annual meeting of the Korean Society of Mathematical Biology, Seoul, October
Future Directions in PDE (Caffarelli's conference) Austin, Texas, December

LECTURES: 2009

African Workshop in Mathematical Biology, Cape Town, January
SMB/CSMB International Conference in Hangzhou, China, June
BIRS workshop in mathematical biology, Banff, Canada, July
Conference on Partial Differential Equations, Prague, December

LECTURES: 2010

International Conference in System Biology, Tel Aviv, Israel, January
Workshop on Pattern Formation and Morphogenesis, IHES, Paris, January
OCC 2010 World Congress: Oxidants and Antioxidants in Biology, Santa Barbara, Calif., March
International Conference in Nonlinear PDES, Dnienpopetrovsk, Ukraine, September
Conference in Industrial Mathematics, Tokyo, October
Conference in Biological Processes Taiwan, December

LECTURES: 2011

MSRI Workshop on Free Boundary Problem, March
PDE International Conference in Toledo, Spain, June

PDE International Conference in Dnepropetrovsk, Ukraine, June
ICIAM Minisymposia talks, Vancouver, July
Cancer Conference, Erice, Sicily, August
International Conference on PDEs Applied to Biology, Beijing, October

LECTURES: 2012

International Conference SMB/India, January
International Conference in Free Boundary Problems, Bavaria (Germany), June
IHES conference in Mathematical Biology, June
AIMS International Conference, Florida, July
Conference in Mathematical Biology, Harbin, China, September
Sustainability Conference, Belgium, October

LECTURES: 2013

Conference in Mathematical Biology, Korea, May
Mathematical Biology Workshop, IHES, Paris, June
Mathematical Conference in Dynamical Systems, Lodze, Poland, June
BEER Conference in Mathematical Biology, Washington D. C. October
Mathematical Biology Conference, Bar Ilan University, Israel, October

LECTURES: 2014

MBI Workshop on Cancer-immune interaction, Columbus, April
Conference on Cancer, Korea, May
Center Regenerative Medicine Cell Based Therapy, Ohio, July

LECTURES: 2015

NIH workshop on Breast Cancer, Washington DC, January
MBI Cancer Workshops, April
International Conference on Mathematics in the Life and Physical Sciences, Beijing, May
Workshop on Management of Natural Resources, Howard University, June
Micro-Macro processes in mathematical biology, Banach Institute, Bedlewo, Poland, June
Epidemiology and infectious diseases, Erice, Italy, September
IMA Workshop on complex biological networks, November

LECTURES: 2016

Workshop on Cancer, Howard University, April
Conference in Mathematical Biology, Bialystok, Poland, June
Conference in Application of Mathematical Analysis, Lodz, Poland, June
SEARCDE 2015, Florida South Coast University, November
Workshop in Infectious Diseases, Howard University, November

LECTURES: 2017

SIAM-Argentina Conference, Patagonia, May
International conference in Free Boundary Problem, Shanghai, China, July
Society Mathematical Biology, Salt Lake City, July
Conference in Control and Disease, Porto, Portugal, July

Conference on Cardiovascular disease and Cancer, Lisbon, Portugal, November

LECTURES: 2018

Ten invited lectures in CBMS Conference in Mathematical Biology at Howard University, May

IMA workshop on Biological Networks, Minnesota, June

Conference on Cancer and Cancer Therapy, Marseille, July

Ten invited lectures in PDE-Biology Summer School, Fudan University, Shanghai, July

Conference in Computational and Mathematical Medicine, Cancun, Mexico, December

LECTURES: 2019

Hans Othmer conference in mathematical biology, University of Minnesota, May

Conference on PDE model in Science, Penn State University, October

LECTURES: 2021

Howard University, December 2021

Ohio State University, December 2021

COLLOQUIUM TALKS: 1984-85

Rensselaer Polytech. Institute, Troy, New York, February 13, 1984

M.I.T., Cambridge, Massachusetts, February 14, 1984

Carnegie-Mellon University, Pittsburgh, Pennsylvania, February 16, 1984

Purdue University, West Lafayette, Indiana, September 20, 1984

Tel Aviv University, Tel Aviv, Israel, October 29, 1984

Weizmann Institute, Rehovot, Israel, November 5, 1984

Hebrew Institute, Jerusalem, Israel, November 7, 1984

University of California, Berkeley, California, February 6, 1985

Three talks at the University of North Carolina, Raleigh, North Carolina, May 6-8, 1985

East China Institute of Textile Technology, Shanghai, China, May 28, 1985

Fudan University, Shanghai, China, May 29, 1985

Xian University, China, May 31, 1985

COLLOQUIUM TALKS: 1986-87

Tel Aviv University, December 1986

Ohio State University, February 1987

Oak Ridge, Tennessee, March 1987

University of Michigan, Ann Arbor, September 1987

University of Houston, September 1987

Rice University, September 1987

University of Pittsburgh, October 1987

Institute for Advanced Study, November 1987

Naval Surface Weapon, White Plains, November 1987

COLLOQUIUM TALKS: 1988-89

Princeton, Institute for Advanced Studies, May 1988

Purdue University, November 1988

Yale University, November 1988
Ohio State, December 1988
Wright-Patterson Institute of Technology, Dec. 1988
University of Calif., San Diego, February 1989
Georgia Tech., March 1989
Los Alamos, April 1989
University of Massachusetts, April 1989
Tokyo University, June 1989
Kyoto University, July 1989
Wichita State University, October 1989
Iowa State University, November 1989
Northwestern University, December 1989

COLLOQUIUM TALKS: 1990-91

University of Manitoba, March 1990
Hebrew University, March 1990
Virginia Polytech Institute, August 1990
Tokyo University, November 1990
University of Paris VI, March 1991
University of Augsburg, October 1991
University of Madrid, November 1991
Tokyo University, November 1991

COLLOQUIUM TALKS: 1991-1992

Xerox Webster Research, Rochester, NY, June 1992
Beer Sheva University, Institute for Industrial Mathematics, June 1992
Wayne State, Sept. 1992
University of Tokyo, November 1992

COLLOQUIUM TALKS: 1993-1994

A series of three colloquium talks in three universities in Taiwan, April 1993
National University of Seoul, Korea, August 1993
Ohio State University, October 1993
University of Austin, Texas, November 1993
University of Manitoba, Industrial Mathematics Conference, December 1993
Notre Dame, March 1994
Inst. For Industrial Mathematics, Beer Sheva, Israel, November 1994
Tel Aviv University, November 1994
Hebrew University, December 1994

COLLOQUIUM TALKS: 1995

University Southern Florida, February
University of Tokyo, June
University of Madrid, June
Central Florida University, October
University of Michigan, October

COLLOQUIUM TALKS: 1996

University of British Columbia, March

University of Madrid, May

COLLOQUIUM TALKS: 1997

University of Madrid, June

North Carolina State, October

COLLOQUIUM TALKS: 1998

University of Madrid, January

University of Lisbon, January

Herroitt-Watt University, February

Princeton (Distinguished Lecture Series), February

California Institute of Technology, March

Rowlee Lecture, University of Nebraska, Lincoln, April

Tel Aviv University, May

University of Pavia, June

Hong Kong Mathematical Society, June

Brown University, October

Universidad de Complutense, Madrid, November

University of Kaiserslautern, Germany, December

COLLOQUIUM TALKS: 1999

University of Texas, Austin, October

University of Illinois, Urbana, November

COLLOQUIUM TALKS: 2000

University of British Columbia, April

CWI, Amsterdam, May

University of Trento, Italy, October

Dow, Technical Advisory Board Meeting, Houston, October

Vanderbilt University, November

COLLOQUIUM TALKS: 2001

National University of Singapore, December

COLLOQUIUM TALKS: 2002

Fudan University, Shanghai, May

Taiwan Normal University, December

Taiwan National University, December

COLLOQUIUM TALKS: 2003

University of Pittsburg, February

University of Akron, April

Kent State, April

Five talks in North England and Scotland Seminar (Manchester, Leeds, Edinburgh, and Dundee),
May
University of Kansas, October

COLLOQUIUM TALKS: 2004

Vanderbilt, March
Iowa State, April
IUPUI, October
University of Michigan, October
SIAM Great Lake, Dearborn, MI, October
University of Minnesota, November
University of Cincinnati, November

COLLOQUIUM TALKS: 2005

University of California, Irvine, February
Nottingham University, England, April
Miami University, September
Indiana University, October
Oberlin College, October
Taiwan Normal University in Taipei, December

COLLOQUIUM TALKS: 2007

Howard University, April
University of Minnesota, May
Baylor University, Waco, November
Simon Fraser University, Vancouver, Canada, November
Singapore National University, Singapore, December
University of Lisbon, Portugal, December

COLLOQUIUM TALKS: 2008

University of Vienna, January
Purdue University, January
University of the Philippines, Manila, February
POSTEC, Phuang, Korea, October
Midwest PDE, Columbus, OH, November

COLLOQUIUM TALKS: 2009

Public lecture in CapeTown, South Africa, January
University of Barcelona, Madrid, March
University of Heidelberg, October

COLLOQUIUM TALKS: 2010

University of Auckland, New Zealand, February
Iowa State, Miller Distinguished Lecture, March
Ukraine Academy of Sciences, Kiev, September
Ching-Hua University, Taiwan, December

COLLOQUIUM TALKS: 2011

Bar Ilan University, November
Beijing University, October
China Academy of Science, October

COLLOQUIUM TALKS: 2012

AIMS, Cape Town, January
Stellenbosch University, South Africa, January
Howard University, October
Bar Ilan University, Israel, October
Hong Kong (one week series of lectures), December

COLLOQUIUM TALKS: 2013

Michigan State, April
Konkuk University, Seoul, May
Harbin Institute of Technology, one week lecture series, China
CIMAT, Mexico, September, October
Duke University, October
University of Kansas, October
Howard University, October

COLLOQUIUM TALKS: 2014

Arizona State University, April
Konkuk University, Seoul, Korea, May

COLLOQUIUM TALKS: 2015

Renmin University, May
Beijing Science and Technology, May
Beijing Technological University, May

COLLOQUIUM TALKS: 2016

Penn State, February
Technical University, Lodz, October
Clairmont Colleges, November
Nimbios, University of Tennessee, December

COLLOQUIUM TALKS: 2017

FDA, Washington DC, February
Fudan University, China, July
University of Houston, September

COLLOQUIUM TALKS: 2019

National Children Hospital, February

COLLOQUIUM TALKS: 2021

BIBLIOGRAPHY

1. *On the mean value theorem.* Bull. Res. Council. Israel, Vol. 6A, (1956), 47--49.
2. *Mean values and polyharmonic polynomials.* Michigan Math. , Vol. 4 (1957), 67--74.
3. *Bilinear integrals of polyharmonic functions and of analytic functions.* Michigan Math. J., Vol. 4 (1957), 77--84.
4. *On n -metaharmonic functions and harmonic functions of infinite order.* Proc. Amer. Math. Soc., Vol. 8 (1957), 223--229.
5. *On classes of solutions of elliptic linear partial differential equations.* Proc. Amer. Math. Soc., Vol. 8 (1957), 418--427.
6. *On the properties of a singular Sturm-Liouville equation determined by its spectral functions.* Michigan Math. J., Vol. 4 (1957), 137--145.
7. *Classes of solutions of linear systems of partial differential equations of parabolic type.* Duke Math. J., Vol. 24 (1957), 433--442.
8. *On n -metacaloric functions.* Proc. Amer. Math. Soc., Vol. 8 (1957), 770--776.
9. *Oscillatory solutions of nonlinear autonomous differential equations or order higher than two.* Duke Math. J., Vol. 24 (1957), 561--566.
10. *On two theorems of Phragmen-Lindelof for linear elliptic and parabolic differential equations of the second order.* Pacific J. Math., Vol. 7 (1957), 1563--1575.
11. *On the regularity of the solutions of nonlinear elliptic and parabolic systems of partial differential equations.* J. Math. and Mech., Vol. 7 (1958), 43--59.
12. *Uniqueness properties in the theory of differential operators of elliptic type.* J. Math. and Mech., Vol. 7 (1958), 61--67.
13. *Linear partial differential systems with an additional differential equation at one point.* J. Math. and Mech., Vol. 7 (1958), 173--190.
14. *Interior estimates for parabolic systems of partial differential equations.* J. Math. and Mech., Vol. 7 (1958), 393--417.
15. *Liouville's theorem for parabolic equations of the second order with constant coefficients.* Proc. Amer. Math. Soc., Vol. 9 (1958), 272--277.
16. *Boundary estimates for second order parabolic equations and their applications.* J. Math. and Mech., Vol. 7 (1958), 771--791.
17. *On quasi-linear parabolic equations of the second order.* J. Math. and Mech., Vol. 7 (1958), 793--809.
18. *Remarks on the maximum principle for parabolic equations and its applications.* Pacific J. Math., Vol. 8 (1958), 201--211.
19. *Convergence of solutions of parabolic equations to a steady state.* J. Math. and Mech., Vol. 8 (1959), 57--76.
20. *Generalized heat transfer between solids and gases under nonlinear boundary conditions.* J. Math. and Mech., Vol. 8 (1959), 161--183.
21. *Asymptotic behavior of solutions of parabolic equations.* J. Math. and Mech., Vol. 8 (1959), 387--392.
22. *On the uniqueness of the Cauchy problem for parabolic equations.* Amer. J. Math., Vol. 81 (1959), 503--511.

23. *Free boundary problems for parabolic equations I: Melting of solids.* J. Math. and Mech., Vol. 8 (1959), 499--517.
24. *Parabolic equations of the second order.* Trans. Amer. Math. Soc., Vol. 93 (1959), 509--530.
25. *Free boundary problems for parabolic equations II: Condensation and evaporation of a liquid drop.* J. Math. and Mech., Vol. 9 (1960), 19--66.
26. *Free boundary problems for parabolic equations III: Dissolution of a gas bubble in liquid.* J. Math. and Mech., Vol. 9 (1960), 327--345.
27. *Mildly nonlinear parabolic equations with application to flow of gases through porous media.* Archive Rat. Mech. and Anal., Vol. 5 (1960), 238--248.
28. *On quasi-linear parabolic equations of the second order II.* J. Math. and Mech., Vol. 9 (1960), 539--558.
29. *Remarks on Stefan-type free boundary problems for parabolic equations.* J. Math. and Mech., Vol. 9 (1960), 885--903.
30. *A new proof and generalizations of the Cauchy-Kowaleski theorem.* Trans. Amer. Math. Soc., Vol. 98 (1961), 1--20.
31. *A strong maximum principle for weakly subparabolic functions.* Pacific J. Math., Vol. 11 (1961), 175--184.
32. *Simplifying the structure of second order partial differential equations.* Trans. Amer. Math. Soc., Vol. 99 (1961), 303--307.
33. *Local isometric imbedding of Riemannian manifolds with indefinite metric.* J. Math. and Mech., Vol. 10 (1961), 625--649.
34. *On fundamental solutions of elliptic equations.* Proc. Amer. Math. Soc., Vol. 12 (1961), 533-537.
35. *Asymptotic behavior of solutions of parabolic equations of any order.* Acta. Math., Vol. 106 (1961), 1--43.
36. *Function-theoretic characterization of Einstein spaces and harmonic spaces.* Trans. Amer. Math. Soc., Vol. 101 (1961), 240--258.
37. *The wave equation for differential forms.* Pacific J. Math., Vol. 11 (1961), 1267--1279.
38. *A new proof and generalizations of the Cauchy-Kowalewski theorem to nonanalytic and to non-normal systems.* Symposia in Pure Mathematics, Vol. 4 (1961), 115--119.
39. (with W. Littman) *Bodies for which harmonic functions satisfy the mean value property.* Trans. Amer. Math. Soc., Vol. 102 (1962), 147--166.
40. (with W. Littman) *Functions satisfying the mean value property.* Trans. Amer. Math. Soc., Vol. 102 (1962), 167--180.
41. *Mixed problems for hyperbolic systems.* Archive Rat. Mech. and Anal., Vol. 10 (1962), 180--188.
42. *Cauchy problem in several time variables.* J. Math. and Mech., Vol. 11 (1962), 859--889.
43. *A difference-differential scheme for the general Cauchy problem.* J. Math. and Mech., Vol. 11 (1962), 891--905.
44. *Regularity of fundamental solutions for hyperbolic equations.* Archive Rat. Mech. and Anal., Vol. 11 (1962), 62--96.
45. (with W. Littman) *Partially characteristic boundary problems for hyperbolic equations.* J. Math. and Mech., Vol. 12 (1963), 213--224.

46. *Existence of smooth solutions of the Cauchy problem for differential systems of any type.* J. Math. and Mech., Vol. 12 (1963), 335--374.
47. *On integral equations of Volterra type.* J. d'Analyse Math., Vol. 11 (1963), 381--413.
48. *Optimal control for hereditary processes.* Archive Rat. Mech. and Anal., Vol. 15 (1964), 396--416.
49. *Entire solutions of partial differential equations with constant coefficients.* Duke Math. J., Vol. 31 (1964), 235--240.
50. *Uniqueness of solutions of ordinary differential inequalities in Hilbert space.* Archive Rat. Mech. and Anal., Vol. 17 (1964), 353--357.
51. *Isometric imbedding of Riemannian manifolds in Euclidean spaces.* Review Modern Physics, Vol. 37 (1965), 201--203.
52. *Integral representation of even positive definite functions.* Ann. Polon. Math., Vol. 16 (1965), 267--283.
53. *Periodic behavior of solutions of Volterra integral equations.* J. d'Analyse Math., Vol. 15 (1964), 287--303.
54. *On the Cousin problems.* Bull. Amer. Math. Soc., Vol. 71 (1965), 737--741.
55. *Solvability of the first Cousin problem and vanishing of higher cohomology groups for domains which are not domains of holomorphy.* Bull. Amer. Math. Soc., Vol. 71 (1965), 742--746.
56. *Remarks on nonlinear parabolic equations.* Proc. Sympos. Appl. Math., Vol. 17 (1965), 3--23.
57. *Weak Levi conditions in several complex variables.* Bull. Amer. Math. Soc., Vol. 71 (1965), 908--912.
58. *Differentiability of solutions of ordinary differential equations in Hilbert space.* Pacific J. Math., Vol. 16 (1966), 267--271.
59. *Solvability of the first Cousin problem and vanishing of higher cohomology groups for domains which are not domains of holomorphy II.* Bul. Amer. Math. Soc., Vol. 72 (1966), 505--507.
60. (with M. Shinbrot) *Volterra integral equations in Banach space.* Trans. Amer. Math. Soc., Vol. 126 (1967), 131--179.
61. *Asymptotic behavior of solutions of parabolic differential equations and of integral equations, differential equations, and dynamical systems.* Academic Press, New York (1967), 409--426.
62. *Optimal control for parabolic equations.* J. Math. Anal. and Appl., Vol. 19 (1967), 479--491.
63. *Optimal control in Banach spaces.* J. Math. Anal. and Appl., Vol. 19 (1967), 35--55.
64. (with M. Shinbrot) *The initial value problem for the linearized equations of water waves.* J. Math. and Mech., Vol. 17 (1967), 107--180.
65. *On some inequalities and their application to the Cauchy problem.* Symposium on Inequalities, Academic Press, N.Y. (1967), 119--126.
66. *Boundary behavior of solutions of variational inequalities for elliptic operators.* Archives Rat. Mech. and Anal., Vol. 27 (1968), 95--107.
67. *Singular perturbations for partial differential equations.* Archive Rat. Mech. and Anal., Vol. 29 (1968), 289--303.
68. *The Stefan problem in several space variables.* Trans. Amer. Math. Soc., Vol. 133 (1968), 51--87.

69. *One dimensional Stefan problems with non-monotone free boundary.* Trans. Amer. Math. Soc., Vol. 133 (1968), 89--114.
70. (with M. Shinbrot) *Nonlinear eigenvalue problems.* Acta Math., Vol. 121 (1968), 77--125.
71. *Optimal control in Banach space with fixed end-points.* J. Math. Anal. Appl., Vol. 24 (1968) 161--181.
72. *Differential games of pursuit in Banach space.* J. Math. Anal. Appl., Vol. 25 (1969), 93--113.
73. *Singular perturbation for the Cauchy problem and for boundary value problems.* J. Dif. Eq., Vol. 5 (1969), 226--261.
74. *Monotonicity of solutions of Volterra integral equations in Banach space.* Trans. Amer. Math. Soc., Vol. 138 (1969), 129--148.
75. (with M. Shinbrot) *The initial value problem for the linearized equations of water waves, II.* J. Math. and Mech., Vol. 12 (1969), 1177--1193.
76. *Linear quadratic differential games with non-zero sum and with N players.* Archive Rat. Mech., Anal., Vol. 34 (1969), 165--187.
77. *Nonlinear eigenvalue problems. Studies in Applied Math. Advances in Differential and Integral Equations,* SIAM, Philadelphia (1970), 9--13.
78. *On the definition of differential games and the existence of value and saddle points.* J. Diff. Eq., Vol. 7 (1970), 69--91.
79. *Existence of value and of saddle point for differential games of pursuit and evasion.* J. Diff. Eq., Vol. 7 (1970), 92--110.
80. *Existence of value and of saddle point for differential games of survival.* J. Diff. Eq., Vol. 7 (1970), 111--125.
81. *Optimal play for a class of differential games with fixed duration.* J. D'Analyse Math., Vol. 13 (1970), 113--131.
82. *Differential games with restricted phase coordinates.* J. Diff. Eq., Vol. 8 (1970), 934--162.
83. *Free boundary problems for parabolic equations.* Bull, Amer. Math. Soc., Vol. 76 (1970), 934--941.
84. *Computation of saddle points for differential games of pursuit and evasion.* Archive Rat. Mech. Anal., Vol. 40 (1970), 79--119.
85. *Lectures on differential games, differential games and related topics.* North-Holland, Amsterdam (1971), 83--107.
86. (with Z. Schuss) *Degenerate evolution equations in Hilbert space.* Trans. Amer. Math. Soc., Vol. 161 (1971), 401--427.
87. *Stochastic differential games.* J. Diff. Eq., Vol. 11 (1972), 79--108.
88. *Stochastic differential games.* Optimization Techniques, Academic Press (1972), 299--307.
89. *Comparison theorems for differential games I.* J. Diff. Eq., Vol. 12 (1972), 162--172.
90. *Comparison theorems for differential games II.* J. Diff. Eq., Vol. 12 (1972), 396--416.
91. *Limit behavior of solutions of stochastic differential equations.* Trans. Amer. Math. Soc., Vol. 170 (1972), 359--384.
92. *Upper and lower values of differential games.* J. Diff. Eq., Vol. 12 (1972), 462-473. Correction, same Journal, Vol. 14 (1973), 395--396.

93. *Stability and angular behavior of solutions of stochastic differential equations.* Stability and Stochastic Dynamical Systems, Lecture Notes in Mathematics, No. 294, Springer-Verlag, Berlin (1972), 14--20.
94. *Probabilistic methods in partial differential equations.* Israel J. Math., Vol. 13 (1972), 56--64.
95. *Existence of extended value for differential games of generalized pursuit-evasion.* J. Diff. Eq., Vol. 13 (1973), 172--181.
96. *The asymptotic behavior of the first eigenvalue of a second order elliptic operator with a small parameter in the highest derivatives.* Indiana U. Math. J., Vol. 22 (1973), 1005--1015.
97. *Bounded entire solutions of elliptic equations.* Pacific J. Math., Vol. 44 (1973), 497--507.
98. *The Cauchy problem for first order partial differential equations.* Indiana U. Math. J., Vol. 23 (1973), 27--40.
99. *Uniqueness for the Cauchy problem for degenerate parabolic equations.* Pacific J. Math., Vol. 46 (1973), 131--147.
100. *Remarks on differential games of survival.* J. Diff. Eq., Vol. 14 (1973), 121--128
101. *Stochastic games and variational inequalities.* Archive Rat. Mech. and Anal., Vol. 51 (1973), 321--346.
102. (with M. A. Pinsky) *Asymptotic behavior of solutions of linear stochastic differential equations.* Trans. Amer. Math. Soc., Vol. 181 (1973), 1--22.
103. *Regularity theorems for variational inequalities in unbounded domains and applications to stopping time problems.* Archive Rat. Mech. and Anal., Vol. 52 (1973), 134--160.
104. *Wandering out to infinity of diffusion processes.* Trans. Amer. Math. Soc., Vol. 184 (1973), 185--203.
105. (with M. A. Pinsky) *Asymptotic stability and spiraling properties of solutions of stochastic equations.* Trans. Amer. Math. Soc., Vol. 186 (1973), 331--358.
106. (with M. A. Pinsky) *Dirichlet problem for degenerate elliptic equations.* Trans. Amer. Math. Soc., Vol. 186 (1973), 359--383.
107. *Differential games.* A.M.S., Providence, R.I., (Regional Conference Series in Math., No. 18), (1974).
108. (with R. J. Elliott and N. J. Kalton) *Alternate play in differential games.* J. Diff. Eq., Vol. 15 (1974), 560--588.
109. (with A. Devinatz and R. Ellis) *The asymptotic behavior of the first real eigenvalue of second order elliptic operators with a small parameter in the highest derivatives, II.* Indiana U. Math. J., Vol. 23 (1974), 991--1011.
110. (with A. Bensoussan) *Nonlinear variational inequalities and differential games with stopping times.* J. Func. Anal., Vol. 16 (1974), 305--352.
111. *Non-attainability of a set by a diffusion process.* Trans. Amer. Math. Soc., Vol. 197 (1974), 245--271.
112. *Fundamental solutions for degenerate parabolic equations.* Ordinary and Partial Differential Equations, Lecture Notes in Mathematics, No. 415, Springer-Verlag, Berlin (1974), 144--148.

113. *Small random perturbations of dynamical systems and applications to parabolic partial differential equations.* Indiana U. Math. J., Vol. 24 (1974), 533--553. Erratum 903.
114. *Fundamental solutions for degenerate parabolic equations.* Acta. Math., Vol. 133 (1974), 171--217.
115. *Parabolic variational inequalities in one-space dimension and smoothness of the free boundary.* J. Func. Anal., Vol. 18 (1975), 151--176.
116. (with R. E. Elliott) *A note on generalized pursuit-evasion games.* SIAM J. Control, Vol. 13 (1975), 105--109.
117. *Stopping time problems and the shape of the domain of continuation.* Lecture Notes in Economics and Mathematical Systems, Vol. 107, Springer-Verlag, Berlin (1975), 559--566.
118. (with D. Kinderlehrer) *A one-phase Stefan problem.* Indiana U. Math. J., Vol. 24 (1975), 1005--1035.
119. *Stochastic differential games with stopping times and variational inequalities.* Proceedings of the International Congress of Mathematicians, Vol. 2 (1975), 339--342.
120. (with R. Jensen) *A parabolic quasi-variational inequality arising in hydraulics.* Ann. Scu. Norm. Sup. Pisa, Vol. 2 (Ser. 4) (1975), 421--468.
121. (with H. Brezis) *Estimates on the support of solutions of parabolic variational inequalities.* Illinois J. Math., Vol. 20 (1976), 82--97.
122. *Analyticity of the free boundary for the Stefan problem.* Archive Rat. Mech. Anal., Vol. 61 (1976), 97--125.
123. *The shape and smoothness of the free boundary for some elliptic variational inequalities.* Indiana U. Math. J., Vol. 25 (1976), 103--118.
124. (with R. Jensen) *Elliptic quasi-variational inequalities and application to a non-stationary problem in hydraulics.* Ann. Scu. Norm. Sup. Pisa, Vol. 3(4) (1976), 47--88.
125. *Two-person nonzero sum stochastic differential games with stopping time.* Symposium on Stochastic Optimization. Mathematical Programming Study 67, North-Holland Pub. Co. (1976), 15--18.
126. *A problem in hydraulics with non-monotone free boundary.* Indiana U. Math. J., Vol. 25 (1976), 577--592.
127. (with D. Kinderlehrer) *A class of parabolic quasi-variational inequalities.* J. Diff. Eq., Vol. 21 (1976), 396--416.
128. *A class of parabolic quasi-variational inequalities II.* J. Diff. Eq., Vol. 22 (1976), 379--401.
129. (with R. F. Anderson) *A quality control problem and quasi-variational inequalities.* Archive Rat. Mech. Anal., Vol. 63 (1977), 205--252.
130. (with A. Bensoussan and H. Brezis) *Estimates on the free boundary for quasi-variational inequalities.* Comm. in P.D.E., Vol. 2 (1977), 297--321.
131. *Optimal stopping and quasi-variational equalities.* Conference on Stochastic Differential Equations and Applications, Academic Press, N. Y. (1977), 5--24.
132. (with A. Bensoussan) *Nonzero sum stochastic differential games with stopping times and new free boundary problems.* Trans. Amer. Math. Soc., Vol. 231 (1977), 275--327.
133. (with A. Torelli) *A free boundary problem connected with non-steady filtration in porous media.* J. Nonlinear Analysis Theory Methods and Applications, Vol. 1 (1977), 503-545. Correction, Vol. 2 (1978), 513--518.

134. (with R. F. Anderson) *Optimal inspections in a stochastic control problem with costly observations*. Math. of Operations Research, Vol. 2 (1977), 155--190.
135. (with A. Devinatz) *The asymptotic behavior of the first eigenvalue of differential operators degenerating on the Boundary*. Trans. Amer. Math. Soc., Vol. 234 (1977), 505--529.
136. (with C. Baiocchi) *A filtration problem in a porous medium with variable permeability*. Ann. Math. Pura. Appl., Vol. 114 (1977), 377--394.
137. (with A. Devinatz) *The asymptotic behavior of the principal eigenvalue of singularity perturbed elliptic operators*. Illinois J. Math., Vol. 21 (1977), 853--870.
138. *Singular perturbations of the principal eigenvalue of elliptic operators, differential equations*. Proceedings from the Uppsala 1977 International Conference on Differential Equations, Uppsala (1977), 82--90.
139. (with A. Devinatz) *Asymptotic behavior of the principal eigenfunction for singularly perturbed Dirichlet problem*. Indiana U. Math. J., Vol. 27 (1978), 143--157.
140. (with M. Robin) *The free boundary for variational inequalities with nonlocal operators*. SIAM J. Control and Optimization, Vol. 16 (1978), 347--372.
141. (with R. Jensen) *Convexity of the free boundary in the Stefan problem and in the dam problem*. Archive Rat. Mech. Anal., Vol. 67 (1978), 1--24.
142. *Quality control and quasi-variational inequalities*. Proceedings of the International Conference on Stochastic Differential Equations. Kyoto, Japan 1976, Kinokuniya Bookstore, Tokyo (1978), 49--56.
143. *One phase moving boundary problems*. Conference on Moving Boundary Problems, Academic Press (1978), 25--40.
144. (with A. Devinatz) *The asymptotic behavior of the solution of a singularly perturbed Dirichlet problem*. Indiana U. Math. J., Vol. 27 (1978), 527--537.
145. (with R. F. Anderson) *Optimal inspections in a stochastic control problem with costly observations II*. Math. of Operations Research, Vol. 3 (1978), 67--81.
146. (with L. A. Caffarelli) *The one phase Stefan problem and the porous medium diffusion equation: Continuity of the solution in n-space dimensions*. Proc. Nat. Acad. Sci., Vol. 75 (1978), 2084.
147. (with L. A. Caffarelli) *Asymptotic estimates for the dam problem with several layers*. Indiana U. Math. J., Vol. 27 (1978), 551--580.
148. (with L. A. Caffarelli) *Regularity of the solution of the quasi-variational inequality for the impulse control problem*. Comm. in P.D.E., Vol. 3 (1978), 745--753.
149. *Optimal stopping for random evolution of multi-dimensional Poisson processes with partial observation, stochastic analysis*. Academic Press (1978), 109--126.
150. (with A. Bensoussan) *On the support of the solution of a system of quasi-variational inequalities*. J. Math. Anal. Appl., Vol. 65 (1978), 660--674.
151. (with L. A. Caffarelli) *The dam problem with two layers*. Archive Rat. Mech. Anal., Vol. 68 (1978), 125--154.
152. (with R. F. Anderson) *Multi-dimensional quality control problems and quasi-variational inequalities*. Trans. Amer. Math. Soc., Vol. 246 (1978), 31--76.
153. (with R. F. Anderson) *Quality control for Markov chains and free boundary problems*. Trans. Amer. Math. Soc., Vol. 246 (1978), 77--94.
154. *On the free boundary of quasi-variational inequality arising in a problem of quality control*. Trans. Amer. Math. Soc., Vol. 246 (1978), 95--110.

155. *Optimal stopping problems in stochastic control.* SIAM Review, Vol. 21 (1979), 71--80.
156. (with L. A. Caffarelli) *Regularity of the solution of the quasi-variational inequality for the impulse control problem, II.* Comm. in P.D.E., Vol. 3 (1979), 279--292.
157. (with L. A. Caffarelli) *Continuity of the temperature in the Stefan problem.* Indiana U. Math. J., Vol. 28 (1979), 53--70.
158. (with L. A. Caffarelli) *The obstacle problem for the biharmonic operator.* Ann. Scu. Norm. Sup. Pisa, Vol. 6(4) (1979), 151--184.
159. *The flow of gas in a porous medium.* Proceeding of the International Meeting on Recent Methods in Nonlinear Analysis, Pitagora Editrice, Bologna (1979), 34--44.
160. *Time dependent free boundary problems.* SIAM Review, Vol. 21(1979), 213--222.
161. (with C. Evans) *The flow of two immiscible fluids in one dimensional porous medium.* J. Diff. Eq., Vol. 31 (1979), 366--291.
162. (with L. A. Caffarelli) *The free boundary in the Thomas-Fermi atomic model.* J. Diff. Eq., Vol. 32 (1979), 335--356.
163. (with L. A. Caffarelli) *The free boundary for elastic-plastic problems.* Trans. Amer. Math. Soc., Vol. 252 (1979), 65--97.
164. (with L. A. Caffarelli) *Continuity of the density of a gas flow in a porous medium.* Trans. Amer. Math. Soc., Vol. 252 (1979), 99--113.
165. (with C. Evans) *Optimal stochastic switching and the Dirichlet problem for the Bellman equation.* Trans. Amer. Math. Soc., Vol. 253 (1979), 365--389.
166. (with L. A. Caffarelli) *Regularity of the free boundary for the one dimensional flow of gas in a porous medium.* Amer. J. Math., Vol. 101 (1979), 1193--1218.
167. (with R. Jensen) *A non-steady flow of liquid in a porous pipe with variational permeability.* J. Diff. Eq., Vol. 34 (1979), 1--24.
168. *Interaction between stochastic differential equations and partial differential equations, stochastic control theory and stochastic differential systems.* Lecture Notes in Control and Information Sciences, Vol. 16, Springer-Verlag, Berlin (1979), 156--171.
169. (with G. A. Pozzi) *The free boundary for elastic-plastic torsion problems.* Trans. Amer. Math. Soc., Vol. 257 (1980), 411--425.
170. (with P. L. Lions) *The optimal strategy in the control problem associated with the Hamilton-Jacobi-Bellman equation.* SIAM J. Control & Optimization, Vol. 18 (1980), 191--198.
171. (with L. A. Caffarelli) *The shape of axisymmetric rotating fluids.* J. Func. Anal. Vol. 35 (1980), 109--142.
172. (with L. A. Caffarelli and G. A. Pozzi) *Reflection methods in the elastic-plastic torsion problem.* Indiana U., Math. J., Vol. 29 (1980), 205--228.
173. *Reinforcement of the principal eigenvalue of an elliptic operator.* Archive Rat. Mech. Anal., Vol. 73 (1980), 1--18.
174. *Quality control and free boundary problems.* Extremal Methods and Systems Analysis, Austin, TX, September 1977. Lecture Notes in Economics and Mathematical Systems, Springer-Verlag (1980), 506--621.
175. *The dam problem with variable permeability, variational inequalities and complimentary conditions.* Eds. Cottle, Gianessi and Lions, J. Wiley, New York (1980), 135--141.

176. *Stochastic control with partial observations, variational inequalities and complimentary conditions*. Eds. Cottle, Gianessi, and Lions, J. Wiley, New York (1980), 143--149.
177. (with L. A. Caffarelli) *Regularity of the free boundary of a gas flow in an n -dimensional porous medium*. Indiana U. Math. J., Vol. 29 (1980), 361--369.
178. (with C. Baiocchi, L. C. Evans, & L. Frank) *Uniqueness for two immiscible fluids in one dimensional porous medium*. J. Diff. Eq., Vol. 36 (1980), 249--256.
179. (with B. Turkington) *Asymptotic estimates for axisymmetric rotating fluid*. J. Func. Anal., Vol. 37 (1980), 136--163.
180. (with L. A. Caffarelli) *A free boundary problem associated with a semilinear parabolic equation*. Comm. in P.D.E., Vol. 5 (1980), 969--981.
181. (with L. A. Caffarelli) *Asymptotic estimates for the plasma problem*. Duke Math. J., Vol. 47 (1980), 705--742.
182. (with B. Turkington) *The oblateness of an axisymmetric rotating fluid*. Indiana U. Math. J., Vol. 29 (1980), 777--792.
183. (with S. Kamin) *The asymptotic behavior of gas in an n -dimensional porous medium*. Trans. Amer. Math. Soc., Vol. 262 (1980), 551--563.
184. (with L. A. Caffarelli) *Reinforcement problems in elasto-plasticity*. Rocky Mountain J. of Math., Vol. 10 (1980), 155--184.
185. (with H. Brezis and L. A. Caffarelli) *Reinforcement problems in elliptic equations and variational inequalities*. Ann. Math. Pure Appl., Vol. 123 (1980), 219--246.
186. *Variational inequalities in sequential analysis*. SIAM J. of Math. Anal., Vol. 12 (1981), 385--397.
187. (with L. A. Caffarelli) *Sequential analysis of several simple hypotheses for a diffusion process and the corresponding free boundary problem*. Pacific J. Math., Vol. 93 (1981), 49--94.
188. (with L. A. Caffarelli and A. Visintin) *A free boundary problem describing transition in a superconductor*. SIAM J. Math. Anal., Vol. 12 (1981), 679--690.
189. (with L. A. Caffarelli and A. Torelli) *The free boundary for a fourth order elliptic operator*. Illinois J. Math., Vol. 25 (1981), 402--422.
190. *Free boundaries in elasto-plasticity*. J. Angew. Math. Mech., Vol. 61 (1981), 1--8.
191. (with L. A. Caffarelli) *Unloading in the elastic-plastic torsion problem*. Vol. 41 (1981), 186--217.
192. (with B. Turkington) *Existence and asymptotic estimates for vortex rings*. Trans. Amer. Math. Soc., Vol. 268 (1981), 1--37.
193. *Stochastic differential equations and application*. C.I.M.E. Stoc. Diff. Eq., Liguore Editore, via Mezzocannone, Napoli (1981), 75--148.
194. (with B. Turkington) *Existence and dimensions of a rotating white dwarf*. J. Diff. Eq., Vol. 42 (1981), 414--437.
195. (with L. A. Caffarelli) *Axially symmetric infinite cavities*. Indiana U. Math. J., Vol. 30 (1982), 135--160.
196. (with H. W. Alt and L. A. Caffarelli) *Asymmetric jet flows*. Comm. Pure App. Math., Vol. 35 (1982), 29--68.
197. (with H. W. Alt and L. A. Caffarelli) *Jet flows with gravity*. Reine Angew. Math., Vol. 331 (1982), 58--103.

198. *Asymptotic behavior for the free boundary of parabolic variational inequalities and applications to sequential analysis.* Illinois J. Math., Vol. 26 (1982), 653--697.
199. (with L. A. Caffarelli and A. Torelli) *The two-obstacle problem for the biharmonic operator.* Pacific J. Math., Vol. 103 (1982), 325--335.
200. *Some problems in sequential analysis, stochastic differential systems.* Springer Lecture Notes in Control and Information Science, No. 43 (1982), 85--93.
201. (with H. W. Alt and L. A. Caffarelli) *Axially symmetric jet flow.* Archive Rat. Mech. and Anal., Vol. 81 (1983), 97--149.
202. (with H. Brezis) *Nonlinear parabolic equations involving measures as initial conditions.* J. Math. Pure et Appl., Vol. 62 (1983), 73--97.
203. *Asymptotic estimates for variational inequalities.* Free Boundary Problems: Theory and Applications, Vol. 2 (ed. by A. Fasano and M. Primecricio) Pitman, London (1983), 658--663.
204. *Axially symmetric cavities in rotational flows.* Comm. P.D.E., Vol. 8 (1983), 949--997.
205. (with L. S. Jiang) *Nonlinear optimal control problems in heat conduction.* SIAM J. Control Optim., Vol. 21 (1983), 940--952.
206. (with T. Vogel) *Cavitation flows in a channel with oscillatory wall.* Nonlinear Anal., Vol. 7 (1983), 1175--1192.
207. (with L. S. Jiang) *A Stefan-Signorini problem.* J. Diff. Eq., Vol. 51 (1984), 213--231.
208. (with D. Phillips) *The free boundary of a semilinear elliptic equation.* Trans. Amer. Math. Soc., Vol. 282 (1984), 153--182.
209. (with E. DiBenedetto) *The ill-posed Hele-Shaw model and the Stefan problem for supercooled water.* Trans. Amer. Math. Soc., Vol. 282 (1984), 183--204.
210. (with H. W. Alt and L. A. Caffarelli) *Jets with two fluids, I.* Indiana U. Math. J., Vol. 33 (1984), 213--247.
211. (with H. W. Alt and L. A. Caffarelli) *Variational problems with two phases and their free boundaries.* Trans. Amer. Math. Soc., Vol. 282 (1984), 431--461.
212. (with H. W. Alt and L. A. Caffarelli) *Jets with two fluids, II.* Indiana U. Math. J., Vol. 33 (1984), 367--391.
213. (with H. W. Alt and L. A. Caffarelli) *A free boundary problem for quasi-linear elliptic equations.* Ann. Scu. Norm. Sup. Pisa, Vol. 11 (1984), 1--44.
214. (with J. Bemelmans) *Analyticity for the Navier-Stokes equations governed by surface tension on the free boundary.* J. Diff. Eqs., Vol. 55 (1984), 135--150.
215. *Nonlinear optimal control for parabolic equations.* SIAM J. Control and Optim., 22 (1984), 805--816.
216. (with D. DiBenedetto) *Nonlinear degenerate parabolic systems.* J. Reine Angew. Math., Vol. 349 (1984), 83--123.
217. (with H. W. Alt and L. A. Caffarelli) *The dam problem with two fluids.* Comm. Pure Appl. Math., Vol. 37 (1984), 601--646.
218. *Free boundary problems in fluid dynamics.* Revue Asterisque Proceeding of the Trento Conference, Vol. 118 (1984), 55--67.
219. (with H. W. Alt and L. A. Caffarelli) *Jets and cavities for compressible fluid.* J. Diff. Eq., Vol. 56 (1985), 82--141.

220. (with D. Yaniro) *Optimal control for the dam problem*. J. Optim. & Applied Math., Vol. 13 (1985), 59--78.
221. (with L. A. Caffarelli) *Regularity of the boundary of the support of a capillary drop on an inhomogeneous plane and related variational problems*. Revista Mat. Iberoamericana, Vol. 1 (1985), 61--84.
222. (with B. McLeod) *Blow-up of positive solutions of semilinear heat equations*. Indiana U. Math. J., Vol. 34 (1985), 425--447.
223. (with L. A. Caffarelli) *Convexity of solutions of semilinear elliptic equations*. Duke Math. J., Vol. 52 (1985), 431--457.
224. (with C. M. Elliott) *Analysis of a model of percolation in a gently sloping sand-bank*. SIAM Math. Anal., Vol. 16 (1985), 941--954.
225. (L. A. Caffarelli) *A nonlinear evolution problem associated with electropaint process*. SIAM J. Math. Anal., Vol. 16 (1985), 955--969.
226. (with E. DiBenedetto) *Holder estimates for nonlinear degenerate parabolic systems*. J. Reine Angew. Math., Vol. 357 (1985), 1--22.
227. (with L. A. Caffarelli) *Partial regularity of the zero-set of solutions of linear and superlinear elliptic equations*. J. Diff. Eq., 60 (1985), 420--433.
228. (with L. A. Caffarelli) *Differentiability of the blow-up curve for one dimensional nonlinear wave equations*. Archive Rat. Mech. Anal., Vol. 91 (1985), 83--98.
229. *Periodic behavior for the evolutionary dam problem and related free boundary problems*. „Free Boundary Problem.“ Vol. IV, Pittman, 1985, London. Editors A. Bossavit, A. Damlanian and M. Fremond, 243--247.
230. (with H. W. Alt and L. A. Caffarelli) *Abrupt and smooth separation of free boundaries in flow problems*. Scuol Norm. Sup. Pisa., Vol. 13 (1986), 137--172.
231. (with L. Veron) *Solution singulieres d'equations quasilineaires elliptiques*. C. R. Acad. Sci. Paris, Vol. 302 (1986), 147--150.
232. (with P. E. Souganidis) *Blow-up of solutions of Hamilton-Jacobi equations*. Comm. in P.D.E., Vol. 11 (1986), 397--443.
233. (with C. M. Elliott) *On the contact set of a rigid body partially supported by a membrane*. Nonlinear Analysis, Vol. 10 (1986), 251--276.
234. (with B. McLeod) *Strict inequalities for integrals of decreasingly rearranged functions*. Royal Society of Edinburgh, Vol. 102A (1986), 277--289.
235. (with A. D. Cocker and M. McLeod) *Liquid drop suspended by soap film*. Archive Rat. Mech. Anal., Vol. 93 (1986), 15--44.
236. (with E. DiBenedetto) *Conduction-convection problems with change of phase*. J. Diff. Eqs., Vol. 62 (1986), 129--185.
237. *Optimal control for variational inequalities*. SIAM J. Control Optim., Vol. 24 (1986), 439--451.
238. (with E. DiBenedetto) *Periodic behavior of the evolutionary dam problem and related free boundary problems*. Comm. in P.D.E., Vol. 11 (1986), 1297--1377.
239. (with E. DiBenedetto) *Bubble growth in porous media*. Indiana U. Math. J., Vol. 35 (1986), 573--606.
240. (with M. Sakai) *Characterization of null quadrature domains in R^N* . Indiana U. Math. J., Vol. 35 (1986), 607--610.
241. (with L. A. Caffarelli) *The blow-up boundary for nonlinear wave equations*. Trans. Amer. Math. Soc., Vol. 297 (1986), 223--241.

242. *Monotonic decay of solutions of parabolic equations with non-local boundary conditions.* Quart. Appl. Math., Vol. 44 (1986), 401--407.
243. *Injection of ideal fluid from a slot into a free stream.* Arch. Rat. Mech. Anal., Vol. 94 (1986), 335--361.
244. (with E. DiBenedetto and C. M. Elliott) *The free boundary of a flow in a porous body heated from its boundary.* Nonlinear Analysis, Vol. 10 (1986), 879--900.
245. *Free boundary problems in fluid dynamics;* in Proceedings of Equadiff 6, 1986, J. E. Purkyne University, Dept. of Math. Brno, Czechoslovakia, Edited by J. Vosmanský and M. Zlamal, 7--22.
246. (with B. McLeod) *Blow-up of solutions of nonlinear degenerate parabolic equations.* Archive Rat. Mech. and Anal., Vol. 96 (1986), 55--80.
247. (with L. Veron) *Singular solutions of some quasilinear elliptic equations.* Archive Rat. Mech. Anal., Vol. 96 (1986), 359--387.
248. (with S. Huang and J. Yong) *Bang-bang optimal control for the dam problem.* Appl. Math. and Optim., Vol. 15 (1987), 68--85.
249. *Detection of mines by electric measurements.* SIAM J. Appl. Math., Vol. 47 (1987), 201--212.
250. *Optimal control for parabolic variational inequalities.* SIAM J. Control and Optim., Vol. 25 (1987), 482--497.
251. (with Y. Giga) *A single point blow-up for solutions of semilinear parabolic systems.* J. Faculty Sci. Univ. Tokyo, Sec. IA, Math., Vol. 34 (1987), 65--79.
252. (with K. Hollig) *On the Mesa problem.* J. Math. Anal. Appl., Vol. 123 (1987), 564--571.
253. (with M. Herrero) *Extinction properties of semilinear heat equations with strong absorption.* J. Math. Anal. Appl., Vol. 124 (1987), 530--546.
254. (with A. Lacey) *The blow-up time for solutions of nonlinear heat equations with small diffusion.* SIAM J. Math. Anal., Vol. 18 (1987), 711--721.
255. (with B. Gustafsson) *Identification of the conductivity coefficient in an elliptic equation.* SIAM J. Math. Anal., Vol. 18 (1987), 777--787.
256. (with K. Tintarev) *Boundary asymptotics for solutions of the Poisson-Boltzmann equation.* J. Diff. Eqs., Vol. 69 (1987), 15--38.
257. (with S. Stojanovic) *A free boundary problem associated with icing in a channel.* Nonlinear Analysis, Vol. 11 (1987), 501--526.
258. (with L. A. Caffarelli) *A singular perturbation problem for semiconductors.* Boll. Unione Ital. Mat., (7) 1-B (1987), 409--421.
259. *Blow-up of solutions of nonlinear evolution equations.* In "Directions in Partial Differential Equations," edited by Crandall, Rabinowitz and Turner, Academic Press, 1987, 75--88.
260. (with B. McLeod) *Optimal design of an optical lens.* Archive Rat. Mech. Anal., Vol. 99 (1987), 147--164.
261. *Optimal control for variational inequalities.* Proceedings of Conference on "Nonlinear Parabolic Equations," edited by Boccardo and Tesi, Pittman, 1987, 110--113.
262. (with A. E. Tzarvaras) *A quasilinear parabolic system arising in modeling of catalytic reactors.* J. Diff. Eqs., Vol. 70 (1987), 167--196.

263. (with L. A. Caffarelli) *Asymptotic behavior of solutions of $u_t = (u^m)_x$ as $m \rightarrow \infty$* . Indiana Univ. Math. J., Vol. 36 (1987), 711--728.
264. *Optimal control for free boundary problems in Control Problems for Systems Described by Partial Differential Equations and Applications*, Springer-Verlag, Lasciecka, Triggian, eds., 1987, 56--64.
265. (with S. Huang) *The inhomogeneous dam problem with discontinuous permeability*. Ann. Scu. Norm. Sup. Pisa, Vol. 14 (4) (1987), 49--77.
266. (with L. A. Caffarelli) *Blow-up of solutions of nonlinear heat equations*. J. Math. Anal. Appl., Vol. 129 (1988), 409--419.
267. (with S. Huang and J. Yong) *Optimal periodic control for the two-phase Stefan problem*. SIAM J. Control Optim., Vol. 26 (1988), 23--41.
268. (with K. H. Hoffmann) *Control of free boundary problems with hysteresis*. SIAM J. Control Optim., Vol. 26 (1988), 42--55.
269. (with L. S. Jiang) *Periodic solution for a thermostat control problem*. Comm. in PDE, Vol. 13 (1988), 515--550.
270. (with B. McLeod) *An optical lens for focusing two pairs of points*. Archive Rat. Mech. Anal., Vol. 101 (1988), 57--83.
271. (with A. E. Tzavaras) *Combustion in a porous medium*. SIAM J. Math. Anal., Vol. 19 (1988), 509--519.
272. (with S. Huang) *Asymptotic behavior of solutions of $u_t = (m(u))_x$ as $m \rightarrow \infty$ with inconsistent initial values*; Analyse Mathématique et Applications, Contributions in honor of J.L. Lions, Gauthier-Villars, 1988, Paris, pp. 165--180.
273. (with J. Friedman, B. McLeod) *Concavity of solutions of nonlinear ordinary differential equations*. J. Math. Anal. Appl., Vol. 131 (1988), 486--500.
274. (with H. Bellout) *Identification problems in potential theory*. Archive Rat. Mech. Anal., Vol 101 (1988), 143--160.
275. *Blow-up of solutions of nonlinear parabolic equations. in „Nonlinear Diffusion Equations and their Equilibrium States*, edited by Ni, Peletier and Serrin, Vol. 1, pp. 301--318, MSRI Publications, no. 12, Springer-Verlag, 1988.
276. (with A. Lacey) *Blow-up of solutions of semilinear parabolic equations*. J. Math. Anal. Appl., Vol. 132 (1988), 171--186.
277. (with L. Oswald) *The blow-up surface of nonlinear wave equations with small spatial velocity*. Trans. Amer. Math. Soc., Vol. 308 (1988), 349--367.
278. (with L. Oswald) *The blow-up time for higher order semilinear parabolic equations with small leading coefficients*; J. Diff. Eqs., Vol. 75 (1988), 239--263.
279. (with J. Necas) *Systems of nonlinear wave equations with nonlinear viscosity*. Pacific J. Math.
280. (with L.A. Caffarelli) *A model of dislocations and the associated free boundary problem*, Indiana Univ. Math. J., Vol. 37 (1988), 451--479.
281. (with B. Ou) *A model of crystal precipitation*, J. Math. Anal. Appl., Vol. 137 (1989), 550--575
282. (with B. Ou and D. Ross) *Crystal precipitation with discrete initial data*, J. Math. Anal. Appl., Vol. 137 (1989), 576--590.
283. (with M. Vogelius) *Identification of small inhomogeneities of extreme conductivity by boundary measurements: a continuous dependence result*. Archive Rat. Mech. & Anal., Vol. 105 (1989), 299--326.

284. (with B. Hu) *The Stefan problem for a hyperbolic heat equation*. J. Math. Anal. & Appl., Vol 138 (1989), 249--279.
285. (with H. Bellout) *Blow-up estimates for nonlinear hyperbolic heat equation*. SIAM J. Math. Anal., Vol. 20 (1989), 354--366.
286. (with M. Brokate) *Optimal design for heat conduction problems with hysteresis*, SIAM J. Control and Optim., Vol. 27 (1989), 697--717.
287. (with R.A. Romero) *Functional differential equations for the determination of the viscosity function in a rheometer*, Archive Rat. Anal., Vol. 107 (1989), 85--97.
288. (with X. Chen) *A bubble is ideal fluid with gravity*, J. Diff. Eqs., Vol. 81 (1989), 136--166.
289. (with M. Vogelius) *Detection of cracks by boundary measurements*, Indiana Univ. Math. J., Vol. 38 (1989), 527--556.
290. (with M. Vogelius) *Identification of objects of extreme conductivity by boundary measurements*, International Series of Numerical Mathematics, 91 (1989), 135--144.
291. (with F. Bernis) *Higher order nonlinear degenerate parabolic equations*, J. Diff. Eqs., Vol. 83 (1990), 179--206.
292. (with M.A. Herrero) *A nonlocal wave equation arising in combustion theory*, Nonlinear Analysis, Vol. 14 (1990), 93--106.
293. (with C.J. Budd, B. McLeod and A.A. Wheeler) *The space change problem*, SIAM J. Appl. Math., Vol. 50 (1990), 181--198.
294. (with V. Isakov) *On the uniqueness in the inverse conductivity problem with one measurement*, Indiana Univ. Math. J., Vol. 38 (1989), 563--579.
295. (with H. Bellout) *Scattering by stripe grating*, J. Math. Anal. Appl., Vol. 147 (1990), 228--248.
296. (with M. Honig) *On the spread of continuous-time linear systems*, SIAM J. Math. Anal., Vol. 21 (1990), 757--770.
297. (with F. Reitich) *A hyperbolic inverse problem in aerosol modeling*, Archive Rat. Mech. Anal., Vol. 110 (1990), 313--350.
298. (with W. Liu) *A system of partial differential equations arising in electrophotography*, J. Diff. Eqs., Vol. 89 (1991), 272--304.
299. (with X. Chen) *Nonlocal diffusion equation arising in terminally attached polymer chains*, European J. Appl. Math., Vol. 1 (1990), 311--326.
300. (with J. Sprekels) *Steady states of Austenitic-Martensitic domains in the Ginzburg-Landau theory of shape memory alloys*, Continuum Mechanics and Thermodynamics, Vol. 2 (1990), 199--213.
301. (with B. Hu) *A free boundary problem arising in electrophotography*, Nonlinear Analysis, 9 (1991), 729--759.
302. (with J. Bell and A. Lacey) *On solutions to a quasilinear diffusion problem from the study of soft tissue*, SIAM J. Appl. Math., Vol. 51 (1991), 484--493.
303. *Blow-up of solutions of nonlinear heat and wave equations in „Asymptotic Analysis and Numerical Solution of Partial Differential Equations*, H.G. Kaper and M. Garbey, editors, Marcel Dekker, New York, 1991, pp. 217--224.
304. (with X. Chen) *Maxwell's equations in a periodic structure*, Trans. Amer. Math. Soc., Vol. 323 (1991), 465--507.
305. (with V. Barbu) *Optimal design of domains with free boundary problems*. SIAM J. Control Optim., Vol. 29 (1991), 623--637.

306. (with F. Reitich) *On the Stefan problem with small surface tension*, Trans. Amer. Math. Soc., 465--515.
307. (with D. Dobson), *The time-harmonic Maxwell equations in a doubly periodic structure*, J. Math. Anal. Appl., Vol. 166 (1992), 507--528.
308. (with F. Reitich) *Parameter identification in reaction diffusion models*, Inverse Problems, Vol. 8 (1992), 187--192.
309. (with M.H. Herrero) *Extinction and positivity for a system of semilinear parabolic variational inequalities*, J. Math. Anal. Appl., Vol. 167 (1992), 167--175.
310. (with H. Bellout and V. Isakov) *Stability for an inverse problem in potential theory*, Trans. Amer. Math. Soc., Vol. 332 (1992), 271--296.
311. (with P. Knaber) *A transport model with micro- and macro-structure*, J. Diff. Eqs., 98 (1992), 328--354.
312. (with B. Hu), *Homogenization approach to light scattering from polymer-dispersed liquid crystal film*, SIAM J. Appl. Math., Vol. 52 (1992), no. 1, 46--64.
313. (with W. Liu) *An augmented drift-diffusion model arising in semiconductor modeling*, J. Math. Anal. Appl., Vol. 168 (1992), 401--412.
314. (with B. Hu) *The Stefan problem with kinetic condition at the free boundary*, Scuol. Norm. Sup. Pisa, Vol. 19 (4), (1992), 615--636.
315. (with B. Hu), *A free boundary problem arising in superconductor modeling*, Asymptotic Analysis, Vol. 6 (1992), 109--133.
316. (with X. Chen) *A free boundary problem for a nonlinear degenerate elliptic system modeling a thermistor*, Ann. Scu. Norm. Sup. Pisa, Vol. 19 (4) (1992), 615--636.
317. (with B. Hu and J.J.L. Velazquez) *A free boundary problem modeling loop dislocations in crystals*, Archive Rat. Mech. Anal., Vol. 119 (1992), 229--291.
318. (with X. Chen and L.S. Jiang), *Mathematical modeling of semiconductor lasers*, SIAM J. Appl. Math., Vol. 53 (1993), 168--186.
319. (with X. Chen) *The thermistor problem for conductivity which vanishes at large temperatures*, Quart. Appl. Math., Vol. 60 (1993), 101--115.
320. *Free boundary problems arising in processing of semiconductor*, SPIE Proceedings, Vol. 1919, Mathematics in Smart Structures, 1--3 February 1993, Albuquerque, H.T. Banks ed., 336--344.
321. *Scattering of electromagnetic waves*, Delaware, in "Mathematical and Numerical Aspects of Wave Propagation," editors, R. Kleinman, T. Angell, D. Colton, F. Santosa, I. Stakgold, SIAM, Philadelphia (1993), pp. 229--236.
322. (with O. Bruno and F. Reitich), *Asymptotic behavior for a coalescence problem*, Trans. Amer. Math. Soc., Vol. 338 (1993), pp. 133--158.
323. *Free boundary problems arising in industry*, in „Variational Problems, A. Friedman and J. Spruck, eds., IMA Volumes in Mathematics and its Applications, Vol. 53 Springer-Verlag, New York, 1993, pp. 1--10.
324. (with J.J.L. Velazquez) *A time dependent free boundary problem modeling the visual image in electrophotography*, Archive Rational Mech. Anal. Vol. 123 (1993), 259--303.
325. (with C. Huang) *Diffusion in network*, J. Math. Anal. Appl. Vol. 183 (1994), 352--384.
326. (with X. Chen and T. Kimura), *Nonstationary filtration in partially saturated porous media*, European J. Appl. Math., 5 (1994), 405--429.

327. *Differential Games in „Handbook of Game Theory* Vol. 2, editors R. J. Aumann and S. Hart, Elsevier (1994), 781--799.
328. (with C. Huang) *Averaged motion of charged particles under their self-induced electric field*, Indiana University Mathematics Journal, 43 (1994), 1167--1225.
329. (with C. Huang and J. Yong) *Effective permeability of the boundary of a domain*, Comm PDE., Vol. 20 (1995), 59--102.
330. (with J. Zhang) *Swelling of a rubber ball in the presence of good solvent*, Nonlinear Analysis, Vol. 25 (1995), 547--568.
331. (with J.J.L. Velazquez) *The analysis of coating flows near the contact line*, J. Diff. Eqs., Vol. 119 (1995), 137--208.
332. (with J.J.L. Velazquez) *The analysis of coating flows in a strip*, J. Diff. Eqs., Vol. 121 (1995), 134--182.
333. (with D. Ross and T. Zhang) *A Stefan problem for reaction-diffusion system*, SIAM J. Math. Anal., Vol. 26 (1995), 1089--1112.
334. (with G. Bao) *Inverse problems for scattering by periodic structure*, Archive Rat. Mech. Anal., Vol. 132 (1995), 49--72.
335. (with Y. Liu) *A free boundary problem arising in magnetohydrodynamic system*, Ann. Scu. Norm. Sup. Pisa, Vol. 22 (Ser. 4) (1995), 375--448.
336. *Nonlinear PDE problems in electrophotography*, First Congress of Nonlinear World, August 1992, Florida, Walter de Gruyter, Berlin (1996), Vol. 1, 13--24.
337. (with B. Hu) *The Stefan problem for multi-dimensional reaction-diffusion system*, SIAM J. Math. Anal., Vol. 27 (1996), 1212--1234.
338. (with Y. Liu) *Propagation of cracks in elastic media*, Rat. Mech. Anal., Vol. 136 (1996), 235--290.
339. (with G. Rossi) *Phenomenological continuum equations to describe case II diffusion in polymeric materials*, Macromolecules, Vol. 30 (1997), 153--154.
340. (with B. Hu and Y. Liu) *A boundary value problem for the Poisson equation with multi-scale oscillating boundary*, J. Diff. Eqs., Vol. 137 (1997), 54--93.
341. (with B. Hu) *A non-stationary multi-scale oscillating free boundary for the Laplace and heat equations*, J. Diff. Eqs., Vol. 137 (1997), 119--165.
342. (with J.J.L. Velazquez) *Liouville type theorems for fourth order elliptic equations in a half space*, Trans. Amer. Math. Soc., Vol. 349 (1997), 2537--2603.
343. (with J.J.L. Velazquez) *Time dependent coating flows in a strip, Part I: The linearized problem*, Trans. Amer. Math. Soc., Vol. 349 (1997), 2981--3074.
344. (with C. Huang) *Averaged motion of charged particles in a curved strip*, SIAM Appl. Math., Vol. 57 (1997), 1557--1587.
345. (with B. Hu) *Head-media interaction in magnetic recording*, Archive Rat. Mech. Anal., Vol. 140, No. 1, (1997), 79-101.
346. (with B. Hu) *Optimal control of chemical vapor deposition reactor*, J. Optimization Theory & Applications, Vol. 97 (1998), 623-644.
347. (with F. Reitich) *Asymptotic behavior of solutions of coagulation-fragmentation models*, Indiana Univ. Math. J., Vol. 47 (1998), 563-591.
348. (with G.A. Chechkin and A.L. Piatinski) *The boundary-value problems in domains with rapidly oscillating boundary*, J. Math. Anal. Appl., 231 (1999), 213-234.
349. (with B. Hu and J.J.L. Velazquez) *Asymptotics for the biharmonic equation near the tip of a crack*, Indiana Univ. Math. J., Vol. 47 (1998), 1327-1395.

350. (with L. Wang and J. A. Cox), *Modal analysis of homogeneous optical wave guides by the boundary integral formulation and the nysrom method*, J. Opt. Soc. Ann. A, 15 (1998), 92-100.
351. (with F. Reitich) *Analysis of a mathematical model for the growth of tumors*, J. Math. Biology,, Vol. 38 (1999), 262-284.
352. (with B. Hu) *A Stefan problem for a protocell model*, SIAM J. Math. Anal., Vol. 30, No. 4 (1999), 912-926.
353. (with S. Cui) *Analysis of a mathematical moel of protocell*. J. Math. Anal. & Appl., Vol 236 (1999), 171-206.
354. (with B. Hu and J.J.L. Velazquez) *The evolution of stress intensity factors in the propagation of cracks in elastic media*. Archive Rat. Mech. Anal., Vol 136 (2000), 235-290.
355. *What is Industrial Mathematics?* Revista de la Real Academia de Ciencias, Rev. R. Acad. Exac. Fis. Nat, Vol. 93 (1999), 179-184.
356. (with S. Cui) *Analysis of a mathematical model of the effect of inhibitors on the growth of tumors*, Math. Biosciences, Vol 164 (2000), 103-137.
357. *Propagation of cracks in elastic media*, ICIAM '99: Proceedings of the 4th International Congress of Industrial & Applied Mathematics, eds. J.M. Ball and J.C.R. Hunt, Oxford University Press, Oxford UK (2000), 63-68.
358. (with M. Fontelos) *Stationary non-Newtonian fluid flows in channel-like and pipe-like domains*, Archive Rat. Mech. Anal., 151 (2000), 1-43.
359. *Free Boundary Problems in Science and Technology*, Notices of AMS, Vol. 47 (2000), 854-861.
360. (with B. Hu and J.J.L. Velazquez) *The evolution of stress intensity factors in propogation of cracks*, European J. Appl. Math., Vol 11 (2000), 453-472.
361. (with B.Hu and J.J.L. Velazquez) *On the Zeros of quotients of Bessel functions*, Chinese Annals of Mathematics, Vol. 21 (2000), 285-96.
362. (with M. Fontelos), *The flow of a class of Oldroyd fluids around a re-entrant corner*, J. Non-Newtonian Fluids, Vol. 95 (2000), 185-198.
363. (with F. Reitich) *Symmetry-breaking bifurcation of analytic solutions to free boundary problems: An application to a model of tumor growth.*, Trans AMS., Vol. 353 (2000), 1587-1634.
364. (with X. Chen) *A free boundary problem arising in a model of wound healing*, SIAM J. Math. Anal., Vol. 32 (2000), 778-800.
365. (with S. Cui) *Analysis of mathematical model of the growth of necrotic tumors*, submitted to J. Math. Analysis & Applications, Vol. 255 (2001), 636-677.
366. (with B.Hu and J.J.L. Velazquez), *A Stefan problem for a protocell model with symmetry-breaking bifurcations of analytic solutions*, Interfaces and Free Boundaries, Vol. 3 (2001), 143-199.
367. (with J.I. Tello), *Head-media interaction in magnetic recording*, J. Diff. Eqs., Vol. 171 (2001), 443-461.
368. (with F. Reitich) *On the existence of spatially patterned dormant malignancies in a model for the growth of non-necrotic tumors*, Mathematical Models & Methods in Applied Sciences, Vol. 11 (2001), 601-625.
369. (with M. Fontelos) *Analysis of the stick-slip problem for non-Newtonian flows*, Comm in PDE, Vol. 26 (2001), 461-536.

370. (with F. Reitich) *Quasi-state motion of a capillary drop, I: The two dimensional case*, J. Diff. Eqs. Vol. 178 (2001), 212-263.
371. (with F. Reitich) *Nonlinear stability of a quasi-static Stefan problem with surface tension: a continuation approach*, Ann. Scuola Norm. Super. Pisa, Vol. 30 (4) (2001), 341-403.
372. (with J.J.L. Velazquez) *A free boundary problem associated with crystallization of polymers in a temperature field*, Indiana Univ. Math. J., Vol. 50 (2001), 1609-1649.
373. (with W. Shen) *A Variational Inequality Approach to Financial Valuation of Retirement Benefits Based on Salary*, Finance & Stochastics, Vol. 6 (2002), 273-302.
374. (with M.A. Fontelos and B. Hu) *Mathematical analysis of a model for the initiation of angiogenesis*, SIAM J. Math. Anal., Vol. 33 (2002), 1330-1355.
375. (with J. I. Tello) *Stability of solutions of chemotaxis equations in reinforced random walk*, J. Math. Anal. App., Vol. 272 (2002), 138-163.
376. (with F. Reitich) *Quasi-static motion of a capillary drop, II: the three-dimensional case*, J. Diff. Eqs., Vol. 186 (2002), 509-557.
377. (with Y. Tao) *Nonlinear stability of the Muskat problem with capillary pressure at the free boundary*, Nonlinear Analysis, Vol. 53 (2003), 45-80.
378. (with B. V. Bazaliy) *A free boundary problem for an elliptic-parabolic system: Application to a model of tumor growth*, Comm. in PDE, Vol. 28 (2003), 627-675.
379. (with S. Cui) *Free boundary problems for a singular system of differential equations: An application to a model of tumor growth*, Trans. AMS, Vol. 355 (2003), 3537-3590.
380. (with S. Cui) *A hyperbolic free boundary problem modeling tumor growth, Interfaces and free boundaries*, Vol. 5 (2003), 159-182.
381. (with B. Bazaliy) *Global existence and stability for an elliptic-parabolic free boundary problem: Application to a model with tumor growth*, Indiana Univ. Math. J., Vol. 52 (2003), 1265-1304.
382. (with Y. Tao) *Analysis of a model of virus that replicates selectively in tumor cells*, J. Math. Biology, Vol. 47 (2003), 391-423.
383. (with M.A. Fontelos) *Symmetry-breaking bifurcations of free boundary problems in three dimensions*, Asymptotic Analysis, Vol. 35 (2003), 187-206.
384. *A hierarchy of cancer models and their mathematical challenges*, Discrete and Continuous Dynamical Systems, Vol. 4 series B (2004), 147-160.
385. (with X. Chen) *A free boundary problem for an elliptic-hyperbolic system: An application to tumor growth*, SIAM J. Math. Analysis, Vol. 35 (2003), 974-986.
386. (with M. Fontelos) *Symmetry breaking bifurcations of charged drops*, Archive Rat. Mech. Anal., Vol. 172 (2004), 267-294.
387. (with G. Lolas) *Analysis of a mathematical model of tumor lymphangiogenesis*, Math. Models & Methods in Appl. Sciences, Vol. 15 (2005), 95-107.
388. *Symmetry-breaking bifurcations for free boundary problems*. In "Contemporary Mathematics:" Nonlinear Partial Differential Equations and Related Analysis, G. Q. Chen, G. Gasper & J. Jerome editors, pp. 153-162, 2005. Amer. Math. Soc. Providence, R. I.
389. *Free boundary problems arising in tumor models*. Rend. Mat. Acc. Lincei Vol. 15 (9) (2005), 161-168.

390. *Introduction to neurons*, in "Tutorial in Mathematical Biosciences," Vol. 1, Mathematical Neuroscience, Springer Verlag, 2005, 1-20.
391. (with A. Borisovich) *Symmetry breaking bifurcations for free boundary problems*, Indiana Univ. Math J., Vol. 54 (2005), 927-947.
392. (with G. Craciun and B. Aguda), *A detailed mathematical analysis of a model that couples the cell cycle and apoptosis*, Mathematical Biosciences and Engineering, Vol 2 (2005), 473-485.
393. (with B. Bazaliy) *The Hele-Shaw problem with surface tension in a half-plane: A model problem*, J. Diff. Eqs., Vol. 216 (2005), 387-483.
394. (with B. Bazaliy) *The Hele-Shaw problem with surface tension in a half-plane*, J. Diff. Eqs., Vol. 216 (2005), 439-469.
395. (with G. Craciun) *A model of intercellular transport of particles in axon*, J. Math. Biology, 51 (2005), 217-246.
396. (with X. Chen and S. Cui) *A hyperbolic free boundary problem modeling tumor growth: Asymptotic behavior*, Trans. Amer. Math. Society, 357 (2005), 4771-4804.
397. *Free boundary problems with surface tension conditions*, Nonlinear Analysis, 63 (2005), 666-671.
398. (with J. J. Tian, G. Fulci, E. A. Chiocca and J. Wang) *Glioma virotherapy: The effects of innate immune suppression and increased viral replication capacity*, Cancer Research, 66 (2006), 2314-2319.
399. *Cancer models and their mathematical analysis*, in Tutorials in Mathematical Biosciences, Vol. 3, Springer-Verlag, 2005, 223-246.
400. (with B.V. Bazaliy, Ya.B. Bazaliy, and B. Hu) *Energy considerations in a model of nematode sperm crawling*. Mathematical Biosciences and Engineering, 2 (2006), 347-370.
401. (with B. Hu) *Bifurcation from stability to instability for a free boundary problem arising in a tumor model*, Archive Rat. Mech. & Anal, 180 (2006), 293-330.
402. (with G. Craciun and A. Brown) *A dynamical system model of transport of neurofilaments in axons*. J. Theoretical Biology, 237 (2006), 316-322.
403. *A free boundary problem for a coupled system of elliptic, hyperbolic, and Stokes equations modeling tumor growth*, Interface and Free Boundaries, Vol. 8 (2006), 247-261.
404. (with B. Hu) *Asymptotic stability for a free boundary problem arising in tumor model*, J. Diff. Eqs., 227 (2006), 598-639.
405. (with B. Hu) *Bifurcation from stability to instability for a free boundary problem modeling tumor growth by Stokes equation*, Math. Anal. & Appl., 327 (2007), 643-664.
406. (with P. Goel and J. Sneyd) *Homogenization of the cell cytoplasm: The calcium bidomain equations*, SIAM Multiscale Modeling and Simulations, Vol. 5 (2006), 1045-1062.
407. (with G. Craciun) *Approximate traveling waves in linear reaction-hyperbolic equations*, SIAM J. Math. Anal., Vol. 38 (2006), 741-758.
408. (with B. Bazaliy and Y. Bazaliy) *One-dimensional free boundary problem for actin-based propulsion of Listeria*, J. Math. Anal. Appl. Vol. 328 (2007), 84-100.
409. (with B. Hu) *Bifurcation for a free boundary problem modeling tumor growth by Stokes equation*, SIAM J. Math. Anal., Vol. 39 (2007), 174-194.

410. (with Y. Wang and B. D. Aguda) *A continuous mathematical model of endothelial layer maintenance and senescence*, Theoretical Biology and Medical Modelling 4:30 (2007), 1-10.
411. (with S. Roy, D. Patel, S. Khanna, G. M. Gordilly, S. Biswas and C. Sen) *Genome wise analysis of blood vessels laser captured from human skin and chronic wound-edge tissue*, Proc. Nat. Acad. Sciences, 104 (2007), 14472-14477.
412. *Mathematical analysis and challenges arising from models of tumor growth*, Mathematical Models & Methods in Appl. Sciences, Vol. 17, Suppl. (2007), 1751-1772.
413. (with B. Hu) *Uniform convergence for approximate traveling waves in linear reaction-hyperbolic system*, Indiana Univ. Math. J., Vol. 56 (2007), 2133-2158.
414. (with B. Hu) *Uniform convergence for approximate traveling waves in Linear reaction-diffusion-hyperbolic systems*, Archive Rat. Mech. Anal. Vol. 186 (2007), 251-274.
415. (with P. Budu-Grajdeanu, R. Schugart, C. Valentine and B. H. Rovin) *A mathematical model of venous neointimal hyperplasia formation*. Theoretical Biology & Medical Modeling, Vol 5:2 (2008), 1-17.
416. (with R. Schugart, R. Zhao, and C. Sen) *Wound angiogenesis as function of tissue oxygen tension: A mathematical model*. Proc. Nat. Acad. Sciences, (2008), 2628-2633.
417. *A multiscale tumor model*, Interfaces and Free Boundaries, Vol. 10 (2008), 245-262.
418. (with E. Green) *The extensional flow of a thin sheet of incompressible, transversally isotropic flow*, European J. Appl. Math., Vol. 19 (2008), 225-257.
419. (with J. Turner and B. Szomolay) *A model on the influence of age on immunity to infection with Mycobacterium tuberculosis*, Experimental Gerontology, 43 (2008), 275-285.
420. (with X. Chen and B. Hu) *A parabolic-hyperbolic quasilinear system*, Comm. PDE, Vol. 33 (2008), 969-987.
421. (with B. Hu) *The role of oxygen in tissue maintenance: mathematical modeling and quantitative analysis*. Math. Model and Methods in App. Sciences, Vol. 18 (2008), 1409-1441.
422. (with J. P. Tian, J. Wang and E. A. Chiocca) *Modeling the effects of resection, radiation and chemotherapy in glioblastoma*, J. Neurooncology, DOE 10,1007/s11060-008-9710-6, 2008.
423. (with B. Hu) *Stability and instability of Liapounov-Schmidt and Hopf bifurcations for a free boundary problem arising in a tumor model*. Trans. Amer. Math. Soc., Vol. 360 (2008), 5291-5342.
424. (with B. D. Aguda, Y. Kim, M. G. Piper-Hunter, C. B. Marsh), *MicroRNA regulation of a cancer network: Consequences of the feedback loops involving miR-17-92, E2F, and Myc*, Proc. Nat. Acad. Sciences, Vol. 105 (2008), 19678-19683.
425. (with Y. Kim, S. Lim, S. V. Raman, V. P Simonetti) *Blood flow in compliant vessel by the immersed boundary method*, Ann. Biomedical Engineering, Vol. 37 (2009), 927-942.
426. (with P. Goel and A. Sherman) *Multiscale modeling of electrical and intracellular activity in the pancreas: The islet tridoman equations*, SIAM Multiscale Modeling and Simulations, Vol. 7 (2009), 1609-1642.
427. (with J. Day and L. Schlesinger) *Modeling the immune rheostat of macrophages in the lung in response to infection*, PNAS, Vol. 106 (2009), 11246-11251.

428. (with A. Matzavinos, C. Y. Kao, J. E. Green, A. Sutradhar, M. Miller) *Modeling oxygen transport in surgical tissue*, PNAS, Vol 106 (2009), 12091-12096.
429. (with Y. Kim, S. Lawler, M. O. Nowicki and E. A. Chiocca) *A mathematical model of brain tumor: Pattern formation of glioma cells outside the tumor spheroid core*, J. Theoretical Biology, Vol. 260 (2009) 359-371.
430. *Free boundary value problems associated with multiscale tumor models*, Mathematical Modeling of Natural Phenomena, Vol. 4 (2009), 134-155.
431. (with C. Xue and C. Sen) *A Mathematical model of ischemic cutaneous wounds*, PNAS, Vol 106 (2009) 16782-16787.
432. (with C. Y. Kao and C. W. Shih) *Asymptotic phases in a cell differentiation model*, J. Diff. Eqs., Vol 247 (2009), 736-769.
433. (with B. Dembele and A. A. Yakubu) *Malaria model with periodic mosquito birth and death rate*, J. Biological Dynamics, Vol. 3 (2009), 430-445.
434. (with J. Day and L. S. Schlesinger) *Tuberculosis research: Going Forward with powerful "Translation System Biology" approach*, Tuberculosis, Vol. 90 (2010), 7-8.
435. (with B. Hu and C-Y Kao) *Cell cycle control at the first restriction point and its effect on tissue growth*, J. Math. Biology, Vol. 60 (2010), 881-907.
436. (with B. Dembele and A. A. Yakubu) *Mathematical model for optimal use of sulfadoxine pyrimethane as a temporary malaria vaccine*, Bull. Math. Biology, Vol. 72 (2010), 914-919.
437. (with P. Budu-Grajdeanu, R. Schugart, D. J. Birmingham, and B. H. Rovin) *Mathematical framework for human SLE Nephritis: disease dynamics and urine biomarkers*, Theoretical Biology and Medical Modeling, Vol. 7:14 (2010), 1-20.
438. (with H. Coskun, T. L. S. Summerfield and D. A. Kniss) *Quantitative analysis of preadipocyte fate determination*, J. Theoretical Biology, Vol 265 (2010), 87-94.
439. (with Y. Kim, J. Wallace, F. Li and M. Ostrowski) *Interaction of tumor with its microenvironment*, J. Math. Biology, Vol. 61 (2010), 401-421.
440. *What is mathematical biology and how useful is it?*, Notices AMS, Vol. 57 (2010), 851-860.
441. (with Y. Kim) *Interaction of tumor with its microenvironment: A mathematical model*, Bull. Math Biology, Vol 72 (2010), 1029-1068.
442. (with S. Biswas, S. Roy, J. Banerjee, S-R. Hussain, S. Khanna, G. Meenakshisundaram, P. Kuppusamy, and C. Sen) *Hypoxia inducible microrna 210 attenuates keratinocyte proliferation and impairs closure in a murine model of ischemic wounds*, PNAS, Vol 107 (2010), 6976-6981.
443. (with X. Liu, P. Srinivasan, E. Collard, P. Grajdeanu, K. Lok, S. E. Boye, J. L. Zweier), *Oxygen regulates the effective diffusion distance of nitric oxide in the aortic wall*, Free Radical Biology and Medicine, 48 (2010), 554-559.
444. (with N. Ziyadi and K. Boushuba) *A model of drug resistance with infection by health care workers*, Math. Biosciences and Engineering, Vol. 7 (2010), 779-792.
445. (with B. Hu and C. Xue) *Analysis of a mathematical model of ischemic cutaneous wounds*, SIAM J. Math. Anal., Vol. 42 (2010), 2013-2040.
446. (with Y. Kim) *Tumor cells-proliferation and migration under the influence of their microenvironment*, Math Bioscience & Engineering, Vol. 8 (2010), 373-385.
447. (with J. Day and L. Schlesinger) *The modeling of the host response to inhalation anthrax*, J. Theoretical Biology, 276 (2011), 199-208.

448. (with C. Xue) *A mathematical model for chronic wounds*, Math. Bioscience & Engineering, Vol 8 (2011), 253-261.
449. (with B. D. Aguda, Y. Kim, H. S. Kim, and H. A. Fine) Quantitative network modeling of the Mye-p53 control system of cell proliferation and differentiation, Biophysics J. Vol. 101 (2011) 2082-2091.
450. (with H. Jain, S. Clinton, A. Bhinder) *Modeling mutation acquisition in prostate cancer undergoing androgen ablation therapy*, PNAS, Vol. 108 (2011), 19701-19706.
451. (with Y. Kim, S. Roh, and S. Lawler) *miR451 and AMPK mutual antagonism in glioma cell migration and proliferation: a mathematical model*, PLoS ONE, Vol. 6 (2011) Issue 12 (10 pages).
452. (with M. Eisenberg, Y. Kim, R. Li, W. E. Ackerman and D. Kniss) *Mechanistic modeling of a novel cancer protein: myoferlin effects on tumor cell invasion*, PNAS, Vol. 108, (2011) 20078-20083.
453. (with C. S. Chou, C. Xue, C. Y. Kao, C. Sen) *Propagation of cutaneous thermal injury: A mathematical model*, Wound Repair and Regeneration, Vol. 20 (2011), 1-9.
454. (with X. Chen) *Asymptotic analysis for the narrow escape problem*, SIAM J. Math. Anal., Vol. 43 (2011) 2542-2563.
455. *Cancer as a multifaceted disease*, Math. Model. Nat. Phenom., Vol 7 (2012), 1-26.
456. Conservation laws in mathematical biology, Discrete and Continuous Dynamical Systems, Vol. 32 (2012), 3081-3097.
457. (with B. Hu and C. Xue) *A three dimensional model of wound healing; Analysis and computation*, Discrete & Continuous Dynamical Systems, Ser. B, Vol. 17 (2012), 2691-2712.
458. (with B. Szomolay, T. D. Eubank, R. D. Roberts, and C. M. Marsh) *Modeling inhibition of breast cancer growth by GM-CSF*, J. Theor. Biology, Vol. 303 (2012), 141-151.
459. *Epidemiological models with seasonality*, in "Mathematical Methods and Models in Biomedicine," pages 377-398, Springer Verlag, 2012.
460. (with D. Chen, J. M. Roda, C. B. Marsh and T. D. Eubank) *Hypoxia induced factors mediate the inhibition of cancer by GM-CSF: A mathematical model*, Bull. Math. Biology, Vol. 74 (2012), 2752-2777.
461. *PDE problems arising in mathematical biology*, Applied Math. J. Networks and Heterogeneous Media, Vol. 7 (2012), 691-703.
462. (with R. Leander, S. Dai, L. Schlesinger) *A mathematical model of CR3/TLR2 crosstalk in the cortex of Francisella tularensis infection*, PLOS Computational Biology, Vol. 8 (2012), Issue 11 (24 pages).
463. (with C-Y Kao and C-W Shih) *Asymptotic limit in a cell differentiation with consideration of transcription*, J. Diff. Eqs., Vol. 252 (2012), 5679-5711).
464. (with W. L. Lo, E. W. Martin, and C. L. Hitchcock) *Mathematical model of colitis-associated colon cancer*, J. Theor. Biology, Vol. 317 (2013), 20-29.
465. (with A. A. Yakubu) *Anthrax epizootic and migration: Persistence or extinction*, Math. Biosciences, Vol. 241, Issue 1, (2013) 137-144.
466. (with J. E. F. Green and A. P. Basson) *A mathematical model for cell induced gel compaction in vitro*, Math. Mod. Meth. Appl. Sci., Vol. 23 (2013), 127-163.

467. (with H-W Kang, M. Crawford, M. Fabgri, G. Nuova and P. Nana-Sinkam) *A mathematical model for miR-9, let-7, and EMT in lung cancer*, PLoS One, Vol. 8 (2013), Issue 1, 12 pages.
468. (with H. Jain) *Modeling prostate cancer response to continuous versus intermittent androgen ablation therapy*, Discrete and Continuous Dynamical Systems, Vol. 18, Ser. B (2013), 945-967.
469. (with A. A. Yakubu) *Fatal disease and demographic Allee effect: Population persistence and extinction*, J. Biological Dynamics, Vol 6 (2012), 495-508.
470. (with A. A. Yakubu) *Host demographic Allee effect, fatal disease and migration: Persistence of extinction*, SIAM J. Appl. Math., Vol. 72 (2012), 1644-1666.
471. (with H. Jain) *A partial differential equation model of metastasized prostate cancer*, Mathematical Biosciences and Engineering, Vol. 10 (2013), 591-608.
472. (with E. Lungu) *Can malaria parasite pathogenesis be presented by treatment with tumor necrosis factor-alpha?*, Mathematical Biosciences and Engineering, Vol. 10 (2013), 609-624.
473. (with D. Chen) *A two-phase free boundary problem with discontinuous velocity: Application to tumor model*, J. Math. Anal. Appl., Vol. 399 (2013), 378-393.
474. (with K-L Liao and X-F Bai) *The role of CD200-CD200R in tumor immune evasion*, J. Theor. Biology, Vol. 328 (2013), 65-76.
475. (with J. Lo and R. I Arsenescu) *Mathematical model of the roles of T cells in inflammatory bowel disease*, Bull. Math. Biology, Vol. 75 (2013), 1417-1433.
476. (with B. Hu and J. Keener) *The diffusion approximation for linear non-autonomous reaction-hyperbolic equations*, SIAM J. Math Anal., Vol 45 (2013), 2285-2298.
477. (with A. A. Yakubu) *A bovine babesiosis model with dispersion: implications for bovine babesiosis in Columbia*, Bull. Math. Biology, Vol. 76 (2014), 98-135.
478. (with W. Hao) *The LDL-HDL profile determine the risk of atherosclerosis: A mathematical model*. PloS One, Vol. 9 (2014), issue 3|e90497 (15 pages).
479. (with B. Hu and C. Xue) *A two phase free boundary problem for a system of Stokes equations with application to biofilm growth*, Archive Rat. Mech. Anal., Vol. 211 (2014), 257-300.
480. (with K-L Liao and X-F Bai) *Mathematical modeling of interleukin-27 induction of anti-tumor T cell response*, PLoS One, Vol. 9 (2014), issue 3|e91844 (16 pages).
481. (with K-Y Lam) *On the stability of steady states in a granuloma model*, J. Diff. Eqs. Vol. 256 (2014), 3743-3769.
482. *Are macrophages are friends or enemies*, Proceedings of the Sixth Symposium of BEER 2013, 1-20 (Published in 2014).
483. (with Y. Lousoun, C. Xue, and G. B. Lesinski) *A mathematical model for pancreatic cancer growth and treatment*, J. Theo. Biology, Vol. 351 (2014), 74-82.
484. (with R. Leander and C-Y Kao) *Dynamics of radially symmetric granulomas*, J. Math. Anal. Appl. Vol. 412 (2014), 776-791.
485. (with R. Leander) *Mutation of the cAMP response to G alpha I and G beta gamma: a computational study of G protein signaling in immune cells*. Bull. Math. Biology, Vol. 76 (2014), 1352-1375.
486. (with Y. Kim, H. G. Lee, N. Dmitrieva, J. Kim, B. Kaur) *Choidroitinase ABC I-Mediated Enhancement of oncholytic virus spread and anti tumor efficacy: A mathematical model*. PLoS ONE, Vol. 9, (2014) issue 7|e102499 (19 pages).

487. (with W. Hao and B. Rovin) *A mathematical model of renal interstitial fibrosis*, PNAS, Vol 111 (2014), 14193-14198.
488. (with W. Hao and E. Crouser) *A mathematical model of sarcoidosis*, PNAS, Vol. 111 (2014), 16065-16070.
489. (with K. L. Liao and X. F. Bai) *Mathematical modeling of interleuin-35 promoting tumor growth and angiogenesis*, PLoS ONE, Vol. 9 (2014), issue 10|e10126 (19 pages).
490. (with D. Chen, A. Bobko, A. C. Gross, R. Evans, C. B. Marsh., V. V. Khramtsov, and T. D. Eubank) *Involvement of tumor macrophage HIFs in chemotherapy effectiveness: Mathematical modeling of oxygen, pH, and glutathione*, PLoS ONE, Vol. 9 (2014) issue 10|e107511 (18 pages).
491. (with T. T. Yusuf and A. A. Full), *Strategies for controlling the spread of Hepatitis B virus in adult population*, International J. Scientific and Engin. Research, Vol. 5 (2014), 1455-1469.
492. (with K. Jacobsen, L. Russel, and B. Kaur) *Effects of CCN1 and macrophage content on glioma virotherapy: A mathematical model*, Bull. Math. Biology, Vol. 77 (2015), 984-1012.
493. (with W. Hao) *A mathematical model of atherosclerosis with reverse cholesterol transport and associated risk factors*, Bull, Math. Biology, Vol. 77 (2015), 758-781.
494. (with W. Hao and B. Hu) *A free boundary problem for steady small plaques in the artery and their stability*, J. Diff. Eqs., Vol. 259 (2015), 1227-1255.
495. (with K. L. Liao) *The role of the cytokines IL-27 and IL-35 in cancer*, Math. Bioc. Engin., Vol. 12 (2015), 1203-1217.
496. (with M. A. Fontelos) *A continuum model of the dynamics of trail formations by ants*, J. Math. Anal. Appl., Vol. 425 (2015), 1-19.
497. *Free boundary problems in biology*, Proceedings Royal Society, Vol. A373 (2015), 20140368 (16 pages).
498. (with W. Hao and C. Marsh) *A mathematical model of idiopathic pulmonary fibrosis*, PLoS ONE, 2015, DOI:10.131, 19 pages.
499. (with K. Y. Lam) *Analysis of a free boundary tumor model with angiogenesis*, J. Diff. Eqs., Vol. 259 (2015), 7636-7661.
500. (with N. Siewe, A. Yakubu, A. Satoskar) *Immune response to infection by Leishmania: A mathematical model*, Mathematical Biosciences, Vol. 276 (2016), 28-43.
501. (with W. Hao and L. Schlesinger) *Modeling granulomas in response to infection in the lung*, PLoS ONE, (2016) DOI:10.1371 (26 pages).
502. (with W. Hao) *Serum uPAR as biomarker in breast cancer recurrence: A mathematical model*, PLoS ONE, (2016) DOI:10.1371, 24 pages.
503. *Free boundary problems for systems of Stokes equations, Discrete and Continuous Dynamical Systems*, Vol. 21 (2016), 1455-1468.
504. (with W. Hao) *Mathematical modeling of liver fibrosis*, MBE, Vol. 14 (2017), 143-164.
505. (with E. Ratajczyk, U. Ledzewicz, and M. Ledzcynski) *The role of TNF- α inhibitor in glioma virotherapy: a mathematical model*, MBE, Vol 14 (2017), 305-319.
506. (with W. Hao) *Mathematical model of Alzheimer's disease*, submitted to BMC Systems Biology, (2016) 10:108DOI:10.1186, 18 pages.
507. (with W-C. Lo, V. Arseuescu, R. Arseuescu) *Inflammatory Bowel Disease: How effective is TNF- α suppression?* PLoS ONE, (2016) DOI:10.1371, 19 pages.

508. (with X. Lai) *Exosomal miRs in lung cancer: A mathematical model*, PLoS ONE, (2016) DOI:10.1371 27 pages.
509. (with N. Siewe, A. Yakubu, A. Satoskar) *Granuloma formation in Leishmaniasis: A mathematical model*, J. Theoretical Biology, Vol. 412 (2017), 48-60.
510. (with X. Lai) *Exosomal microRNA concentrations in colorectal cancer*, J. Theor. Biol., Vol 416 (2017), 70-83.
511. (with W. Hao, S. Gong, S. Wu, J. Xu, and M. Go) *A mathematical model of aortic aneurysm formation*. PLoS ONE, (2017) DOI: 10.137.0170807, 22 pages.
512. (with W. Hao, H. M. Komar, P. A. Hart, D. Conwell, G. Lesinski) *A mathematical model of chronic pancreatitis*, PNAS, Vol. 114 (2017), 5011-5016.
513. (with X. Lai) *Combination therapy of cancer with cancer vaccine and immune check point inhibitors: A mathematical model* PLoS ONE, (2017) DOI:10.1371.0178479, 24 pages.
514. (with X. Lai) *Combination therapy for melanoma with BRAF/MEK inhibitor and immune checkpoint inhibitor: A mathematical model*, BMC System Biology, (2017) 11:70 DOI:10.1186, 18 pages.
515. *Free Boundary Problems arising in biology*, Discrete and Continuous Dynamical Systems, Vol. 23 (2018), 193-202.
516. (with W. Hao) *The role of exosomes in pancreatic cancer microenvironment*, Bull. Math. Biology, (2017) DOI 10.1007/11538-017-0254-9, 23 pages.
517. (with X. Lai) *Combination therapy of oncolytic virus and checkpoint inhibitor*, PLoS ONE, (2018) DOI:10.1371.0192449, 21 pages.
518. (with N. Siewe) *Chronic hepatitis B virus and liver Fibrosis: A mathematical model*. PLoS ONE (2018) DOI:10.1371.0195037, 23 pages.
519. (with Y. Kim, Y. Yoo, and B. Kaur, et al) *Complex Role of NK cells in regulation of OV-Bortezomib therapy*, PNAS (2018). Vol. 115, 4927-4932.
520. (with X. Lai, A. Stiff, R. Wesolwski, and W. Carson) *Combination therapy for breast cancer with BET inhibitor and immune checkpoint inhibitor: A mathematical model*. PNAS, (2018). Vol. 115, 5534-5539.
521. (with N. Moise) *Rheumatoid arthritis – a mathematical model*, J. Theor. Biology, Vol. 461 (2019), 17-33.
522. (with X. Lai) *Mathematical modeling in scheduling cancer treatment with combination of VEGF inhibitor and chemotherapy drugs*, J. Theor. Biology, Vol. 462. (2019), 490-498.
523. (with X. Lai) *How to schedule VEGF and PD-1 inhibitors in combination cancer therapy?* BMC Systems Biology, (2019) DOI:10.1186/S2198-019-0706.
524. (with X. Lai) *Antagonism and negative side-effects in combination therapy for cancer*. DCDS. Vol 24 (2019), 2237-2250.
525. (with X. Lai) *Free boundary problems associated with cancer treatment by combination therapy*, DCDS, Vol. 39 (2019), 6825-6842.
526. (with N. Siewe) *Overcoming drug resistance to BRAF inhibitor*, Bull. Math. Biology, Vol. 82 (2020), 1-31.
527. (with X. Lai) *Mathematical modeling of cancer treatment with radiation and PD-LI inhibitor*, Science China, Mathematics, 2020. doi.org/10a1607/S11425-019-1648-6. 20 pages.

528. (with K-Y Lam) Analysis of a mathematical model of rheumatoid arthritis, *J. Math. Biology*, Vol. 80 (2020), 1857-1883.
529. (with X. Lai and W. Hao) TNF- α inhibitor reduces drug-resistance to anti-PD-1: A mathematical model, 2020. PLoS ONE. DOI.org/10.1371.0231499.
530. (with N. Siewe) Increase hemoglobin level in severe malarial anemia while controlling parasitemia: A mathematical model. *Mathematical Biosciences*, 326, 108374 (2020)
531. (with N. Moise) A mathematical model of the multiple sclerosis plaque, *J. Theor. Biology*, Vol. 461 (2021), 17-33.
532. (with N. Siewe) A mathematical model of chronic dermal wounds in diabetes and obesity, *Bull. Math. Biology*, Vol. 83 (2021), 1-33.
533. (with K. Y. Lam) Analysis of a mathematical model of immune response to fungal infection. *J. Mathematical biology*. 2021. DOI:10.1007/s00285-021-01633
534. (with N. Siewe) TGF- β inhibitor can overcome cancer primary resistance to PD-1 blockade: A mathematical model, 2021, PLOS ONE. DOI.org/10.1371.0252620
535. (with N. Siewe) Combination therapy for MCRPC with immune checkpoint inhibitors, ADT and vaccine: A mathematical model, 2021. PLOS ONE. DOI.org.1371/0262453
536. (with N. Moise) A mathematical model of immunomodulatory treatment in myocardial infarction, *Journal Theoretical Biology* (2022), Vol. 544, 111122
537. (with N. Siewe) Optimal timing of steroid initiation in response to CTLA-4 antibody in metastatic cancer: A mathematical model. (2022) PLOS ONE DOI.org/10.1371/journal.pone.0277248.
538. (with W. Hao and K. Y. Lam) A cancer model with nonlocal free boundary dynamics. *Journal Mathematical Biology*. (2022) October 7, Vol. 85. Online.
539. (with N. Siewe) Breast cancer exosomal miRs facilitate metastatic niche in the bone: A mathematical model. *Bull, Math. Biology*. (2023) January 6, Vol. 85. Online.
540. (with N. Siewe) Cancer therapy with immune checkpoint inhibitor and CSF-1 blockade: A mathematical model. *Journal Theor. Biology*, (2023). Vol. 556, January 7, Online.
541. (with N. Siewe) Treatment of leishmaniasis with chemotherapy and vaccine: A mathematical model. *J. Biological Dynamics*. (2023), September 21, online.
542. (with K-L Liao and X-F Bai) IL-27 in combination with anti-PD-1 can be anti-cancer or pro-cancer. *Journal Theoretical Biology* (2023) December 13, online.
543. (with N. Siewe) Obesity-induced type 2 diabetes metilus. *Journal Theoretical Biology* (2024) February 1, online
544. (with C. Lee) Generating PET scan patterns in Alzheimer's with a mathematical model. (2024) PLOS ONE
545. (with N. Siewe) Osteoporosis induced by cellular senescence: A mathematical model. Submitted.