



CURRICULUM VITAE

Gabriela Georgeta Marinoschi

Actual position :

- Senior researcher I, director of research, Gheorghe Mihoc-Caius Iacob Institute of Mathematical Statistics and Applied Mathematics of the Romanian Academy (ISMMA)

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Education :

- University of Bucharest, diploma in Mathematics, 1979
- University of Bucharest, certificate of specialization in Fluid Mechanics, 1980
- University of Bucharest, Ph. D. in Mathematics, 1989
- Thesis: Contribution to the study of wave propagation in fluids, advisor: Prof. Lazăr Dragoş

Scientific Committees and Academies :

- Corresponding member of the Romanian Academy, June 2017
- Executive scientific secretary of the Romanian National Committee of Mathematics, since 1994

Background profile / Field of specialization :

- Mathematics / Nonlinear PDEs, optimal control, fluid dynamics

Fields of current interests and keywords:

- Nonlinear partial differential equations
- Boundary value problems
- Parabolic equations
- Free boundary problems
- Semigroup and variational methods
- Optimal control, stabilization and inverse problems
- In particular, with applications in:
 - porous media (groundwater flows)
 - biological flows (population dynamics, chemotaxis, biology, medicine)
 - phase transitions
 - fluid dynamics and MHD flows

Publications :

- 4 books (see List of publications A)
- 11 invited chapters in peer-reviewed collective volumes (see List of publications B)
- co-editor of 8 volumes (see List of publications C)
- more than 90 papers published in peer reviewed journals (see List of publications D)
- over 70 papers presented at national and international scientific meetings
- about 30 technical reports and computer soft for operational hydrological events (1980-1990)

Language proficiency :

- English, Italian, French: very well
- German: fair

Professional positions held:

- Mathematician, Institute of Meteorology and Hydrology, Bucharest, 1980-1985
- Scientific researcher, Institute of Meteorology and Hydrology, Bucharest, 1985-1990
- Senior researcher II, Institute of Meteorology and Hydrology, Bucharest, 1990
- Scientific secretary, Romanian Academy, Section of Mathematical Sciences, December 1990 –September 2017 (part time)
- Senior researcher II (May 1991-February 1998), Institute of Applied Mathematics of the Romanian Academy
- Senior researcher I (February 1998-December 2001), Institute of Applied Mathematics of the Romanian Academy
- Senior researcher I (December 2001-present), Gheorghe Mihoc-Caius Iacob Institute of Statistical Mathematics and Applied Mathematics of the Romanian Academy (ISMMA) (former Institute of Applied Mathematics between 1991-2001)

Positions abroad :

- NATO research fellowship: University of Athens, Greece April-June 1994
- Researcher, Forschungszentrum Jülich, Germany, September-October 1994
- Visiting professor, Center of Optimal Control, and Discrete Mathematics, Central China Normal University, November-December 2003, May-June 2004
- Visiting professor CIRM-Fondazione Bruno-Kessler Italy, November 2008, November 2012

Visiting appointments abroad :**Visiting researcher:**

- Forschungszentrum Jülich, Germany: July 1995, May 1997, November 1999, November 2000, October 2001
- Center of Atmosphere Physics and Climatology of the Academy of Athens, Greece: July 1996, August 1998, August 1999, September 2000
- Technical University of Athens: March 2000

- University of Trento, Department of Mathematics: April 2003, October 2003, April 2004, October 2004, April 2005, November 2005, March-April 2006, March 2007, October 2007, May 2008; October 2009, November 2011, November 2013, October 2014, October 2015, September 2016
- Institute for Analysis of Systems and Informatics, CNR, Rome, May 2014
- University of Pavia; May 2014, December 2014, March 2015, November 2015, April 2016

Visiting professor:

- University of Bologna: July 2005, September 2006, April 2008, April 2009, June 2009, October 2009, April-May 2010, November 2010, May 2011, November 2011, October 2012, May, October 2013, September 2014, September 2016
- University of Bari: May-June 2013, May 2015

Teaching experience :

- Assistant professor, University of Bucharest, Faculty of Mathematics, 1981-1984
- Assistant professor, University Politehnica of Bucharest, 1983-1984
- Professor, Central China Normal University: November-December 2003, May-June 2004
- Ph.D. advisor, since 2004, (O.M. no. 4629/7.09.2004) with ISMMA, between 2003-2013 and with the Simion Stoilow Institute of Mathematics, between 2013-present

Theses coordinated:

- Cornelia Ciutoreanu, Numerical methods for nonlinear diffusion equations, ISMMA, June 2010
- Roxana Sgarcea, Models of reaction-diffusion with chemotaxis, ISMMA, June 2012
- Felician Preda, Topological and Monotonicity Methods in the Study of Nonlinear Partial Differential Equations, ISMMA, October 2012
- Sergiu Lupu, Contributions to the study of orbit errors of GPS satellites due to non-gravitational perturbations, Simion Stoilow Institute of Mathematics, August 2014
- Ioana Boacă, Variational methods for diffusion-reaction problems and applications, Simion Stoilow Institute of Mathematics, January 2017

Jury member:

- Member of jury in about 20 Ph.D thesis and habilitation thesis in Romania
- Jury member (Examinateur): Ph.D. thesis Diffusion and Age in Population Dynamics, by Caterina Cusulin, University of Trento 2006
- Jury member: Ph.D. thesis Stefano Melchionna, University of Vienna, 2018
- Jury member: Ph.D thesis Michele Colturato, University of Pavia, 2018

Director of Project:

International projects

- **EC contract No. EV5VCT 920214**, *Critical parameters governing the mobility and fate of pesticides in the soil/aquifer system*, with Forschungszentrum Jülich, **1994-1996**
- **Bilateral cooperation** *Analytical and numerical modelling of complex pollutant transport phenomena in surface waters*, with the Technical University of Athens, **1998-2000**
- **Bilateral agreement** between Romanian Academy and CNR, Italy, *Nonlinear partial differential equations (PDE) with applications in modeling cell growth, chemotaxis and phase transition*, **2014-2016**
- **Project LEA** (Laboratoire Européen Associé Franco-Roumain) between CNRS-France and Simion Stoilow Institute of Mathematics: *Analyse mathématique et control d'un modèle de sélection- mutation et division pour la modélisation de la leucémie chronique du ganglion*, with dr. Vuk Milisic, University Paris 13, **2014-2015**
- **Bilateral agreement** between Romanian Academy and CNR, Italy, *Control and stabilization problems for phase field and biological systems*, **2017-2019**

> National projects

- **RD- project of excellency**, Contract CEEX-05-D11-25 / 2005-2007 (director of project)
- **RD- project of excellency**, Contract CEEX-05-D11-36 / 2005-2008 (partner-responsible of project)
- **RD- project of excellency**, Contract 2-CEX-06-D11-97/ 2006-2008 (partner-responsible of project)
- **Advanced IDEAS Project**, PN-IDEI ID_70, 2008-2011 (director of project)

About 10 Grants financed by

- Romanian Academy: 1996, 1997, 2003-2004, 2005-2006
- Ministry of Research : 1998, 1998-1999, 1999-2001, 2001-2002

- Ministry of Education and Research (CNCSIS): 2002, 2004 – 2005

Research contracts :

- Annual several contracts concerning research and operative hydrological prognosis within the Institute of Meteorology and Hydrology, between 1981-1990
- Several contracts within IMA with the Institute of Meteorology and Hydrology, 1992-1994

Participant in other projects :**➤ International projects :**

- **MIUR-PRIN Italy**, “Teoria Matematica delle Popolazioni: metodi, modelli, confronto con i dati”, led by Prof. M. Iannelli, 2007-2010
- **MIUR-PRIN Italy**, PRIN 2009 - 2009RNH97Z_001, “Interacting structures in population dynamics”, led by Prof. M. Iannelli, 2011-2013
- Member of the management committee of **COST MP0701**, Composites with novel functional and structural properties by nanoscale materials (NANO COMPOSITE MATERIALS - NCM), 2008-2012

➤ National projects :

- Advanced IDEAS Project, PN-IDEI ID_404, 2007-2010
- Complex Advanced IDEAS Project, PCCE-55, Differential systems and applications, led by University of Craiova, 2008-2012
- PN-II-ID-PCE-2011-3-0027, Analysis and Control of Deterministic and Stochastic Diffusion Equations, 2011-2016, led by Romanian Academy, Iasi Branch, Inst. Mathematics Octav Mayer, Iasi
- PN-II-ID-PCE-2011-3-0045, Mathematical modeling of ductile rupture, 2011-2016, led by Inst. Mathematics S. Stoilow

- PN-III-P4-ID-PCE- 2016-0011, Analysis and control of Schrodinger stochastic equations and of some nonlinear diffusion models, 2017-2019, led by Romanian Academy, Iasi branch
- PN-III-P4-ID-PCE- 2016-0372, Stochastic analysis and nonlinear equations for fragmentation processes, 2017-2019, led by Inst. Mathematics S. Stoilow

Participation in international meetings as invited or plenary speaker

- 7-ème Colloque Franco-Roumain de Mathématiques Appliquées, Craiova, Romania, August 30- September 3, 2004
- 8th International Symposium on Automatic Control and Computer Science, Iasi, Romania, October 22 - 23, 2004
- International Conference Inverse Problems, June 19-24, 2005, Cortona, Italia
- International workshop "Functional methods in biomathematics", August 10-16, 2005 Galanesti, Romania
- Conférence Francophone sur la Modélisation Mathématique en Biologie et en Médecine, Craiova, July 12-14, 2006 (**plenary conference**)
- 8-ième Colloque Franco-Roumain de Mathématiques Appliquées, Chambéry, August 28 – September 1, 2006
- International Conference on Applied Analysis and Differential Equations, ICAADE, Iasi September 4-9, 2006 (**plenary conference**)
- Conference Matematica Oggi per l'Uomo e l'Ambiente, Montecatini March 26-29, 2007
- Evolution Equations: Direct and Inverse Problems, University of Bologna, September 18-20
- Direct, Inverse and Control Problems, University of Rome, La Sapienza, June 23-28
- 6th Congress of Romanian Mathematicians, Bucharest, June 28-July 4, 2007 (**plenary conference on sections**)
- Conference Mathematical Models for Complex Systems, Cortona, September 25-29, 2007
- 9-ième Colloque Franco-Roumain de Mathématiques Appliquées, Brasov, August 27 – September 2, 2008
- Exploratory Workshop "Differential Equations and Applications in Life Sciences", Iasi, September 3-7, 2008

- Direct, Inverse and Control Problems, Cortona, September 22-26 2008.
- Recent challenges in medical mathematics and cancerology : modeling and mathematical analysis", February 23-27, 2009, CIRM, Marseille, France
- The 5th International Conference "Dynamical Systems and Applications", Constanta, Romania, June 15-18, 2009 (**plenary conference**)
- EEMMAS Conference, Taranto, Italy, June 29- July 3, 2009
- "A. Myller" Mathematical Seminar Centennial Conference, June 21-26, 2010, Iasi
- 10-ème Colloque Franco-Roumain, august 26-31 2010, Poitiers, France (**plenary conference**)
- "Diaspora în cercetarea stiintifica si învatamântul superior din România" Bucuresti, September 21-24 2010 (**plenary conference**)
- 8th Workshop on Mathematical Modelling of Environmental and Life Problems, Constanta, October 21-24, 2010
- 33th Caius Iacob Conference on Fluid Mechanics, Bucharest, Sept. 29-30, 2011
- Conference MIMMO-BIO, December 19-21 2011, Trento, Italy
- Conference MathProSpeM2012, April 16-21, 2012, Roma, Italy
- Workshop "Evolution Problems and Applications", July 13, 2012, Bari, Italy
- Conference PDEs, Inverse Problems and Control Theory, July 16-20, 2012, Bologna, Italy
- Conference ADMAT 2012, Cortona, September 17-21, 2012
- Conference PDEs and Stochastic Processes, The 5th Workshop Series on Mathematics, October 12-14, 2012, Pitești, Romania
- Conference Diff. Eq., Inverse Problems and Control Theory, Cortona, Italia, 16-22.06.2013
- AMS Conference, Nonlinear Evolution Equations, June 26-30, 2013, Alba Iulia
- Conference Faculty of Sciences - 150 years, 29.08-1.09.2013, Bucharest
- Diffuse Interface Models - DIMO2013, Levico Terme, Italia, 9.09-14.09.2013
- AIMS conference, Madrid, 7-11.07.2014
- 12e Colloque Franco-Roumain de Mathématiques Appliquées, Lyon, France, 25-30.08.2014
- PDE's, Inverse Problems and Control Theory, September 15-19, 2014, Bologna, Italy
- New advances in PDE's, Inverse Problems and Control Theory, Parma, July 6-11, 2015

- The 36th Conference Caius Iacob, Fluid Mechanics, Bucharest, November 29-30, 2015
- Session Analyse et Contrôle des EDP, XIII-ème Colloque Franco-Roumain de Mathématiques Pures et Appliquées, Iasi, 25-29.08.2016
- Partial Differential Equations and Applications, Bologna, May 22-26, 2017
- Atelier de travail en stochastique et interférences avec EDP, 13-14.09.2017, Bucarest
- Joint International Meeting of the German Mathematical Society and the Romanian Mathematical Society, 16-19.09.2017, Constanta
- Current Trends in Applied Mathematics, 27-28.10.2017, Iasi
- Dynamical Systems Applied to Biology and Natural Sciences (DSABNS2018), Torino, 7-9.02.2018
- Oberwolfach workshop, Challenges in optimal control of nonlinear PDE systems, 8-14 April, 2018
- Atelier “Analyse, analyse numerique et controle des milieux continus”, 23-27 May 2018, Bucharest
- SMACS 2018, 17-19 June 2018, Gargnano, Italy

Invited conferences at foreign universities and institutes:

- Forschungszentrum Jülich, Germany: September 1994, May 1997, October 2001
- University of Trento: April 2003, April 2005
- Institute of Mathematics of the Chinese Academy of Sciences, Wuhan, China: November 2003
- Center of Optimal Control, and Discrete Mathematics, Central China Normal University: June 2004
- Department of Mathematics, University of Bologna: September 2004, July 2005, April 2008, May 2010, October 2013, September 2016
- Department of Mathematics, University of Bari, July 2012
- IMAR Monthly Conferences, January 9, 2013
- University of Bari (three conferences, May 2013)

- Department of Mathematics , University of Pavia, May 2014, March 2015, November 2015
- Department of Mathematics , University of Bari, May 2015

Other talks:

- 1st European Conference of Fluid Mechanics, Cambridge, UK, September 1991
- ECMI Workshop, Bucharest, July 1995
- ICIAM Congress, Hamburg, 1995
- 9th ECMI Congress, Lyngby, Denmark, July 1995
- The 29th ESGI (European Study Group in Industry) meeting, Oxford, UK, March 1996
- VIIth Conference on Nonlinear Analysis, Numerical Analysis, Applied Mathematics and Informatics, Constanta, May 1999
- 1st Workshop on Mathematical Modelling of Environmental Problems, Bucharest, Romania, July 2003
- 2nd Workshop on Mathematical Modelling of Environmental and Life Science Problems, Bucharest, Romania, July 2003
- GAMM Conference, Abano Terme, Italy, March 24-28, 2003
- NPDE2003, Alushta, Ukraine, September 15-21, 2003
- Conference “New Trends in Continuum Mechanics”, Constanta, Romania, September 8-12, 2003
- 4th Workshop on Mathematical Modelling of Environmental and Life Science Problems, Constanta, Romania, September 2005
- 5th Workshop on Mathematical Modelling of Environmental and Life Science Problems, Constanta, Romania, September 2006
- Conference “Colocvii Matematice”, Romanian Academy, November 2013
- Conference “Colocvii Matematice”, Romanian Academy, April 2016

Organization of scientific meetings :

- 1st Workshop on Mathematical Modelling of Environmental Problems, Bucharest, June 17-21, 2002 (main organizer)
- Vth Congress of Romanian Mathematicians (member of the organization committee), Pitesti, June 2003
- 2nd Workshop on Mathematical Modelling of Environmental and Life Problems, Bucharest, July 2003 (main organizer)
- 4th Workshop on Mathematical Modelling of Environmental and Life Problems, Constanta, September 2005 (member of the organization committee)
- International workshop "Functional methods in biomathematics", August 10-16, 2005 Galanesti, Romania (member of the organization committee)
- Franco-Roumaine Conference de Biomathématique, Craiova, July 2006 (member in the scientific board)
- 8-ième Colloque Franco-Roumain de Mathématiques Appliquées, Chambéry, 28 aug-1 sept. 2006 (co-organizer of the minisymposium Biomathématiques)
- 5th Workshop on Mathematical Modelling of Environmental and Life Problems, Constanta, September 2006 (member of the organization committee)
- 6th Workshop on Mathematical Modelling of Environmental and Life Problems, Constanta, September 2006 (member of the organization committee)
- 6th Congress of Romanian Mathematicians, Bucharest, June 28-July 4, 2007 (member of the organization committee)
- 9-ième Colloque Franco-Roumain de Mathématiques Appliquées, Brasov, August 28 – Sept. 2, 2008 (co-organizer of the minisymposium Nonlinear PDE in applied sciences)
- International workshop "Differential Equations and Applications in Life Sciences", September 3-7 2008, Iasi
- 7th Workshop on Mathematical Modelling of Environmental and Life Problems, Constanta, 2007 (member of the organization committee)
- 8th Workshop on Mathematical Modelling of Environmental and Life Problems, Constanta, October 21-24, 2010 (member of the organization committee)

- 7th Congress of Romanian Mathematicians, Bucharest, June 20-July 5, 2011 (member of the organization committee)
- 9th Workshop on Mathematical Modelling of Environmental and Life Problems, Constanta, 2012 (member of the organization committee)
- Conference Caius Iacob, Bucharest, October 10-12, 2013 (member of the organization committee)
- PDEs and Stochastic Processes, The 5th Workshop Series on Mathematics, October 12-14, 2012, Pitești, Romania (member of the organization committee)
- Special session Mathematical models in life and environment, AMS Conference, 26-30.06.2013, Alba Iulia
- 10th Workshop on Mathematical Modelling of Environmental and Life Problems, Constanta, October 16-19, 2014 (member of the organization committee)
- 8th Congress of Romanian Mathematicians, Bucharest, June 26-July 1, 2015 (member of the organization committee)
- Current Issues in PDEs and Stochastics, Bucharest, June 1, 2016
- Session Maths et Planète Terre, XIII-ème Colloque Franco-Roumain de Mathématiques Pures et Appliquées, Iasi, 25-29.08.2016
- 11th Workshop on Mathematical Modelling of Environmental and Life Problems, Constanta, October 12-16, 2016 (member of the scientific committee)
- Current Trends in Applied Mathematics, Iasi, 24-26 October 2017
- Current Trends in Applied Mathematics, Iasi, 10-12 September 2018
- Organization of about 50 meetings and conferences within the annual scientific programs of the Section of Mathematical Sciences (between 1991-2016)

Editorial activity :

- Scientific secretary of the editorial board of the Romanian Academy journal Mathematical Reports, 2000-2012
- Member of the editorial board of Mathematical Reports, since 2013

- Member of the editorial board of Revue Roumaine de Mathématiques Pures et Appliquées, since 2013
- Member of the editorial board of Journal of Numerical Analysis and Approximation Theory, since 2013
- Reviewer for Mathematical Reviews, Zentralblatt
- Reviewer for international journals (e.g., AIMS journals, Transport in Porous Media, NODEA, Abstract and Applied Analysis, Nonlinear Analysis, J. Math. Anal. Appl., SIAM journals, Math. Methods. Appl. Sci., Appl. Math. Comput., Appl. Math. Modeling, J. Optimiz. Theory Appl., Nonlinearity)

Administration, professional membership and offices held :

- Member of the Commission of Litigation of CNADTCU - Ministry of Education, 2016-2020
- Vicepresident of the Commission of Litigation of CNADTCU - Ministry of Education, 2012-2016
- Vicepresident of the Commission of Mathematics of CNADTCU – Ministry of Education and Research, 2011-2012
- Member of the leading board of the Excellence Research Programme CEEEX, 2005-2009
- Member of the Council of Mathematics Doctoral School, Faculty of Mathematics, Bucharest
- Responsible with administrative activities regarding the evaluation of the institutes of the Romanian Academy, 1999-2004
- Secretary of the Romanian Section of GAMM since 2001
- Scientific secretary of the Romanian National Committee of Mathematics, since 1994
- GAMM member since 1991
- Secretary of the Romanian Section of GAMM since 2001
- IFNA member 2007-2009
- Member of the Scientific Council of ISMMA

- Leader of the ISMMA team “PDEs in life and environmental sciences”

Awards :

- Spiru Haret Prize of the Romanian Academy in the domain of Mathematical Sciences, 1992
- Cultural Distinction of the Romanian Academy, 2002
- Chevalier of the National Order “For Merit”, 2004 (presidential award)

LIST OF PUBLICATIONS

A. Books (inverse chronological order)

1. A. Favini, G. Marinoschi, *Degenerate Nonlinear Diffusion Equations*, Lecture Notes in Mathematics 2049, Springer, Berlin, New York, 2012. (143 pages, ISBN 978-3-642-28284-3) DOI 10.1007/978-3-642-28285-0
2. G. Marinoschi, *Functional approach to nonlinear models of water flow in soils*, Mathematical Modelling Series: Theory and Applications, volume 21, Springer, 2006. (315 pages, ISBN-10: 1-4020-4879-3)
3. G. Marinoschi, *Analysis and Control of Basic Problems in the Theory of Water Infiltration in Soils*, Hubei Science and Technology Press, Wuhan, 2004. (233 pages, ISBN: 7-5352-3210-8)
4. G. Marinoschi, *Mathematical treatment of infiltration and dispersion problems*, Center of Optimal Control and Discrete Mathematics, Central China Normal University, Wuhan, 2003. (Lecture notes, 147 pages)

B. Articles or chapters in peer-reviewed collective volumes (chronological order)

(Thomson Reuters Web of Science journals marked by *)

1. S. Ion, G. Marinoschi, D. Marinescu, *Analytical and numerical approach to Richards' equation*. In: **Current topics in Continuum Mechanics** (Ed. L. Dragos), 103-140, Romanian Academy Publishing House, Bucharest, 2002. ISBN: 973-27-0919-7
2. G. Marinoschi, *Analytical method for solving an advection - diffusion problem in a n - layered medium*. In: **Mathematical Modelling of Environmental Problems** (Eds. G. Marinoschi, S. Ion), 57-82, Romanian Academy Publishing House, 2002. ISBN: 973-27-0934-0
3. G. Marinoschi, A. Morega, *A study of the evolution of moisture discontinuity in a stratified porous medium*, In: **Mathematical Modelling of Environmental and Life Sciences Problems** (Eds. S. Ion, G. Marinoschi, C. Popa), Romanian Academy Publishing House, pp. 69-80, 2004. ISBN: 973-27-1113-2
4. G. Marinoschi, *On a nonlinear boundary value problem related to infiltration in unsaturated media*, In: **New Trends in Continuum Mechanics** (Ed. M. Suliciu, Proceedings of the International Conference 8-12 September, 2003, Constanta), Theta Publishing, 175-184, 2005.
5. G. Marinoschi, *Well-posedness for a non-autonomous model of fast diffusion*, In: **Applied Analysis and Differential Equations** (Eds. Ovidiu Carja, Ioan I. Vrabie), 199- 216, World Sci. Publ., Hackensack, NJ, 2007. ISBN 978-981-270-594-5
6. G. Marinoschi, *Mathematical models of diffusion in nonhomogeneous porous media*, In: **Topics in Applied mathematics and Mathematical Physics** (Eds. Cecil Pompiliu Grünfeld, Stelian Ion, G. Marinoschi), 243-277, Romanian Academy Publishing House, Bucharest, 2008. ISBN: 978-973-27-1719-6
7. G. Marinoschi, *Nonlinear diffusion equations with discontinuous coefficients in porous media*, In: **Progress in Nonlinear Analysis Research** (Ed. Erik T. Hoffmann), 209-242, Nova Science Publishers, New York, 2008. Hard-copy ISBN: 978-1-60456-359-7; 2009 On-line ISBN: 978-1-60741-399-8
8. G. Marinoschi, *Identification of a singular coefficient in a parabolic degenerate equation with transport*, In: **Alexandru Myller Mathematical Seminar Centennial Conference**, Iasi (Romania), 21-26 June 2010 (Eds. V. Barbu, O. Carja), AIP Conference Proceedings* volume 1329, 191-205, 2011. ISBN: 978-0-7354-0884-5 DOI: [10.1063/1.3559170](https://doi.org/10.1063/1.3559170)
9. A. Favini, A. Lorenzi, G. Marinoschi, H. Tanabe, *Perturbation methods and identification problems for degenerate evolution systems*, In: **Advances in Mathematics, Invited Contributions at the Seventh Congress of Romanian Mathematicians, Brasov, 2011** (Eds. L. Beznea, V. Brinzanescu,

- M. Iosifescu, G. Marinoschi, R. Purice, D. Timotin), Publishing House of the Romanian Academy, 145-156, 2013. ISBN:978-973-27-2316-6
10. G. Fragnelli, G. Marinoschi, R.M. Mininni, S. Romanelli, *A control approach for an identification problem associated to a strongly degenerate parabolic system with interior degeneracy*, In: **New Prospects in Direct, Inverse and Control Problems for Evolution Equations**, (Eds. A. Favini et al.), Springer INdAM Series, vol. 10, 121-139, 2014. ISBN 978-3-319-11405-7
 11. G. Marinoschi, *A note on the feedback stabilization of a Cahn-Hilliard type system with a singular logarithmic potential*, In: **Solvability, Regularity, Optimal Control of Boundary Value Problems for PDEs** (Eds. A. Favini, P. Colli, E. Rocca, G. Schimperna, J. Sprekels), Springer INdAM Series, vol 22. 357-377, Springer, 2017

C. Volume editor

1. G. Marinoschi, S. Ion, *Proceedings of the First Workshop on Mathematical Modelling of Environmental Problems*, Romanian Academy Publishing House, 2002. (160 pages, ISBN: 973-27-0934-0).

2. S. Ion, G. Marinoschi, C. Popa, *Mathematical Modelling of Environmental and Life Sciences Problems, Proceedings of Workshops June 2003, Bucharest and May 2004, Constanta*, Romanian Academy Publishing House, 2004. (293 pages, ISBN: 973-27-1113-2).
3. S. Ion, G. Marinoschi, C. Popa, *Mathematical Modelling of Environmental and Life Sciences Problems, Proceedings of the Fourth Workshop September 2005, Constanta*, Romanian Academy Publishing House, 2006. (293 pages, ISBN: 973-27-1158-5).
4. S. Ion, G. Marinoschi, C. Popa, *Mathematical Modelling of Environmental and Life Sciences Problems, Proceedings of the Fifth Workshop September 2006, Constanta*, Romanian Academy Publishing House, 2008. (224 pages ISBN: 978-973-27-1641-0).
5. C. P. Grünfeld, S. Ion, G. Marinoschi, *Topics in Applied Mathematics and Mathematical Physics*, Romanian Academy Publishing House, 2008. (ISBN: 978-973-27-1719-6).
6. S. Ion, G. Marinoschi, C. Popa, *Mathematical Modelling of Environmental and Life Sciences Problems, Proceedings of the 6th Workshop, September 2007 and 7th Workshop, September 2008, Constanta*, Romanian Academy Publishing House, 2010. (281 pages ISBN: 978-973-27-1903-9).
7. L. Beznea, V. Brinzanescu, M. Iosifescu, G. Marinoschi, R. Purice, D. Timotin, *Advances in Mathematics, Invited Contributions at the Seventh Congress of Romanian Mathematicians, Brasov, 2011*, Publishing House of the Romanian Academy, 2013. ISBN: 978-973-27-2316-6
8. S. Anița, N. Hritonenko, G. Marinoschi, A. Swiermiak, *Optimal Control, in Mathematical Modelling of Natural Phenomena*, 9, 4, Cambridge University Press, 2014. (ISSN: 0973-5348).
9. T. Barbu, G. Marinoschi, Gh. Moroșanu, I. Munteanu, *Advances in Variational and Partial Differential Equation-Based Models for Image Processing and Computer Vision, Mathematical Problems in Engineering*, Hindawi, 2018, <https://doi.org/10.1155/2018/1701052>

D. Articles in peer-reviewed publications (chronological order)

(Clarivate Analytics Web of Science journals marked by *)

1. G. Marinoschi, *Minimax principle for an electrically conducting fluid flow along a channel*, *Studii si Cercetari Matematice*, 34, 2, 147-157, 1982.

2. G. Marinoschi, *Contribution to the study of a conducting fluid flow in a MGH generator*, **Studii si Cercetari Matematice**, 34, 6, 536-547, 1982.
3. G. Marinoschi, *The influence of an isolated low obstacle upon an airstream*, **Meteorology and Hydrology**, 21, 1, 15-19, 1991.
4. G. Marinoschi, *On the propagation of small perturbations into a mixture of fluids*, **Meteorology and Hydrology**, 21, 2, 25-29, 1991.
5. G. Marinoschi, A. Georgescu, *Models of asymptotic approximation governing the atmospheric motion over a low obstacle*, **Studii si Cercetari Matematice**, 44, 3, 237-252, 1992.
6. G. Marinoschi, *Uniqueness and existence theorems concerning the propagation of small perturbations in an electrically conducting plasma*, **Rev. Roumaine Math. Pures Appl.** 37, 7, 625-636, 1992.
7. G. Marinoschi, *On a problem of eigenvalues and eigenvectors concerning the small wave propagation in a conducting plasma*, **Rev. Roumaine Phys.** 37, 5, 481-486, 1992.
8. G. Marinoschi, *Solution for the two-dimensional pollutant dispersion produced by an accident in a river*, **Rev. Roumaine Sci. Tech. - Méc. Appl.** 38, 6, 637-641, 1993.
9. G. Marinoschi, *A perturbation method for the solution of convection-diffusion problems with variable velocity*, **Rev. Roumaine Math. Pures Appl.** 39, 2, 147-153, 1994.
10. G. Marinoschi, M. Simota, R. Mic, *Pollution simulations for Danube, according to mathematical models of dispersion in various hypotheses*, **Proc. XVIIth Conference of the Danube Countries, Band I/Vol. II**, Budapest, 817-822, 1994.
11. G. Marinoschi, *Solution for a radioactive pollutant one-dimensional dispersion in a river*, **Romanian Journal of Hydrology and Water Resources**, 1, 1, 25-28, 1994.
12. G. Marinoschi, M. Simota, R. Mic, *The study of the pollutant transport on the Danube*, **Romanian Journal of Hydrology and Water Resources**, 2, 1-2, 55-59, 1995.
13. G. Marinoschi, U. Jaekel, H. Vereecken, *Some considerations about the effective macrodispersion coefficient*, **Revue Roumaine Sci. Tech. - Mec. Appl.** 40, 4, 503-518, 1995.
14. G. Marinoschi, *An analytical approach of the solutions of nonadiabatic motion in radiative magnetogasdynamics*, **Acta Mechanica***, 114, 1-4, 71-81, 1996.
15. G. Marinoschi, U. Jaekel, H. Vereecken, *Analytical solutions for the convective-dispersion equation with a time-dependent effective dispersion coefficient*, **Z. Angew. Math. Mech.*** 76, S5, 321-322, 1996.

16. G. Marinoschi, I. Ghergut, D. Homentcovschi, U. Jaekel, H. Vereecken, *Large time behaviour of pollutant concentrations in stratified porous media*, **Proc. 9th Conference of the European Consortium for Mathematics in Industry**, Technical University of Denmark, Lyngby, 25-29 June 1996, 42-45, 1996.
17. H. Vereecken, U. Jaekel, C. Mouvet, C. Moreau, P. Bureau, M. Dust, D.J. Kim, D. Jacques, J. Feyen, A. Georgescu, N. Suciu, G. Marinoschi, *Critical parameters governing the mobility and fate of pesticides in soil/aquifer systems*, In: **Environmental Fate of Xenobiotics***, Proc. Symposium on Pesticide Chemistry - The Environmental Fate of Xenobiotics, Sep. 30-Oct 02, 1996 Castelnuovo Fogliani, Italy, 627-648, 1996.
18. G. Marinoschi, *Equations of non-adiabatic motion in radiative magnetohydrodynamics: Uniqueness and existence*, **Rev. Roumaine Math. Pures Appl.** 41, 9-10, 663-673, 1996.
19. G. Marinoschi, I. Ghergut, D. Homentcovschi, U. Jaekel, H. Vereecken, *Determination of the macrodispersive parameters of a motion in a two-layer porous medium*, **Acta Mechanica***, 129, 1-2, 117-126, 1998.
20. D. Homentcovschi, I. Ghergut, G. Marinoschi, H. Vereecken, U. Jaekel, *Asymptotic solutions for two-site non-equilibrium transport*, **Acta Mechanica***, 129, 1-2, 127-132, 1998.
21. G. Marinoschi, *Determination of the parameters of the asymptotic diffusive transport in a n-layer stratified medium*, **Rev. Roumaine Math. Pures Appl.** 44, 1-2, 97-108, 1999.
22. G. Marinoschi, U. Jaekel, H. Vereecken, *Analytical Solutions of Three-Dimensional Convection-Dispersion Model with Time Dependent Coefficients*, **Z. Angew. Math. Mech.*** 79, 6, 411- 422, 1999.
23. G. Marinoschi, *Study of the diffusive transport in a nonhomogeneous medium*, **Studii si Cercetari Matematice**, 51, 1, 87-98, 1999.
24. G. Marinoschi, *On some mathematical aspects of dispersion in fluids*, **Rev. Roumaine Sci. Tech. - Méc. Appl.** 44, 4, 385-394, 1999.
25. G. Marinoschi, *On the solution of a Neumann problem for a system of parabolic PDEs*, **Proc. Romanian Academy***, Series A, 2, 71-74, 2000.
26. G. Marinoschi, *On the rate of propagation of disturbances in a diffusion process*, **Rev. Roumaine Math. Pures Appl.** 46, 2-3, 297-304, 2001.
27. G. Marinoschi, H. Vereecken, *Analysis of the time behaviour of a diffusive transport in a stratified medium*, **Transport in Porous Media***, 45, 3, 365-384, 2001.

28. G. Marinoschi, *A note on the sources interaction in a diffusion process*, **Proc. Romanian Academy***, Series A, 2, 1-2, 11-14, 2001.
29. G. Marinoschi, *On the one-dimensional sorption into a unsaturated nonhomogeneous soil*, **Mathematical Reports***, 54, 4, 379-387, 2002.
30. V. Barbu, G. Marinoschi, *Controlling the volumetric water content discontinuity in a stratified unsaturated soil*. In : **Nonlinear Analysis and Applications: To V. Lakshmikantham on his 80th birthday** (Eds. R.P. Agarwal, D. O'Regan), vol. 1, 241-258, Kluwer Academic Publishers, Dordrecht, 2003 (ISBN: 1-4020-1688-3)
31. G. Marinoschi, *On some problems concerning the nonlinear infiltration in unsaturated media*, **Proc. NPDE 2003**, Alushta, Ukraine, September, 15-21, 2003.
32. G. Marinoschi, *Nonlinear infiltration with a singular diffusion coefficient*, **Differential Integral Equations***, 16, 9, 1093-1110, 2003.
33. G. Marinoschi, A. Morega, *On the boundary value problem of water infiltration into a nonhomogeneous unsaturated soil*, **Proc. GAMM**, March 24-28, 2003, Abano Terme, Italy, **PAMM**, 3, 1, 466-467, 2003. <http://www3.interscience.wiley.com/cgi-bin/jtoc/91016652/>
34. G. Marinoschi, *A control problem for the infiltration in saturated-unsaturated soils*, **Proc. of 8th International Symposium on Automatic Control and Computer Science- Workshop on Control Theory (SACCS-WTC)**, Iasi, 1-9, 2004.
35. V. Barbu, G. Marinoschi, *Existence for a time dependent rainfall infiltration model with a blowing up diffusivity*, **Nonlinear Analysis Real World Appl.*** 5, 2, 231-245, 2004.
36. G. Marinoschi, *A free boundary problem describing the saturated-unsaturated flow in a porous medium*, **Abstr. Appl. Anal.*** 2004:9, 729-755, 2004. DOI: 10.1155/S10853375043111272004
37. C. Cusulin, M. Iannelli, G. Marinoschi, *Age-structured diffusion in a multi-layer environment*, **Nonlinear Anal. Real World Appl.*** 6, 1, 207-223, 2005. doi:10.1016/j.nonrwa.2004.08.006
38. G. Marinoschi, *A free boundary problem describing the saturated-unsaturated flow in a porous medium. II. Existence of the free boundary in the 3-D case*, **Abstr. Appl. Anal.*** 2005:8, 813-854, 2005.
39. G. Marinoschi, *An identification problem in the theory of water infiltration in soils*, **Annals of University of Craiova, Math. Comp. Sci. Ser.**, Volume 32, 188-199, 2005. (ISSN: 1223-6934)
40. G. Marinoschi, G. Wang, *Identification of the Rain Rate for a Boundary Value Problem of a Rainfall Infiltration in a Porous Medium*, **Numer. Func. Anal. Optim.*** 27, 2, 189-205, 2006. DOI: 10.1080/01630560600570021

41. G. Marinoschi, G. Wang, *Identification of the Rain Rate for a Boundary Value Problem of a Rainfall Infiltration in a Porous Medium. II. Determination of the conditions of optimality*, **Numer. Func. Anal. Optim.*** 27, 2, 207-236, 2006. DOI: 10.1080/01630560600570039
42. G. Marinoschi, *Mathematical models of nonlinear saturated-unsaturated infiltration in porous media*, **Mathematical Reports***, 8, 3, 287-307, 2006.
43. C. Cusulin, M. Iannelli, G. Marinoschi, *Convergence in a multi-layer population model with age-structure*, **Nonlinear Anal. Real World Appl.** *, 8, 887-902, 2007. doi:10.1016/j.nonrwa.2006.03.012
44. Angelo Favini, G. Marinoschi, *Existence for a degenerate parabolic problem with a nonlinear operator*, **Journal Evol. Equ.*** 7, 743-764, 2007.
45. G. Marinoschi, *The diffusive form of Richards' equation with hysteresis*, **Nonlinear Anal. Real World Appl.*** 9, 518-535, 2008.
46. M. Iannelli, G. Marinoschi, *Well-posedness for a hyperbolic-parabolic Cauchy problem arising in population dynamics*, **Differential Integral Equations***, 21, 9-10, 917-934, 2008.
47. C. Ciutoreanu, G. Marinoschi, *Convergence of the finite difference scheme for a fast diffusion equation in porous media*, **Numer. Func. Anal. Optim.*** 29, 9-10, 1034-1063, 2008.
48. G. Marinoschi, *Periodic solutions to fast diffusion equations with non Lipschitz convective terms*, **Nonlinear Anal. Real World Appl.*** 10, 1048-1067, 2009.
49. G. Marinoschi, *Optimal control of metabolite transport across cell membranes driven by the membrane potential*, **Nonlinear Anal. Real World Appl.*** 10, 3, 1276-1298, 2009.
50. A. Favini, G. Marinoschi, *Periodic behavior for a degenerate fast diffusion equation*, **J. Math. Anal. Appl.***, 351, 509-521, 2009.
51. M. Iannelli, G. Marinoschi, *Harvesting control for an age-structured population in a multi-layered habitat*, **J. Optimiz. Theory Appl.*** 142, 107-124, 2009.
52. C. Fierbinteanu, D. Andronescu, R. Usvat, D. Cretoiu, C. Baicus, G. Marinoschi, *Acoustic radiation force imaging sonoelastography for noninvasive staging of liver fibrosis*, **World Journal of Gastroenterology***, 15, 44, 5525-5532, 2009.
53. A. Favini, G. Marinoschi, *Identification of the time derivative coefficient in a fast diffusion degenerate equation*, **J. Optimiz. Theory Appl.*** 145, 249-269, 2010.

54. G. Marinoschi, *Well posedness of singular diffusion equations in porous media with homogeneous Neumann boundary conditions*, **Nonlinear Anal.* (Theory, Methods and Applications)** 72, 3491-3514, 2010.
55. G. Marinoschi, *Well posedness of a time-difference scheme for a degenerate fast diffusion problem*, **Discrete Contin. Dyn. Syst. Ser. B***, 13, 2, 435-454, 2010.
56. M. Fabrizio, A. Favini, G. Marinoschi, *An optimal control problem for a singular system of solid-liquid phase transition*, **Numer. Func. Anal. Optim.***, 31, 9, 989- 1022, 2010. DOI: [10.1080/01630563.2010.512691](https://doi.org/10.1080/01630563.2010.512691)
57. A. Gandolfi, M. Iannelli, G. Marinoschi, *An age-structured model of epidermis growth*, **J. Math. Biology***, 62, 1, 111-141, 2011. DOI: [10.1007/s00285-010-0330-3](https://doi.org/10.1007/s00285-010-0330-3)
58. G. Marinoschi, *A Trotter–Kato type theorem in the weak topology and an application to a singular perturbed problem*, **J. Math. Anal. Appl.*** 386, 1, 50-60, 2012. doi:[10.1016/j.jmaa.2011.07.039](https://doi.org/10.1016/j.jmaa.2011.07.039)
59. A. Favini, G. Marinoschi, *Identification for degenerate problems of hyperbolic type*, In "PDE's, Semigroup Theory, Inverse and Control Problems", Eds. A. Favini and A. Lorenzi, **Appl. Anal.***, 91, 8, 1511-1527, 2012. DOI: [10.1080/00036811.2011.630665](https://doi.org/10.1080/00036811.2011.630665)
60. G. Marinoschi, *Existence to time-dependent nonlinear diffusion equations via convex optimization*, **J. Optimiz. Theory Appl.***, 154, 3, 792-817, 2012. DOI: [10.1007/s10957-012-0017-6](https://doi.org/10.1007/s10957-012-0017-6)
61. G. Marinoschi, *A variational approach to nonlinear diffusion equations with time periodic coefficients*, **Annals of the University of Bucharest (mathematical series)**, 3 (LXI), 173-185, 2012.
62. E.R. Ardeleanu, G. Marinoschi, *An asymptotic solution to a nonlinear reaction-diffusion system with chemotaxis*, **Numer. Func. Anal. Optim.*** 34, 2, 117-148, 2013. DOI:[10.1080/01630563.2012.704474](https://doi.org/10.1080/01630563.2012.704474)
63. G. Marinoschi, *Well-posedness for chemotaxis dynamics with nonlinear cell diffusion*, **J. Math. Anal. Appl.***, 402, 2, 415-439, 2013. DOI: [10.1016/j.jmaa.2013.01.031](https://doi.org/10.1016/j.jmaa.2013.01.031)
64. M. Iannelli, G. Marinoschi, *Approximation of a population dynamics model by parabolic regularization*, **Math. Methods Appl. Sci.*** 36, 10, 1229–1239, 2013. DOI: [10.1002/mma.2675](https://doi.org/10.1002/mma.2675)
65. M. Beldiman, I. Boacă, G. Marinoschi, *Optimization of a singular flow in a porous medium*, **Z. Angew. Math. Mech.*** 93, 9, 633 – 647, 2013. DOI: [10.1002/zamm.201200178](https://doi.org/10.1002/zamm.201200178)

66. A. Gandolfi, M. Iannelli, G. Marinoschi, *Time evolution for a model of epidermis growth*, **J. Evol. Equ.*** 13, Issue 3, 509-533, 2013. DOI:10.1007/s00028-013-0188-0
67. G. Marinoschi, *A control problem for a cross-diffusion system in a nonhomogeneous medium*, **Journal Biol. Dyn.** 7, Suppl. 1, 88–107, 2013. DOI: 10.1080/17513758.2013.836574
68. G. Marinoschi, *Variational solutions to nonlinear diffusion equations with singular diffusivity*, **J. Optimiz. Theory Appl.***, 161, 2, 430–445, 2014. DOI: 10.1007/s10957-013-0430-5
69. G. Marinoschi, *Control approach to an ill-posed variational inequality*, **Math. Model. Nat. Phenom.*** 9, 4, 153-170, 2014. <http://dx.doi.org/10.1051/mmnp/20149410>
70. G. Marinoschi, *A duality approach to nonlinear diffusion equations*, **Set-Valued Var. Anal.*** 22, 783–807, 2014. DOI:10.1007/s11228-014-0288-1
71. G. Fragnelli, G. Marinoschi, R.M. Mininni, S. Romanelli, *Identification of a diffusion coefficient in strongly degenerate parabolic equations with interior degeneracy*, **J. Evol. Equ.***, 15, 27-51, 2015 DOI: 10.1007/s00028-014-0247-1 (early version [arXiv:1307.6393](https://arxiv.org/abs/1307.6393))
72. V. Barbu, A. Favini, G. Marinoschi, *Nonlinear parabolic flows with dynamic flux on the boundary*, **J. Differential Equations***, 258, 6, 2160–2195, 2015. <http://dx.doi.org/10.1016/j.jde.2014.12.003>
73. P. Colli, G. Marinoschi, E. Rocca, *Sharp interface control in a Penrose-Fife model*, **ESAIM Control Optim. Calc. Var. ***, 22, 2, 473-499, 2016. DOI:10.1051/cocv/2015014 (early version [arXiv:1403.4446](https://arxiv.org/abs/1403.4446))
74. P. Colli, G. Gilardi, G. Marinoschi, *A boundary control problem for a possibly singular phase field system with dynamic boundary conditions*, **J. Math. Anal. Appl.*** 434, 432-463, 2016. <http://dx.doi.org/10.1016/j.jmaa.2015.09.011> (early version <http://arxiv.org/abs/1501.04517>)
75. P. Colli, G. Gilardi, G. Marinoschi, E. Rocca, *Optimal control for a phase field system with a possibly singular potential*, **Math. Control Relat. Fields***, 6, 1, 95-112, 2016. doi:10.3934/mcrf.2016.6.xx (early version <http://arxiv.org/abs/1410.6718v1>)
76. V. Barbu, G. Marinoschi, *An Optimal Control Approach to the Optical Flow Problem*, **Systems and Control Lett.***, 87, 1-9, 2016. <http://dx.doi.org/10.1016/j.sysconle.2015.10.004>
77. G. Marinoschi, A. Martiradonna, *Fish populations dynamics with nonlinear stock-recruitment renewal conditions*, **Appl. Math. Comput.*** 277, 101-110, 2016. <http://dx.doi.org/10.1016/j.amc.2015.12.041>
78. G. Marinoschi, *On the escape probability of particles from a charged channel*, **Annals of the University of Craiova-Mathematics and Computer Science Series**, 43, 1, 53-61, 2016

54. G. Marinoschi, *Well posedness of singular diffusion equations in porous media with homogeneous Neumann boundary conditions*, **Nonlinear Anal.* (Theory, Methods and Applications)** 72, 3491-3514, 2010.
55. G. Marinoschi, *Well posedness of a time-difference scheme for a degenerate fast diffusion problem*, **Discrete Contin. Dyn. Syst. Ser. B***, 13, 2, 435-454, 2010.
56. M. Fabrizio, A. Favini, G. Marinoschi, *An optimal control problem for a singular system of solid-liquid phase transition*, **Numer. Func. Anal. Optim.***, 31, 9, 989- 1022, 2010. DOI: [10.1080/01630563.2010.512691](https://doi.org/10.1080/01630563.2010.512691)
57. A. Gandolfi, M. Iannelli, G. Marinoschi, *An age-structured model of epidermis growth*, **J. Math. Biology***, 62, 1, 111-141, 2011. DOI: [10.1007/s00285-010-0330-3](https://doi.org/10.1007/s00285-010-0330-3)
58. G. Marinoschi, *A Trotter–Kato type theorem in the weak topology and an application to a singular perturbed problem*, **J. Math. Anal. Appl.*** 386, 1, 50-60, 2012. doi:[10.1016/j.jmaa.2011.07.039](https://doi.org/10.1016/j.jmaa.2011.07.039)
59. A. Favini, G. Marinoschi, *Identification for degenerate problems of hyperbolic type*, In "PDE's, Semigroup Theory, Inverse and Control Problems", Eds. A. Favini and A. Lorenzi, **Appl. Anal.***, 91, 8, 1511-1527, 2012. DOI: [10.1080/00036811.2011.630665](https://doi.org/10.1080/00036811.2011.630665)
60. G. Marinoschi, *Existence to time-dependent nonlinear diffusion equations via convex optimization*, **J. Optimiz. Theory Appl.***, 154, 3, 792-817, 2012. DOI: [10.1007/s10957-012-0017-6](https://doi.org/10.1007/s10957-012-0017-6)
61. G. Marinoschi, *A variational approach to nonlinear diffusion equations with time periodic coefficients*, **Annals of the University of Bucharest (mathematical series)**, 3 (LXI), 173-185, 2012.
62. E.R. Ardeleanu, G. Marinoschi, *An asymptotic solution to a nonlinear reaction-diffusion system with chemotaxis*, **Numer. Func. Anal. Optim.*** 34, 2, 117-148, 2013. DOI:[10.1080/01630563.2012.704474](https://doi.org/10.1080/01630563.2012.704474)
63. G. Marinoschi, *Well-posedness for chemotaxis dynamics with nonlinear cell diffusion*, **J. Math. Anal. Appl.***, 402, 2, 415-439, 2013. DOI: [10.1016/j.jmaa.2013.01.031](https://doi.org/10.1016/j.jmaa.2013.01.031)
64. M. Iannelli, G. Marinoschi, *Approximation of a population dynamics model by parabolic regularization*, **Math. Methods Appl. Sci.*** 36, 10, 1229–1239, 2013. DOI: [10.1002/mma.2675](https://doi.org/10.1002/mma.2675)
65. M. Beldiman, I. Boacă, G. Marinoschi, *Optimization of a singular flow in a porous medium*, **Z. Angew. Math. Mech.*** 93, 9, 633 – 647, 2013. DOI: [10.1002/zamm.201200178](https://doi.org/10.1002/zamm.201200178)

79. A. Gandolfi, M. Iannelli, G. Marinoschi, *The steady state of epidermis: mathematical modeling and numerical simulations*, **J. Math. Biology***, 73, 6-7, 1595-1626, 2016
<http://link.springer.com/article/10.1007/s00285-016-1006-4>
80. G. Marinoschi, *A singular nonconvex optimal control problem*, **Pure Appl. Funct. Anal.** 1, 4, 613-628, 2016.
81. A. Favini, G. Marinoschi, *Identification for general degenerate problems of hyperbolic type*, Bruno Pini Mathematical Analysis Seminar, Vol. 7, 175-188, 2016.
82. T. Barbu, G. Marinoschi, *Image denoising by a nonlinear control technique*, **Internat. J. Control***, 90, 5, 1005-1017, 2017. <http://dx.doi.org/10.1080/00207179.2016.1192688>
83. S. Ion, G. Marinoschi, *A self-organizing criticality mathematical model for contamination and epidemic spreading*, **Discrete Contin. Dyn. Syst. Ser. B***, 22, 2, 383-405, 2017
84. V. Barbu, P. Colli, G. Gilardi, G. Marinoschi, *Feedback stabilization of the Cahn-Hilliard type system for phase separation*, **J. Differential Equations***, 262, 2286-2334, 2017
<http://dx.doi.org/10.1016/j.jde.2016.10.047> (early version <http://arxiv.org/abs/1606.09230>)
85. G. Marinoschi, R.M. Mininni, S. Romanelli, *An inverse problem for a strongly degenerate N -dimensional parabolic equation with interior degeneracy*, **J. Optimiz. Theory Appl.*** 173, 1, 56-77, 2017. [10.1007/s10957-017-1077-4](https://doi.org/10.1007/s10957-017-1077-4)
86. V. Barbu, P. Colli, G. Gilardi, G. Marinoschi, E. Rocca, *Sliding mode control for a nonlinear phase-field system*, **SIAM J. Control Optim.*** 55, 3, 2108-2133, 2017
<https://doi.org/10.1137/15M102424X> (early version <http://arxiv.org/abs/1506.01665v1>)
87. G. Marinoschi, *Internal feedback stabilization of a Cahn-Hilliard system with viscosity effects*, **Pure Appl. Funct. Anal.** 3, 1, 107-135, 2018.
88. P. Colli, G. Gilardi, G. Marinoschi, E. Rocca, *Optimal control for a conserved phase field system with a possibly singular potential*, **Evol. Equ. Control Theory***, 7, 1, 95-116, 2018.
doi: [10.3934/eect.2018006](https://doi.org/10.3934/eect.2018006) <https://arxiv.org/abs/1709.02269>
89. G. Marinoschi, *A model of an epidemic mapping*, In: *Demographic and temporal heterogeneity in infectious disease epidemiology* (Eds. B. Buonomo, N. Chitnis, A. D'Onofrio), **Ricerche di Matematica**, Springer, 67, 1, 271-284, 2018. <https://doi.org/10.1007/s11587-018-0367-y>

90. P. Colli, G. Gilardi, G. Marinoschi, E. Rocca, Distributed optimal control problems for phase field systems with singular potential, **An. Stiint. Univ. "Ovidius" Constanta Ser. Mat.*** 26, 2, 71-85, 2018.
91. A. Favini, G. Marinoschi, H. Tanabe, Y.S. Yakubov, Identifications for general degenerate problems of hyperbolic type in Hilbert spaces, **Contemporary Mathematics. Fundamental Directions**, 64, 1, 194-210, 2018.
92. P. Colli, G. Gilardi, G. Marinoschi, E. Rocca, Sliding mode control for phase field system related to tumor growth, **Appl. Math. Optimiz.*** DOI: 10.1007/s00245-017-9451-z
<https://link.springer.com/article/10.1007/s00245-017-9451-z> (earlier version <https://arxiv.org/pdf/1706.03564.pdf>)
93. G. Marinoschi, Rescaling approach for a stochastic population dynamics equation perturbed by a linear multiplicative Gaussian noise, **Appl. Math. Optimiz.*** DOI: 10.1007/s00245-018-9507-8
<https://arxiv.org/abs/1710.02655>
94. V. Barbu, G. Marinoschi, An identification problem for a linear evolution equation in a Banach space, **Discrete Contin. Dyn. Syst. Ser. S***, in press.