

LIST OF PUBLICATIONS

A. Books

1. G. Marinoschi, *Dual Variational Approach to Nonlinear Diffusion Equations*, Series Progress in Nonlinear Differential Equations and Their Applications, Subseries in Control (PNLDE-SC) 102, Springer Nature, Birkäuser, 2023. (212 pages, [ISBN 978-3-031-24582-4](#))
2. 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](#)
3. 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](#))
4. 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](#))
5. 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

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](#)
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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. [ISBN: 9738543258](#)
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. C.P. Grünfeld, S. 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](#)
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. ISBN 978-3-319-64488-2
 12. G. Marinoschi, *Evoluția epidemiei de SARS-CoV-2 în România, Evoluția epidemiei în România din perspectiva modelelor matematice*, In: **Pandemia Covid-19 în România. Aspecte Clinice și Epidemiologice** (Ed. V. Voicu, C. Cernescu, I. Popescu), 56-69, Editura Academiei Române, 2020, ISBN-978-973-27-3253-3
 13. G. Marinoschi, *Feedback stabilization of Cahn–Hilliard phase-field systems*, In: **Optimization and Control for Partial Differential Equations. Uncertainty quantification, open and closed-loop control, and shape optimization** (Eds. R. Herzog, M. Heinkenschloss, D. Kalise, G. Stadler, and E. Trélat), Radon Series on Computational and Applied Mathematics, vol. 29, 367-392, de Gruyter, 2022, ISBN: 978-3-11-069596-0

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>
10. V. Barbu, G. Marinoschi, I. Tomescu (editors), *Pagini din istoria matematicii românești*, In: *Civilizația Românească*, vol.11, Editura Academiei Române, 2018.

D. Articles in peer-reviewed publications

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.
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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.
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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.

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17. H. Vereecken, U. Jaekel, C. Mouvet, C. Moreau, P. Burauel, M. Dust, D.J. Kim, D. Jacques, J. Feyen, A. Georgescu, N. Suci, 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.
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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.
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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.
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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/>
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