

LIST OF PUBLICATIONS

Books

1. Gabriela 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).
2. Gabriela 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).
3. Gabriela 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)

Book editor

1. Gabriela Marinoschi, Stelian 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. Stelian Ion, Gabriela Marinoschi, Constantin 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. Stelian Ion, Gabriela Marinoschi, Constantin 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. Stelian Ion, Gabriela Marinoschi, Constantin 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. Cecil Pompiliu Grünfeld, Stelian Ion, Gabriela Marinoschi, *Topics in Applied Mathematics and Mathematical Physics*, Romanian Academy Publishing House, 2008 (ISBN: 978-973-27-1719-6).

Research Papers in collective volumes (ISI journals marked by *)

1. Stelian Ion, Gabriela Marinoschi, Dorin 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. Viorel Barbu, Gabriela 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).
3. G. Marinoschi, *Mathematical models of diffusion in nonhomogeneous porous media*, In: *Topics in Applied mathematics and Mathematical Physics* (Eds. Cecil Pompiliu Grunfeld, Stelian Ion, Gabriela Marinoschi), 243-277, Romanian Academy Publishing House, Bucharest, 2008.
4. G. Marinoschi, *Nonlinear diffusion equations with discontinuous coefficients in porous media*, In: *Progress in Nonlinear Analysis Research* (Ed. Erik T. Hoffmann), pp. 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)

Articles published in peer-reviewed journals and proceedings of conferences with international programme committees (ISI journals marked with *)

1. Gabriela Marinoschi, *Minimax principle for an electrically conducting fluid flow along a channel*, **Studii si Cercetari Matematice (Mathematical Reports)**, 34, 2, 147-157, 1982.
2. Gabriela Marinoschi, *Contribution to the study of a conducting fluid flow in a MGH generator*, **Studii si Cercetari Matematice (Mathematical Reports)**, 34, 6, 536-547, 1982.
3. Gabriela Marinoschi, *The influence of an isolated low obstacle upon an airstream*, **Meteorology and Hydrology**, 21, 1, 15-19, 1991.
4. Gabriela Marinoschi, *On the propagation of small perturbations into a mixture of fluids*, **Meteorology and Hydrology**, 21, 2, 25-29, 1991.
5. Gabriela Marinoschi, Adelina Georgescu, *Models of asymptotic approximation governing the atmospheric motion over a low obstacle*, **Studii si Cercetari Matematice (Mathematical Reports)**, 44, 3, 237-252, 1992.
6. Gabriela 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. Gabriela 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.
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9. Gabriela 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. Gabriela Marinoschi, Marinela Simota, Rodica 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. Gabriela 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. Gabriela Marinoschi, Marinela Simota, Rodica Mic, *The study of the pollutant transport on the Danube*, **Romanian Journal of Hydrology and Water Resources**, 2, 1-2, 55-59, 1995.

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17. Gabriela Marinoschi, *Equations of non-adiabatic motion in radiative magnetogasdynamics: Uniqueness and existence*, **Rev. Roumaine Math. Pures Appl.**, 41, 9-10, 663-673, 1996.
18. Gabriela Marinoschi, Iulia Ghergut, Dorel Homentcovschi, Uwe Jaekel, Harry Vereecken, *Determination of the macrodispersive parameters of a motion in a two-layer porous medium*, **Acta Mechanica***, 129, 1-2, 117-126, 1998.
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30. Gabriela Marinoschi, *On some problems concerning the nonlinear infiltration in unsaturated media*, **Proc. of the International Conference NPDE 2003**, Alushta, Ukraine, September 15-21, 2003.
31. Gabriela Marinoschi, *Nonlinear infiltration with a singular diffusion coefficient*, **Differential and Integral Equations**, 16, 9, 1093-1110, 2003.
32. Gabriela Marinoschi, Alexandru Morega, *On the boundary value problem of water infiltration into a nonhomogeneous unsaturated soil*, **Proc. of GAMM Conference**, March 24-28, 2003, Abano Terme, Italy, **PAMM**, 3, 1, 466-467, 2003 (<http://www3.interscience.wiley.com/cgi-bin/jtoc/91016652/>)
33. Gabriela Marinoschi, *A control problem for the infiltration in saturated-unsaturated soils*, **Proceedings of 8th International Symposium on Automatic Control and Computer Science-Workshop on Control Theory (SACCS-WTC)**, Iasi, 1-9, 2004 (published on CD-ROM).
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35. Viorel Barbu, Gabriela Marinoschi, *Existence for a time dependent rainfall infiltration model with a blowing up diffusivity*, **Nonlinear Analysis: Real World Applications***, 5, 2, 231-245, 2004.
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38. Caterina Cusulin, Mimmo Iannelli, Gabriela Marinoschi, *Age-structured diffusion in a multi-layer environment*, **Nonlinear Analysis Real World Applications***, 6, 1, 207-223, 2005 (doi:10.1016/j.nonrwa.2004.08.006)
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46. Angelo Favini, Gabriela Marinoschi, *Existence for a degenerate parabolic problem with a nonlinear operator*, **Journal of Evolution Equations***, 7, 743-764, 2007 (DOI 10.1007/s00028-007-0348-1, ISSN 1424-3199)
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55. G. Marinoschi, *Well posedness of a time-difference scheme for a degenerate fast diffusion problem*, **DCDS-B***, in press.
56. G. Marinoschi, *Well posedness of singular diffusion equations in porous media with homogeneous Neumann boundary conditions*, **Nonlinear Analysis Theory, Methods and Applications***, submitted.