

Publications

Books:

1. **Farina, A., Klar, A., Mattheij, R.M.M., Mikelić, A., Siedow, N., Fasano, Antonio (Ed.):** Mathematical Models in the Manufacturing of Glass, *C.I.M.E. Summer School, Montecatini Terme, Italy 2008, Series: Lecture Notes in Mathematics*, Vol. 2010, Subseries: C.I.M.E. Foundation Subseries, Springer Verlag, 2011.
2. **A. Mikelić, C. Schwab:** Reactive flow and transport through complex systems. Abstracts from the workshop held October 30–November 5, 2005. Organized by Cornelius J. van Duijn, Andro Mikelić and Christoph Schwab. Oberwolfach Reports. Vol. 2, no. 4. Oberwolfach Rep. 2 (2005), no. 4, 2761–2832.
3. **N. Antonić, C.J. van Duijn, W. Jäger, A. Mikelić:** " *Multiscale Problems in Science and Technology* .Challenges to Mathematical Analysis and Perspectives", Proceedings of the *Conference on Multiscale Problems in Science and Technology*, Dubrovnik, Croatia, 3/9/2000 - 9/9/2000, Springer-Verlag, Heidelberg, 2002,
4. **M. Espedal, A. Fasano, A. Mikelić:** " *Filtration in Porous Media and Industrial Applications* ", Lectures given at the 4th session of the Centro Internazionale Matematico Estivo (C.I.M.E.) held in Cetraro, Italia, August 24-29, 1998, Lecture Notes in Mathematics Vol. 1734, Springer, 2000.
5. **G. Allaire, T. Arbogast, J.-L. Auriault, A. Bourgeat, H. Ene, K. Golden, U. Hornung, A. Mikelić, R.E. Showalter:** Homogenization and Porous Media, *Interdisciplinary Applied Mathematics Series*, Vol. 6, Springer, New York, 1997.
6. **A. Bourgeat, C. Carasso, S. Luckhaus, A. Mikelić,** eds.: Mathematical Modelling of Flow through Porous Media, (Proceedings of the " Congrès international sur la modélisation mathématique des écoulements en milieu poreux ", Ecole Nationale Supérieure des Mines, Saint–Etienne, 22/05 – 26/05/1995.),

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7. **A. Mikelić, M. F. Wheeler, T. Wick:** A phase field approach to the fluid filled fracture surrounded by a poroelastic medium, ICES Report 13-15, June 4, 2013.

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8. **A. Marciniak-Czochra, A. Mikelić:** Shadow limits via the renormalization group method and the center manifold method, accepted for publication in *Vietnam Journal of Mathematics*, Special Issue dedicated to Willi Jäger, 2016, DOI: 10.1007/s10013-016-0199-6.
9. **S. Lee, A. Mikelić, M. F. Wheeler, T. Wick:** Phase-field modeling of proppant-filled fractures in a poroelastic medium, accepted for publication in *Comput. Methods Appl. Mech. Engrg.*, 2016. doi: 10.1016/j.cma.2016.02.008.

10. **G. Allaire, O. Bernard, J.-F. Dufrêche, A. Mikelić:** Ion transport through deformable porous media: derivation of the macroscopic equations using upscaling, 2015, <hal-01215457>, accepted for publication in *Comp. Appl. Math.*, 2016. DOI 10.1007/s40314-016-0321-0.

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11. **A. Mikelić, J. Tambača:** Derivation of a poroelastic flexural shell model, *SIAM Multiscale Model. Simul.*, 14-1 (2016), pp. 364-397.

Articles published in 2015:

12. **A. Mikelić, M. F. Wheeler, T. Wick:** Phase-field modeling of a fluid- driven fracture in a poroelastic medium, *Computational Geosciences*, Vol. 19(2015), no. 6, 1171-1195.
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16. **A. Mikelić, M. F. Wheeler, T. Wick:** A Phase-Field Method For Propagating Fluid-Filled Fractures Coupled To A Surrounding Porous Medium, *SIAM Multiscale Model. Simul.*, Vol. 13 (2015), no. 1, 367–398.
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