



# Mohammad Dehghan Niry

**Assistant Professor**

**IASBS, Department of Physics**

## Publications

### Journals

---

- Elyasizad, L. and Niry, M.D., "Local Violation of Conservation in the Abelian Sandpile Model Through Fractal Patterns of Non-conservative Sites", *Journal of Statistical Physics*, Vol. 184, NO. 1, 2021
- Farzadian, O. and Oikonomou, T. and Good, M.R.R. and Niry, M.D., "Entropic analysis of the localization?delocalization transition in a one-dimensional correlated lattice", *Physica A*, Vol. 545, NO. 1, 2020
- Khoddam, M. and Sheidafar, Z. and Niry, M.D. and Khajehpour, M.R.H., "Criticality in collective behavior of biogenic single-domain nanomagnetites", *Physical Review E*, Vol. 98, NO. 3, 2018
- Goodarzinick, A. and Niry, M.D. and Valizadeh, A. and Perc, M., "Robustness of functional networks at criticality against structural defects", *Physical Review E*, Vol. 98, NO. 2, 2018
- Farzadian, O. and Niry, M.D., "Role of short-range correlation in facilitation of wave propagation in a long-range ladder chain", *Physica A*, Vol. 505, NO. 2, 2018
- Farzadian, O. and Niry, M.D., "Delocalization of mechanical waves in the ladder chain of DNA with correlated disorder", *Physica A*, Vol. 450, NO. 2, 2016



- Zarepour, M. and Niry, M.D. and Valizadeh, A., "Functional scale-free networks in the two-dimensional Abelian sandpile model", *Physical Review E*, Vol. 92, NO. 1, 2015
- Rasouli, S. and Niry, M.D. and Rajabi, Y. and Panahi, A.A. and Niemela, J.J., "Applications of 2-D moiré deflectometry to atmospheric turbulence", *Journal of Applied Fluid Mechanics*, Vol. 7, NO. 4, 2014
- Niry, M.D. and Mostafavi-Amjad, J. and Kholesifard, H.R. and Ahangary, A. and Azizian-Kaladaragh, Y., "Formation of silver nanoparticles inside a soda-lime glass matrix in the presence of a high intensity Ar<sup>+</sup> laser beam", *Journal of Applied Physics*, Vol. 111, NO. 3, 2012
- Sheikhan, A. and Abedpour, N. and Sepehrinia, R. and Niry, M.D. and Reza Rahimi Tabar, M. and Sahimi, M., "Anderson localization and propagation of electromagnetic waves through disordered media", *Waves in Random and Complex Media*, Vol. 20, NO. 1, 2010
- Saberi, A.A. and Niry, M.D. and Fazeli, S.M. and Rahimi Tabar, M.R. and Rouhani, S., "Conformal invariance of isoheight lines in a two-dimensional Kardar-Parisi-Zhang surface", *Physical Review E*, Vol. 77, NO. 5, 2008
- Sepehrinia, R. and Niry, M.D. and Bozorg, B. and Tabar, M.R.R. and Sahimi, M., "Exact Lyapunov exponent of the harmonic magnon modes of one-dimensional Heisenberg-Mattis spin glasses", *Physical Review B*, Vol. 77, NO. 10, 2008
- Bahraminasab, A. and Niry, M.D. and Davoudi, J. and Tabar, M.R.R. and Masoudi, A.A. and Sreenivasan, K.R., "Taylor's frozen-flow hypothesis in Burgers turbulence", *Physical Review E*, Vol. 77, NO. 6, 2008
- Bahraminasab, A. and Allaei, S.M.V. and Shahbazi, F. and Sahimi, M. and Niry, M.D. and Tabar, M.R.R., "Renormalization



group analysis and numerical simulation of propagation and localization of acoustic waves in heterogeneous media", *Physical Review B*, Vol. 75, NO. 6, 2007

- Abedpour, N. and Niry, M.D. and Bahraminasab, A. and Masoudi, A.A. and Davoudi, J. and Sahimi, M. and Tabar, M.R.R., "Stochastic  $\phi^4$ -theory in the strong coupling limit", *Nuclear Physics B*, Vol. 761, NO. 3, 2007
- Tabar, M.R.R. and Sahimi, M. and Ghasemi, F. and Kaviani, K. and Allamehzadeh, M. and Peinke, J. and Mokhtari, M. and Vesaghi, M. and Niry, M.D. and Bahraminasab, A. and Tabatabai, S. and Fayazbakhsh, S. and Akbari, M., "Short-term prediction of medium-and large-size earthquakes based on Markov and extended self-similarity analysis of seismic data", *Lecture Notes in Physics*, Vol. 705, NO. 3, 2006