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Education:

Oct. 2011-Sep. 2016

Doctor of Philosophy (Ph.D.), University of Tehran, Tehran,
Iran.

Dissertation Title

Microstructure design for optimization and achievement of
predetermined properties in heterogeneous materials
(Application to solid oxide fuel cell anode and cathode)

Supervisors: Prof. Karen Abrinia & Dr. Majid Baniassadi

Oct. 2004-Sep. 2007

Master of Science (M.Sc.), University of Tehran, Tehran, Iran.

Oct. 2000-Sep. 2004

Bachelor of Science (B.Sc.), Amirkabir University of
Technology, Tehran, Iran.

Research Interest:

**Mechanics of Materials: Random Heterogeneous and Porous
Media**
Computer Aided Design & Manufacturing

Teaching Experience:

Oct. 2011-Present

M.Sc. Courses:

Advanced Computer Aided Design & Manufacturing,
Continuum Mechanics.

B. Sc. Courses:

Material Science and Engineering, Computer Aided Design &
Manufacturing, Manufacturing Methods, Technical Drawing

Publications (Journal):

1. **A. Hasanabadi**, M. Baniassadi, K. Abrinia, M. Safdari, and H. Garmestani, "Optimal combining of microstructures using statistical correlation functions," *International Journal of Solids and Structures*, vol. 160, pp. 177-186, 2019/03/15/ 2019.
2. A. Sheidaei, M. Kazempour, **A. Hasanabadi**, F. Nosouhi, M. Pithioux, M. Baniassadi, *et al.*, "Influence of bone microstructure distribution on developed mechanical energy for bone remodeling using a statistical reconstruction method," *Mathematics and Mechanics of Solids*, vol. 0, p. 1081286519828418, 2019.
3. Hossein Izadi, Majid Baniassadi, Fateme Hormozzade, Fayyaz Nosouhi Dehnavi, **Ali Hasanabadi**, Hossein Memarian, *et al.*, "Effect of 2D image resolution on 3D stochastic reconstruction and developing petrophysical trend," *Transport in Porous Media*, vol. 125, pp. 41-58, 2018.
4. H. Izadi, M. Baniassadi, **A. Hasanabadi**, B. Mehrgini, H. Memarian, H. Soltanian-Zadeh, *et al.*, "Application of full set of two point correlation functions from a pair of 2D cut sections for 3D porous media reconstruction," *Journal of Petroleum Science and Engineering*, vol. 149, pp. 789-800, 2017/01/20/ 2017.
5. **A. Hasanabadi**, M. Baniassadi, K. Abrinia, M. Safdari, and H. Garmestani, "3D microstructural reconstruction of heterogeneous materials from 2D cross sections: A modified phase-recovery algorithm," *Computational Materials Science*, vol. 111, pp. 107-115, 1// 2016.
6. **A. Hasanabadi**, M. Baniassadi, K. Abrinia, M. Safdari, and H. Garmestani, "Efficient three-phase reconstruction of heterogeneous material from 2D cross-sections via phase-recovery algorithm," *Journal of microscopy*, vol. 0, pp. 1-10, 2016.
7. **A. Hasanabadi**, M. Baniassadi, K. Abrinia, M. Baghani, and M. Mazrouei Sebdani, "Evaluation of solid oxide fuel cell anode based on active triple phase boundary length and tortuosity," *Energy Equipment and Systems*, vol. 4, pp. 11-19, 2016.
8. **A. Hasanabadi**, M. Baniassadi, K. Abrinia, M. Safdari, and H. Garmestani, "Optimization of solid oxide fuel cell cathodes using two-point correlation functions," *Computational Materials Science*, vol. 123, pp. 268-276, 2016/10/01/ 2016.