

Ebrahim Asadi-Brief CV

Assistant Professor
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Major Professional Preparations

Post-Doctoral Research Associate, Department of Materials Science & Engineering, Missouri University of Science & Technology, January 2013- August 2015
Visiting Assistant Professor, School of Engineering and Technology, Central Michigan University, spring and fall of 2012
Visiting Scholar, Center for Advanced Vehicular Systems (CAVS), Starkville, MS, summer of 2012
Ph.D. in Mechanical Engineering, Mississippi State University, December 2011
M.Sc. in Mechanical Engineering, Amirkabir University of Technology (Tehran Polytechnic), December 2008
B.Sc. in Mechanical Engineering, University of Kerman, May 2006

Representative Publications (see my [Google Scholar](#) or lab web for the full list)

1. E. Asadi, M. Aslezaem, 2015, A modified two-mode phase-field crystal model applied to face-centered cubic and body-centered cubic orderings, *Computational Materials Science* 105:110-113.
2. E. Asadi, M. Aslezaem, S. Nouranian, M.I. Baskes, 2015, Quantitative modeling of solid-liquid coexistence of Fe by atomistic simulations on diffusive time scales, *Physical Review B* 91: 024105.
3. E. Asadi, M. Aslezaem, S. Nouranian, M.I. Baskes, 2015, Two-phase solid-liquid coexistence of Ni, Cu, and Al by modified-embedded atom method, *Acta Materialia* 86: 169-181.
4. E. Asadi, M. Aslezaem, A. Moitra, M.A. Tschopp, 2014, Effects of vacancy defects on generalized stacking fault energy of fcc metals, *IOP Select Article, Journal of Physics: Condensed Matter* 26: 115404.
5. E. Asadi, S.J. Fariborz, 2012, Free vibration of composite plates with mixed boundary conditions based on higher-order shear deformation theory, *Archive of Applied Mechanics* 82: 755-766.
6. E. Asadi, S.J. Fariborz, A.R. Fotouhi, 2012, Anti-plane analysis of orthotropic strips with defects and imperfect FGM coating, *European Journal of Mechanics A/Solids* 34: 12-20.
7. E. Asadi, M.S. Qatu, 2012, Static analysis of thick laminated shells with different boundary conditions using GDQ, *Thin-walled Structures* 51: 76-81.
8. E. Asadi, W. Wang, M.S. Qatu, 2012, Static and free vibration analyses of deep thick laminated composite shells using 3D and various shear deformation theories, *Composite*

Structures 94: 494-500.

9. E. Asadi, 2011, Analysis of multiple axisymmetric annular cracks in a piezoelectric medium, European Journal of Mechanics A/Solids 30(6): 844-853.

Selected Recent Conference Presentations

1. E. Asadi, M. Aslezaem, S. Nouranian, M.I. Baskes, Quantitative atomistic modeling of metals at melting point using phase-field crystals, Computational Modeling and Stochastic Methods for Materials Discovery and Properties, 2015 TMS Annual Meeting & Exhibition, March 15-19 2015, Orlando FL.
2. E. Asadi, M. Aslezaem, Elasticity and Grain Growth of Fe, Al, Cu, and Ni using Phase-Field Crystals Connected to Molecular Dynamics, ASME 2014 International Mechanical Engineering Congress & Exposition, November 14-20, 2014, Montreal, Canada.
3. E. Asadi, M. Aslezaem, Multi scale modeling for solidification of metals: phase-field crystals connected to molecular dynamics, 17th U.S. National Congress on Theoretical and Applied Mechanics, Michigan State University, June 15-20, 2014, Lansing, MI.
4. E. Asadi, M. Aslezaem, Solidification and grain boundary energy of FCC and BCC metals using phase-field crystal, ASME 2013 International Mechanical Engineering Congress & Exposition, November 15-21, 2013, San Diego, CA.
5. E. Asadi, M.S. Qatu, An accurate Higher-order shear deformation theory for deep composite thick shells, Mechanics of Nano, Micro and Macro Structures, June 18-20, 2012, Torino, Italy.

Selected Awards

Bagley College of Engineering Fellowship, Mississippi State University, 2011.

Travel Assistant Award to attend ASME Applied Mechanics and Materials Conference, May 30-June 1, 2011, Chicago, IL

Travel Assistant Award to attend American Society of Composites annual meeting, August 2010, Dayton, OH

Reviewer for

Journal of Alloys and Compounds

Crystal Growth & Design

International Journal of Solids and Structures

Journal of Sound and Vibration

International Journal of Mechanical Sciences

Thin-Walled Structures

Transactions of Nonferrous Metals Society of China

Journal of Vibration and Control

International Journal for Vehicle Noise and Vibrations

Meccanica

ASME and TMS conferences