

**CURRICULUM VITAE**  
**Masoud Panjepour**



- **PERSONAL Details**

**Designation:** Associate Professor of Materials Science and Engineering

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- **RESEARCH INTERESTS**

- Extractive and Process Metallurgy
- Thermodynamics and Kinetics of Materials
- Advanced Materials
- Molecular Dynamic Simulation
- Transport Phenomena
- Numerical Simulation of Fluid Flow, Heat and Mass Transfer in Porous Media and Catalyst

- **ACADEMIC QUALIFICATIONS**

- **Ph.D.** Metallurgy and Materials Engineering; Iran University of Science and Technology, Tehran, IRAN, 2003.

*THESES:* Effect of Aluminum on the Mechanical Activation and Non-Isothermal Reduction of Hematite - Graphite Mixture.

- **M.Sc.** Metallurgy and Materials Engineering; Iran University of Science and Technology, Tehran, IRAN, 1997.

*THESES:* Effect of Solidification Rate on the Cast structure and Hot Workability of Aluminum Alloy AA2024.

- **B.Sc.** Materials Engineering, Isfahan University of Technology, Isfahan, IRAN, 1993.

- **APPOINTMENT AT ISFAHAN UNIVERSITY OF TECHNOLOGY (IUT)**

- Director of Research Affairs, 2012-2013
- Associate Professor of Materials Science and Engineering, 2012 – present
- Member of Steel Company Supreme Council of Research, 2012 – present
- Member and Secretary of Steel Coordination Center, 2011-2013
- Deputy of Research in Steel Institute, 2011-2012
- Graduate Coordinator in Department of Materials Engineering, 2010 – 2012
- Member of Nano - Technology and Advanced Materials Institute, 2010-2013
- Member of Scientific Committee of Safety and Environment, 2007 – 2011
- Assistant Professor of Materials Science and Engineering, 2006 – 2012
- Member of Central of Excellence for Steel, 2005 – 2009

- **PREVIOUS APPOINTMENTS / EXPERIENCES**

- **Technical Deputy and Manager of Factory:** Container Factory, Shob Sanat Company, Isfahan, IRAN, 2004-2005.

- **Manager:** Department of Research and Development, Foolad Technic International Engineering. Co., Ltd, Isfahan, IRAN, 1999-2001.

- **MEMBERSHIPS**

Member of Iron and Steel Society of IRAN
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- **TEACHING EXPERIENCE**

<b>Undergraduate Courses</b> <ul style="list-style-type: none"> <li>- Transport Phenomena</li> <li>- Thermodynamics of Materials</li> <li>- Kinetics of Materials</li> <li>- Iron Making (Blast Furnace)</li> <li>- Iron Making (Direct and Smelting Reduction Processes)</li> <li>- Principles of Extractive Metallurgy</li> <li>- Pyrometallurgy</li> <li>- Technical and Scientific Writing and Speech</li> </ul>
<b>Graduate Courses</b> <ul style="list-style-type: none"> <li>- Advanced Thermodynamics</li> <li>- Advanced Kinetics</li> <li>- Diffusion in Solids</li> <li>- Advanced Transport Phenomena</li> <li>- Thermal Analysis of Materials</li> <li>- Theory of Pyrometallurgical processes</li> </ul>
<b>Undergraduate Labs</b> <ul style="list-style-type: none"> <li>- Principles of Extractive Metallurgy</li> </ul>
<b>Graduate Labs</b> <ul style="list-style-type: none"> <li>- Thermal Analysis</li> </ul>

- **RESEARCH PROJECTS AND GRANTS**

<p>1. A. Gaei, A. Taherzade, <b>M. Panjepour</b> et al. Research Grant from MOBARAKEH Steel Complex to study "Feasibility and design virtual simulation center of MOBARAKEH Steel Complex ", 2013- present.</p> <p>2. M. Ahmadian, <b>M. Panjepour</b> and M. H. Abbasi Research Grant from MOBARAKEH Steel Complex to study "Investigations on the possibility of carbon increase in DRI produced using a blend of iron ores from Golegozar, Chadormalu and Choghart mines ", 2007- present.</p> <p>3. M. Shamanian, <b>M. Panjepour</b> and M. H. Abbasi Research Grant from Isfahan Steel Plant to study "Removal of Tramp Element in the Steel Ladle", Isfahan, Iran, 2006 - 2007.</p> <p>4. F. Jahanbakhsh, A. R. Abadi and <b>M. Panjepour</b> Research Grant from Khuzestan Steel Company to study "Effect of Type of Iron Ores on the Crushing and Milling Process and Consumption of Electrical Energy", Ahvaz, Iran, 1999-2000.</p> <p>5. M. A. Golozar, <b>M. Panjepour</b> , M. Meratian and M. Shamainan</p>
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Research Grant from Isfahan Steel Plant, "Study of Defects in Rolling Mills", Isfahan, Iran, 1995-1996.

6.A. Saatchi, **M. Panjepour** and D. Ghadirzade

Research Grant from Isfahan Steel Plant, "Decreasing the Oxide Scales in Rolling Preheating Furnaces", Isfahan, Iran, 1994-1996.

7: A. Saatchi, M. Shamainan and **M. Panjepour**

Research Grant from Isfahan Steel Plant, "Study on the Process of Heat-treatment Rod Steel", Isfahan, Iran, 1995-1996.

• POSTGRADUATE (M.Sc. and Ph.D.) THESIS SUPERVISED & ADVISORD

1. Study on the formation mechanism of TiAl intermetallic compound by the methods of molecular dynamic simulation and spark plasma sintering process, on September, 2020

2. Investigation of catalytic effect of nickel on carbon/carbon composite fabrication by chemical vapor infiltration process, on September, 2020

3. Effect of geometrical parameters of catalyst foams on determination of mass and thermal coefficient by CFD, on June 28, 2020

4. Investigation of Sintering Mechanisms process of metal single-crystal particles by SPS method: using Molecular Dynamic simulation, , on June, 2019

5. Investigation of the effect of atomic configuration and porosity on the pseudo elastic behavior of shape memory alloy NiAl single crystal by the molecular dynamic simulation method, on September 22, 2019

6. Study on production and characterization of nickel catalyst supported on alumina in para-nitrophenol reduction, on October 16, 2019

7. Simulation and calculation mass and thermal transfer coefficients in monolithic foam catalyst by CFD, on June 26, 2018

8. Simulation of combustion and kinetics of carbothermic reduction of iron oxide in rotary hearth by CFD, on June, 2018

9. Investigation on mill scale reduction kinetics, on June 26, 2018

10. Fabrication and characterization of carbon/carbon composite catalyst by chemical vapor infiltration, on June 24, 2018

11. In-situ fabrication of AL-TiAl<sub>3</sub> composite by accumulative roll bonding and annealing, on June 17, 2018

12. Study on the formation mechanism of TiAl intermetallic compound by the coupling of combustion synthesis and mechanical-thermal activation processes, on June 23, 2018

13. Fabrication of MoSi<sub>2</sub> intermetallic Foam by combustion Synthesis process, on June 21, 2018
14. Study of oxidation of MoSi<sub>2</sub> intermetallic compound in the presence of aluminum and zirconium, on June 17, 2017
15. Study of effective parameters in numerical simulation of transition phenomena in metallic foams, on June 14, 2017
16. Simulation of chemical reaction on the mass transfer in porous media, on June 25, 2017
17. Fabrication and characterize of aluminum-B<sub>4</sub>C composite via pseudo -in-situ stir casting, on September 6, 2016
18. To study the mechanism of combustion synthesis of titanium aluminide intermetallic compound by molecular dynamics simulation, on June 8, 2016
19. Simulating of combustion in FASTMET process, on June 22, 2016
20. Study of mechanical properties of nonporous catalysts by molecular dynamics simulation, on June 15, 2016
21. Study of the effect of characteristics metal foams on coefficients of Organ equation, on June 11, 2016
22. Investigation of the effect of impurity element on grain growth mechanism in monocrystalline metals structure by molecular dynamics simulation, on June 8, 2016
23. Evaluation the parameters affecting on purification of magnesium produces by retort process, on January 13, 2016
24. The effects of particle size and heating rata on the oxidation mechanism of aluminum powder, on August 22, 2015
25. Study of the thermal profiles in the carbothermic reduction of hematit-graphit composite beds and influence of additives iron and aluminum, on August 22, 2015
26. Investigation of the effects of aluminum on the self-propagation and explosive combustion synthesis of MoSi<sub>2</sub>, on August 2, 2015
27. Fabrication of MoSi<sub>2</sub> intermetallic compound by combustion synthesis process in the presence of zirconium, on July 26, 2015
28. Boron carbide synthesis by magnesiothermic and aluminothermic reduction using a new process design of Boron oxide production, on August 22, 2015
29. Fabrication of highly porous copper foam via powder metallurgy route and its characterization, on July 12, 2015
30. Investigation of the type of binder and particle size iron ore on the mechanical and physical properties of pellet properties of pellet produced in

Sirjan Golgohar, on January 12, 2014

31. Synthesis and mechanical evaluation of Al/Al<sub>2</sub>O<sub>3</sub> cast composite using boron trioxide, on September 20, 201

32. Numerical Simulation of Heat Transfer and Fluid Flow in Metal Porous Media, on January 12, 2014

33. Synthesis of Cementite from Hematite-graphite Mixture by Mechanical-thermal and Fractional Melting Processes, on January 22, 2014

34. To Study the Effect Of Manganese Oxide Additive on the Formation and Stabilization of Cementite During the Direct Reduction of Hematite Process, on January 22, 2014

35. The Thermodynamical Study of Grain Growth in Nanostructured Metals in Presence of Additional Elements by Molecular Dynamics Simulation, on May 6, 2013.

36. Study of Diffusion Process in Nanocrystalline Iron by Molecular Dynamics Simulation, on May 6, 2013

37. To Study the Effect Of Manganese Oxide Additive on the Formation and Stabilization of Cementite During the Direct Reduction of Hematite Process, on January 22, 2014

38. Production of Magnesium Base Foams by Casting Route and Study of Effective Factors on Quality Parameters, 2013.

39. The Thermodynamical Study of Grain Growth in Nanostructured Metals in Presence of Additional Elements by Molecular Dynamics Simulation, on May 6, 2013.

40. Study of Diffusion Process in Nanocrystalline Iron by Molecular Dynamics Simulation, on May 6, 2013  
Characterization of Ultrafine Grained 5086 Al-Mg Alloy Synthesized by ECAP Process, on June 9, 2013

41. Investigation of Mechanical Activation and Aluminum Additive on the Carbothermic Reduction of Molybdenite in Presence of Lime, September 22, 2013

42. Simulation of Sintering Process by Considering Extended Chemical Mechanisms, on January 15, 2013.

43. Fabrication of TiAl Intermetallic Compound by Mechanical-thermal Activation Process and Study on Its Formation Mechanism, on April 10, 2012

44. Thermodynamic Study of Phase Stability in Nanostructured Aluminum by Molecular Dynamics Simulation, on October, 2012

45. An Investigation on Effect of Chemical Modifiers and Cooling Rate on Morphology and Mechanical Properties of Cast In Situ Non-reactive Mg/Mg<sub>2</sub>Si Composite, on April 7, 2012

46. Study of the Effect of Grain Boundary Structures in the Allotropic Transformation of Nanocrystalline Iron by Equation of State and Molecular Dynamics Simulation, on April 2, 2012
47. Investigation of Formation of MoSi<sub>2</sub> Intermetallic Compound and MoSi<sub>2</sub>-ZrO<sub>2</sub> Composite by Mechanical Alloying and Combustion Synthesis Processes, on April 2, 2012
48. To Study the Effect of Mechanical-thermal Activation Process on Iron Carbide Formation by Carbothermic Reduction of Hematite, on April 8, 2012.
49. Thermodynamic Study of Grain Growth in Nanocrystalline Structure of Metals with Atomistic Simulations, on April 30, 2011
50. Investigation of Mechanical Activation on Hematite-Graphite Reduction Kinetics in the Presence of Iron, on August 20, 2011
51. Synthesis of cast particulate in-situ aluminum-alumina composite by aluminothermic reaction of multi powders mixture, on October 11, 2011
52. Development of Porous Metallic Materials for Fuel Cell Applications, on July 31, 2011
53. Thermodynamics Study of Allotropic Transformation in Metallic Nanocrystalline and its Molecular Dynamics Simulation, on April 30, 2010
54. The Effect of Mechanical Activation on the Leaching of Sarcheshmeh Copper Sulfidic Concentrate, on August 21, 2010
55. A Study of the Effect of Aluminum on MoSi<sub>2</sub> Formation by Self-Propagation High-temperature Synthesis, 2010.
56. Production and Characterization of High Nitrogen Stainless Steel (Fe-Cr-Mn-Mo) by Mechanical Alloying and Investigation of Conditions for Improving PREN Value, on March 8, 2010
57. Thermodynamics Study of Allotropic Transformation in Metallic Nanocrystalline and its Molecular Dynamics Simulation, on November 23, 2010
58. Fabrication, Tribological and Microstructural Characterization of PEEK/SiO<sub>2</sub> Polymer Matrix Nanocomposite Coatings on the Plain Carbon Steel Substrate, on July 14, 2010
59. Fabrication of Magnesium Matrix Composites by Pressure Infiltration Casting to Ceramic Preform, on March 10, 2010
60. Fabrication and Characterization of Mg/Mg<sub>2</sub>Si Composite by Non-reactive In-situ Process, 2010
61. Production and Characterization of Acrylic Based Polyurethane-Nano silica Clear Coatings on the Carbon Steel Substrate, on July 14, 2010
62. Development of In-Situ Cast Aluminum-Alumina Composite by

Aluminothermic Reaction of Activated Aluminum-Zinc Oxide Powder, on January, 2009

63. Effect of Mechanical Activation on Carbothermic Reduction of Molybdenite in the Presence of Lime, on June 8, 2009

64. Modification of Chromium Carbide Network Morphology in Cold Work Ledeburite Steel for Mechanical Properties Improvement, on July 28, 2010

65. Investigation Effect of Various Hydrodynamic and Thermal Parameters on Sintering Process, on April, 2009

66. Influence of Mechanical Activation on Manufacturing of Aluminum-Alumina Casting Composite, on July 22, 2009

67. Synthesis of FeAl Intermetallic Compound by the Solid-Liquid Reaction Method, on June 15, 2009

68. Study on the Mechanism of Ni<sub>3</sub>Al Formation during Combustion Synthesis, on July 1, 2009

69. Thermal Behavior of Mechanically Activated Aluminum Sulphate and Fabrication of Al- Al<sub>2</sub>O<sub>3</sub> in Situ Particle Composite, 2008

70. Production and Characterization of Al-Si-SiCp Semi Solid Composite by Particle Injection in the Melt, on March 12, 2008

71. Effect of Coke Particle Size on Sinter Quality, on October, 2007

72. Production of High Nitrogen Austenite Stainless Steel by Mechanical Alloying, on April 12, 2008

- **PUBLICATIONS**

**Journal Papers**

59. Siavash Aghili, **Masoud Panjepour**, Mehran Ghiaci  
"Degradation mechanism and oxidation kinetics of C60 fullerene", *Diamond & Related Materials*, 124 (2022) 108943.
58. Siavash Aghili, **Masoud Panjepour**,\*, Mahmood Meratian  
"The kinetics and mechanism of B2O3 formation from the chemically-synthesized HBO2 under non-isothermal conditions", *Reaction Kinetics, Mechanisms and Catalysis*, Accepted: 10-11-2021.
57. Hossein Elahi Davaji, Fatemeh Shamoradi, **Masoud Panjepour**, and Mehdi Ahmadian "Preparation and characterization of carbon felt/carbon composites by chemical vapor infiltration process", *Carbon Letters*, Accepted: 8 July 2021.
56. Javad Alizadeh , Amin Salati, Mohammad Reza Ebrahimi Fordoei, and **Masoud Panjepour** "Investigation of Grain Boundary Influence on the Thermodynamic Phase Stability of Nanocrystalline Iron by Using the Molecular Dynamics Simulation Method", *Journal of Materials Engineering and Performance*, Accepted: 24 March 2021.
55. M. A. Farzaneh, **M. Panjepour**, M. Meratian, "Kinetics Analysis of X65 Steel corrosion reactions at the simultaneous presence of CO<sub>2</sub> and H<sub>2</sub>S ", *International Journal of ISSI*, Vol. 17(2020), No. 1, pp. 40-56.
- 54: Maryam Mikelani, **Masoud Panjepour** and Aboozar Taherizadeh  
"Investigation on mechanical properties of nanofoam aluminum single crystal: using the method of molecular dynamics simulation", *Applied Physics A*, (2020) 126:921.
53. Sepide Dabbaghi, Azade Jafarizade, **Masoud Panjepour** and Mahmood Meratian  
"Numerical Simulation of Fluid Flow Through Metallic Foams: A General Correlation for Different Length Sizes and Pore Characteristics", *Special Topics & Reviews in Porous Media – An International Journal*, 12(1):73–93 (2021).
52. Amir Peyman Soleymani, **Masoud Panjepour**, and Mahmood Meratian  
"Intensive Improvement of Cementite Synthesis: A New Method in Presence of Carbothermic Reduction of Hematite", *EJERS, European Journal of Engineering Research and Science*, Vol. 5, No. 2, February 2020.
- 51: Siavash Aghili, **Masoud Panjepour**, Mahmood Meratian, Hassan Hadadzade,  
"Effects of boron oxide composition, structure, and morphology on B<sub>4</sub>C formation via the SHS process in the B<sub>2</sub>O<sub>3</sub>-Mg - C ternary system" *Ceramics*

International 46 (2020) 7223–7234.

50. Javad Alizadeh , **Masoud Panjepour** and Mehdi Ahmadian,  
"Modeling the stretch behavior of the single crystal NiAl alloy and its molecular Dynamics simulation ", Physics of the Solid State, 2020, Vol. 62, No. 1, pp. 83–91.
49. Javad Alizadeh , **Masoud Panjepour** and Mehdi Ahmadian,  
"Using the non-vibrational mathematical model to investigate the mechanical behavior of FeAl single crystal derived from molecular dynamics simulation", Mater. Res. Express 6 (2019) 1165h8,
48. Alireza Shahzeydia, Mehran Ghiaci, Leila Jameie, **Masoud Panjepour**,  
"Immobilization of N-doped carbon porous networks containing copper nanoparticles on carbon felt fibers for catalytic applications ", Applied Surface Science 485 (2019) 194–203.
- 47: Azade Jafarizade, **Masoud Panjepour**, Mahmood Meratian, Mohsen Davazdah Emami,  
"Numerical simulation of gas/solid heat transfer in metallic foams: a general correlation for different porosities and pore sizes ", Transport in Porous Media, (2019) 127:481-506.
46. Maryam Safiri, Mahmood Meratian and **Masoud Panjepour**,  
" Fabrication of Al-TiAl<sub>3</sub> Composite Via In-Situ Accumulative Roll Bonding (ARB) and Annealing", METALLURGICAL AND MATERIALS TRANSACTIONS A, VOLUME 50A, JANUARY (2019) 415-425.
45. Amir Gorji, **Masoud Panjepour** and Mehdi Ahmadian,  
Study of Morphology and Magnesium Purity, Formed by Vapor Phase Through Silicothermic Reduction", METALLURGICAL AND MATERIALS TRANSACTIONS B, (2018).
44. Siavash Aghili, **Masoud Panjepour**, Mahmood Meratian  
" Kinetic analysis of formation of boron trioxide from thermal decomposition of boric acid under non-isothermal conditions", Journal of Thermal Analysis and Calorimetry, (2017),
- 43: Y. Nasiri, **M. Panjepour**, M. Ahmadian,  
" The kinetics of hematite reeduction and cementite formation with CH<sub>4</sub>-H<sub>2</sub>-Ar gas mixture", International Journal of Mineral Processing 153 (2016) 17–28.
42. 2 M. Pahlevaninezhad , M. Davazdah Emami, **M. Panjepour**,  
" Identifying Major Zones of an Iron Ore Sintering Bed ", Applied Mathematical Modelling, 40 (2016) 8475-8492,
41. M. Raei, **M. Panjepour**, M. Meratian,  
"Effect of Stirring Speed and Time on Microstructure and Mechanical Properties of Cast Al-Ti-Zr-B<sub>4</sub>C Composite Produced by Stir Casting", Russian Journal of Non-Ferrous Metals, Vol. 57, No. 4, pp. 347–360, 2016.

40. M. Raei, **M. Panjepour**, M. Meratian,  
" Pseudo-in-situ Stir Casting: New Method for Production of Aluminum Composites with Bimodal-Sized B<sub>4</sub>C Reinforcement ",  
International Journal of Minerals, Metallurgy and Materials, Volume 23, Number 8, August 2016, 981-990 (2016), ID IJM-10-2015-0839.R1.
- 39: A.P Soleymani, **M. Panjepour**, M. Meratian,  
" The Effect of Temperature and Carbon to Hematite Ratio on the Formation of Cementite during the Couple of STMA and Partial Melting Processes",  
METALLURGICAL AND MATERIALS TRANSACTIONS B, VOLUME 47B, APRIL 2016, Pages. 846-858.
38. M.H. Shahzeydi, A.M. Parvanian, **M. Panjepour**,  
" The distribution and mechanism of pore formation in copper foams fabricated by Lost Carbonate Sintering method ", Materials Characterization, 111 (2016) 21–30.
37. M. Zafari, **M. Panjepour**, M. Meratian, M. Davazdah Emami,,  
" CFD Simulation of Forced Convective Heat Transfer by Tetraikadehedron Model in Metal Foams ", Journal of Porous Media, Volume 19, Issue. 1, 2016, Pages.1-11.
36. Z. Noori, **M. Panjepour**, M. Ahmadian,  
" Study of The Effect of Grain Size on Melting Temperature of Al Nanocrystals by Molecular Dynamics Simulation", Journal of Materials Research, JMR 30(10), Volume 30, Issue 10, 21 May 2015, Pages 1648-1660.
- 35 M. Zafari, **M. Panjepour**, M. Davazdah Emami, M. Meratian,  
" Microtomography-based numerical simulation of fluid flow and heat transfer in open cell metal foams ", Applied Thermal Engineering 80 (2015) 347-354.
34. M. Ashrafzade, A.P Soleymani, **M. Panjepour**, M. Shamanian,  
" Cementite Formation from Hematite–Graphite Mixture by Simultaneous Thermal–Mechanical Activation", METALLURGICAL AND MATERIALS TRANSACTIONS B, Vol. 46B, pp. 813- 823, APRIL 2015.
33. M. Zafari, **M. Panjepour**, M. Davazdah Emami, M. Meratian  
" 3D Numerical Investigation of Fluid Flow through Open Cell Metal Foams: Using Micro-Tomography Images", Journal of Porous Media, 17 (11): 1019–1029 (2014).
32. S. Hasani, A.P. Soleymani, **M. Panjepour**, A. Ghaei  
" A Tension Analysis During Oxidation of Pure Aluminum Powder Particles: Non-isothermal Condition", Oxidation of Metals, 82 (2014), 209–224.
31. M. Pahlevaninezhad, M. Davazdah. Emami, **M. Panjepour**,  
"The Effects of Kinetic Parameters on Combustion Characteristics in a Sintering Bed", Energy, 73 (2014) 160e176.
30. A.M. Parvanian, M. Saadatfar, **M. Panjepour**, A. Kingston, A.P. Sheppard

- " The effects of manufacturing parameters on geometrical and mechanical properties of copper foams produced by space holder technique", *Materials and Design* 53 (2014) 681–690.
29. S. Hasani, **M. Panjepour**, M. Shamanian  
" Non-Isothermal Kinetic Analysis of Oxidation of Pure Aluminum Powder Particles", *Oxid Met* (2014) 81:299–313.
28. A. Salati, E. Mokhtari, **M. Panjepour**, G.R. Aryanpour  
" Reduction of the allotropic transition temperature in nanocrystalline zirconium: Predicted by modified equation of state (MEOS) method and molecular dynamics simulation", *Journal of Physics and Chemistry of Solids* 74 (2013) 584–589.
27. A.M. Parvanian, **M. Panjepour**  
" Mechanical behavior improvement of open-pore copper foams synthesized through space holder technique", *Materials and Design* 49 (2013) 834–841
- 26 A.M. Parvanian, **M. Panjepour**  
" Development of Open Pore Copper Foams to Use as Bipolar Plates in Polymer Electrolyte Membrane Fuel Cell Stacks", *Iranica Journal of Energy & Environment* 4 (2): 99-103, 2013.
- 25: S.R. Khayyam Nekouei, A.P. Soleymani, **M. Panjepour**  
" THERMODYNAMIC STUDY OF CEMENTITE FORMATION IN Fe–C–O–H SYSTEM", *Mineral Processing & Extractive Metall. Rev.*, 34: 176–184, 2013.
- 24: S. Sadeghi Lafmejani, M. Davazdah Emami, **M. Panjepour**, S. Sohrabi  
" Two-dimensional axisymmetric modeling of combustion in an iron ore sintering bed", *Special Topics & Reviews in Porous Media — An International Journal*, (2013) 4 (4): 299–313.
23. M. Ghahremanian, B. Niroumand, **M. Panjepour**  
" Production of Al-Si-SiCp Cast Composites by Injection of Low-Energy Ball-Milled Al-SiCp Powder into the Melt", *Met. Mater. Int.*, Vol. 18, No. 1 (2012), pp. 149~156.
22. S. Hasani, **M. Panjepour**, M. Shamanian  
" The Oxidation Mechanism of Pure Aluminum Powder Particles", *Oxid Met* (2012) 78:179–195.
21. S. Hasani, **M. Panjepour**, M. Shamanian  
"Effect of atmosphere and heating rate on mechanism of MoSi<sub>2</sub> formation during self-propagating high-temperature synthesis", *J Therm Anal Calorim* (2012) 107:1073–1081.
20. F. Tehrani, M.H. Abbasi, M.A. Golozar, **M. Panjepour**  
" Characterization of nanostructured high nitrogen Fe–18Cr–xMn–4Mo austenitic stainless steel prepared by mechanical alloying", *Materials Science and Engineering A* 534 (2012) 203– 208.

19. S. Hasani, **M. Panjepour**, M. Shamanian  
"The effect of heating rate on mechanism of oxidation of aluminum powder",  
Alloys and Composite Materials (2012) 1: 29-36
18. M. Hedayati, M. Salehi, R. Bagheri, **M. Panjepour**, F. Naeimi,  
" Tribological and mechanical properties of amorphous and semi-crystalline  
PEEK/SiO<sub>2</sub> nanocomposite coatings deposited on the plain carbon steel by  
electrostatic powder spray technique", Progress in Organic Coatings 74 (2012)  
50– 58.
17. F. Mirshahi; M. Meratian; **M. Panjepour**  
" Microstructural and mechanical behavior of Mg/Mg<sub>2</sub>Si composite fabricated by  
a directional solidification system", Materials Science and Engineering A 528  
(2011) 8319– 8323.
16. S.A. Sabeti, M. Pahlevaninezhad, M. Soleymani, **M. Panjepour**  
" The effect of temperature on the grain growth of nanocrystalline metals and its  
simulation by molecular dynamics method", Computational Materials Science 51  
(2012) 233–240.
15. S.A. Sabeti, M. Soleymani, **M. Panjepour**, G. Aryanpour  
" Thermodynamic study of grain growth in nanocrystalline metals and its  
simulation by molecular dynamics", Computational Materials Science 50 (2011)  
2865–2871.
14. S.A. Sabeti, M. Pahlevaninezhad, **M. Panjepour**  
" The effect of grain size on the nanocrystalline growth in metals and its  
Simulation by Monte Carlo method", Computational Materials Science 50 (2011)  
2104–2111.
13. A. Salati, **M. Panjepour**, G. Aryanpour  
" Estimation of critical grain size at different temperatures and thermodynamic  
stability of  $\gamma$   $\alpha$  in NC Fe by QDA and EOS methods ", Journal of Physics and  
Chemistry of Solids 72 (2011) 104–110.
12. M. Hedayati, M. Salehi, R. Bagheri, **M. Panjepour**, A. Maghzian  
" Ball milling preparation and characterization of poly (ether ether ketone)/surface  
modified silica nanocomposite", Powder Technology 207 (2011) 296–303.
11. F. Tehrani, M.H. Abbasi, M.A. Golozar, **M. Panjepour**  
" The effect of particle size of iron powder on  $\alpha$  to  $\gamma$  transformation in  
thenanostructured high nitrogen Fe–Cr–Mn–Mo stainless steel produced  
by mechanical alloying", Materials Science and Engineering A 528 (2011) 3961-  
3966.
10. F. Mohseni, M. H. Abbasi, **M. Panjepour**  
"The effect of mechanical activation on the carbothermic reduction kinetics of  
hematite-graphite mixture", International Journal of ISSI, Vol.7 (2010), No.2,  
pp. 26-33.

9. S. Hasani, **M. Panjepour**, M. Shamanian  
" A study of the effect of aluminum on MoSi<sub>2</sub> formation by self-propagation high-temperature synthesis", Journal of Alloys and Compounds 502 (2010) 80–86.
8. Ali Maleki, **Masoud Panjepour**, Behzad Niroumand, Mahmood Meratian  
" Mechanism of zinc oxide–aluminum aluminothermic reaction", J Mater Sci (2010) 45:5574–5580.
7. T. Haghiri, M. H. Abbasi, M. A. Golozar and **M. Panjepour**  
" Investigation of  $\alpha$  to  $\gamma$  transformation in production of a nanostructure high nitrogen austenitic stainless steel powder via mechanical alloying ", Materials Science and Engineering A 507 (2009) 144–148.
6. M. Samadi, M. Shamanian, A. Saidi, M. H. Abbasi, **M. Panjepour** and F. Asgharzadeh  
" The effect of Mo particle size on SHS synthesis mechanism of MoSi<sub>2</sub> ", Journal of Alloys and Compounds 475 (2009) 529–534.
5. M. Ghasri, M. Meratian and **M. Panjepour**  
"Effect of Mechanical Activation on Structure and Thermal Decomposition of Aluminum Sulfate ", Journal of Alloys and Compounds 472 (2009) 535–539.
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