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PREVIOUS APPOINTMENTS

Associate Professor of Metallurgy (April 2005-April 2009) in the Department of Materials Engineering, Tarbiat Modares University, Tehran, Iran.

Assistant Professor of Metallurgy (January 1997-April 2005) in the Department of Materials Engineering, Tarbiat Modares University, Tehran, Iran.

Head of Department of Materials Engineering (May 2004-Oct. 2005), Tarbiat Modares University, Tehran, Iran.

Head of Metallurgy Group (May 1998-July 2000) in the Department of Materials Engineering, Tarbiat Modares University, Tehran, Iran.

Head of Materials Engineering Department (March 1998-Feb. 2002) in the Iranian Research Organization for Science and Technology (IROST), Tehran, Iran.

FIELDS OF INTEREST

Physical metallurgy, thermomechanical processing, nano-coatings.

HIGHER EDUCATION

B.Sc. in Materials Science and Engineering (1989),
Sharif University of Technology, Tehran, Iran

M.Sc. in Materials Engineering (1992),
University of Wollongong, Australia.

Ph.D. in Materials Engineering (1996),
University of Wollongong, Australia.

PROESSIONAL SKILLS

Transmission electron microscopy, scanning electron microscopy, electron back scattered diffraction, X-ray diffraction, thermomechanical testing of materials.

TEACHING EXPERIENCE

Feb. 1998-Jan. 1999: Teaching metal forming to undergraduate students in Materials Science and Engineering, Amir Kabir University of Technology, Iran.

From Feb. 1997: Teaching graduate courses in advanced materials analysis methods, X-ray diffraction, phase transformation, high temperature alloys, strengthening mechanisms of materials and fatigue, Tarbiat Modares University, Iran.

PROFESSIONAL ACTIVITIES

Head of the referee committee of Materials Science Group, IROST, for the international Kharazmi Festival, Iran (1998-2002).

Member of the referee committee of Materials Science Group, IROST, for the international Kharazmi Festival, Iran (2002-2005).

Member of the referee committee, IROST, for the international Kharazmi Festival, Iran (2012).

Member of the referee committee for the assessment of research proposals for 2/1000 Bureau, Ministry or industry, Iran (1997-2000).

Member of R&D steering committee, Sadid Pipe and Profile Co., Tehran, Iran (from 2002).

SOCIETY MEMBERSHIPS

Metallurgical Engineering Association, Iran.

Iron and Steel Society, USA.

PUBLICATIONS

Journal Papers

1. A. Abdollah-zadeh, N. Kaviani, S. M. Abbasi; The Effect of Thermomechanical Treatment on Morphology of Inclusions and Mechanical Properties in a Low Alloy Steel, *Modares Technical & Eng. J.* (in Persian), 2001, Vol. 5, pp. 33-38.
2. A. Abdollah-zadeh, D.P. Dunne; Effect of Nb on Recrystallization after Hot Deformation in Austenitic Fe-Ni-C, *ISIJ Int.*, 2003, Vol. 43, pp. 1219-1224.
3. A. Abdollah-zadeh, D.P. Dunne; Formation of Reccrystallized grains in a Hot Deformed Austenitic Fe-Ni-C Alloy, *J. Mater. Sci. & Technol.*, 2004, Vol. 12, pp. 15-25.
4. A. Abdollah-zadeh, M.S. Jamshidi, S.M.M. Hadavi; Thermal Fatigue Behavior of a Chromium Electroplated 32 NiCrMo145 Steel, *J. Mater. Sci. & Technol.*, 2004, Vol. 20, pp. 269-273.
5. S.M.M. Hadavi, A. Abdollah-zadeh, M.S. Jamshidi; The Effect of Thermal Fatigue on the Hardness of Hard Chromium Electroplating, *J. Mater. Process. Technol.*, 2004, Vol. 147, pp. 385-388.
6. B. Eghbali, A. Abdollah-zadeh; The Influence of Thermomechanical Parameters in Ferrite Grain Refinement in a Low Carbon Nb-Microalloyed Steel, *Scripta Materialia*, 2005, Vol. 53, pp. 41-45.
7. A. Abdollah-zadeh, H. Hemati-Novin, G. Liaghat; The Influence of Metallurgical Parameters on Explosive Welding of Cu-Al 6061 Plates, *Amirkabir J. Sci. & Technol.* (in Persian), 2005, Vol. 15, pp. 9-15.
8. A. Abdollah-zadeh, M. Belbasy; The Effects of Manganese and Copper on the Mechanical Properties of a High Strength Low Alloy NiCrMoV Steel, *J. Mater. Sci. & Technol.*, 2005, Vol. 21, 470-474.

9. A. Abdollah-zadeh, A. Jafari-Pirlari, M. Barzegari; On the Tempered Martensite Embrittlement in a 32NiCrMoV125 Steel, J. Mater. Eng. & Performance, 2005, Vol. 14, pp. 569-573.

10. B. Eghbali, A. Abdollah-zadeh; Effect of Strain Rate on the Ferrite Grain Refinement in a Low Carbon Nb–Ti Microalloyed Steel During Low Temperature Deformation, *J. Mater. Sci. & Technol.*, 2005, Vol. 21, pp. 851-855.

11. A. Salemi, A. Abdollah-zadeh, A Review on Development and Fabrication of All-Steel CNG Cylinders, Metallurgical Eng. J. (in Persian), 2005, Vol. 8, pp. 32-39.

12. B. Eghbali, A. Abdollah-zadeh; Strain-Induced Transformation in a Low Carbon Microalloyed Steel During Hot Compression Testing, *Scripta Materialia*, 2006, Vol. 54, pp. 1205-1209.

13. B. Eghbali,A. Abdollah-zadeh; Deformation-Induced Ferrite Transformation in a Low Carbon Nb–Ti Microalloyed Steel, *Materials & Design*, 2007, Vol. 28, pp. 1021-1026.

14. A. K. Kamrani, A. Abdollah-zadeh; Effect of Thermomechanical Parameters on the Workability of 2024 Al Alloy, *Iranian Int. J. Eng. Sci.* (in Persian), 2005, Vol. 16, pp. 103-110.

15. H. Arabi, A. Abdollah-zadeh, S.M. Abbasi; The Effect of Interpass Annealing Time on the Mechanical Properties of 18Ni-Co-Mo Steel, *Modares Technical & Eng. J.* (in Persian), 2006, Vol 26, pp. 53-60.

16. B. Eghbali, A. Abdollah-zadeh; Influence of Deformation Temperature on the Ferrite Grain Refinement in a Low Carbon Nb–Ti Microalloyed Steel, *J. Mater. Process. Technol.*, 2006, Vol. 180, pp. 44-48.

17. B. Eghbali, A. Abdollah-zadeh, H. Beladi and P.D. Hodgson; Characterization on Ferrite Microstructure Evolution During Large Strain Warm Torsion Testing of Plain Low Carbon Steel, *Materials Science & Engineering: A*, 2006, Vol. 435-436, pp. 499-503.

18. A. Abdollah-zadeh, B. Eghbali; Mechanism of ferrite grain refinement during warm deformation of a low carbon Nb-microalloyed steel, *Materials Science and Engineering: A*, 2007, Vol. 457, pp. 219-225.

19. B. Eghbali, A. Abdollah-zadeh, P.D. Hodgson; Dynamic softening of ferrite during large strain warm deformation of a plain-carbon steel, *Materials Science & Engineering: A*, 2007, Vol. 462, pp. 259-263.

20. A. Salemi, A. Abdollah-zadeh; The effect of tempering temperature on the mechanical properties and fracture morphology of a NiCrMoV steel, *Materials Characterization*, 2007, Vol. 59, pp. 484-487.

21. M. Nouri, A. Abdollah-zadeh, F. Malek, Effect of welding parameters on dilution and weld bead geometry in cladding, J. Mater. Sci. & Technol., 2007, Vol. 23, pp. 817-822.

22. S. Soleymani, A. Abdollah-zadeh, S.A. Alidokht, H. Assadi, J. Optoelectronics and Advanced Materials, 2007, Vol. 9, pp. 1789-1792.

23. A. Abdollah-zadeh, A. Salemi, H. Assadi; Mechanical behavior of CrMo steel with tempered martensite and ferrite–bainite–martensite microstructures, *Materials Science and Engineering: A*, 2008, Vol. 483-484, pp.325-328.

24. A. Abdollah-zadeh, T. Saeid, B. Sazgari; Microstructural and mechanical properties of friction stir welded aluminum/copper lap joints, *J. Alloys and Compounds*, 2008, Vol. 460, pp. 535-538.

25. A. Salemi, A. Abdollah-zadeh, M. Mirzaei, H. Assadi, A study on fracture properties of multiphase microstructures of a CrMo steel, *Materials Science and Engineering: A*, 2008, Vol. 492, pp.45-48.

26. T. Saeid, A. Abdollah-zadeh, H. Assadi, F. Malek Ghaini, Effect of friction stir welding speed on the microstructure and mechanical properties of a duplex stainless steel, Materials Science and Engineering: A, 2008, Vol. 496, pp.262-268.

27. P. Rahnama, A. Abdollah-zadeh, M.A. Mofid, The Influence of heat treatment Parameters on mechanical properties of a low alloy steel, *Modares Technical & Eng. J.* (in Persian), 2009, Vol. 37, pp. 83-92.

27. A. Samadi, A. Abdollah-zadeh, S. Behrouzghaemi, S.H. Razavi, Effect of Solid Solution Supersaturation on Precipitation of γ′ in Rapidly Quenched Ni-Al Binary Alloys, *J. Mater. Sci. & Technol.*, 2009, Vol. 25, pp. 130-134.

29. A. Samadi, A. Abdollah-zadeh, H. Assadi, The effect of composition on the precipitation of γ′ in rapidly quenched Ni-Al binary alloys, *Modares Technical & Eng. J.*, 2010, Vol. 39, pp. 103-109.

30. S.M. Mousavizade, F. M. Ghaini, M.J. Torkamany, J. Sabbaghzadeh, A. Abdollah-zadeh, Effect of severe plastic deformation on grain boundary liquation of a nickel-base superalloy, *Scripta Materialia*, 2009, Vol. 60, pp. 244-247.

31. A. Salemi, A. Abdollah-zadeh, M. Mirzaei, Mechanical properties of 42CrMo4 Steel with tempered martensite and ferrite-bainite-martensite microstructure, *Modares Technical & Eng. J.* (in Persian), 2010, Vol. 39, pp. 63-76.

32. A. Samadi, A. Abdollah-zadeh, S.H. Razavi and H. Assadi, The effect of cooling rate on the precipitation of γ′ in Ni-11.6 at.%Al alloy, *Esteghlal* (in Persian), 2010, Vol. 29, pp. 9-19.

33. T. Saeid, A. Abdollah-zadeh, B. Sazgari, Weldability and mechanical properties of dissimilar aluminum–copper lap joints made by friction stir welding, *J. of Alloys and Compounds*, 2010, Vol. 490, pp. 652-655.

34. T. Saeid, A. Abdollah-zadeh, T. Shibayanagi, K. Ikeuchi, H. Assadi, On the formation of grain structure during friction stir welding of duplex stainless steel, *Materials Science and Engineering: A*, 2010, Vol. 527, pp. 6484-6488.

35. S. A. Alidokht, A. Abdollah-zadeh, S. Soleymani, H. Assadi, Microstructure and tribological performance of an aluminium alloy based hybrid composite produced by friction stir processing, *Materials & Design*, 2011, Vol. 32, pp. 2727-2733.

36. S. Soleymani, A. Abdollah-zadeh and S.A. Alidokht, Improvement of tribological properties of surface layer of an Al alloy by friction stir processing, *JSEMAT*, 2011, Vol. 1, pp. 1-6

37. S. Soleymani, A. Abdollah-zadeh, S. A. Alidokht, Microstructural and tribological properties of Al5083 based surface hybrid composite produced by friction stir processing, *Wear*, 2012, Vol. 278–279, pp. 41–47.

38. M.A. Mofid, A. Abdollah-zadeh, F. Malek Ghaini, The effect of water cooling during dissimilar friction stir welding of Al alloy to Mg alloy, *Materials & Design*, Vol. 36, 2012, pp. 161-167.

39. H. Elmkhah, F. Mahboubi, A. Abdollah-zadeh, Sh. Ahangarani, M. Raoufi, M.S. Mahdipoor, Size-dependency of corrosion behavior for TiN nanostructure coatings deposited by the PACVD method, *Materials Letters*, 2012, Vol. 82, pp. 105-108.

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41. M. Jafarzadegan, A.H. Feng, A. Abdollah-zadeh, T. Saeid, J. Shen, H. Assadi, Microstructural characterization in dissimilar friction stir welding between 304 stainless steel and st37 steel, *Materials Characterization*, 2012, Vol. 74, pp. 28-41.

42. M. Jafarzadegan, A. Abdollah-zadeh, A.H.Feng, T. Saeid, J. Shen, and H. Assadi, Microstructure and mechanical properties of a dissimilar friction stir weld between austenitic stainless steel and low carbon steel, , *J. Mater. Sci. & Technol.*, 2013, Vol. 29, pp. 367-372.

43. N. Yasavol, A. Abdollah-zadeh, M. Ganjali, S.A. Alidokht, Microstructure and mechanical behavior of pulsed laser surface melted AISI D2 cold work tool steel, *Applied Surface Science*, 2013, Vol. 265, pp. 653-662.

44. S. Soleymani, A. Abdollah-zadeh and S.A. Alidokht, Microstructure and tribological properties of ultra fine grained hybrid composite produced by friction stir processing, *Materials Physics and Mechanics*, 2013, Vol. 17, pp. 6-10.

45. S.A. Alidokht, A. Abdollah-zadeh, H. Assadi, Effect of applied load on the dry sliding wear behaviour and the subsurface deformation on hybrid metal matrix composite, *Wear*, 2013, Vol. 305, pp. 291-298 .

46. Z. Malekshahi Beiranvand, F. Malek Ghaini, M. Sheikhi and A. Abdollah-Zadeh, Effect of severe plastic deformation on hot cracking of wrought aluminium alloy in pulsed laser welding, *Science and Technology of Welding and Joining* , 2013,Vol. 18, pp. 473-478.

47. S. Ahmadi, H.R. Shahverdi, M. Afsari, A. Abdollah-zadeh, Nano-crystallization of $Fe_{36}Cr_{12}Mo_{10}$ phase in $Fe_{55-x}Cr_{18}Mo_7B_{16}C_4Nb_x$ (X = 0, 3, 4) amorphous alloys, *Journal of Non-Crystalline Solids,* 2013, Vol. 365, pp. 47–52

48. A. Amirafshar, A. Abdollah-zadeh and H.R. Shahverdi, Study of microstructure and surface properties of st14 steel surface composite reinforced by Fe-based nanostructured particles produced by friction stir processing, *J Surface Science and Eng.* (in Persian), 2013, Vol. 19, pp. 1-10.

49. N. Yasavol, A. Abdollah-zadeh, M.T. Vieira, H.R. Jafarian, Microstructure evolution and texture development in a friction stir-processed AISI D2 tool steel, *Applied Surface Science*, 2014, Vol. 293, pp. 151-159.

50. M. Hajian , A. Abdollah-zadeh , S.S. Rezaei-Nejad , H. Assadi, S.M.M. Hadavi, K. Chung , M. Shokouhimehr, Microstructure and mechanical properties of friction stir processed AISI 316L stainless steel, *Materials & Design*, 2014, Vol. 67, pp. 82-94.

51. M. Gholampour, A. Abdollah-zadeh, R. Poursalehi, L. Shekari, Synthesis of GaN nanoparticles by DC plasma enhanced chemical vapor deposition, *Advanced Materials Research*, 2014, Vol. 829. pp 897-901.

52. M. Hajian , A. Abdollah-zadeh , S.S. Rezaei-Nejad , H. Assadi, S.M.M. Hadavi, K. Chung, M. Shokouhimehr , Improvement in cavitation erosion resistance of AISI 316L stainless steel by friction stir processing, *Applied Surface Science*, 2014, Vol. 308, pp. 184-192.

53. M.A. Mofid, A. Abdollah-zadeh, F. Malek Ghaini, C. K. Gur, Investigating the formation of intermetallic compounds during friction stir welding of magnesium alloy to aluminum alloy in air and under liquid nitrogen, *Int J Adv Manuf Technol*, 2014, Vol. 71, pp.1493–1499.

54. H. Elmkhah, A. Abdollah-zadeh, F. Mahboubi, A.R. Sabour rohaghdam, , K.H. Kim, Qualitative evaluation of mechanical properties of nanostructured TiAlN coatings deposited on cutting tools by analysis of XRD results, *Modares Mechanical Engineering* (in Persian), 2014, Vol. 14, pp. 61-66.

55. A. Rahbar-kelishami, A. Abdollah-zadeh, M.M. Hadavi, R.A. Seraj, A.P. Gerlich, Improvement of wear resistance of sprayed layer on 52100 steel by friction stir processing, *Applied Surface Science*, 2014, Vol. 316, pp. 501-507.

56. M. Gholampour, A. Abdollah-zadeh, R. Poursalehi, L. Shekari, Gold catalyst effect on the morphological and structural properties of GaN nanostructures deposited by plasma enhanced chemical vapor deposition, *Materials Letters*, 2014, Vol. 120, pp. 136-139

57. A. Rahbar-kelishami, A. Abdollah-zadeh, M.M. Hadavi, A. Banerji ,A. Alpas, A.P. Gerlich, Effects of friction stir processing on wear properties of WC–12%Co sprayed on 52100 steel, *Materials & Design*, 2015, Vol. 86, , pp. 98–104.

58. M. Gholampour, A. Abdollah-zadeh , L. Shekari, R. Poursalehi, A catalyst free method to grow GaN nanowires on porous Si at low temperature, *Ceramics International*, 2015, Vol. 41, pp. 13855–13860.

59. H. Elmkhah , T.F. Zhang, A. Abdollah-zadeh, K.H. Kim, F. Mahboubi, Surface characteristics for the Ti-Al-N coatings deposited by high power impulse magnetron sputtering technique at the different bias voltages, *Journal of Alloys and Compounds*, 2016, Vol. 688, 15, pp. 820–827.

60. Z. Yousefi Mayabi, A. Abdolahzadeh and R. Soltanalizadeh, The Effect of deposition temperature on the microstructure and erosion properties of the TiN coating by PACVD on 316 austenitic stainless steel, *Surface Science and Eng.* (in Persian), 2016, Vol. 29, pp. 99-106.

61. R.A. Seraj, A. Abdollah-zadeh,M. Hajian, F. Kargar, R. Soltanalizadeh, Microstructural Evolution and Wear Resistance of Friction Stir-Processed AISI 52100 Steel, *Metallurgical and Materials Transactions A*, 2016, Vol. 47, pp. 3564-3572.

62. V.A. Latifi, R. Miresmaeili, A. Abdollah-zadeh, The mutual effects of hydrogen and microstructure on hardness and impact energy of SMA welds in X65 steel, *Materials Science and Engineering A*, 2017, Vol. 679,pp. 87-94.

63. H. Elmkhah, A. Abdollah-zadeh, F. Mahboubi, A.R.S. Rouhaghdam, A. Fattah-alhosseini, Correlation between the duty cycle and the surface characteristics for the nanostructured titanium aluminum nitride coating deposited by pulsed-DC PACVD technique, *Journal of Alloys and Compounds*, 2017, Vol. 711, pp. 530-540.

64. M. Pourali, A. Abdollah-zadeh, T. Saeid, F. Kargar, Influence of welding parameters on intermetallic compounds formation in dissimilar steel/aluminum friction stir welds, *Journal of Alloys and Compounds*, 2017,Vol. 715, pp. 1-8.

64. M. Pourabbas, A. Abdollah-zadeh, M. Pouranvari, The effects of magnetic pulse welding Parameters on the structural and mechanical properties of AA4014-AA7075 joint, *Modares Mechanical Engineering* (in Persian), 2018, Vol.18, pp. 84-93.

65. S. Entesari, A. Abdollah-zadeh, N. Habibi, A. Mehri, Experimental and numerical investigations into the failure mechanisms of friction stir welded AA7075-T6 thin sheets, *Journal of Manufacturing Processes*, 2017, Vol. 29, pp. 74-84.

66. F. Movassagh-Alanagh, A. Abdollah-zadeh, M. Aliofkhazraei, M. Abedi, Improving the wear and corrosion resistance of Ti–6Al–4V alloy by deposition of TiSiN nanocomposite coating with pulsed-DC PACVD, *Wear*, Vol. 390–391, 2017, pp. 93-103.

67. F. Movassagh-Alanagh, A. Abdollah-zadeh, M. Asgari, M.A. Ghaffari, Influence of Si content on the wettability and corrosion resistance of nanocomposite TiSiN films deposited by pulsed-DC PACVD, *Journal of Alloys and Compounds*, 2018, Vol. 739, pp. 780-792.

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69. M. Abedi, A. Abdollah-zadeh, M. Bestetti, A. Vicenzo, A. Serafini, F. Movassagh-Alanagh, The effects of phase transformation on the structure and mechanical properties of TiSiCN nanocomposite coatings deposited by PECVD method, *Applied Surface Science*, 2018, Vol. 444, pp. 377-386.

71. S. Delfani-Abbariki, A. Abdollah-zadeh, S.M.M. Hadavi, M. Abedi, S.M.R. Derakhshandeh, Enhancing the adhesion of diamond-like carbon films to steel

substrates using silicon-containing interlayers, *Surface and Coatings Technology*, 2018, Vol. 350, pp. 74-83.

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