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1404

Supervised PhD Theses

#	Thesis title	By	Date
1	Investigation of V2O5 Coating on lithium ion dynamic mechanism in LiNi _{0.5} Mn _{1.5} O ₄ Cathode of Li-ion battery	Hamedreza Seied Hossein Zadeh & Farzad Mahboubi	September 2013
2	investigation of corrosion resistance of nitrocarbide/Ni-Cr nanocomposite/nitride triple layer coating developed by plasma nitrocarburizing ,electroplating and plasma nitriding processes	Mehry Fattah Ziarani & Farzad Mahboubi	October 2010

Supervised MSc Theses

#	Thesis title	By	Date
1	The effect of plasma nitriding on wear properties of optimized Stellite 6 and stellite 190 coating	Danial Zarghi & Farzad Mahboubi	October 2021
2	The effect of oxidation temperature on wear behavior of AISI 4140 steel duplex treaded by plasma nitrocarburizing and plasma oxidizing	Rania Yaseen Mohammed & Farzad Mahboubi	March 2021
3	Hot Corrosion behavior of a simultaneous Al-Si diffusion coating on IN713, Ni based super alloy by pack cementation	Yasin Dehghani Jafari & Farzad Mahboubi	February 2020
4	Hot corrosion behavior of a Simultaneous Al-Cr diffusion coating on WI-52 Co-based superalloy by pack cementation	Kaveh Ismaeili & Farzad Mahboubi	February 2020

5	The effect of the amount of reducing agent on the wear properties of plasma nitrided Ni-B Coating	Zhila Dehghan Shahrak & Farzad Mahboubi	February 2019
6	Influence of thickness on adhesion and wear resistance of DLC coating deposited onto AISI H13 tool steel	Seyyedata Oskouie & Farzad Mahboubi	October 2017
7	Optimization of plasma nitriding parameters for improving of wear resistance of Din 1.2344 steel	Safoura Karimzadeh & Farzad Mahboubi	October 2017
8	The effect of furnace wall temperature on wear properties of hot wall plasma nitride AISI H13 steel	Tohid Pouraman & Farzad Mahboubi	October 2016
9	Investigation of wear properties of Diamond-Like Carbon coatings on AISI H13 steel by pulsed DC PACVD	Zahra Solgi & Farzad Mahboubi	October 2016
10	Investigation of wear properties of multi layer TiN+TiC+TiCN coatings deposited by PVD method	Azin Blooki & Farzad Mahboubi	February 2016
11	Wear and Corrosion Properties of Diamond-Like Carbon (DLC) Coating Produced on AISI 410 Martensitic Stainless Steel for oilfield Gate valves	Maziar Jokari Sheshdeh & Farzad Mahboubi	October 2015
12	Investigation of Wear behavior of plasma nitrided AISI 17-4PH stainless steel	Zainababdulelahhadi Wetwet & Farzad Mahboubi	October 2015
13	Wear resistance of TiN, TiC and TiCN coatings deposited on steel by PACVD method	Alireza Khademolhosseini & Farzad Mahboubi	October 2015
14	Investigation on thermal properties of plasma nanostructured YSZ thermal barrier	Mohammad Taghizade & Farzad Mahboubi	September 2015
15	Investigation of the corrosion and wear resistance of Ni-P-PTFE coating	Hamid Rahmati & Farzad Mahboubi	July 2015
16	Investigation of corrosion property of Aluminum coating deposited by ion vapor deposition (IVD) method	Marjan Khani Alamooti & Farzad Mahboubi	October 2014
17	Metal Oxide/CNTs composite coatings on electrodes for electrolytic supercapacitors	Lida Mahmoudi & Farzad Mahboubi	January 2014
18	Wear behavior of diamond-like carbon (DLC) nano-coatings prepared by pulsed direct current plasma-assisted chemical vapor deposition (DC-PACVD)	Alireza Najafi Orimi & Farzad Mahboubi	January 2014
19	Active screen plasma nitriding of grooved components by hot and cold wall chamber	Shirin Haji Hassanzadeh & Farzad Mahboubi	October 2013
20	The study of tribological and corrosion behavior of plasma nitrided DIN 1.6582 steel in hot and cold wall conditions	Arash Maniee & Farzad Mahboubi	October 2013
21	Corrosion behavior of electroless nano composite coating of Ni-P-SiC on aluminum alloy casting	Reza Soleimani Gilakjani & Farzad Mahboubi	June 2013
22	Study of Corrosion resistance of austenitic stainless steel weld overlay cladding with submerged arc welding and electroslag welding on a plain carbon steel, usable in sour oil environments	Milad Shamsodin & Farzad Mahboubi	May 2013
23	Effect of plasma nitriding of the dimensional changes of Nitralloy 135M steel.	Hadi Rumi & Farzad Mahboubi	January 2013
24	The effect of frequency and duty cycle on pulsed plasma nitriding behavior of AISI H13 hot work tools steel	Kiyanoosh Taherkhani & Farzad Mahboubi	January 2012
25	Fabrication of TiO ₂ nanostructure anode for Li-Ion battery	Mojtaba Pourbafrani & Farzad Mahboubi	October 2011

26	Investigation of the Fatigue Resistance of Plasma Nitrided Valve Spring	Aliasghar Bayati & Farzad Mahboubi	October 2011
27	Investigation of effective parameters on oxidation resistance of Al-Cr coating after Aluminizing-Chromizing process	Yousef Sedigh Bijarpas & Farzad Mahboubi	February 2011
28	The	Mhrdad Mohammadi & Farzad Mahboubi	December 2010
29	The	Mohsen Ahmadi Jazani & Farzad Mahboubi	October 2010
30	The effect of geometry on the plasma nitriding behavior of steel components by conventional plasma nitriding (CPN) and active screen plasma nitriding (ASPN	Zohreh Soltani Asadi & Farzad Mahboubi	January 2010
31	Evaluation of the wear resistance of electroless Ni-B coating nitrided by conventional and active screen plasma nitriding	Donya Ahmadkhanyha & Farzad Mahboubi	December 2009
32	Tribological studies of nitride and TiN duplex layers formed on DIN 1.2344 steel using plasma nitriding and PACVD methods	Mohammad Sadegh Mahdipour Varaniab & Farzad Mahboubi	December 2009
33	Active Screen Plasma Nitriding of Tool Steels	Hosein Karamali & Farzad Mahboubi	April 2009
34	Duplex layer formation of nitrided and TiN layers on DIN 1.2344 steel using plasma nitriding and PACVD methods	Ghasem Saatchian & Farzad Mahboubi	January 2009
35	ACTIVE SCREEN PLASM NITRO-CARBURIZING	Nasim Khoshdel Salakjani & Farzad Mahboubi	May 2008
36	PLASMA NITRO-CARBURIZING AND POST OXIDATION WITH	Neda Mand Karian & Farzad Mahboubi	April 2008
37	CORROSION BEHAVIOR COMPOSITE LAYER OF NI/SIC NANO PARTICAL	Jafar Jafari Piteh Noee & Farzad Mahboubi	March 2007
38	INVESTIGATION OF COMPOSITE NANO PARTICLE BASED CHROMIUM COATING BY USE OF ELECTROPLATING METHOD	Mitra Iranmanesh & Farzad Mahboubi	March 2007
39	Effects of chromium coating and plasma nitrided chromium coating on surface	Alireza Saba & Farzad Mahboubi	March 2005

Books

#	Title	Author(s)	Publisher country	publication date	version
Portal Records					
1	practical handbook of cladding technology	Farzad Mahboubi, Milad Shamsoddin	Iran (Islamic Republic of)	August 2014	1

Journal Papers

Portal Records

- 1 Reza Tima, Farzad Mahboubi, "Effect of plasma nitriding temperature on microstructure and wear properties of electroless nickel-boron coatings", SURFACE & COATINGS TECHNOLOGY, June 2021 Vol. 415, Num. 127084, Page 1-7, June 2021,
- 2 Reza Tima, Farzad Mahboubi, "Ability of plasma nitriding to improve tribological behavior of medium and high boron electroless nickel coatings", TRIBOLOGY INTERNATIONAL, April 2021 Vol. 156, Num. 1, Page 1-7, April 2021,
- 3 Omid Sharifahmadian, Farzad Mahboubi, "RSM study on the influence of nitrogen flow rate and deposition temperature on the tribological properties of nitrogen doped diamond-like carbon coating", SURFACES AND INTERFACES, February 2020 Vol. 19, Num. 19, Page 75-83, February 2020,
- 4 H. Elmkhah, A. Fattah-Alhoseini, K. Babaei, A. Abdollah-Zadeh, Farzad Mahboubi, "Correlation between the Al content and corrosion resistance of TiAlN coatings applied using a PACVD technique", Journal of Asian Ceramic Societies, January 2020 Vol. 8, Num. 1, Page 72-80, January 2020,
- 5 Arash Maniee, Farzad Mahboubi, Reza Soleimani Gilakajani, "Improved Hardness, Wear and Corrosion Resistance of Inconel 718 Treated by Hot Wall Plasma Nitriding", METALS AND MATERIALS INTERNATIONAL, October 2019 Vol. 26, Num. 11, Page 1664-1670, October 2019,
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- 7 Sepehr Yazdani, Farzad Mahboubi, Reza Tima, Omid Sharifahmadian, "Effect of Carbon Nanotube Concentration on the Corrosion Behavior of Electroless Ni-B-CNT Coating", JOURNAL OF MATERIALS ENGINEERING AND PERFORMANCE, June 2019 Vol. 6, Num. 1, Page 1-14, June 2019,
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- 9 A. Poladi, H.R. Mohammadian Semnani, E. Emadoddin, Farzad Mahboubi, H.R. Ghomi, "Wettability and Biocompatibility of TaCx Films Deposited on AISI316L Stainless Steel: Effect of Methane Concentration", JOURNAL OF INORGANIC AND ORGANOMETALLIC POLYMERS AND MATERIALS, May 2019 Vol. 30, Num. 1, Page 349-358, May 2019,
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- 11 Omid Sharifahmadian, Farzad Mahboubi, Seyyedata Oskouie, "Structural evolution and tribological behavior of nitrogen-doped DLC coatings deposited by pulsed DC PACVD method", DIAMOND AND RELATED MATERIALS, January 2019 Vol. 91, Num. 0, Page 74-83, January 2019,
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Conference Papers

Portal Records







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- 2 Hamid Merati, Farzad Mahboubi, Golnush Seid Karimi, Mohammad Sadegh Kazemi, Mohammad Javad Ameri Shahrabi, "Dehydration Unit and Condensate Stabilization of Sarajah Field Gas Storage Unit Design ", Second International Conference Oil, Gas and Petrochemical, December 2014
- 3 Mahdi Ramezani, Mohammad Fathi Tovini, Morteza Saghafi Yazdi, Farzad Mahboubi, "The influence of graphene nanosheet content on the supercapacitive behavior of praphene nanosheet/MnO₂ composites ", 5th International Congress on Nanoscience & Nanotechnology, October 2014
- 4 Shirin Haji Hassanzadeh, Farzad Mahboubi, "Active screen plasma nitriding of grooved components in cold wall condition ", 16th steel symposium, February 2014

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- 8 Arash Maniee, Farzad Mahboubi, "Tribological behavior of hot wall plasma nitrided 34CrNiMo6 low alloy steel ", 14th national seminar on surface engineering, October 2013
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- 10 Hadi Rumi, Farzad Mahboubi, "Study of the dimensional change of plasma nitrided Nitralloy 135M steel ", The first international and the sixth joint conference of Iranian metallurgical engineering society and Iranian foundrymen society, November 2012
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- 12 Lida Mahmodi, Farzad Mahboubi, "Investigation of tribological properties of chromizing coating produced on nickel-base superalloy by salt bath immersion method ", Thirteenth national surface engineering seminar, May 2012
- 13 Kiyanoosh Taherkhani, Farzad Mahboubi, "The effect of plasma nitriding parameters on component complex geometry ", 3rd international conference on materials heat treatment, May 2012
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- 15 Kiyanoosh Taherkhani, Farzad Mahboubi, "The effect of frequency and duty cycle on active screen plasma nitriding behavior of AISI H13 hot work tool steel ", 3rd international conference on materials heat treatment, May 2012
- 16 Kiyanoosh Taherkhani, Farzad Mahboubi, "The effect of nitriding parameters on AISI H13 steel ", Third national manufacturing engineering conference, February 2012
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- 23 Nasim Khoshdel Salakjani, Farzad Mahboubi, "The comparison of active screen and conventional DC plasma nitro carburizing on DIN 1.6582 low alloy steel ", , October 2008

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Taught Courses

#	Course title	Description	Headlines	Date
1	Physical Metallurgy II	The main emphasis of this course is to create a physical basis which relates the structure of the materials, particularly, the metals, to their properties.		Spring 2022
2	Advanced Surface Engineering	The main objective of this course is to enable the students to design and manufacture composite material with a mixture of surface and bulk properties that no single material possesses such properties. Moreover, employing proper technology to reach the		Spring 2022
3	Physical Metallurgy II	The main emphasis of this course is to create a physical basis which relates the structure of the materials, particularly, the metals, to their properties.		Fall 2021
4	Physical Metallurgy II	The main emphasis of this course is to create a physical basis which relates the structure of the materials, particularly, the metals, to their properties.		Spring 2021
5	Physical Metallurgy II	The main emphasis of this course is to create a physical basis which relates the structure of the materials, particularly, the metals, to their properties		Fall 2020
6	Research Methods in Science & Engineering Materials	Familiarity with research skills, internet searching tools, skills of scientific writing and oral presentation		Fall 2020

Inventions/Patents

#	Invention title	Reg. number	Country	contributors	Reg. date	Exp. date
1	Nano structure multi component coating on industrial parts using concurrent plasma assisted PVD and CVD processes	69335			2011/03/1	2012/03/1
2	Production of wear resistance titanium nitride (TiN) nano structure coating on steel components	65609			2010/07/1	2011/07/1
3	Production of corrosion resistant titanium nitride (TiN) nano structure coating on steel components	65610			2010/07/1	2011/07/1

4	formation of hard nano structure tiN coatig using plasma assisted chemical vapor deposition (PACVD) process.	387111097	2009/02/1	2029/02/1
5	design and construction of triple purpose, hot wall and cold wall pulsed DC plasma nitriding (nitrocarburizing) and PACVD installation	386091019	2007/12/1	2027/12/1
6	design and construction of plasma assisted chemical vapor deposition (pacvd) installation	386091018	2007/12/1	2027/12/1
7	design and construction of hot wall and cold wall pulsed DC plasma nitriding installation	38608741	2007/11/1	2027/11/1
8	codepositian of chromium/ nano - wc layer asing solpnate and standard chromium baths.	38604336	2007/07/1	2027/07/1