***Candidate:***

****

**Dr. MASOUD ATAPOUR**

Head of the Department of Materials Engineering, Associate Professor at Isfahan University of Technology, (World’s Top 2% Scientists)

**Research interests: Corrosion, Coating, Sustainability, Additive manufacturing**

**CV- Masoud Atapour**

|  |  |
| --- | --- |
| **Name:** Masoud Atapour | **Date of Ph.D defense:** 15 June 2011. |
| **Date of Birth:** 20 March 1979 | **Academic title:** Associate professor |
| **Gender:** Male | **Position:** Faculty |
| **Country:** Iran | **Organization:** Isfahan University of Technology |
| **Email:** [m.atapour@cc.iut.ac.ir](mailto:m.atapour@cc.iut.ac.ir) | |
| Fax: +98 311 391 2752 | |

1. **Education**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Doctorate** | | | | |
| **Degree** | **Organization** | **Field** | **Supervisor** | **Advisor** |
| Excellent  (15-06-2011) | Isfahan University of Technology, Iran | Corrosion Technology | M.H. Fathi  M. Shamanian | G. Frankel (Ohio University of Technology) |
| **Title of thesis:** Corrosion behavior of titanium alloys | | | | |
|  | | | | |
| **Visiting Scholar: Ohio State University (Fontana Corrosion Center)**  **Period: March 2009 – March 2010** | | | | |
|  | | | | |
| Dissertation date: **15 June 2011** | | | | |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Master of Science (M.Sc)** | | | | |
| **Degree** | **Organization** | **Period** | **Field** | **Supervisor** |
| Excellent | Isfahan University of Technology, Iran | Sep 2003- Sep 2005 | Wear of Coatings | F. Ashrafizadeh |
| **Title of thesis:** Cyclic Oxidation Resistance and Tribological Behavior of Plasma Nitrided Valve Steels | | | | |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Bachelor of Science (B.Sc.)** | | | | |
| **Degree** | **Organization** | **Period** | **Field** | **Supervisor** |
| Excellent | Amirkabir University of Technology, Iran | Sep 1998- Sep 2003 | Powder Metallurgy | N. Parvin |
| **Title of thesis:** Effect of the Sintering Temperature on the Mechanical Behavior of Iron Powder Metallurgy Samples | | | | |

1. **Present position**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Present position** | | | | |
| **Period** | **Organization** | **Position** | **Field** | **Title** |
| July 2011- January 2015 | Department of Materials Engineering, Isfahan University of Technology, Iran | Faculty | Corrosion,  Coatings, Sustainability | Assistance Professor |
| January 2015- Now | Department of Materials Engineering, Isfahan University of Technology, Iran | Faculty | Corrosion,  Sustainability Additive Manufacturing | Associate Professor |
| June 2014- June 2017 | Graduate Coordinator, Department of Materials Engineering, Isfahan University of Technology, Iran | | | |
| Sep 2022- Now | Head of the Department of Materials Engineering, Isfahan University of Technology, Iran | | | |
| <http://materials.iut.ac.ir/en> | | | | |

1. **Research Exchanges**

|  |  |  |
| --- | --- | --- |
| **Research Exchanges** | | |
| **Period** | **Organization** | **Research** |
| 23Jan2009-21Apr2009 | Ohio State University, USA | Corrosion of Ti based alloys |
| Summer 2016 | Helmholtz-Zentrum Geesthacht, Germany | Wear and Corrosion of coatings |
| Summer 2017 | Milan University, Italy | Corrosion of stainless steels for Fuel Cells |
| Summer 2018 | KTH University, Sweden | Corrosion of stainless steels |
| Summer 2019 | KTH University, Sweden | Corrosion of Additive Manufactured stainless steels |
| Summer 2022 | Western University, Canada | Corrosion of Additive Manufactured metals |

|  |  |
| --- | --- |
| **Teaching** | |
| **Course** | **Level** |
| Corrosion and Oxidation | Bachelor |
| Advanced Corrosion | Master and PhD |
| Hot Corrosion | Master and PhD |
| Advanced Corrosion Lab | Master and PhD |
| Advanced welding metallurgy | Master and PhD |

**List of publications**

Total number of citations: Google Scholar: 2596

**h-index: in google scholar 28.**

Google Scholar profile available at:

<https://scholar.google.com/citations?hl=en&user=k0OT0mcAAAAJ&view_op=list_works&sortby=pubdate>

|  |  |  |
| --- | --- | --- |
| **Publications (Peer reviewed published papers) – Masoud Atapour** | | |
| **2024** | | |
| 1 | Rahmati, M., Zahrani, E.M., Atapour, M., Nezhad, A.N., Hakimizad, A. and Alfantazi, A.M., 2024. In situ synthesis and electrochemical corrosion behavior of plasma electrolytic oxidation coating containing an osteoporosis drug on AZ31 magnesium alloy. Materials Chemistry and Physics, 315, p.128983. | |
| 2 | Ebrahimi, M., Atapour, M., Bahrami, A. and Momeni, M.M., 2024. Enhanced photoelectrochemical cathodic protection of stainless steel under visible light using Co3O4–ZnO-modified TiO2 nanotubes. Applied Physics A, 130(3), p.176. | |
| 3 | Sichani, H.R., Atapour, M., Ashrafizadeh, F., Galati, M. and Saboori, A., 2024. Mechanical, electrochemical and permeability behaviour of Ti6Al–4V scaffolds fabricated by electron beam powder bed fusion for orthopedic implant applications: The role of cell type and cell size. *Journal of Materials Research and Technology*, *28*, pp.3240-3257. | |
| 4 | Mofazali, P., Atapour, M., Nakamura, M., Sheikholeslam, M., Galati, M. and Saboori, A., 2024. Surface modification of additive manufactured Ti6Al4V scaffolds with gelatin/alginate-IGF-1 carrier: An effective approach for healing bone defects. *International Journal of Biological Macromolecules*, p.131125. | |
| 5 | Karampoor, M.R., Bahrami, A. and Atapour, M., 2024. Towards an antibacterial self‐healing coating based on linseed oil/ZnO nanoparticles repair agent, encapsulated in polyurea formaldehyde microcapsules. Micro & Nano Letters, 19(3), p.e12195. | |
| 6 | Atapour, M., Standish, T.E., Henderson, J.D., Wei, Z., Dehnavi, V. and Hedberg, Y.S., 2024. Influence of Proteins and Building Direction on the Corrosion and Tribocorrosion of CoCrMo Fabricated by Laser Powder Bed Fusion. ACS Biomaterials Science & Engineering. | |
| 7 | Heidari, E., Atapour, M. and Obeydavi, A., 2024. The effect of Cr-content on the corrosion behavior of Ti0. 5Mo0. 5CoNiMnCrx high-entropy alloy thin films deposited by direct current magnetron sputtering. Journal of Alloys and Compounds, 976, p.173265. | |
| 8 | Sarmadi, M.A., Atapour, M. and Alizadeh, M., 2024. Influence of Cold Rolling on the Microstructure and Mechanical Properties of FeCoCrNiMn High-Entropy Alloy. *Metallography, Microstructure, and Analysis*, pp.1-11. | |
| 9 | Bandekhoda, M.R., Mosallanejad, M.H., Atapour, M., Iuliano, L. and Saboori, A., 2024. Investigation on the potential of laser and electron beam additively manufactured Ti–6Al–4V components for orthopedic applications. Metals and Materials International, 30(1), pp.114-126. | |
| **2023** | | |
| 10 | Heydarian, A., Rahmati, M., Atapour, M., Hakimizad, A. and Raeissi, K., 2023. Effect of electrochemical parameters on wear and tribocorrosion capabilities of the PEO coatings generated through pulsed waveforms on AZ91 magnesium alloy. *Journal of Materials Research and Technology*, *27*, pp.6148-6158. | |
| 11 | Karampoor, M.R., Atapour, M. and Bahrami, A., 2023. Preparation of an anti-bacterial CuO-containing polyurea-formaldehyde/linseed oil self-healing coating. *Progress in Organic Coatings*, *184*, p.107879. | |
| 12 | Daavari, M., Conde, A., Atapour, M., HosseinpourRokni, M., Sánchez, H.M., Mohedano, M., Matykina, E. and Arrabal, R., 2023. In vitro corrosion-assisted cracking of AZ31B Mg alloy with a hybrid PEO+ MWCNTs/PCL coating. *Surfaces and Interfaces*, *42*, p.103446. | |
| 13 | Daavari, M., Atapour, M., Mohedano, M., Matykina, E., Arrabal, R. and Nesic, D., 2023. Biological Performance of Duplex PEO+ CNT/PCL Coating on AZ31B Mg Alloy for Orthopedic and Dental Applications. *Journal of Functional Biomaterials*, *14*(9), p.475. | |
| 14 | Salehi Mobarakeh, V., Niroumand, B., Atapour, M. and Shamanian, M., 2023. Effects of transient liquid phase bonding time on microstructure, mechanical and corrosion properties during bonding of inconel 617/AISI 310 stainless steel. *Metallography, Microstructure, and Analysis*, *12*(4), pp.714-729. | |
| 15 | Noori, M., Atapour, M., Ashrafizadeh, F., Elmkhah, H., di Confiengo, G.G., Ferraris, S., Perero, S., Cardu, M. and Spriano, S., 2023. Nanostructured multilayer CAE-PVD coatings based on transition metal nitrides on Ti6Al4V alloy for biomedical applications. *Ceramics International*, *49*(14), pp.23367-23382. | |
| 16 | Atapour, M., Sanaei, S., Wei, Z., Sheikholeslam, M., Henderson, J.D., Eduok, U., Hosein, Y.K., Holdsworth, D.W., Hedberg, Y.S. and Ghorbani, H.R., 2023. In vitro corrosion and biocompatibility behavior of CoCrMo alloy manufactured by laser powder bed fusion parallel and perpendicular to the build direction. *Electrochimica Acta*, *445*, p.142059. | |
| 17 | Sanaei, S., Atapour, M. and Kermanpur, A., 2023. Characterization and corrosion evaluation of high‐entropy TixNb0. 5MnMo0. 5Zr0. 3 (x= 0.5, 0.75, 1) thin films for biomedical applications. *Materials and Corrosion*, *74*(3), pp.430-440. | |
| 18 | Davoodi, F., Ashrafizadeh, F., Atapour, M., Akbari-Kharaji, E. and Mokhtari, R., 2023. Anticorrosion performance of TiN coating with electroless nickel-phosphorus interlayer on Al 6061 alloy. *Materials Chemistry and Physics*, *296*, p.127170. | |
| 19 | Motalebian, M., Momeni, M.M., Ghayeb, Y. and Atapour, M., 2023. Fabrication and photoelectrochemical activity of Mn/Cr co-doped titanium oxide nanostructures and their application in photocathodic protection of stainless steel. *Journal of Solid State Electrochemistry*, *27*(2), pp.357-369. | |
| 20 | Farshid, S., Kharaziha, M. and Atapour, M., 2023. A self-healing and bioactive coating based on duplex plasma electrolytic oxidation/polydopamine on AZ91 alloy for bone implants. *Journal of Magnesium and Alloys*, *11*(2), pp.592-606. | |
| 21 | Ghafarzadeh, M., Kharaziha, M., Atapour, M. and Heidari, P., 2023. Copper-chitosan nanoparticles incorporated PGS/MAO bilayer coatings for potential cardiovascular application. *Progress in Organic Coatings*, *174*, p.107269. | |
| **2022** | | |
| 22 | Varmaziar, S., Atapour, M. and Hedberg, Y., 2022. Effect of filler metal on microstructure and corrosion behavior of welded AISI 316L using GTAW process. *Journal of Welding Science and Technology of Iran*, *8*(1), pp.123-136. | |
| 23 | Ghorbani, H.R., Mosallanejad, M.H., Atapour, M., Galati, M. and Saboori, A., 2022. Hybrid additive manufacturing of an electron beam powder bed fused Ti6Al4V by transient liquid phase bonding. *Journal of Materials Research and Technology*, *20*, pp.180-194. | |
| 24 | Sanaei, S., Atapour, M. and Kermanpur, A., 2022. Characterization and corrosion evaluation of high‐entropy TixNb0. 5MnMo0. 5Zr0. 3 (x= 0.5, 0.75, 1) thin films for biomedical applications. *Materials and Corrosion*. | |
| 25 | Farshid, S., Kharaziha, M. and Atapour, M., 2022. A self-healing and bioactive coating based on duplex plasma electrolytic oxidation/polydopamine on AZ91 alloy for bone implants. *Journal of Magnesium and Alloys*. | |
| 26 | DAVOODI, F., ASHRAFIZADEH, F., ATAPOUR, M. and RIKHTEHGARAN, R., 2022. A novel approach for evaluation of load bearing capacity of duplex coatings on aluminum alloy using PLS and SVR models. *Transactions of Nonferrous Metals Society of China*, *32*(6), pp.1834-1851. | |
| 27 | Haftbaradaran-Esfahani, M.R., Ahmadian, M. and Atapour, M., 2022. Corrosion and Metal Release Investigation of a Porous Biomedical Vitallium Alloy Coated with 58S Sol-Gel Bioactive Glass. *Journal of Materials Engineering and Performance*, pp.1-11. | |
| 28 | Rajabi, T., Atapour, M., Elmkhah, H. and Nahvi, S.M., 2022. Nanometric CrN/CrAlN and CrN/ZrN multilayer physical vapor deposited coatings on 316L stainless steel as bipolar plate for proton exchange membrane fuel cells. *Thin Solid Films*, p.139288. | |
| 29 | Varmaziar, S., Atapour, M. and Hedberg, Y.S., 2022. Corrosion and metal release characterization of stainless steel 316L weld zones in whey protein solution. *npj Materials Degradation*, *6*(1), pp.1-9. | |
| 30 | Davoodi, F., Atapour, M., Ashrafizadeh, F. and Rikhtehgaran, R., 2022. Dry Sliding Wear Characteristics of NiP/TiN Duplex Coated Aluminum Alloy and Wear Analysis Using Response Surface Method. *Journal of Materials Engineering and Performance*, pp.1-13. | |
| 31 | Mosallanejad, M.H., Sanaei, S., Atapour, M., Niroumand, B., Iuliano, L. and Saboori, A., 2022. Microstructure and Corrosion Properties of CP-Ti Processed by Laser Powder Bed Fusion under Similar Energy Densities. *Acta Metallurgica Sinica (English Letters)*, pp.1-12. | |
| 32 | Abdolvand, R., Atapour, M. and Shamanian, M., 2022. Effects of cooling regimes on the microstructural and mechanical properties of the transient liquid phase joints of UNS S32750 super duplex stainless steel/BNi-2/AISI 304 stainless steel. *Journal of Materials Science*, *57*(6), pp.4383-4398. | |
| 33 | Momeni, M.M., Akbarnia, M., Atapour, M. and Khalaghi, M., 2022. Preparation of chromium and sulfur single and co-doped TiO2 nanostructures for efficient photoelectrochemical water splitting: effect of aliphatic alcohols on their activity. *Journal of Solid State Electrochemistry*, *26*(1), pp.281-291. | |
| **2021** | | |
| 34 | Sadeghian, B., Taherizadeh, A., Atapour, M., Saeidi, N. and Alhaji, A., 2021. Phase-field simulation of microstructure evolution during friction stir welding of 304 stainless steel. *Mechanics of Materials*, *163*, p.104076. | |
| 35 | Daavari, M., **Atapour, M.**, Mohedano, M., Arrabal, R., Matykina, E. and Taherizadeh, A., 2021. Biotribology and biocorrosion of MWCNTs-reinforced PEO coating on AZ31B Mg alloy. Surfaces and Interfaces, 22, p.100850. | |
| 36 | Razazzadeh, A., **Atapour, M.** and Enayati, M.H., 2021. Corrosion Characteristics of TiNbMoMnFe High Entropy Thin Film Deposited on AISI316L for Biomedical Applications. Metals and Materials International, pp.1-12. | |
| 37 | Aghayar, Y., Naghashzadeh, A. and **Atapour, M.,** 2021. An assessment of microstructure and mechanical properties of inconel 601/304 stainless steel dissimilar weld. Vacuum, 184, p.109970. | |
| 38 | Momeni, M.M., Motalebian, M., Ghayeb, Y. and **Atapour, M.,** 2021. Photoelectrochemical Cathodic Protection of Stainless Steel using W-and Cr-Doped/Codoped TiO2 Nanotube Thin Film Photoanodes. Journal of The Electrochemical Society. | |
| 39 | Mortezanejad, E., **Atapour, M.,** Salimijazi, H., Alhaji, A. and Hakimizad, A., 2021. Wear and Corrosion Behavior of Aluminate-and Phosphate-Based Plasma Electrolytic Oxidation Coatings with Polytetrafluoroethylene Nanoparticles on AZ80 Mg Alloy. Journal of Materials Engineering and Performance, 30(6), pp.4030-4044. | |
| 40 | Mobarakeh, V.S., **Atapour, M**., Niroumand, B. and Shamanian, M., 2021. Effect of Bonding Temperature on Microstructure and Mechanical Properties of Dissimilar Joint Between Inconel 617 and Stainless Steel 310. Metallography, Microstructure, and Analysis, pp.1-11. | |
| 41 | Rahimi, A., Shamanian, M. and **Atapour, M.,** 2021. Effect of Pulse Current Frequency on Microstructure and Hot Corrosion Behavior of Tungsten Inert Gas-Welded Joints of N155 Superalloy. Journal of Materials Engineering and Performance, pp.1-16. | |
| 42 | Behjat, A., Shamanian, M., **Atapour, M.** and Sarmadi, M.A., 2021. Microstructure and Corrosion Properties of Friction Stir-Welded High-Strength Low-Alloy Steel. Transactions of the Indian Institute of Metals, pp.1-12. | |
| 43 | Bodaghi, F., **Atapour, M.** and Shamanian, M., 2021. Assessment of Microstructure and Stress Corrosion Cracking Susceptibility of Multipass Gas Metal Arc Welded Al 5083-H321 Aluminum Alloy. Metallography, Microstructure, and Analysis, 10(2), pp.246-256. | |
| 44 | Rahimi, A., Shamanian, M. and **Atapour, M.,** 2021. Effect of Pulse Current Frequency on Microstructure and Hot Corrosion Behavior of Tungsten Inert Gas-Welded Joints of N155 Superalloy. Journal of Materials Engineering and Performance, pp.1-16. | |
| 45 | Davoodi, F., **Atapour, M**., Blawert, C. and Zheludkevich, M., 2021. Wear and corrosion behavior of clay containing coating on AM 50 magnesium alloy produced by aluminate-based plasma electrolytic oxidation. Transactions of Nonferrous Metals Society of China, 31(12), pp.3719-3738. | |
| 46 | Ghafarzadeh, M., Kharaziha, M. and **Atapour, M**., 2021. Bilayer micro-arc oxidation-poly (glycerol sebacate) coating on AZ91 for improved corrosion resistance and biological activity. *Progress in Organic Coatings*, *161*, p.106495. | |
| **2020** | | |
| 47 | **Atapour, M.,** Wang, X., Färnlund, K., Wallinder, I.O. and Hedberg, Y., 2020. Corrosion and metal release investigations of selective laser melted 316L stainless steel in a synthetic physiological fluid containing proteins and in diluted hydrochloric acid. Electrochimica Acta, 354, p.136748. | |
| 48 | Alaei, M., **Atapour, M.** and Labbaf, S., 2020. Electrophoretic deposition of chitosan-bioactive glass nanocomposite coatings on AZ91 Mg alloy for biomedical applications. Progress in Organic Coatings, 147, p.105803. | |
| 49 | Ebrahimi, M., Kermanpur, A., **Atapour, M.,** Adhami, S., Heidari, R.H., Khorshidi, E., Irannejad, N. and Rezaie, B., 2020. Performance enhancement of mesoscopic perovskite solar cells with GQDs-doped TiO2 electron transport layer. Solar Energy Materials and Solar Cells, 208, p.110407. | |
| 50 | Heydarian, A., **Atapour, M.,** Hakimizad, A. and Raeissi, K., 2020. The effects of anodic amplitude and waveform of applied voltage on characterization and corrosion performance of the coatings grown by plasma electrolytic oxidation on AZ91 Mg alloy from an aluminate bath. Surface and Coatings Technology, 383, p.125235. | |
| 51 | **Atapour, M.,** Wallinder, I.O. and Hedberg, Y., 2020. Stainless steel in simulated milk and whey protein solutions–Influence of grade on corrosion and metal release. Electrochimica Acta, 331, p.135428. | |
| 52 | **Atapour, M.b**, Wang, X., Persson, M., Wallinder, I.O. and Hedberg, Y.S., 2020. Corrosion of Binder Jetting Additively Manufactured 316L Stainless Steel of Different Surface Finish. Journal of The Electrochemical Society, 167(13), p.131503. | |
| 53 | **Atapour, M.,** Rajaei, V., Trasatti, S., Casaletto, M.P. and Chiarello, G.L., 2020. Thin Niobium and Niobium Nitride PVD Coatings on AISI 304 Stainless Steel as Bipolar Plates for PEMFCs. Coatings, 10(9), p.889. | |
| 54 | Sadeghi, B., Abbasi, H., **Atapour, M.,** Shafiee, S., Cavaliere, P. and Marfavi, Z., 2020. Friction stir spot welding of TiO 2 nanoparticle-reinforced interstitial free steel. Journal of Materials Science, 55, pp.12458-12475. | |
| 55 | Khalaghi, M., **Atapour, M.,** Momeni, M.M., Zaeri, M.R. and Ghaffari, G., 2020. Photocatalytic activity and photo-electrochemical performance of trimetallic (Cu–Ni–Zn)/TiO 2 coating on AISI 316L stainless steel for water treatment. Applied Physics A, 126(5), pp.1-11. | |
| 56 | Hedberg, Y.S., Gamna, F., Padoan, G., Ferraris, S., Cazzola, M., Herting, G., **Atapour, M.,** Spriano, S. and Wallinder, I.O., 2020. Surface modified Ti6Al4V for enhanced bone bonding ability–Effects of silver and corrosivity at simulated physiological conditions from a corrosion and metal release perspective. Corrosion Science, 168, p.108566. | |
| 57 | Alibek, R., **Atapour, M**., Aghajani, A. and Ashari, R., 2020. Microstructure and electrochemical properties of IrO2+ RhOx+ ZrO2 coated titanium anodes. Electrochimica Acta, 329, p.135158. | |
| **2019** | | |
| 58 | Jannat, S., Rashtchi, H., **Atapour, M.,** Golozar, M.A., Elmkhah, H. and Zhiani, M., 2019. Preparation and performance of nanometric Ti/TiN multi-layer physical vapor deposited coating on 316L stainless steel as bipolar plate for proton exchange membrane fuel cells. Journal of Power Sources, 435, p.226818. | |
| 59 | Mahlooji, E., **Atapour, M.** and Labbaf, S., 2019. Electrophoretic deposition of Bioactive glass–Chitosan nanocomposite coatings on Ti-6Al-4V for orthopedic applications. Carbohydrate polymers, 226, p.115299. | |
| 60 | **Atapour, M.,** Wei, Z., Chaudhary, H., Lendel, C., Wallinder, I.O. and Hedberg, Y., 2019. Metal release from stainless steel 316L in whey protein-And simulated milk solutions under static and stirring conditions. Food Control, 101, pp.163-172. | |
| 61 | Beni, S.S., **Atapour, M**., Salmani, M.R. and Ashiri, R., 2019. Resistance spot welding metallurgy of thin sheets of zinc-coated interstitial-free steel. Metallurgical and Materials Transactions A, 50(5), pp.2218-2234. | |
| 62 | Hajiannia, I., Shamanian, M., **Atapour, M**. and Ashiri, R., 2019. Evaluation of weldability and mechanical properties in resistance spot welding of ultrahigh-strength TRIP1100 steel. SAE International Journal of Materials and Manufacturing, 12(1), pp.5-18. | |
| 63 | Eskandari, F., **Atapour, M.,** Golozar, M.A., Sadeghi, B. and Cavaliere, P., 2019. The microstructure and wear behaviour of friction stir processed AISI 430 ferritic stainless steel. Tribology-Materials, Surfaces & Interfaces, 13(3), pp.172-181. | |
| 64 | Chiani, M. and **Atapour, M.,** 2019. A study on the stress corrosion cracking susceptibility of friction stir welded Ti-6Al-4V alloy joints. Materials Research Express, 6(9), p.096598. | |
| 65 | Talebian, M., Raeissi, K., **Atapour, M.,** Fernández-Pérez, B.M., Betancor-Abreu, A., Llorente, I., Fajardo, S., Salarvand, Z., Meghdadi, S., Amirnasr, M. and Souto, R.M., 2019. Pitting corrosion inhibition of 304 stainless steel in NaCl solution by three newly synthesized carboxylic Schiff bases. Corrosion Science, 160, p.108130. | |
| 66 | **Atapour, M.**, Blawert, C. and Zheludkevich, M.L., 2019. The wear characteristics of CeO2 containing nanocomposite coating made by aluminate-based PEO on AM 50 magnesium alloy. Surface and Coatings Technology, 357, pp.626-637. | |
| 67 | Harati, F., Shamanian, M., **Atapour, M.,** Hasani, S. and Szpunar, J.A., 2019. The effect of microstructure and texture evolution on the hardness properties of the cold rolled AA7075-T6 aluminum alloy during the friction stir processing. Materials Research Express, 6(4), p.046559. | |
| 68 | Eskandari, F., **Atapour, M.,** Golozar, M.A., Sadeghi, B. and Cavaliere, P., 2019. Corrosion behavior of friction stir processed AISI 430 ferritic stainless steel. Materials Research Express, 6(8), p.086532. | |
| **2018** | | |
| 69 | Sadeghian, B., Taherizadeh, A. and **Atapour, M.**, 2018. Simulation of weld morphology during friction stir welding of aluminum-stainless steel joint. *Journal of Materials Processing Technology*, *259*, pp.96-108. | |
| 70 | Jalali, A., **Atapour, M.,** Shamanian, M. and Vahman, M., 2018. Transient liquid phase (TLP) bonding of Ti-6Al-4V/UNS 32750 super duplex stainless steel. *Journal of Manufacturing Processes*, *33*, pp.194-202. | |
| 71 | Hajiannia, I., Shamanian, **M., Atapour**, M., Ghassemali, E. and Ashiri, R., 2018. A microstructure evaluation of different areas of resistance spot welding on ultra-high strength TRIP1100 steel. *Cogent Engineering*, *5*(1), p.1512939. | |
| 72 | Mokhtarian, J., Allafchian, A. and **Atapour, M.,** 2018. Effect of silane coating containing SiC nanoparticles on the corrosion behaviour of stainless steel 304. *Micro & Nano Letters*, *13*(8), pp.1203-1208. | |
| 73 | Talebian, M., Raeissi, K., **Atapour, M.**, Fernández-Pérez, B.M., Salarvand, Z., Meghdadi, S., Amirnasr, M. and Souto, R.M., 2018. Inhibitive effect of sodium (E)-4-(4-nitrobenzylideneamino) benzoate on the corrosion of some metals in sodium chloride solution. *Applied Surface Science*, *447*, pp.852-865. | |
| 74 | Hajiannia, I., Shamanian, **M., Atapour**, M., Ghassemali, E. and Saeidi, N., 2018. Development of ultrahigh strength TRIP steel containing high volume fraction of martensite and study of the microstructure and tensile behavior. Transactions of the Indian Institute of Metals, 71(6), pp.1363-1370. | |
| **2017** | |
| 75 | Norouzi, E., **Atapour, M.** and Shamanian, M., 2017. Effect of bonding time on the joint properties of transient liquid phase bonding between Ti--6Al--4V and AISI 304. Journal of Alloys and Compounds, 701, pp.335-341. | |
| 76 | Norouzi, E., Shamanian, **M., Atapour**, M. and Khosravi, B., 2017. Diffusion brazing of Ti–6Al–4V and AISI 304: an EBSD study and mechanical properties. Journal of Materials Science, 52(20), pp.12467-12475. | |
| 77 | Ziyaei, E., **Atapour, M.,** Edris, H. and Hakimizad, A., 2017. Corrosion behavior of PEO coatings formed on AZ31 alloy in phosphate-based electrolytes with calcium acetate additive. Journal of Materials Engineering and Performance, 26(7), pp.3204-3215. | |
| 78 | Navaser, M. and **Atapour, M.,** 2017. Effect of friction stir processing on pitting corrosion and intergranular attack of 7075 aluminum alloy. Journal of Materials Science & Technology, 33(2), pp.155-165. | |
| 79 | Abdolvand, R., **Atapour, M.,** Shamanian, M. and Allafchian, A., 2017. The effect of bonding time on the microstructure and mechanical properties of transient liquid phase bonding between SAF 2507 and AISI 304. Journal of Manufacturing Processes, 25, pp.172-180. | |
| **2016** | | |
| 80 | Zarei, S., Nedoushan, R.J. and **Atapour, M.,** 2016. The sources of the micro stress and strain inhomogeneity in dual phase steels. Materials Science and Engineering: A, 674, pp.384-396. | |
| 81 | Aghajani, A., **Atapour, M.** and Alibek, R., 2016. Passivation of zinc anodes in marine conditions. Materials Performance, 55(9), pp.34-35. | |
| 82 | Norouzi, E., **Atapour, M.,** Shamanian, M. and Allafchian, A., 2016. Effect of bonding temperature on the microstructure and mechanical properties of Ti-6Al-4V to AISI 304 transient liquid phase bonded joint. Materials & Design, 99, pp.543-551. | |
| 83 | **Atapour, M.,** Sarlak, H. and Esmailzadeh, M., 2016. Pitting corrosion susceptibility of friction stir welded lean duplex stainless steel joints. The International Journal of Advanced Manufacturing Technology, 83(5-8), pp.721-728. | |
| 84 | **Atapour, M.,** Pourmohammadi, S. and Ashrafizadeh, F., 2016. Hot corrosion behavior of Cr-modified NiAl coatings on 310 stainless steel produced by a gas tungsten arc cladding process. Canadian Metallurgical Quarterly, 55(1), pp.65-74. | |
| **2015** | | |
| 85 | Golmohammadi, M., **Atapour, M.** and Ashrafi, A., 2015. Fabrication and wear characterization of an A413/Ni surface metal matrix composite fabricated via friction stir processing. Materials & Design, 85, pp.471-482. | |
| 86 | Adhami, S., **Atapour, M.** and Allafchian, A.R., 2015. Corrosion protection of copper by silane sol–gel coatings. Journal of Sol-Gel Science and Technology, 74(3), pp.800-809. | |
| 87 | Sarlak, H., **Atapour, M.** and Esmailzadeh, M., 2015. Corrosion behavior of friction stir welded lean duplex stainless steel. Materials & Design (1980-2015), 66, pp.209-216. | |
| **2014** | | |
| 88 | Mirshekari, G.R., Tavakoli, E., **Atapour, M**. and Sadeghian, B., 2014. Microstructure and corrosion behavior of multipass gas tungsten arc welded 304L stainless steel. Materials & Design, 55, pp.905-911. | |
| **2013** | | |
| 89 | Katani, S., Madadi, F., **Atapour, M.** and Rad, S.Z., 2013. Micromechanical modelling of damage behaviour of Ti–6Al–4V. Materials & Design, 49, pp.1016-1021. | |
| 2012 |  | |
| 90 | **Atapour, M.,** Fathi, M.H. and Shamanian, M., 2012. Corrosion behavior of Ti–6Al–4V alloy weldment in hydrochloric acid. *Materials and Corrosion*, *63*(2), pp.134-139. | |
| **2011** | | |
| 91 | **Atapour, M.,** Pilchak, A.L., Frankel, G.S. and Williams, J.C., 2011. Corrosion behavior of β titanium alloys for biomedical applications. *Materials Science and Engineering: C*, *31*(5), pp.885-891. | |
| 92 | **Atapour, M.**, Pilchak, A.L., Shamanian, M. and Fathi, M.H., 2011. Corrosion behavior of Ti–8Al–1Mo–1V alloy compared to Ti–6Al–4V. *Materials & Design*, *32*(3), pp.1692-1696. | |
| **2010** | | |
| 93 | **Atapour, M.,** Pilchak, A.L., Frankel, G.S. and Williams, J.C., 2010. Corrosion behavior of friction stir-processed and gas tungsten arc-welded Ti-6Al-4V. *Metallurgical and Materials Transactions A*, *41*(9), pp.2318-2327. | |
| 94 | **Atapour, M.,** Pilchak, A., Frankel, G.S. and Williams, J.C., 2010. Corrosion behaviour of investment cast and friction stir processed Ti–6Al–4V. *Corrosion Science*, *52*(9), pp.3062-3069. | |
| 95 | **Atapour, M.**, Pilchak, A., Frankel, G.S., Williams, J.C., Fathi, M.H. and Shamanian, M., 2010. Corrosion behavior of Ti-6Al-4V with different thermomechanical treatments and microstructures. *Corrosion*, *66*(6), pp.065004-065004. | |
| **2008** | | |
| 96 | **Atapour, M.** and Ashrafizadeh, F., 2008. Tribology and cyclic oxidation behavior of plasma nitrided valve steel. *Surface and Coatings Technology*, *202*(20), pp.4922-4929. | |

Awards

|  |
| --- |
| Awards |
| **Distinguished PhD student in the field of engineering of 2011, Iran** |
| **Distinguished Instructor of Isfahan University of Technology, 2021.** |
| **Distinguished Instructor of Isfahan University of Technology, 2022.** |
| **World’s Top 2% Scientists, 2021** |
| **World’s Top 2% Scientists, 2022** |

***Industrial project:***

1- The effects of shut pinning and presetting on the fatigue resistance of Tourtionebars of the Pride automobiles, **Ikad Company and Irankhodro Company**, Esfahan, Iran, 2005.

2- Spot welding of straps of automobiles batteries, **Tavanbattery Company**, Esfahan, Iran, 2005.

3- The study of pipes, pressure vessels and marine steel, **Mobarake Steel Company**, Isfahan, Iran, 2006

4- Photocatalytic activity and photo-electrochemical performance of trimetallic (Cu–Ni–Zn)/TiO2 coating on AISI 316L stainless steel for water treatment, **Isfahan Oil Refining Company, Isfahan**, 8335113115, Iran, 2017-2019

5- Corrosion aspects of dissimilar welding of 430-316 stainless steels, **Isfahan Oil Refining Company**, Isfahan, 8335113115, Iran

6- **Repairing the pumps**, National Iranian oil Company, Iran, 2014-2017

**Other activities**

|  |  |
| --- | --- |
| **Period** | **Activity** |
| 2001-2024 | Research Assistant, Surface Engineering Center, Isfahan, Iran |
| 2004-2005 | Research Assistant, Saipa, Ikad, Isfahan, Iran |
| 2006-2007 | Research Assistant, Steel Making Research Senter, Mobarake Steel Company, Isfahan, Iran. |
| 2007-2008 | Research Assistant, Saipa, Tavan Battery, Isfahan, Iran |
| 2010-Now | Member of Iranian Surface Science and Engineering Association |

***Memberships***

Member of Surface Science and Engineering Association

Member of Iranian Welding Society

**Patent**

|  |  |
| --- | --- |
| Patent | |
| Finding a method for evaluation of alpha and beta  Corrosion Behavior of Ti-6Al-4V alloy | No: 65455, Date: Jul 6, 2010 |
| Wear testing machine for different coatings | 2015 |
| Tribocorrosion testing machine | 2020 |

**Google scholar profile:**

<https://scholar.google.com/citations?view_op=list_works&hl=en&hl=en&user=k0OT0mcAAAAJ&sortby=pubdate>

**LinkedIn:**

<https://www.linkedin.com/in/masoud-atapour/?originalSubdomain=ir>

**References**:

1. Prof. Gerald S. Frankel, Ohio State University, USA
2. Dr. Yolanda Hedberg, Western University, Canada
3. Prof. Inger Odnevall Wallinder, KTH Royal Institute of Technology, Sweden.
4. Prof. Mikhail Zheludkevich, Helmholtz-Zentrum Geesthacht, Germany.
5. Prof. Stefano Trasatti, Milano University, Italy.