

# RESUME (updated: October 06, 2024)

## Biography

**Name** Keyvan Raeissi

**Date of Birth** 1975

**Nationality** Iranian

**Title** Professor

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## Educations

**B.Sc.:** Department of Materials Engineering, Isfahan University of Technology, Isfahan, Iran. (1993-1997)

**M.Sc.:** Department of Materials Engineering, Isfahan University of Technology, Isfahan, Iran. (1997-1999)

M.Sc. by Course and Research in: "Corrosion and Protection of Metals"

**Title of dissertation:** "Designing of slurry base coatings for reducing the oxidation rate of low alloy steels at high temperatures"

**Ph.D.:** Department of Materials Engineering, Isfahan University of Technology, Isfahan, Iran. (1999-2004)

Ph. D. by Course and Research in: "Materials Engineering"

**Title of dissertation:** "Study of Texture and Morphology in Zinc Electrodeposits"

**Research Assistant:** Department of Mining, Metals and Materials Engineering, McGill University, Montreal, Quebec, Canada. (2003- 2004)

## Academic Appointments

**Assistant Professor:** Department of Materials Engineering, Isfahan University of Technology, Isfahan, Iran. (2004-2008)

**Associate Professor:** Department of Materials Engineering, Isfahan University of Technology, Isfahan, Iran. (2009-2015)

**Full Professor:** Department of Materials Engineering, Isfahan University of Technology, Isfahan, Iran. **(2016)**

**Visiting Professor:** Department of Civil, Environmental, Aerospace and Materials Engineering (DICAM), Università degli Studi di Palermo (UNIPA), Palermo, Sicily, Italy. **(2016-2017)**

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**Industrial Collaborations Coordinator:** Department of Materials Engineering, Isfahan University of Technology, Isfahan, Iran. **(2006-2009)**

**Vice Councilor Education:** Steel Institute, Isfahan University of Technology, Isfahan, Iran. **(2011-2012)**

**Graduate Coordinator:** Department of Materials Engineering, Isfahan University of Technology, Isfahan, Iran. **(2012-2016)**

**Deputy of Educational Affairs:** Department of Materials Engineering, Isfahan University of Technology, Isfahan, Iran. **(2020- 2022)**

**Member of Editorial Board of:**

- International Journal of Iron & Steel Society of Iran **(2012-present)**
- Journal of New Materials **(2012-present)**
- Journal of Advanced Materials in Engineering **(2013-present)**

## Courses Taught

**Undergraduate Courses:**

- Corrosion and Oxidation of Metals
- Metals Corrosion (for chemistry students)
- Principals of Hydrometallurgy
- Principals of Pyrometallurgy
- Ore Dressing and Concentration

**Graduate Courses:**

- Modern Electrochemistry
- Advanced Corrosion
- Advanced Corrosion Lab
- Corrosion Inhibitors
- Paints & Conversion Coatings
- Corrosion and its Mechanical Aspects in Weldments

## Research Fields

Electrocatalytic degradation, Anodic oxidation, Cathodic deposition, Corrosion.

## Journal Papers

1. Aliramezani, R., **Raeissi, K.**, Labbaf, S., Hakimizad, A., "In-situ incorporation of polydopamine surface modified bioactive glass nanoparticles into a plasma electrolytic oxidation coating on biodegradable AZ31 Mg alloy: A study of bioactivity and corrosion performance" (2024) *Journal of Alloys and Compounds*, 1005, 176145.
2. Daneshnia, A., **Raeissi, K.**, Salehikahrizsangi, P., Khorsand, S., "A Comparative Study on the Corrosion Resistance and Long-Term Stability of Hierarchical Superhydrophobic Nickel Coatings Obtained by One-Step and Two-Step Electrodeposition Processes" (2024) *Journal of Materials Engineering and Performance*, 9, pp. 1-9.
3. Aghili, F., **Raeissi, K.**, Hoomehr, B., Kharaziha, M., Salehi, S. "Biological and Corrosion Barrier Characteristics of Electrophoretically Obtained Zinc Oxide/Bioactive Glass Composite Coating on Treated AZ31 Mg Alloy: Toward Further In Vitro Study" (2024) *Journal of Materials Engineering and Performance*, , pp. 1-17.
4. Rahmati, M., Saidi, R., **Raeissi, K.**, Hakimizad, A. "Effect of CaO Additive on the Properties of Plasma Electrolytic Oxidation Coatings on AZ31 Mg Alloy" (2024) *Journal of Materials Engineering and Performance*, , pp. 1-17.
5. Adel-Mehraban, F., Saidi, R., Moradmand, M., Zhiani M., **Raeissi, K.** "Corrosion performance of carbon steel and 304 stainless steel in activated methyl-diethanolamine solution using autoclave tests" (2024) *Corrosion Engineering, Science and Technology*, 59, 197-204.
6. Hayati, Z., Hoomehr, B., **Raeissi, K.** "The role of silica on the superiority of corrosion barrier performance and biological properties of sintered titania-silica composite coating electrophoretically deposited on 316L stainless steel" (2024) *Journal of Materials Research and Technology*, 29, 644-655.
7. Heydarian, A., Rahmati, M., Atapour, M., Hakimizad, A., **Raeissi, K.** "Effect of electrochemical parameters on wear and tribocorrosion capabilities of the PEO coatings generated through pulsed waveforms on AZ91 magnesium alloy" (2023) *Journal of Materials Research and Technology*, 27, 6148-6158.
8. Hoomehr, B., Aghili, F., Farhadian, M., **Raeissi, K.** "A Study on Reagent Concentration and Antibacterial Activity of Bioactive Glass-ZrO<sub>2</sub> and ZnO-Bioactive Glass Particles" (2023) *BioNanoscience*, 13, pp. 973-982.
9. Adel-Mehraban, F., **Raeissi, K.**, Karimzadeh, F. "Grafting aryldiazonium cations to copper: Insights into wettability behavior of a highly hydrophobic coating with enhanced corrosion performance" (2023) *Journal of Industrial and Engineering Chemistry*, 123, 488-499.
10. Daneshnia, A., **Raeissi, K.**, Salehikahrizsangi, P. "Corrosion protection of superhydrophobic/amphiphobic cobalt coating with anti-icing and self-cleaning properties fabricated by a one-step electrodeposition method" (2023) *Journal of Alloys and Compounds*, 948, 169767.
11. Sourani, F., **Raeissi, K.**, Enayati, M.H., Kharaziha, M., Hakimizad, M., Blugan, G., Salimijazi, H.R. "Corrosion and tribocorrosion behavior of ZrO<sub>2</sub>-Al<sub>2</sub>O<sub>3</sub> composite coatings developed by plasma electrolytic oxidation for load-bearing implants" (2023) *Journal of Materials Science*, 58, 4115-4136.
12. Moradi, M., Saidi, R., Hoomehr, B., **Raeissi, K.** "The effect of bioactive glass nanoparticles on corrosion barrier performance and bioactivity of zinc oxide coatings electrodeposited on Ti6Al4V substrate" (2023) *Ceramics International*, in press.
13. Hashemzadeh, M., **Raeissi, K.**, Ashrafizadeh, F., Frank S., Hakimizad, A., Santamaria, M., Lampke, T. "The importance of type of Ti-based additives on the PEO process and properties of Al<sub>2</sub>O<sub>3</sub>-TiO<sub>2</sub> coating" (2023) *Surfaces and Interfaces*, 36, 102523.
14. Hayati, Z., Hoomehr, B., Khalesi, F., **Raeissi, K.** "Synthesis and electrophoretic deposition of TiO<sub>2</sub>-SiO<sub>2</sub> composite nanoparticles on stainless steel substrate" (2023) *Journal of Alloys and Compounds*, 931, 167619.
15. Aghili, F., Hoomehr, B., Saidi, R., **Raeissi, K.** "Synthesis and electrophoretic deposition of zinc oxide and zinc oxide-bioactive glass composite nanoparticles on AZ31 Mg Alloy for biomedical applications" (2022) *Ceramics International*, 48, pp. 34013-34024.
16. Daneshnia, A., **Raeissi, K.**, Salehikahrizsangi, P. "Rapid one-step electrodeposition of robust superhydrophobic and oleophobic Ni coating with anti-corrosion and self-cleaning properties" (2020) *Surface and Coatings Technology*, 450, 129007.

17. Sourani, F., **Raeissi, K.**, Enayati, M.H., Kharaziha, M., Hakimizad, M., Blugan, G., Salimijazi, H.R. "Corrosion and tribocorrosion behavior of ZrO<sub>2</sub>-Al<sub>2</sub>O<sub>3</sub> composite coatings developed by plasma electrolytic oxidation for load-bearing implants" (2022) *Journal of Alloys and Compounds*, 920, 165856.
18. Karami, Z., Youssefi, M., **Raeissi, K.**, Zhiani, M. "Morphology control of polyaniline nanostructures on the surface of reduced graphene oxide/cotton fabric composite electrode for high-performance wearable supercapacitor application" (2022) *Journal of Materials Science*, 57, pp. 16776-16794.
19. Sanati, A., Kefayat, A., Rafienia, M., **Raeissi, K.**, Siavash Moakhar, R., Salamat, M.R, Sheibani, S., Presley, J.F., Vali, H. "A novel flexible, conductive, and three-dimensional reduced graphene oxide/polyurethane scaffold for cell attachment and bone regeneration" (2022) *Materials & Design*, 221, 110955.
20. Falahatian, M., Karimzadeh, F., **Raeissi, K.** "Preparation of paraffin/silica-graphene shape-stabilized composite phase change materials for thermal energy storage" (2022) *Journal of Materials Science: Materials in Electronics*, 33, p.p. 12846-12856.
21. Hoomehr, B., **Raeissi, K.**, Ashrafizadeh, F., Kharaziha, M., Labbaf, S. "Corrosion performance and biological properties of electrophoretically deposited bioactive glass-zirconia core-shell composite coating on Ti6Al4V substrate" (2022) *Surface and Coatings Technology*, 434, 128209.
22. Ghorbani, R., Rahmati, M., **Raeissi, K.**, Hakimizad, A., Santamaria, M. "Effect of Molybdate on Corrosion Performance of Oxide Coating Produced on 7075 Al Alloy Using PEO" (2022) *Coatings*, 12, 184.
23. Karbasi, M., Hashemifar, S.J., Karimzadeh F., Giannakis, S., Pulgarin, C., **Raeissi, K.**, Sienkiewicz, A. "Decrypting the photocatalytic bacterial inactivation of hierarchical flower-like Bi<sub>2</sub>WO<sub>6</sub> microspheres induced by surface properties: Experimental studies and ab initio calculations" (2022) *Chemical Engineering Journal*, 427, 131768.
24. Rahmati, M., **Raeissi, K.**, Toroghinejad, M.R., Hakimizad, A., Santamaria, M. "Corrosion and wear resistance of coatings produced on AZ31 Mg alloy by plasma electrolytic oxidation in silicate-based K<sub>2</sub>TiF<sub>6</sub> containing solution: Effect of waveform" (2022) *Journal of Magnesium and Alloys*, 10, pp. 2574-2587.
25. Hoomehr, B., **Raeissi, K.**, Ashrafizadeh, F., Labbaf, S., Kharaziha, M. "Electrophoretic deposition of bioactive glass/zirconia core-shell nanoparticles on Ti6Al4V substrate" (2021) *Ceramics International*, 47, pp. 34959-34969.
26. Hashemzadeh, M., **Raeissi, K.**, Ashrafizadeh, F., Hakimizad, A., Santamaria, M., Lampke, T. "Silicate and Hydroxide Concentration Influencing the Properties of Composite Al<sub>2</sub>O<sub>3</sub>-TiO<sub>2</sub> PEO Coatings on AA7075 Alloy" (2021) *Coatings*, 12, 33.
27. Hashemzadeh, M., **Raeissi, K.**, Ashrafizadeh, F., Hakimizad, A., Santamaria, M. "Incorporation mechanism of colloidal TiO<sub>2</sub> nanoparticles and their effect on properties of coatings grown on 7075 Al alloy from silicate-based solution using plasma electrolytic oxidation" (2021) *Transactions of Nonferrous Metals Society of China*, 31, pp. 3659-3676.
28. Varvara, S, Berghian-Grosan, C., Bostan, T., Ciceo, R.L., Salarvand, Z., Talebian, M, **Raeissi, K.**, Izquierdo, J., Souto, R.M. "Experimental characterization, machine learning analysis and computational modelling of the high effective inhibition of copper corrosion by 5-(4-pyridyl)-1,3,4-oxadiazole-2-thiol in saline environment" (2021) *Electrochimica Acta*, 398, 139282.
29. Saidi, R, **Raeissi, K.**, Ashrafizadeh, F., Kharaziha, M. "The effect of zinc oxide coating morphology on corrosion performance of Ti-6Al-4 V alloys" (2021) *Journal of Alloys and Compounds*, 883, 160771.
30. Khalesi, F., Farhadian, M., **Raeissi, K.** "Porosity tailoring of electrophoretically derived zirconia coatings using acidic and alkaline-based sol-gel post-treatment to enhance anti-corrosion performance" (2021) *Surface and Coatings Technology*, 425, 127692.
31. Karami, Z., Youssefi, M., **Raeissi, K.**, Zhiani, M. "Effect of the morphology of silver layer on electrical conductivity and electrochemical performance of silver/reduced graphene oxide/cotton fabric composite as a flexible supercapacitor electrode" (2021) *Journal of Energy Storage*, 42, 103042.
32. Salehikahrizsangi, P., **Raeissi, K.**, Karimzadeh, F., Calabrese, L., Proverbio, E. "Effects of Surface Morphology on Erosion-Corrosion and Corrosion Resistance of Highly Hydrophobic Nickel-Tungsten Electrodeposited Film" (2020) *Coatings*, 11, 1085.

33. Adel-Mehraban, F., **Raeissi, K.**, Karimzadeh, F., Pedersen, S.U., Salehzadeh, H., Daasbjerg, K. "A novel approach toward attachment of graphene oxide on copper using electrochemical grafting of an organic interlayer with enhanced corrosion performance" (2021) *Progress in Organic Coatings*, 154, 106185.
34. Sanati, A., Siavash Moakhar, R., Hosseini, I., **Raeissi, K.**, Karimzadeh, F., Jalali, M., Kharaziha, M., Sheibani, S., Shariati, L., Presley, J.F., Vali, H., Mahshid, S. "Gold Nano/Micro-Islands Overcome the Molecularly Imprinted Polymer Limitations to Achieve Ultrasensitive Protein Detection" (2021) *ACS Sensors*, 6, pp. 797-807.
35. Shabani, A., Nahvi, S.M., **Raeissi, K.** "Effect of Heat Treatment on Structure and Oxidation Resistance of Flame-Sprayed Ni-20 wt.% Al on Carbon Steel" (2021) *Journal of Thermal Spray Technology*, 30, pp. 739-753.
36. Karami, Z., Youssefi, M., **Raeissi, K.**, Zhiani, M. "An efficient textile-based electrode utilizing silver nanoparticles/reduced graphene oxide/cotton fabric composite for high-performance wearable supercapacitors" (2021) *Electrochimica Acta*, 368, 137647.
37. Mahmoudi, M., Farhadian, M., **Raeissi, K.**, Labbaf, S., Karimzadeh, F., Golozar, M.A., Barnoush, A. "The role of graphene oxide interlayer on corrosion barrier and bioactive properties of electrophoretically deposited ZrO<sub>2</sub>-10 at. % SiO<sub>2</sub> composite coating on 316 L stainless steel" (2020) *Materials Science and Engineering: C*, 117, 111342.
38. Rahmati, M., **Raeissi, K.**, Toroghinejad, M.R., Hakimizad, A., Santamaria, M. "The multi-effects of K<sub>2</sub>TiF<sub>6</sub> additive on the properties of PEO coatings on AZ31 Mg alloy" (2020) *Surface and Coatings Technology*, 402, 126296.
39. Saidi, R., Ashrafizadeh, F., **Raeissi, K.**, Kharaziha, M. "Electrochemical aspects of zinc oxide electrodeposition on Ti6Al4V alloy" (2020) *Surface and Coatings Technology*, 402, 126297.
40. Toulabifard, A., Rahmati, M., **Raeissi, K.**, Hakimizad, A., Santamaria, M. "The Effect of Electrolytic Solution Composition on the Structure, Corrosion, and Wear Resistance of PEO Coatings on AZ31 Magnesium Alloy" (2020) *Coatings*, 10, pp. 1-19.
41. Karbasi, M., Karimzadeh F., **Raeissi, K.**, Giannakis, S., Pulgarin, C. "Improving visible light photocatalytic inactivation of E. coli by inducing highly efficient radical pathways through peroxymonosulfate activation using 3-D, surface-enhanced, reduced graphene oxide (rGO) aerogels" (2020) *Chemical Engineering Journal*, 396, 125189.
42. Salehikahrizsangi, P., **Raeissi, K.**, Karimzadeh, F., Calabrese, L., Proverbio, E. "Highly hydrophobic nickel and nickel-tungsten coatings: Microstructural and surface properties" (2020) *Applied Surface Science*, 520, 146319.
43. Farhadian, M., **Raeissi, K.**, Golozar, M.A., Labbaf, S., Hajilou, T., Barnoush, A. "3D-Focused ion beam tomography and quantitative porosity evaluation of ZrO<sub>2</sub>-SiO<sub>2</sub> composite coating; amorphous SiO<sub>2</sub> as a porosity tailoring agent" (2020) *Applied Surface Science*, 511, 145567.
44. Karbasi, M., Karimzadeh F., **Raeissi, K.**, Rtimi, S., Kiwi, J., Giannakis, S., Pulgarin, C. "Insights into the Photocatalytic Bacterial Inactivation by Flower-Like Bi<sub>2</sub>WO<sub>6</sub> under Solar or Visible Light, Through in Situ Monitoring and Determination of Reactive Oxygen Species (ROS)" (2020) *Water*, 12, 1099.
45. Sanati, A., **Raeissi, K.**, Karimzadeh, F. "A cost-effective and green-reduced graphene oxide-polyurethane foam electrode for electrochemical applications" (2020) *FlatChem*, 20, 100162.
46. Heydarian, A., Atapour, M., Hakimizad, A., **Raeissi, K.** "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" (2020) *Surface and Coatings Technology*, 383, 125235.
47. Farhadian, M., **Raeissi, K.**, Golozar, M.A., Labbaf, S., Hajilou, T., Barnoush, A. "Electrophoretic deposition and corrosion performance of Zirconia-Silica composite coating applied on surface treated 316L stainless steel: Toward improvement of interface structure" (2019) *Surface and Coatings Technology*, 380, 125015.
48. Sanati, A., Jalali, M., **Raeissi, K.**, Karimzadeh, F., Kharaziha, M., Mahshid, S.S., Mahshid, S. "A review on recent advancements in electrochemical biosensing using carbonaceous nanomaterials" (2019) *Microchimica Acta*, 186, 773.
49. Talebian, M., **Raeissi, K.**, Atapour, M., Fernandez-Perez, B.M., Betancor-Abreu, A., Llorente, I., Fajardo, S., Salarvand, Z., Meghdadi, S., Amirnasr, M., Souto, R.M. "Pitting corrosion inhibition of 304 stainless steel in NaCl solution by three newly synthesized carboxylic Schiff bases" (2019) *Corrosion Science*, 160, 108130.

50. Rahmati, M., **Raeissi, K.**, Toroghinejad, M.R., Hakimizad, A., Santamaria, M. "Effect of pulse current mode on microstructure, composition and corrosion performance of the coatings produced by plasma electrolytic oxidation on AZ31 Mg alloy" (2019) *Coatings*, 9, 688.
51. Mahmoudi, M., **Raeissi, K.**, Karimzadeh, F., Golozar, M.A. "A study on corrosion behavior of graphene oxide coating produced on stainless steel by electrophoretic deposition" (2019) *Surface and Coatings Technology*, 372, pp. 327-342.
52. Toulabifard, A., Hakimizad, A., Di Franco, F., **Raeissi, K.**, Santamaria, M. "Synergistic effect of W incorporation and pulsed current mode on wear and tribocorrosion resistance of coatings grown by plasma electrolytic oxidation on 7075 Al alloy" (2018) *Materials Research Express*, 6, 106502.
53. Karbasi, M., Karimzadeh, F., Kiwi, J., **Raeissi, K.**, Pulgarin, C, Rtimi, S. "Flower-like magnetized photocatalysts accelerating an emerging pollutant removal under indoor visible light and related phenomena" (2019) *Journal of Photochemistry & Photobiology A: Chemistry*, 378, pp. 105-113.
54. Hasanpour, P., Salehikahrizangi, P., **Raeissi, K.**, Santamaria, M., Calabrese, L., Proverbio, E. "Dual Ni/Ni-Co electrodeposited coatings for improved erosion-corrosion behaviour" (2019) *Surface and Coatings Technology*, 368, pp. 147-161.
55. Sadeghi Erami, R., Amirnasr, Meghdadi, S. M., Talebian, M., Farrokhpour, H., **Raeissi, K.** "Carboxamide derivatives as new corrosion inhibitors for mild steel protection in hydrochloric acid solution" (2019) *Corrosion Science*, 151, pp. 190-197.
56. Fatehi, A., Eslami, A., Golozar, M.A., **Raeissi, K.**, Ashari, R. "Cathodic Protection Under a Simulated Coating Disbondment: Effect of Sulfate-Reducing Bacteria" (2019) *Corrosion*, 75, pp. 417-423.
57. Dehlordi, H.F., Toroghinejad, M.R., **Raeissi, K.** "An Investigation of the Bonding Behavior of Aluminum Strips in the Presence of an Alumina Layer During the Cold Roll Bonding Process" (2019) *Transactions of the Indian Institute of Metals*, 72, pp. 685-691.
58. Karimi, N., Kharaziha, M., **Raeissi, K.** "Electrophoretic deposition of chitosan reinforced graphene oxide-hydroxyapatite on the anodized titanium to improve biological and electrochemical characteristics" (2019) *Materials Science and Engineering: C*, 98, pp. 140-152.
59. Salehikahrizangi, P., **Raeissi, K.**, Karimzadeh, F., Calabrese, L., Patane, S., Proverbio, E. "Erosion-corrosion behavior of highly hydrophobic hierarchical nickel coatings" (2018) *Colloids and Surfaces A: Physicochemical and Engineering Aspects*, 558, pp. 446-454.
60. Akbari, E., Di Franco, F., Ceraolo, P., **Raeissi, K.**, Santamaria, M., Hakimizad, A. "Electrochemically-induced TiO<sub>2</sub> incorporation for enhancing corrosion and tribocorrosion resistance of PEO coating on 7075 Al alloy" (2018) *Corrosion Science*, 143, pp. 314-328.
61. Ghafaripoor, M., **Raeissi, K.**, Santamaria, M., Hakimizad, A. "The corrosion and tribocorrosion resistance of PEO composite coatings containing  $\alpha$ -Al<sub>2</sub>O<sub>3</sub> particles on 7075 Al alloy" (2018) *Surface and Coatings Technology*, 349, pp. 470-479.
62. Hakimizad, A., **Raeissi, K.**, Santamaria, M., Asghari, M. "Effects of pulse current mode on plasmaelectrolytic oxidation of 7075 Al in Na<sub>2</sub>WO<sub>4</sub> containing solution: From unipolar to soft-sparking regime" (2018) *Electrochimica Acta*, 284, pp. 618-629.
63. Khorsand, S., Sheikhi, A., **Raeissi, K.**, Golozar, M.A. "Hot Corrosion Behavior of Inconel 625 Superalloy in Eutectic Molten Nitrate Salts" (2018) *Oxidation of Metals*, 90, pp. 169-186.
64. Talebian, M., **Raeissi, K.**, Atapour, M., Fernandez-Perez, B.M., Salarvand, Z., Meghdadi, S., Amirnasr, M., Souto, R.M. "Inhibitive effect of sodium (E)-4-(4-nitrobenzylideneamino)benzoate on the corrosion of some metals in sodium chloride solution" (2018) *Applied Surface Science*, 447, pp. 852-865.
65. Salehikahrizangi, P., **Raeissi, K.**, Karimzadeh, F., Calabrese, L., Proverbio, E. "Highly hydrophobic Ni-W electrodeposited film with hierarchical structure" (2018) *Surface and Coatings Technology*, 344, pp. 626-635.

66. Hakimizad, A., **Raeissi, K.**, Golozar, M.A., Lu, X., Blawert, C., Zheludkevich, M.L. "Influence of cathodic duty cycle on the properties of tungsten containing Al<sub>2</sub>O<sub>3</sub>/TiO<sub>2</sub> PEO nano-composite coatings" (2018) *Surface and Coatings Technology*, 340, pp. 210-221.
67. Tabatabaei, F., Vardak, S., Alirezaei, S., **Raeissi, K.** "The tribocorrosion behavior of Ni-P and Ni-P-ZrO<sub>2</sub> coatings" (2018) *Kovove Materialy*, 56, pp. 379-387.
68. Heydari, H., Talebian, M., Salarvand, Z., **Raeissi, K.**, Bagheri, M., Golozar, M.A. "Comparison of two Schiff bases containing O-methyl and nitro substitutes for corrosion inhibiting of mild steel in 1 M HCl solution" (2018) *Journal of Molecular Liquids*, 254, pp. 117-187.
69. Aliramezani, R., **Raeissi, K.**, Santamaria, M., Hakimizad, A. "Characterization and properties of PEO coatings on 7075 Al alloy grown in alkaline silicate electrolyte containing KMnO<sub>4</sub> additive" (2017) *Surface and Coatings Technology*, 329, pp. 250-261.
70. Rashtchi, H., Acevedo Gomez, Y., **Raeissi, K.**, Shamanian, M., Eriksson, B., Zhiani, M., Lagergren, C., Wreland Lindstrom, R. "Performance of a PEM Fuel Cell Using Electroplated Ni–Mo and Ni–Mo–P Stainless Steel Bipolar Plates" (2016) *Journal of the Electrochemical Society*, 164, pp. F1427-F1436.
71. Aliramezani, R., **Raeissi, K.**, Santamaria, M., Hakimizad, A. "Effects of Pulse Current Mode on Plasma Electrolytic Oxidation of 7075 Al in KMnO<sub>4</sub> Containing Solution" (2017) *Journal of the Electrochemical Society*, 164, pp. C690-C698.
72. Sabooni, S., Rashtchi, H., Eslami, A., Karimzadeh, F., Enayati, H., **Raeissi, K.**, Hing Wang Ngan, A., Faghieh Imani, R., "Dependence of corrosion properties of AISI 304L stainless steel on the austenitic grain size" (2017) *International journal of Materials Research*, 108, pp. 1-8.
73. Sanati, A., **Raeissi, K.**, Edris, H. "Investigation of the Corrosion Behavior of Cathodic Arc Evaporated Stainless Steel Coating in 3.5% NaCl" (2017) *Protection of Metals and Physical Chemistry of Surfaces*, 53, pp. 902-909.
74. Mokhtari, S., Karimzadeh, F., Abbasi, M.H., **Raeissi, K.**, "Development of super-hydrophobic surface on Al 6061 by anodizing and the evaluation of its corrosion behavior" (2017) *Surface and Coatings Technology*, 324, pp. 99-221.
75. Hakimizad, A., **Raeissi, K.**, Golozar, M.A., Lu, X., Blawert, C., Zheludkevich, M.L. "The effect of pulse waveforms on surface morphology, composition and corrosion behavior of Al<sub>2</sub>O<sub>3</sub> and Al<sub>2</sub>O<sub>3</sub>/TiO<sub>2</sub> nano-composite PEO coatings on 7075 aluminum alloy" (2017) *Surface and Coatings Technology*, 324, pp. 208-221.
76. Sabooni, S., Rashtchi, H., Eslami, A., Karimzadeh, F., Enayati, M.H., **Raeissi, K.**, Ngan, A.H.W., Imani, R.F. "Dependence of corrosion properties of AISI 304L stainless steel on the austenite grain size" (2017) *International Journal of Materials Research*, 108, pp. 552-559.
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8. RASHTCHI H., RAEISSI K., SHAMANIAN M., ACEVEDO GOMEZ Y., LAGERGREN, C., WRELAND LINDSTROM R., "Enhanced electrical properties and fuel cell performance of 316L stainless steel bipolar plate coated with amorphous NiMoP layer", *9th Iranian Fuel Cell Seminar*, 2017.
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21. SAMIEE F., RAEISSI K., GOLOZAR M., "Corrosion barrier performance of Nanocrystalline ZrO<sub>2</sub> coatings and its Impedance Spectroscopy", *Proceedings of 6th Annual Seminar of Electrochemistry of Iran Kish International Convention Center-IRAN*, 2010.
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33. ASKARI M., GOLOZAR M.A., **RAEISSI K.**, "EIS and polarization studies on corrosion behavior of carbon steel in alkanolamine and sour water mixtures", *Proceedings of European Corrosion Congress-EUROCORN 2007*.
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40. NASRAZADANI S., **RAEISSI K.**, "Comparison of Four Slurry Coatings for Oxidation Resistance of a Low Alloy Steel", *Proceedings of Corrosion 2002*, #2367, 2002.

## Awards

1. Distinguished young researcher of Isfahan University of Technology, 2006.
2. The top researcher in projects for Mobareke Steel Company, 2006.
3. Distinguished researcher of Isfahan University of Technology, 2011.
4. The top researcher at Isfahan University of Technology, 2019.
5. Top 2% Scientists Worldwide, 2021, 2022, and 2023.

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