

Curriculum Vitae
Professor M.E. BAHROLOLOOM

According to Google Scholar Citations:

Number of Published Papers: 124

Total Number of Citations: 3798

h-index: 34

i10-index: 81



Personal Details:

Name: Mohammad Ebrahim Bahrolloom

Date of Birth: 25/3/1955

Marital Status: Married

Position: Professor of Materials Science and Engineering

Email: bahrolom@shirazu.ac.ir

Education:

1973-1974: 'O-level' in English, Guildford High School, Guildford, Surrey, UK.

1974-1976: 'A-level' in three subjects, Farnborough College of Technology, Farnborough, Hampshire, UK.

1976-1979: B.Sc. (Materials Chemistry) - University of London, London, UK.

1982-1984: Master's Degree (Solid State Physics), University of London, London, UK.

1986-1990: Ph.D. (Metallurgy), Glasgow Caledonian University, Scotland, UK.

1991-1994: Member of the Institute of Metal Finishing (MIMF), UK.

Academic Positions:

1979-1982: Teaching 'A'-level subjects at private tutoring schools in London, UK.

1984-1986: "Research Assistant" in "fatigue of metals", Dept. of Materials, University of London, UK.

1986-1990: "Development Technologist" for teaching and research in Glasgow Caledonian University, UK.

1990-1992: "Research Associate" in the Department of Materials, University of Newcastle Upon Tyne, UK.

1992-1998: Assistant Professor, Dept. of Materials Science and Engineering, Shiraz University, Shiraz, Iran.

1998-2004: Associate Professor Dept. of Materials Science and Engineering, Shiraz University, Shiraz, Iran.

2001-2002: Visiting Professor, Department of Materials, Loughborough University, Loughborough, UK.

2002-2002: Visiting Professor, Dept. of Mechanical Engineering, University of California, San Diego, USA.

2004-to present: Professor, Dept. of Materials Science and Engineering, Shiraz University, Shiraz, Iran.

Executive Positions:

1987-1990: Librarian of Glasgow Astronomical Society Library.

1994-1997: Head of Department of Materials Science and Engineering, Shiraz University, Shiraz, Iran.

1996-1998: Member of a committee for founding M.Sc. in "Corrosion and Protection of Metals".

2006-2009: Chief Librarian of Kharazmi Library, School of Engineering, Shiraz University, Shiraz, Iran.

2004-2005: Chairman of a committee for founding M.Sc. in "Nanomaterials".

Membership of Societies:

1987-1990: Member of Glasgow Astronomical Society, Scotland, UK.

1991-1994: Member of the Institute of Metal Finishing (MIMF), UK.

1995-to present: Member of the "Iranian Society of Surface Science and Engineering".

Academic Awards and Prizes:

- 1-Winner of **The Westinghouse Prize** (2005) awarded by Institute of Metal Finishing, Birmingham, UK.
- 2- Distinguished professor in teaching at the School of Engineering, Shiraz University (2012).
- 3- Distinguished professor in research at the School of Engineering, Shiraz University (2016).

Teaching Experience in Shiraz University:

Teaching the following subjects to undergraduate students (B.Sc):

Introduction to Materials Science and Engineering
Metal Finishing and Coatings
Corrosion and Protection of Metals
Introduction to Nanotechnology
Technical Writing and Communication

Teaching the following subjects to postgraduate students (M.Sc.):

Lattice Defects in Materials
Fatigue in Metals
Electrochemistry and Kinetics of Reactions
Advanced Electrochemistry
Advanced Kinetics of Reactions
Paints and Conversion Coatings
Environmental Degradation of Mechanical Properties of Materials
Fundamentals of Nanotechnology
Thin Film Technology
Biomaterials

Teaching the following subjects to Ph.D. students:

Biomaterials
Thin Film Technology

Research Experience

Supervising more than 65 M.Sc. and 15 Ph.D. theses and more than 120 papers published in the following international journals:

- 1- Tribology - Materials, Surfaces & Interfaces
- 2- Surface Engineering and Applied Electrochemistry
- 3- Journal of Nanotechnology Research
- 4- Materials Research Express
- 5- Computational Materials Science
- 6- Anti-Corrosion Methods and Materials
- 7- Journal of Thermal Spray Technology
- 8- Ceramics International
- 9- Chemosensors
- 10- Transactions of the Indian Institute of Metals
- 11- Protection of Metals and Physical Chemistry of Surfaces
- 12- Materials Research Innovations
- 13- Iranian Journal of Materials Science and Engineering
- 14- Journal of Sol-Gel Science and Technology
- 15- Fresenius Environmental Bulletin
- 16- Journal of Dental Biomaterials
- 17- Journal of Water Resource and Protection
- 18- Progress in Color, Colorants and Coatings
- 19- Metallurgical and Materials Transactions - A
- 20- Ceramics Silikaty
- 21- Micro and Nano Letters
- 22- Journal of Composite Materials

- 23- Journal of Coatings Technology and Research
- 24- Journal of Engineering Tribology
- 25- Engineering Failure Analysis
- 26- Journal of the Electrochemical Society
- 27- Journal of Applied Electrochemistry
- 28- Electrochimica Acta
- 29- Physica Status Solidi (a)
- 30- Transactions of the Institute of Metal Finishing
- 31- Surface and Coatings Technology
- 32- Surface Engineering
- 33- Applied Surface Science
- 34- Iranian Journal of Surface Science and Engineering
- 35- Materials Science and Engineering-C
- 36- Materials and Design
- 37- Advances in Applied Ceramics
- 38- Journal of Ceramic Processing Research
- 39- Materials Chemistry and Physics
- 40- Materials and Corrosion
- 41- Key Engineering Materials
- 42- Corrosion Engineering, Science and Technology
- 43- Corrosion Science
- 44- Journal of the Mechanical Behavior of Biomedical Materials
- 45- Computational Materials Science
- 46- World Applied Sciences Journal
- 47- Thin Solid Films
- 48- Materials Characterization
- 49- Vacuum
- 50- Journal of Materials Science and Technology
- 51- Journal of Materials Engineering and Performance
- 52- Desalination and Water Treatment
- 53- Journal of Food, Agriculture and Environment
- 54- World Academy of Science, Engineering and Technology
- 55- Journal of New Materials
- 56- Water Resources and Industry
- 57- Journal of Materials Science: Materials in Electronics
- 58- Chemosphere
- 59- Coatings
- 60- Iranian Journal of Materials Forming
- 61- Journal of Ultrafine Grained and Nanostructured Material
- 62- Emergent Materials
- 63- Separation and Purification Technology
- 64- Biomedical Physics and Engineering Express
- 65- Journal of Materials Research and Technology

Some Recent Published Papers in international journals:

2024-

- 1- A. Hadipour, M.R. Hosseini, **M.E. Bahrololoom** (2024), "Fabrication and characterization of Ni-TiO₂ and Ni-V₂O₅ single-layer and double-layer coatings with the approach of improving the wear and corrosion properties", *Surface and Coatings Technology*, Vol. 479, pp. 130580, doi.org/10.1016/j.surfcoat.2024.130580.

2023-

- 1- Zahra Damshekan, I. Moghim, **M.E. Bahrololoom** (2023), "Preparation of porous indium tin oxide thin films via saccharin-aided sol-gel process for carbon monoxide gas sensing applications", *Journal of Materials Science: Materials in Electronics*, Vol. 34-937, pp.1-16, doi.org/10.1007/s10854-023-10261-9.
- 2- S.M.J.S. Shourije, P. Dehghan, **M.E. Bahrololoom**, A.J. Cobley, V. Vitry, G. Taghavi Pourian Azar, H. Kamyab, M. Mesbah (2023), "Using fish scales as a new biosorbent for adsorption of nickel and copper ions from wastewater and investigating the effects of electric and magnetic fields on the adsorption process", *Chemosphere*, 317, 137829, doi.org/10.1016/j.chemosphere.2023.137829.
- 3- Yasaman Tadayon, **M.E. Bahrololoom**, S. Javadpour (2023), "An experimental study of sunflower seed husk and zeolite as adsorbents of Ni (II) ion from industrial wastewater", *Water Resources and Industry*, Vol. 30, 100214, doi.org/10.1016/j.wri.2023.100214.
- 4- M. Farjamfar, S.M. Zebarjad, **M.E. Bahrololoom**, R. Bazargan-Lari (2023), "The effect of strain rate on the tensile properties of PMMA/hydroxyapatite composite", *Iranian Journal of Materials Forming*, Vol. 10(2), pp. 35-43, doi.org/10.22099/IJMF.2023.47001.1254.
- 5- Mahboobeh Mobaraki, B. Afshang, M.R. Rahimpour, **M.E. Bahrololoom** (2023), "Investigation the anticoking performance of SiO₂ and TiO₂ single and double-layer coatings in the steam ethane cracking furnace", *Emergent Materials*, pp. 1-11, doi.org/10.1007/s42247-023-00451-w.
- 6- Aylar G.M. Ghashghaei and **M.E. Bahrololoom** (2023), "Comparing brightness of nanocrystalline nickel coating with traditional bright nickel coating and investigation of stereochemistry of brightener molecules", *Transactions of the IMF - The International Journal of Surface Engineering and Coatings*, DOI: 10.1080/00202967.2023.2264620.

2021-

- 1- Sedigheh Pirsalami, S. Bagherpour, **M.E. Bahrololoom**, M. Riazi (2021), "Adsorption efficiency of glycyrrhiza glabra root toward heavy metal ions: Experimental and molecular dynamics simulation study on removing copper ions from wastewater", *Separation and Purification Technology*, Vol. 275, 119215, doi.org/10.1016/j.seppur.2021.119215.
- 2- M. Mokhtarzadegan, S.M. Zebarjad, **M.E. Bahrololoom**, M. Modarres (2021), "Effect of sodium chloride as a porogen agent in mechanical properties of PLGA/HA nanocomposite scaffolds", *Biomedical Physics and Engineering Express*, Vol. 7, p. 35009, doi:10.1088/2057-1976/ab61c1.
- 3- M.A. Hormozi, M. Yaghoubi, **M.E. Bahrololoom** (2021), "A Facile Method for Fabrication of Hybrid Hydrophobic-Hydrophilic Surfaces on Anodized Aluminum Template by Electrophoretic Deposition", *Thin Solid Films*, Vol. 724, 138597, pp. 1-10, doi.org/10.1016/j.tsf.2021.138597.
- 4- Fatemeh Mousavi, **M.E. Bahrololoom**, R. Kamjou (2021), "Influence of Pb and Co-doping on photocatalytic degradation performance of ZnO thin films", *Journal of Ultrafine Grained and Nanostructured Materials*, Vol. 54, Issue 2, pp. 173-179, DOI: 10.22059/jufgnsm.2021.02.06.
- 5- E. Vafa, R. Bazargan-Lari, **M.E. Bahrololoom** (2021), "Synthesis of 45S5 bioactive glass-ceramic using the sol-gel method, catalyzed by low concentration acetic acid extracted from homemade vinegar", *Journal of Materials Research and Technology*, Vol. 10, pp. 1427-1436, doi.org/10.1016/j.jmrt.2020.12.093.

2020-

- 1- S. M. J. S. Shourije and **M.E. Bahrololoom**, (2020), "Comparison of effects of simulated electric field interference and presence of a barrier in the nickel electroplating process to experimental data", *Transactions of the Institute of Metal Finishing*, Vol. 98, Issue 11, pp. 303-313, //doi.org/10.1080/00202967.2020.1819021.
- 2- R. Mousavi, **M.E. Bahrololoom**, F. Deflorian, (2020), "Morphology, Hardness, and Wear Properties of Ni-Base Composite Coating Containing Al Particle", *Coatings*, Vol. 10, pp. 346, //doi.org/10.3390/coatings10040346.

2019-

- 1- S. M. J. S. Shourije and **M.E. Bahrololoom**, (2019), "Effect of current density, MoS₂ content and bath agitation on tribological properties of electrodeposited nanostructured Ni-MoS₂ composite coatings", *Tribology - Materials, Surfaces & Interfaces*, Vol. 13, Issue 2, pp. 76-87, DOI:10.1080/17515831.2019.1589160.
- 2- A. Hadipour and **M.E. Bahrololoom** (2019), "Theoretical study of hardness variation with pulse parameters in composite coatings electrodeposited by pulsed currents", *Transactions of the IMF*, Vol. 97, Issue 1, pp. 43-47, DOI.org/10.1080/00202967.2019.1551297.
- 3- Sara Zahmatkesh, Seyed Mojtaba Zebarjad, **Mohammad Ebrahim Bahrololoom**, Erfan Dabiri, S.M. Arab, (2019), "Synthesis of ZnO/In₂O₃ composite nanofibers by co-electrospinning: A comprehensive parametric investigating the process", *Ceramics International* Vol. 45, pp. 2530–2541, DOI.org/10.1016/j.ceramint.2018.10.184.
- 4- Saeideh Fayyazi, Mahdi Kasraei, **Mohammad Ebrahim Bahrololoom**, (2019), "Improving Impact Resistance of High-Velocity Oxygen Fuel-Sprayed WC-17Co Coating Using Taguchi Experimental Design", *J. Thermal Spray Tech.*, Vol. 28, pp. 706–716, DOI.org/10.1007/s11666-019-00844-6.
- 5- Niloofar Abed, **Mohammad Ebrahim Bahrololoom**, Mehdi Kasraei, (2019), "The Effect of Nano-Structured Nickel Coating on Reducing Abrasive Wear of Tillage Tine", *J. Nanotechnol. Res.*, Vol. 1, Issue 2, pp. 058-073, DOI: 10.26502/fjnr005.
- 6- Fatemeh Moosavi, **Mohammad Ebrahim Bahrololoom**, Ramin Kamjou, Ali Mirzaei, Salvatore Gianluca Leonardi and Giovanni Neri, (2019), "Hydrogen Sensing Properties of Co-Doped ZnO Nanoparticles", *Chemosensors*, Vol. 6, 61, pp. 1-11, doi.: 10.3390/chemosensors6040061.

2018-

- 1- A. Bahrololoomi and **M.E. Bahrololoom**, (2018), "Instability of Ferrous Sulfate Bath for Electrodeposition of Nanocrystalline Iron Coating", *Surface Engineering and Applied Electrochemistry*, Vol. 54, No. 6, pp. 562–576, DOI. 10.3103/S1068375518060029.
- 2- Saeideh Fayyazi, **Mohammad Ebrahim Bahrololoom**, Mahdi Kasraei, (2018), "Optimizing High Velocity Oxygen Fuel-Sprayed WC–17Co Coating Using Taguchi Experimental Design to Improve Tribological Properties", *Trans Indian Inst Met.* Vol. 71, Issue 12, pp. 3045–3062, DOI.org/10.1007/s12666-018-1406-9.
- 3- Ali Hadipour and **Mohammad Ebrahim Bahrololoom**, (2018), "Influence of Type of Bath Agitation (Magnetic Stirring and Rotating Disk Cathode) on Tribological Properties of Nickel Electrodeposits", *Protection of Metals and Physical Chemistry of Surfaces*, Vol. 54, No. 2, pp. 274–281. DOI: 10.1134/S2070205118020181.

- 4- Fatemeh Heidari, Mehdi Razavi, **Mohammad Ebrahim Bahrololoom**, Mostafa Yazdimamaghani, Mohammadreza Tahriri, Hari Kotturi, Lobat Tayebi, (2018), "Evaluation of the mechanical properties, in vitro biodegradability and cytocompatibility of natural chitosan/hydroxyapatite/nano-Fe₃O₄ Composite", *Ceramics International*, Vol. 44, pp. 275–281, DOI.org/10.1016/j.ceramint.2017.09.170.
- 5- Fatemeh Heidari, Mehdi Razavi, **Mohammad Ebrahim Bahrololoom**, Mohammadreza Tahriri and Lobat Tayebi, (2018), "Investigation of the mechanical properties and degradability of a modified chitosan-based scaffold", *Materials Chemistry and Physics*, Vol. 204, pp. 187-194, DOI: org/10.1016/j.matchemphys.2017.10.045.

2017-

- 1- Zahra Abbasi, **Mohammad Ebrahim Bahrololoom**, Rafat Bagheri, Mohammad H. Shariat, (2017), "Sintering of dental ceramic/sol–gel-derived bioactive glass mixtures for dental applications: the study of microstructural, biological, and thermal properties", *J. Sol-Gel Sci. Technol.* Vol. 81, pp. 523–533, DOI: 10.1007/s10971-016-4215-9.
- 2- O. Razmjoo, **M.E. Bahrololoom***, P. Najafisayar, (2017), "The effect of current density on the composition, structure, morphology and optical properties of galvanostatically electrodeposited nanostructured cadmium telluride films", *Ceramics International*, Vol. 43, pp. 121–127, DOI: org/10.1016/j.ceramint.2016.09.120.
- 3- Z. Ghaferi, S. Sharafi, **M.E. Bahrololoom**, (2017), "Characterization of Co-Fe magnetic films fabricated by galvanostatic electrodeposition", *Iranian Journal of Materials Science and Engineering*, Vol. 14, Issue 2, pp. 60-70, DOI: 10.22068/ijmse.14.2.60.

2016-

- 1- Fatemeh Heidari, Mehdi Razavi, **Mohammad Ebrahim Bahrololoom**, Mohammadreza Tahriri, Morteza Rasoulianboroujeni, Hari Koturi and Lobat Tayebi, (2016), "Preparation of natural chitosan from shrimp shell with different deacetylation degree", *Materials Research Innovations*, pp. 1-5, DOI: 10.1080/14328917.2016.1271591.
- 2- Zahra Shafiee, **Mohammad Ebrahim Bahrololoom***, Babak Hashemi, (2016), "Electrodeposition of nanocrystalline Ni/Ni–Al₂O₃ nanocomposite modulated multilayer coatings", *Materials and Design*, Vol. 108, pp. 19–26, DOI.org/10.1016/j.matdes.2016.06.018.
- 3- Sareh Vafakhah*, **Mohammad Ebrahim Bahrololoom**, Mohsen Saeedikhani, (2016), "Adsorption Kinetics of Cupric Ions on Mixture of Modified Corn Stalk and Modified Tomato Waste", *Journal of Water Resource and Protection*, Vol. 8, pp. 1238-1250, DOI.org/10.4236/jwarp.2016.813095.
- 4- R. Mousavi, **M.E. Bahrololoom**, F. Deflorian, (2016), "Preparation, corrosion, and wear resistance of Ni - Mo/Al composite coating reinforced with Al particles", *Materials and Design*, Vol. 110, pp. 456–465, DOI.org/10.1016/j.matdes.2016.08.019.
- 5- Monfared M*, **Bahrololoom ME**, (2016), "Fractography and Mechanical Properties of Urethane Dimethacrylate Dental Composites Reinforced with Glass Nanoparticles", *Journal of Dental Biomaterials*, Vol. 3, Issue 4, pp. 327-334.

- 6- S. M. Hassan Zadeh Shirazi, **M. E. Bahrololoom***, and M. H. Shariat, (2016), "The Role of Functional Groups of Saccharin in Electrodeposition of Nanocrystalline Nickel", *ISSN 1068-3755, Surface Engineering and Applied Electrochemistry*, Vol. 52, No. 5, pp. 434–442. DOI: 10.3103/S1068375516050112.
- 7- A. Hadipour, **M. E. Bahrololoom**, S. M. Monirvaghefi, A. R. Bahramkia, (2016), "Evaluation of Wear Properties for Ni–P Electroless Coatings", *Trans. Indian Inst. Met.*, Vol. 69, Issue 9, pp. 1733–1743, DOI 10.1007/s12666-016-0833-8.
- 8- Borhaneddin Boroomand¹, Fereydu Vafaii¹, **Mohammad Ebrahim Bahrololoom**, Chicgoua Noubactep (2016), "Testing willow leaves for the removal of Cu²⁺ from aqueous effluents", *Fresenius Environmental Bulletin*, Vol. 25, Issue 11, pp. 4569-4577.
- 9- Zahra Abbasi, **Mohammad Ebrahim Bahrololoom**, Rafat Bagheri., Mohammad H. Shariat, (2016), "Characterization of the bioactive and mechanical behavior of dental ceramic/ sol–gel derived bioactive glass mixtures", *Journal of the Mechanical Behavior of Biomedical Materials*, Vol. 5 4, pp. 1 1 5 – 1 2 2, DOI.org/10.1016/j.jmbbm.2015.09.025.
- 10- R. Mousavi*, **M.E. Bahrololoom**, F. Deflorian, L. Ecco, (2016), "Improvement of corrosion resistance of Ni Mo alloy coatings: Effect of heat treatment", *Applied Surface Science* Vol. 364, pp. 9–14, DOI.org/10.1016/j.apsusc.2015.12.041.
- 11- Sara Fazli and **M. E. Bahrololoom***, (2016), "Effect of plating time on electrodeposition of thick nanocrystalline permalloy foils", *Transactions of the IMF, The International Journal of Surface Engineering and Coatings*, Vol. 94, Issue 2, pp. 92-98, DOI: 10.1080/00202967.2015.1122918.
- 12- Sara Fazli and **M.E. Bahrololoom**, (2016), "Electrodeposition of Nanostructured Permalloy and Permalloy-Magnetite Composite Coatings and Investigation of Their Magnetic Properties", *METALLURGICAL AND MATERIALS TRANSACTIONS A*, VOLUME 47A, pp. 4316-4324, DOI: 10.1007/s11661-016-3575-7.
- 13- Fatemeh Heidari, Mehdi Razavi, **Mohammad Ebrahim Bahrololoom**, Reza Bazargan-Lari, Daryoosh Vashae, Hari Kotturi, Lobat Tayebi, (2016), "Mechanical properties of natural chitosan/hydroxyapatite/magnetite nanocomposites for tissue engineering applications", *Materials Science and Engineering C*, Vol. 65, pp. 338–344, DOI.org/ 10.1016/j.msec.2016.04.039.
- 14- Fatemeh Moosavi, **Mhammad Ebrahim Bahrololoom***, Ramin Kamjou, (2016), "Effects of Cu doping on nanostructure, morphology and photocatalytic activity of ZnO thin films synthesized by sol-gel method", *STUDIA UBB CHEMIA*, Vol. 61, Issue 1, pp. 79-87.
- 15- M. Azadi*, **M. E. Bahrololoom** and M. J. Olya, (2016), "EIS Study of Epoxy Paints in Corrosive Environments with a New Filler: Rice Husk Ash", *Prog. Color Colorants Coat.* Vol. 9, pp. 53-60.