

## Research Publications

Sr. No.	Title of Research Article	Published in
1.	“Porosity Formation and Remedial Measures in High Pressure Die Cast Aluminum Alloy Components”	“Proceedings of the Pakistan Academy of Sciences” (Journal of Pakistan Academy of Sciences). Vol. 39 No. 2, Published in December 2002
2	“Re-precipitation of Carbides in Austenitic Manganese Steel Parts in service”	Proceedings of First International Conference on “Frontiers of Advanced Engineering Materials (FAEM- 04)” held on 20-22 September 2004 organized by PCSIR Labs Complex, Lahore. Published in 2005. ISBN 978-969-9457-00-5
3.	“A Study of Electroplating of Nickel and Chromium on Mild Steel“	“Journal of Faculty of Engineering and Technology”, University of the Punjab, Lahore, Published in 2007
4.	“Development of G-Al-Si 10 Mg (LM 09) Alloy and Effect of Artificial Aging Time on Its Hardness”	Proceedings of Second International Conference on “Frontiers of Advanced Engineering Materials (FAEM-06)” held on 04-06 December 2006 organized by PCSIR Labs Complex, Lahore. 2008 ISBN 978-969-9457-01-2
5.	“Effect of Silicon Content on the Hardness of Artificially Aged LM25 Alloy”	Proceedings of Third International Conference on “Frontiers of Advanced Engineering Materials (FAEM-08)” held on December 15-17, 2008 organized by PCSIR Labs Complex, Lahore. 2009 ISBN 978-969-9457-02-9
6.	“Heterogeneous Nucleation of Graphite in carbon steel”	“Proceedings of 15 <sup>th</sup> European Microscopy Congress”, held in Manchester, U.K. on September 16-21, 2012. ISBN 978-0-9502463-5-2
7.	“Machinability of Graphitised Carbon Steel”	Ph.D. Thesis, University of Leeds, 2013.
8.	“Corrosion Inhibition of 316L Stainless Steel in Plain Tap Water”	“International Journal of Chemistry and Material Science”, Vol. 2(2), March, 2014
9.	“Effect of Post Heat-treatment on Hardness and Case Depth of 17NiCrMo6-4 Gear Steel after Liquid Carburizing”	“Journal of Pakistan Institute of Chemical Engineers”, JPICChE Vol. 42 (2) 2014: 87-92.
10.	“Maleated High Oleic Sunflower Oil-Treated Cellulose Fiber-Based Styrene Butadiene Rubber	“Polymer Composites”, 2014. IF 2.3

- Composites”
11. “Effect of Starting Microstructure on Material Removal Rate (MRR) of AISI 1045 Steel in (Die-Sinking) Electric Discharge Machining” “Journal of Pakistan Institute of Chemical Engineers”, JPICChE Vol. 43 (2) 2015
  12. “Effect of starting microstructure upon the nucleation sites and distribution of graphite particles during a graphitising anneal of an experimental medium-carbon machining steel” “Materials Characterization” Vol. 106, pp. 86-92, May, 2015.  
IF 3.5
  13. “Graphitisation: A Potential New Route to Free-machining Steels” Proceedings of “HSLA Steels 2015 and Microalloying 2015 and OES 2015 Conference” held in Zhejiang Hotel, Hangzhou, China on November 11-13, 2015 organized by The Chinese Society for Metals and Chinese Academy of Engineering. Online on 6 NOV 2015, Wiley Online Library.
  14. “Carburising of Low-Carbon Steel Using Carbon Black Nanoparticles” “Arabian Journal for Science and Engineering” June, 2016  
IF 1.7
  15. “High-Resolution Metallography of a Coarse Microstructure: Graphite Formation in the Solid-State in Steel” “Published in the ASTM International Journal of Materials Performance and Characterization” Vol. 5, pp. 780-795, 2016.
  16. “Machinability of an Experimental Graphitised Carbon Steel” Online journal “Materials Science Forum” Vol. 879, pp. 477-482, 2017
  17. “Effect of Surface Profile of Mild Steel Substrate upon Adhesion Strength of WC-11%Co Flame Spray Coating” “Journal of Faculty of Engineering and Technology”, University of the Punjab, Lahore, Vol. 24 No.2, 2017
  18. “A high-resolution study of graphite nodule formation in experimental Medium carbon machining steel” “Materials Characterization” Vol. 131, pp. 508-516, July, 2017  
IF 3.5
  19. “Quenching and Partitioning of AISI 4340 Steel” “Journal of Faculty of Engineering and Technology”, University of the Punjab, Lahore, Vol. 24 No.2, 2017
  20. “Graphene Oxide Coatings Deposited on Steel Substrate Using Electrophoretic Deposition and Electrochemical Evaluation of Coatings in Saline Media” “Key Engineering Materials” 778, pp.111-117, 2018
  21. “Investigation on microstructural, mechanical, and electrochemical properties of water, brine quenched and tempered low carbon steel” “Materials Research Express” Vol. 6 (2019)  
IF 1.9

22. “Development of high strength austempered ductile iron(ADI) from conventional pig iron” “Materials Research Express” Vol. 6 (2019) IF 1.9
23. “Effect of morphology of manganese oxide on the capacitive behavior of electrodes” “Materials Research Express” Vol. 6 (2019) IF 1.9
24. “Mechanical properties of graphene oxide coated-glass fiber reinforced unsaturated polyester composites” “Materials Research Express” Vol. 6 (2019) IF 1.9
25. “Effect of tempering time on microstructure, mechanical, and electrochemical properties of quenched–partitioned–tempered Advanced High Strength Steel (AHSS)” “Materials Research Express” (2019) IF 1.9
26. “ $\gamma$ -Fe<sub>2</sub>O<sub>3</sub> photo catalyst immobilized on a porous Ni substrate for recyclable solar photo catalysis” “Journal of Nanoparticle Research” (2019) IF 2.1
27. “Effect of voltage and spray–off distance of electric-arc spray technique on surface properties of nickel–chrome (Ni–Cr) coating developed on 304L stainless steel” “Materials Research Express” (2019) IF 1.9
28. “Mechanical and corrosion properties of medium carbon low alloy steel after cyclic quenching and tempering heat–treatments” “Materials Research Express” (2019) IF 1.9
29. “Optimized Corrosion Performance of AISI 1345 Steel in Hydrochloric Acid Through Thermo–Mechanical Cyclic Annealing Processes” “Crystals” Vol. 10 (2020) IF 2.4
30. “Effect of hot rolling on microstructures and mechanical properties of Ni base superalloy” “Vacuum” Vol. 174 (2020) IF 2.9

31. “Raman spectroscopy study of the crystallinity of graphite formed in an experimental free-machining steel” “Materials Characterization” (2020)  
IF 3.5
32. “Synthesis and characterization of titanium dioxide nanoparticles by chemical and green methods and their antifungal activities against wheat rust” “Chemosphere” Vol. 258 (2020)  
IF 5.1
33. “Thermally Reduced Graphene Oxide-Reinforced Acrylonitrile Butadiene Styrene Composites Developed by Combined Solution and Melt Mixing Method” “Arabian Journal for Science and Engineering” (2020)  
IF 1.7
34. “Microstructural, Mechanical, and Electrochemical Properties of Quenched and Partitioned 3 wt% Mn Steel” “Arabian Journal for Science and Engineering” (2020)  
IF 1.7
35. “La<sub>0.75</sub>Sr<sub>0.25</sub>Cr<sub>0.5</sub>Mn<sub>0.5</sub>O<sub>3</sub> perovskite developed for supercapacitor applications” “Journal of Energy Storage” Vol. 32 (2020)  
IF 3.7
36. “Corrosion study of zinc rich epoxy ester paints for cold galvanizing of mild steel” “Surface Review and Letters” (2021)  
IF 0.77
37. “Biological synthesis, characterization of three metal-based nanoparticles and their anticancer activities against hepatocellular carcinoma HepG2 cells” “Ecotoxicology and Environmental Safety” Vol. 223 (2021)  
IF 7.1
38. “An investigation of accelerated graphitisation kinetics to improve the machinability of an experimental medium-carbon free-machining steel” “Journal of Manufacturing Processes” Vol. 69 (2021)  
IF 5.6
39. “Corrosion Study Of Zinc-Rich Epoxy Ester Paints For Cold Galvanizing Of Mild Steel” “Surface Review and Letters (SRL)” Vol. 28 (2021)  
IF 1.3
40. “Biodegradable properties of AZ31-0.5 Ca magnesium alloy” “Materials Technology” (2022)  
IF 3.8

41. “Influence of spark plasma sintering temperature and hydroxyapatite nanoparticles on properties of HA based functionally graded materials for bone prosthesis” “Ceramics International” (2022) IF 5.5