PERSONAL INFORMATION:

Full Name: Mohammadreza Dehghani Firouzabadi

Nationality: Iranian

Academic Level: Associate Professor

Cell: 0098-9122044207

E-mail: mdehghani@gau.ac.ir

EDUCATION:

Diploma in Natural Sciences, Tehran, Iran, 1985

B.Sc. in Wood Science & Technology, Gorgan University, Iran, 1991

M.Sc. in Wood Science & Technology, Tarbiat Modarres University, 1994

Ph.D. in Wood and Paper Science & Technology, Moscow State Forest University, 2004

RESEARCH INTEREST:

Pulping, Papermaking, Paper Converting, Biorefinery in the Pulp and Paper Industry

PUBLICATION:

Selected Papers in Scientific-Research or ISI Journals since 2017:

1. Surface Chemistry of Gravure Printed Décor Paper and Adhesion of Melamine Formaldehyde Resin Coatings. 2017. Bioresources, 12(2), 4239-4258.

2. Cellulose nanofiber/carboxymethyl cellulose blends as an efficient coating to improve the structure and barrier properties of paperboard. 2017. Cellulose, 24(7), 3001-3014.

3. Catalytic fast pyrolysis of sugarcane bagasse pith with HZSM-5 catalyst using tandem micro-reactor GC-MS, 2017. Energy Sources,

4. Biorefinery of Bagasse and Its Pith Fast Pyrolysis in Fluidized Bed Reactor. 2017. J. of Wood and Forest Science and Technology, 24 (4), 27-40.

5. Effects of washing method on the bagasse pulping characteristics processed by the sulfur dioxide-ethanol-water (SEW) method. 2017. Iranian Journal of wood and Paper Industries, 7(4), 549-559.

6. Comparative study on antimicrobial property of cellulose-silver nanocomposite and nanocellulose film coated by silver nanoparticles. 2017. Iranian Journal of wood and Paper Sciences Research, 31(4), 541-556.

7. The effect of using synthesis zeolite 4A as coating-pigment on physical properties of paper. 2017. J. of Wood and Forest Science and Technology, 24 (2), 143 - 156.

8. The effect of coatings and coating weight by two types of PCC on barrier and optical properties and roughness of paper. 2017. Iranian Journal of wood and Paper Industries, 8(2), 283-295.

9. Comparative study of the characteristics of pulp and paper prepared by Sulfur dioxide-Ethanol-Water (SEW) and soda from bagasse fiber. 2017. J. of Wood and Forest Science and Technology, 24 (3), 221-239.

10. Production of alpha-cellulose from bagasse and evaluation of its characteristics , J. of Wood and Forest Science and Technology. 2017. 24 (3), 183-195.

11. Fluting and Kraft liner papers with GCC coatings and PVA binder. 2017. J. of Wood and Forest Science and Technology, 24 (1), 145 - 159.

12. Production and evaluation of high yield cellulose acetate using iodine as catalyst and purification of cotton linters, Forest and Wood Products. 2018. 70 (4), 671-679.

13. Sugarcane bagasse ex-situ catalytic fast pyrolysis for the production of Benzene, Toluene and Xylenes (BTX). 2018. Journal of Analytical and Applied Pyrolysis, 131, 1-8.

14. SO2 – ethanol – water (SEW) and kraft pulping of giant milkweed (Calotropis procera) for cellulose acetate film production. 2018. Cellulose, 21 (1).

15. Application of cellulose nanofibril (CNF) as coating on paperboard at moderate solids content and high coating speed using blade coater. 2018. Progress in Organic Coating, 122, 207-218.

16. Evaluate the performance of clay and nanoclay in sanitary paper in terms of antibacterial, physical and mechanical properties. 2017. J. of Wood and Forest Science and Technology, 24 (4), 145 - 159.

17. Effect of cellulose acetatetypes on produced membranes properties in order ulterafiltrate of white water in tissue production line. 2018. J. of Wood and Forest Science and Technology, 25 (2), 137 - 152.

18. Effect of calendaring on physical and mechanical properties of coated papers. 2019. Iranian Journal of wood and Paper Industries, 10(2), 273-285.

19. Coupling Nanofibril Lateral Size and Residual Lignin to Tailor the properties of Lignocellulose Films. 2019. Advanced Materials Interfaces, DOI: 10.1002/admi.201900770.

20. Nano-lignocellulose from recycled fibers in coatings from aqueous and ethanolic media: effect of residual lignin on wetting and offset printing quality. 2019. Nordic Pulp & Paper Research Journal, DOI: 10.1515/npprj.20180053.

21. Barrier and structural properties of coated trimethoxymethylsilane layer on coated paper with ethylene vinyl alcohol. 2019. Iranian Journal of Wood and Paper Science Research, 34(2), 255 - 262.

22. Optimization of Dimethoxydimethylsilane Coating Using Plasma Enhanced Chemical Vapor Deposition (PECVD) on Ethylene Vinyl Alcohol Coated Paper. 2019. Iranian Journal of Wood and Paper Science Research, 34(1), 100 - 111.

23. Investigation on the effect of anionic trashes management through removing and neutralizing of dissolved and colloidal substances on the properties of chemi-mechanical pulp and paper. 2018. Iranian Journal of Wood and Paper Science Research, 33(3), 100 - 111.

24. Evaluation of starch films containing cellulose and lignocellulose for food packaging. 2019. Iranian Journal of Wood and Paper Industries, 10(1), 35-47.

25. Evaluation of micro and Nano-fibers produced from old corrugated container (OCC) fibers by super disk grinding method. 2019. J. of Wood & Forest Science and Technology, 26 (1), 65 – 77.

26. How properties of cellulose acetate films are affected by conditions of iodine-catalyzed acetylation and type of pulp. 2019. Cellulose 26, 6119-6132.

27. Effect of graphene oxide nanoparticle coatings on the strength of packaging paper and its barrier and antibacterial properties. 2019. BOIS & FORETS DES TROPIQUES 342, 69-78.

28. Producing and evaluating of Bacterial Nano-cellulose (BNC) using Acetobacter xylinum bacteria. 2019. Journal of Wood and Forest Science and Technology 26 (3), 29-42.

29. Evaluation and comparision of mechanical and barrier properties of stone paper and gloss paper. 2019. Iranian Journal of Wood and Paper Industries 10 (3), 373-384.

30. Effect of coating type and grammage of printing paper on water drop contact angle over time. 2020. Iranian Journal of Wood and Paper Science Research 35 (2), 165-177.

31. Cellulose and its nano-derivatives as a water-repellent and fire-resistant surface: a review. 2021. Materials 15 (1), 82.

32. Microfibrillated cellulose films containing chitosan and tannic acid for wound healing applications. 2021. Journal of Materials Science: Materials in Medicine 32 (6), 67.

33. Study of antibacterial activity and other properties of paper coated by selenium nanoparticles. 2021. Iranian Journal of Wood and Paper Industries (1), 29-44.

34. The effect of chitosan utilization on dimension stability of particleboard. 2021. Journal of Wood and Forest Science and Technology 27 (4), 1-18.

35. Cellulose and Its Nano-Derivatives as a Water-Repellent and Fire-Resistant Surface: A Review. Materials 2022, 15, 82.

36. Evaluation of quantitative and qualitative characteristics of stem fibers and pulp obtained from seed flax (Linum usititassimum L.). 2023. Journal of Wood and Forest Science and Technology 30 (4), 40-56.

37. Effect of the CNFs and CNCs based-flame retardants on the fire retardancy of the hand-made coated paperboard. 2023. Iranian Journal of Wood and Paper Science Research 38 (4), 330-340.

38. Preparation, characteristics, and soil-biodegradable analysis of corn starch/nanofibrillated cellulose (CS/NFC) and corn starch/nanofibrillated lignocellulose (CS/NFLC) films. 2023. Carbohydrate Polymers 309, 120699.

39. The effect of chitosan on the properties of microfibrillated cellulose (MFC) film used in food packaging. 2023. Journal of Wood and Forest Science and Technology 30 (2), 109-123 2.

40. The effect of ethanol concentration of the SO2-ethanol-water (SEW) process liquor on the characteristics of Eldar pine (Pinus eldarica) pulp. 2023. Forest and Wood Products 76 (1), 1-10.

41. The comparison of coated paper properties with cellulose nanofiber-zinc nanooxide and strach-zinc nanooxide. 2023. Forest and Wood Products 75 (4), 377-386.

42. SO2-ethanol–water (SEW) and Kraft pulp and paper properties of Eldar pine (Pinus eldarica): a comparison study. 2023. Biomass Conversion and Biorefinery, 1-9.

43. Influence of spent liquor obtained from SO2–ethanol–water (SEW) fractionation of Eucalyptus on drifting sands stabilization. 2024. Nordic Pulp & Paper Research Journal 39 (2), 101-112.

44. Evaluation of biodegradable smart films obtained from cellulose microfibril gels and yerbamate plant extract. 2024. Iranian Journal of Wood and Paper Industries 15 (1), 55-66.

45. SO2-alcohol-water (SAW) fractionation of Eldar pine (Pinus eldarica): effects of alcohol type on pulp and paper properties. 2024. European Journal of Wood and Wood Products, 1-15.

ACADEMIC TEACHING EXPERIENCE:

Pulping, B.Sc. Level

Papermaking, B.Sc. Level

Fiberboard, B.Sc. Level

Advanced Pulping, M.Sc. Level

Advanced Papermaking, M.Sc. Level

Advanced Fiberboard, M.Sc. Level

Converting Technologies in Papermaking, M.Sc. Level

Research Method, M.Sc. Level

Special Issues, Ph.D. Level

Seminar, Ph.D. Level

Sustainable Development in cellulose industry, Ph.D. Level

Biotechnology for Pulp and Paper Processing, Ph.D. Level

LANGUAGES:

Persian, English & Russian