

Electrospun PCL (Polycaprolactone) Nanofibers and Their Reinforced Composites: Preparation, Modification, Applications, and Perspectives

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In recent decades, nanofiber membranes have gained significant popularity due to their unique characteristics, such as large specific surface areas, excellent permeability, interconnected pores, and exceptional functionality. Electrospun composite nanofibers have found diverse applications in various fields, including tissue engineering, wound healing, photonics, filtration, composites, as well as supercapacitors, and batteries [1-3]. These electrospun composite nanofibers offer tremendous potential for advancing technology and addressing a wide range of challenges in different industries.

Therefore, our research focuses on PCL (Polycaprolactone) nanofibers and their reinforced composites.

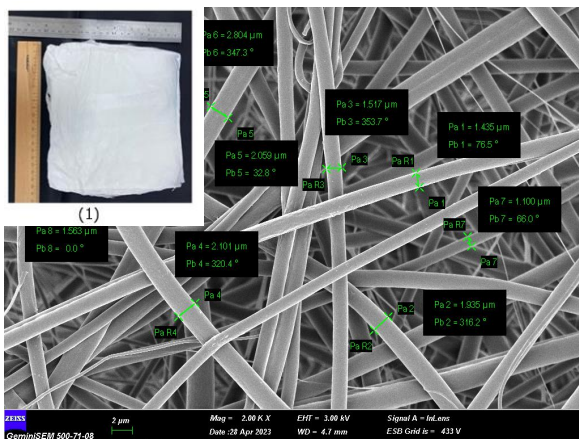


Figure 1. SEM image of PCL scaffolds.

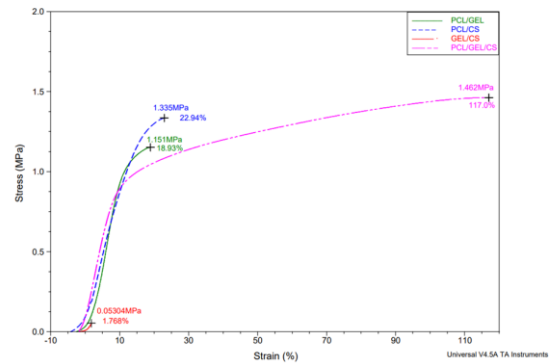


Figure 2. Stress-strain plot of nanofiber scaffolds

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References

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