

Frantz, Christian, Kathleen M. Stewart, and Valerie M. Weaver. "The Extracellular Matrix at a Glance." *Journal of Cell Science* 123.24 (2010): 4195–4200. *PMC*. Web. 25 Feb. 2018.

This published .gov scholarly article written by Christian Frantz from the Department of Surgery and Center for Bioengineering and Tissue Regeneration, and Kathleen Stewart from the Department of Anatomy at University of California San Francisco, discusses the importance of ECM in a wide range of syndromes. The article focuses on three main concepts: the molecular composition of ECM, the definition of tissue homeostasis, and ECM tissue aging. Essentially, because ECM is composed of two main classes of macromolecules: proteoglycans and fibrous proteins, they can be easily degraded, which will effect the proper functioning of the material. Furthermore, the authors continue to state, "... collagen fibers are frequently – inappropriately – crosslinked through glycation, by byproducts of lipid oxidation and through exposure to UV light." This means the mechanical state can impair "ECM organization, and modify epithelial organization and function."

This article is relevant to my essential question because its central claim is that because ECM tissue is a collection of fibrous proteins, it can be degraded by multiple environments. Therefore, it directly answers the question, proving tensile properties will also be effected. I would be able to use to article to further qualify my claim after conducting my experiment.