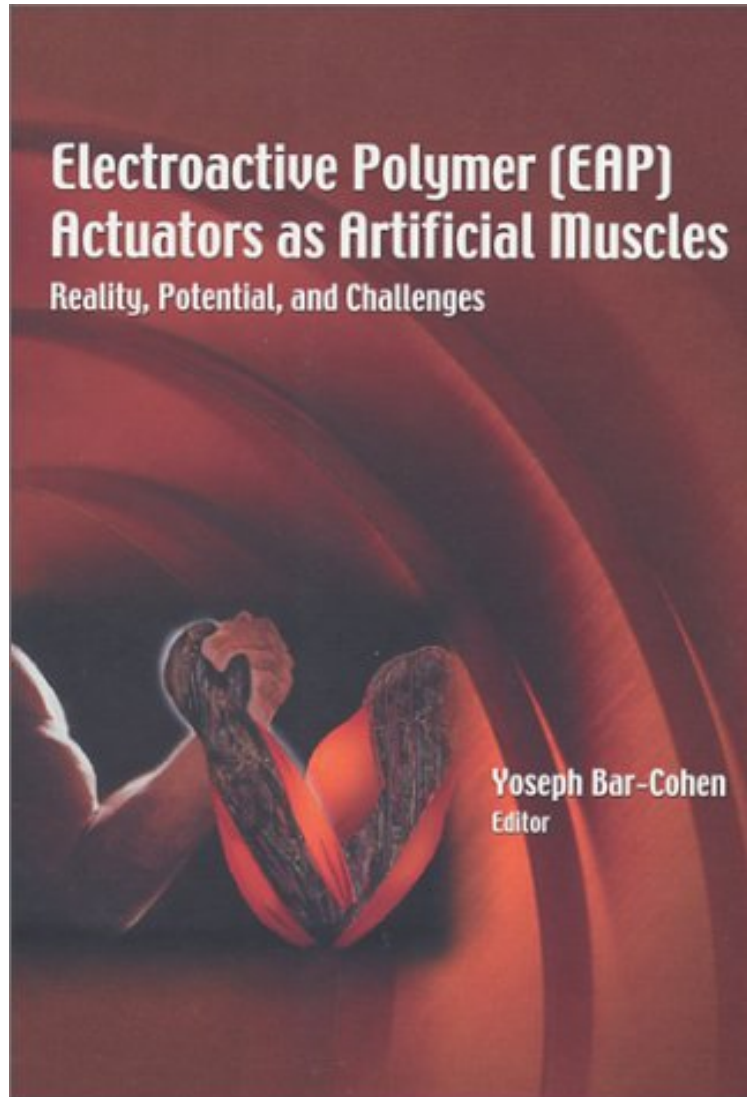


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5 of 5 people found the following review helpful. OK, but not greatBy A CustomerThis book is a collection EAP research material. It is very handy having it in one organized book that's always at your fingertips. The big problem for me was that the different EAP materials weren't covered uniformly. There was a huge emphasis on IPMC (most likely because that is the EAP that excites the editor the most). I was really hoping for more information on Ionic Polymer Gels (IPG) but found that they were only mentioned in passing (covering 2 pages). You will most likely give this book a `5' if you are interested in IPMC but otherwise the local university library is the best bet for studying this exciting subject.0 of 0 people found the following review helpful. Four StarsBy michael A. GreeneJust what I needed to get me the information I was looking for.5 of 6 people found the following review helpful. The Final FrontierBy Steven S. SalitermanA delightful book dealing with the soon to be hottest topic in biomedical engineering, electroactive polymer actuators. Virtually every known method of generating displacement is introduced, except of course for the ones I have kept secret. This book is a must for anyone interested in actuators and sensors, including electrical engineers. Applications reach far beyond medicine, and there is simply no other textbook available that covers this topic. It is thorough in every way, covering the basic sciences, fabrication techniques and applications. I wish I could work in Dr. Bar-Cohen's lab!

Electroactive polymer (EAP) materials with large displacement response are showing great potential. The ability to induce large actuation strains such as stretching, squeezing, and bending makes these resilient materials remarkably similar to biological muscles. This book describes the mechanics of natural muscles and how EAP actuators mimic their actions. It examines materials, EAP function at the molecular level, and methods for predicting polymer response to external electric fields. The text discusses the future of EAP in robotics, entertainment, and medicine, among other industries.

"Electroactive Polymer (EAP) Actuators as Artificial Muscles is a delightful book dealing with one of the hottest topics in biomedical engineering. Virtually every known method of generating displacement is introduced. This book is a must for anyone interested in actuators and sensors, including physicians and biomedical, chemical, electrical, and material engineers. It is thorough in every way..." - Steven S. Saliterman, MD, FACP, Chief of Medicine Methodist Hospital; Department of Biomedical Engineering, University of Minnesota