Electrotherapeutic Devices: Principles, Design, and Applications

George D. O'Clock
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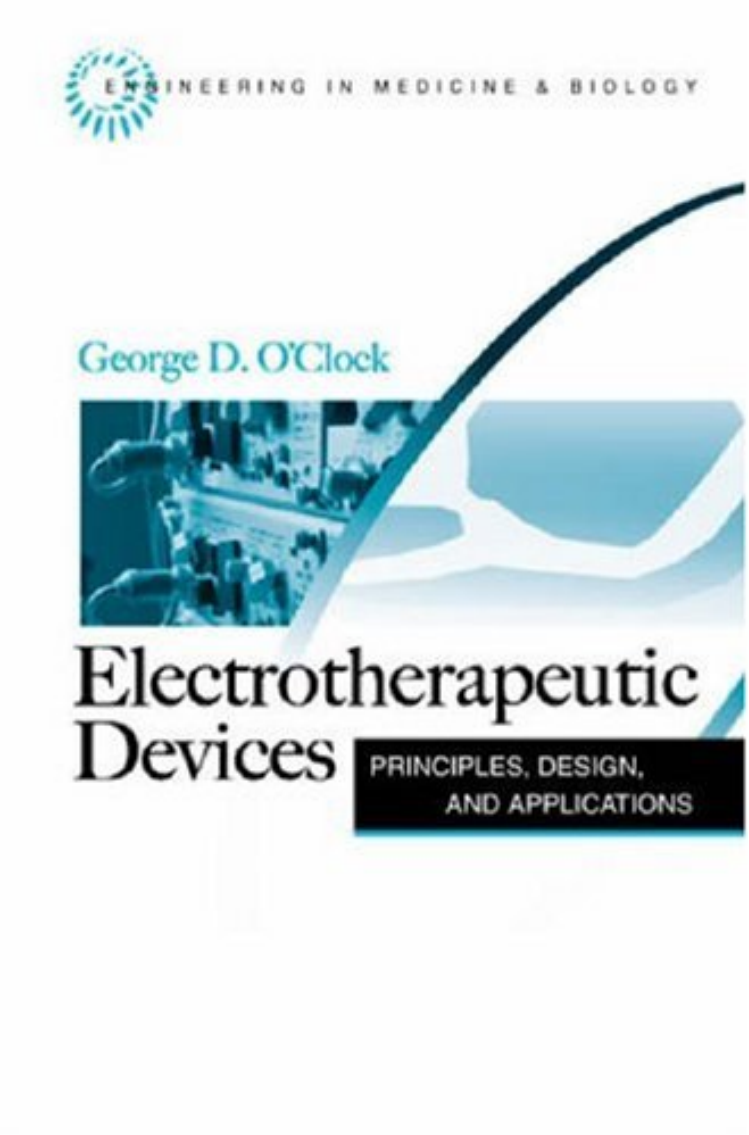

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George D. O'Clock : Electrotherapeutic Devices: Principles, Design, and Applications before purchasing it in order to gage whether or not it would be worth my time, and all praised Electrotherapeutic Devices: Principles, Design, and Applications:

2 of 2 people found the following review helpful. Pulsed Electro Magnetic Fields (PEMF) and how they stimulate healing in the body (including eyes)By Michael Czajka JnrThis is an excellent book for anyone who wants to know how therapeutic PEMF's (Pulsed Electro Magnetic Fields) work in the body.If you have an eye problem and want to

know if PEMF can help... this is EXACTLY the right book to read!George has a patent on an FDA approved PEMF device for the eyes.It doesn't really mention other types of electrotherapeutic devices much... even though the title says otherwise.George has designed PEMF devices (for the eyes primarily?) and knows many of the requirements to make them work properly.With therapeutic PEMF the devil is in the detail... and George certainly helps us to understand what is required.George shows us that the history of these devices goes back a lot further than most of us imagine.The list of applications was not particularly long (electrotherapeutic devices encompass a lot more)... although what was there was well informed and sufficient.George goes back to first principles on these devices yet does it in a way that is not too technical.He also does a few calculations on cell potential that were surprising.A well informed lay person would find the information useful.While very readable... the book does have some technical parts...but that's ideal if you want to know a bit more about how these devices work.This book needs a much more detailed description as until you read it (or this review?) you'll remain uncertain about what's in it.Please add a preview of the contents as that would help potential purchasers decide if it contained material they were interested in?The book is fairly expensive which discourages people from buying it to check it out.An electronic version might also help encourage the uncertain to purchase (as it's cheaper)?Despite some initial trepidation it was well worth the purchase price.:-)1 of 1 people found the following review helpful. Electrotherapeutic DevicesBy Cath YoungThis book fills a very useful niche in learning and teaching of the principles of safety and efficacy of a range of electrical stimulation parameters to allied health professionals. This is because it combines enough biophysics to describe the variable effects on current and voltage at the ever variable electrode-skin interface, with insightful reasoning about the clinical application of microcurrent to milliamp intensities to some particular pathologies. The author shares his experiences about the barriers to building an electrical stimulation device from the ground up, which will be very helpful to designers of new devices. For university teachers of electrophysical agents (EPA) this book underscores the physical principles required by novice health practitioners thinking about patient safety during the application of therapeutic electrical stimulation. It will add a necessary dimension to your library of EPA texts that is not covered in any of the standard more clinically focused offerings.

Rooted in accepted physics, chemistry, biology and electrical engineering principles, this definitive one-stop resource introduces electrotherapeutic fundamentals and discusses the electrical properties of cells, tissues and organs and how they respond to electrotherapy

About the AuthorGeorge D. O'Clock is Emeritus Professor of electrical engineering, Minnesota State University at Mankato. He is a member of the IEEE, Order of the Engineer, and the Bioelectromagnetics Society. He earned a Master's degree in biological sciences at Minnesota State University, Mankato and a Ph.D. in electrical engineering at the South Dakota School of Mines Technology.