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Nota di contenuto	Chapter 1. Introduction -- Chapter 2. Can Magnets Cure All Your Ills? -- Chapter 3. Can a 9-Volt Battery Make You Smarter? -- Chapter 4. Do Power Lines Cause Cancer? -- Chapter 5. Will Electrical Stimulation Help Your Aching Back? -- Chapter 6. Is Your Cell Phone Killing You? -- Chapter 7. Did 5G Cell Phone Radiation Cause Covid-19? -- Chapter 8. Did Cuba Attack America with Microwaves? -- Chapter 9. Is That Airport Security Scanner Dangerous? -- Chapter 10. Conclusion.
Sommario/riassunto	Electricity and Magnetism (E&M) underlies many lifesaving medical devices, such as magnetic resonance imaging scanners, neural

stimulators, and heart pacemakers. But E&M also attracts its share of bogus health claims, such as biomagnetic therapy. How do you separate the good from the bad? Sometimes it's not easy: experiments are prone to artifacts, theories are limited by assumptions, and clinical trials can result in ambiguities. In this book, the author separates the wheat from the chaff, showing which applications of E&M are bogus and which are not. This book takes the reader on a tour through a range of fascinating phenomena, from effects that are constant in time at one extreme, such as transcranial direct current stimulation of the brain, to the millimeter-wave whole-body scanners which are familiar to frequent flyers at the other. Along the way, the author looks in depth at the dispute about power line magnetic fields and leukemia, a case study in what can go wrong when dubious claims inflame unjustified fears. The debate about cell phones and brain cancer still rages today, particularly for the microwave frequencies encountered with new 5G technology. Recently, the so-called Havana Syndrome has been attributed to microwave weapons, but the underlying biophysics of such weapons is unclear. For all these encounters with electricity and magnetism, the author, an eminent biophysicist, uses science and evidence to sort out fact from fantasy. This book is aimed at general readers who want to make sense of the mysterious and often controversial ways in which E&M interacts with the human body. It is also ideal for students and professionals in bioscience and health-related fields who want to learn more without getting overwhelmed by theory.

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