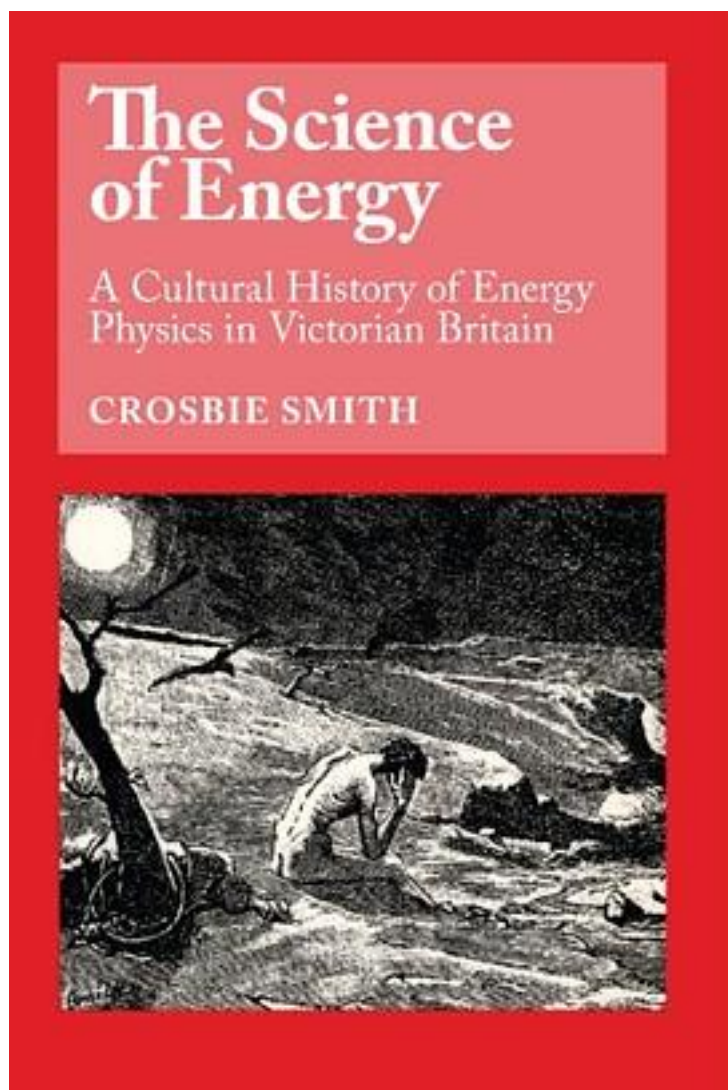


The Science of Energy



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The concept of energy transformed 19th-century physics. This text shows how a North British group of scientists and engineers, including James Joule, James Clerk Maxwell, William and James Thomson, Fleeming Jenkin and P.G. Tait, developed energy physics to solve practical problems encountered by Scottish shipbuilders and marine engineers; to counter biblical revivalism and evolutionary materialism; and to rapidly enhance their own scientific credibility. Replacing the language and concepts of classical mechanics with terms such as "actual" and "potential" energy, the North British group conducted their revolution in physics so vigorously that the concept of "energy" became their intellectual property. This text places this revolution in its scientific and cultural context, exploring the actual creation of scientific knowledge during this period in the history of physics.

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