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Autore	Strizhak Pavel A
Titolo	Sustainability of Fossil Fuels / Pavel A. Strizhak
Pubbl/distr/stampa	MDPI - Multidisciplinary Digital Publishing Institute, 2019 Basel, Switzerland : , : MDPI, , 2019
ISBN	9783039212200 3039212206
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Soggetti	History of engineering and technology
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Sommario/riassunto	The energy and fuel industries represent an extensive field for the development and implementation of solutions aimed at improving the technological, environmental, and economic performance of technological cycles. In recent years, the issues of ecology and energy security have become especially important. Energy is firmly connected with all spheres of human economic life but, unfortunately, it also has an extremely negative (often fatal) effect on the environment and public health. Depletion of energy resources, the complexity of their extraction, and transportation are also problems of a global scale. Therefore, it is especially important nowadays to try to take care of nature and think about the resources that are necessary for future generations. For scientific teams in different countries, the development of sustainable and safe technologies for the use of fuels in the energy sector will be a challenge in the coming decades

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Autore	Cogan Stuart
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Descrizione fisica	1 electronic resource (378 p.)
Soggetti	History of engineering and technology
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Livello bibliografico	Monografia
Sommario/riassunto	Neural electrodes enable the recording and stimulation of bioelectrical activity in the nervous system. This technology provides neuroscientists with the means to probe the functionality of neural circuitry in both health and disease. In addition, neural electrodes can deliver therapeutic stimulation for the relief of debilitating symptoms associated with neurological disorders such as Parkinson's disease and may serve as the basis for the restoration of sensory perception through peripheral nerve and brain regions after disease or injury. Lastly, microscale neural electrodes recording signals associated with volitional movement in paralyzed individuals can be decoded for controlling external devices and prosthetic limbs or driving the stimulation of paralyzed muscles for functional movements. In spite of the promise of neural electrodes for a range of applications, chronic performance remains a goal for long-term basic science studies, as well as clinical applications. New perspectives and opportunities from fields including tissue biomechanics, materials science, and biological mechanisms of inflammation and neurodegeneration are critical to advances in neural electrode technology. This Special Issue will address the state-of-the-art knowledge and emerging opportunities for the development and demonstration of advanced neural electrodes.