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Sommario/riassunto	The use of data collectors in energy systems is growing more and more. For example, smart sensors are now widely used in energy production and energy consumption systems. This implies that huge amounts of data are generated and need to be analyzed in order to extract useful insights from them. Such big data give rise to a number of opportunities and challenges for informed decision making. In recent years, researchers have been working very actively in order to come up with effective and powerful techniques in order to deal with the huge amount of data available. Such approaches can be used in the context of energy production and consumption considering the amount of data produced by all samples and measurements, as well as including many additional features. With them, automated machine learning methods for extracting relevant patterns, high-performance computing, or data visualization are being successfully applied to energy demand forecasting. In light of the above, this Special Issue collects the latest research on relevant topics, in particular in energy demand forecasts, and the use of advanced optimization methods and big data techniques. Here, by energy, we mean any kind of energy, e.g., electrical, solar, microwave, or wind