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Sommario/riassunto	Electric motors consume about 70% of industrial electricity and about 40%-45% of produced electricity in the world. This means that using high-efficiency electric motors will improve the level of energy consumption. In addition, it will reduce the impact of greenhouse gas emissions on the environment. Furthermore, it will significantly reduce the need for new power plants, thus reducing the invested resources to do so. Electric machines employing rare-earth magnets have higher efficiency and power density. However, rare-earth magnets are expensive, and their manufacturing process, as well as the process of mining rare-earth raw materials, is harmful to the environment. Thereby, the development of energy-efficient electric machines without rare-earth magnets is of great interest. The aim of this reprint was to gather new research publications in various topics related to improving the energy efficiency of electric machines without using rare-earth magnets. Ten articles have been published which cover various topics.