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Sommario/riassunto	When it comes to dealing with high voltages or issues of high electric currents, infrastructure security and people’s safety are of paramount importance. These kinds of phenomena have dangerous consequences, therefore studies concerning the effects of lightning are crucial. The normal operation of transmission and distribution systems is greatly affected by lightning, which is one of the major causes of power interruptions: direct or nearby indirect strikes can cause flashovers in overhead transmission and distribution lines, resulting in over voltages on the line conductors. Contributions to this Special Issue have mainly focused on modelling lightning activity, investigating physical causes, and discussing and testing mathematical models for the electromagnetic fields associated with lighting phenomena. In this framework, two main topics have emerged: 1) the interaction between lightning phenomena and electrical infrastructures, such as wind turbines and overhead lines; and 2) the computation of lightning electromagnetic fields in the case of particular configuration, considering a negatively charged artificial thunderstorm or considering a complex terrain with arbitrary topography