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Sommario/riassunto	During the past few decades, plasma science has witnessed a great growth in laboratory studies, in simulations, and in space. Plasma is the most common phase of ordinary matter in the universe. It is a state in which ionized matter (even as low as 1%) becomes highly electrically conductive. As such, long-range electric and magnetic fields dominate its behavior. Cosmic plasmas are mostly associated with stars, supernovae, pulsars and neutron stars, quasars and active galaxies at the vicinities of black holes (i.e., their jets and accretion disks). Cosmic plasma phenomena can be studied with different methods, such as laboratory experiments, astrophysical observations, and theoretical/computational approaches (i.e., MHD, particle-in-cell simulations, etc.). They exhibit a multitude of complex magnetohydrodynamic behaviors, acceleration, radiation, turbulence, and various instability phenomena. This Special Issue addresses the growing need of the plasma science principles in astrophysics and presents our current understanding of the physics of astrophysical plasmas, their electromagnetic behaviors and properties (e.g., shocks, waves, turbulence, instabilities, collimation, acceleration and radiation), both microscopically and macroscopically. This Special Issue provides a series of state-of-the-art reviews from international experts in the field

of cosmic plasmas and electromagnetic phenomena using theoretical approaches, astrophysical observations, laboratory experiments, and state-of-the-art simulation studies.