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Nota di contenuto	Paper 1. Chemistry, spectroscopy, and the question of reduction -- Paper 2. The electronic configuration model, quantum mechanics and reduction -- Paper 3. The periodic table and the electron -- Paper 4. How good is the quantum mechanical explanation of the periodic system? -- Paper 5. Prediction and the periodic table -- Paper 6. Lowdin's remarks on the Aufbau principle and a philosopher's view of Ab Initio quantum chemistry -- Paper 7. Mendeleev's legacy -- Paper 8. The role of triads in the evolution of the periodic table : past and present -- Paper 9. The past and future of the periodic table -- Paper 10. The dual sense of the term "element," attempts to derive the Madelung rule, and the optimal form of the periodic table, if any.
Sommario/riassunto	Contains key articles by Eric Scerri, one of the leading authority on the history and philosophy of the periodic table of the elements. This book explores a range of topics such as the historical evolution of the periodic system as well as its philosophical status and its relationship to modern quantum physics.