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Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	1. Brief description of thermal plasma and electric heating of gas; 2. Electrophysical and aerodynamic processes in a plasma torch; 3. Mathematical methods of investigating arc discharges; 4. Modelling of processes in electric arc plasma torches; 5. Energy characteristics of the arc in different gases; 6. Heat exchange in the electric arc chamber of a linear plasma torch; 7. Direct current linear plasma torches; 8. Two-jet plasma torches; 9. Alternating current plasma torches using industrial frequency; 10. Near-electrode processes and methods of reducing electrode erosion; Plasma reactors ConclusionsReferences; Index
Sommario/riassunto	The results of experimental research of plasma torches are described. A simple classification of linear plasma torches is proposed. Engineering methods of processing experimental data are outlined together with the electrical and thermal characteristics of plasma torches of different design in critical form. Special attention is paid to the problems of plasma torch stability to extend their operating life. The characteristics of individual types of the design of plasma torches are discussed. The operating properties and description of plasma-

