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Nota di contenuto	Chapter 1. Brief history of aluminum-lithium alloy creation -- Chapter 2. Theoretical basis of aluminum-lithium alloying with controlled lithium content and metallic and nonmetallic impurities -- Chapter 3. Hydrogen in aluminum-lithium alloys -- Chapter 4. Crack susceptibility and peculiarities of casting aluminum-lithium alloy billets -- Chapter 5. Aluminum-lithium alloy grain structure solidification conditions and peculiarities -- Chapter 6. Excess hetero-phasicity in 1420 alloy billets and its hereditary influence on the structure, properties, and weldability of semifinished products -- Chapter 7. Structure, mechanical properties, and weldability of alloy 1420 die forgings of complicated configuration versus initial slab structure and pressure-forming modes -- Chapter 8. Aluminum-lithium alloy welding process features.
Sommario/riassunto	This book provides theoretical foundations of the technological processes for melting, casting, forming, heat treatment, and welding of Al-Li alloys. It contains a critical survey of the research in the field and presents data on commercial Al-Li alloys, their phase composition, microstructure, and heat treatment of the ingots, sheets, forgings, and welds of Al-Li alloys. It is illustrated with examples of Al-Li alloy applications in aircraft structures and presents recommendations on

solving practical problems involved with melting and casting ingots, welding of Al-Li alloys, and producing massive stampings for welded products.
