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Nota di contenuto	Graph rewriting systems — The basic concepts -- UBS-Graph rewriting systems — matching subgraphs in constant time -- Programmed attributed graph rewrite systems — An advanced modelling formalism -- The abstract machine for graph rewriting — supporting a fast implementation -- A graphical implementation of functional languages — a case study in UBS-graph rewriting systems -- Conclusions.
Sommario/riassunto	This book presents two major research results on the fast implementation of graph rewriting systems (GRS). First, it explores the class of so-called UBS-GRS, where the complexity of a rewriting step is linear instead of NP, showing for example that visual programming is possible by UBS graph rewriting. Second, an abstract machine for graph rewriting is defined providing an instruction set sufficient for the execution of GRS. The basic definitions of GRS in the algorithmic approach are introduced and extended by attribution and control structures to comprise a formalism for an operational specification. The

translation of a functional programming language to graph rewriting shows the capabilities of UBS-GRS.