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Titolo	Operational amplifier speed and accuracy improvement [[electronic resource]] : analog circuit design with structural methodology / / by Vadim V. Ivanov and Igor M. Filanovsky
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Collana	Kluwer international series in engineering and computer science. Analog circuits and signal processing
Altri autori (Persone)	FilanovskyIgor M
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Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Structural Design Methodology -- Biasing -- OpAmp Gain Structure, Frequency Compensation and Stability -- Input Stage -- Intermediate Amplification Stages -- Class AB Output Stage -- Special Functions -- From Structure to Circuit.
Sommario/riassunto	Operational Amplifier Speed and Accuracy Improvement proposes a new methodology for the design of analog integrated circuits. The usefulness of this methodology is demonstrated through the design of an operational amplifier. This methodology consists of the following iterative steps: description of the circuit functionality at a high level of abstraction using signal flow graphs; equivalent transformations and modifications of the graph to the form where all important parameters are controlled by dedicated feedback loops; and implementation of the structure using a library of elementary cells. Operational Amplifier Speed and Accuracy Improvement shows how to choose structures and design circuits which improve an operational amplifier's important parameters such as speed to power ratio, open loop gain, common-mode voltage rejection ratio, and power supply rejection ratio. The same approach is used to design clamps and limiting circuits which improve the performance of the amplifier outside of its linear operating region, such as slew rate enhancement, output short circuit current

limitation, and input overload recovery.