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Titolo	Balanced Phono-Amps [[electronic resource]] : An Extension to the 'The Sound of Silence' Editions // by Burkhard Vogel
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ISBN	3-030-11229-2
Edizione	[2nd ed. 2019.]
Descrizione fisica	1 online resource (871 pages)
Disciplina	621.381535
Soggetti	Acoustical engineering Electronics Microelectronics Acoustics Signal processing Image processing Speech processing systems Engineering Acoustics Electronics and Microelectronics, Instrumentation Signal, Image and Speech Processing
Lingua di pubblicazione	Inglese
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Livello bibliografico	Monografia
Nota di contenuto	The Complete Engine II – Overview -- Mathcad Worksheets Amp3 -- The Transformer and Op-Amp Driven Input Stage Amp1 -- The BJT and Op-Amp Driven Input Stage Amp2 -- Selection of Draft Designs of Other Input Stages -- Measurement Tools and Trimming -- Mathcad Worksheets of Measurement Tools -- Mathcad Worksheets of the MM Noise Reduction Method -- Mathcad Worksheets of DIF Amps.
Sommario/riassunto	This extensively reworked 2nd edition of the book includes ten new chapters. It also features an updated discussion of simulation software tools, covering topics such as simulating complex and / or expensive amplifier structures with the free LTspice software by developing a broad range of additional simulation models, especially those for triodes and transformers. The book adopts the structure used in The Sound of Silence books, with the first part, Basics - Calculations and

Simulations, providing deep simulation-triggered insights into the gain and noise mechanisms of differential amplifiers, BJTs, resistors, and triodes. The second part then discusses the RIAA Phono-Amp Engine II, describing all the necessary design, simulation, calculation, construction and measurement processes for this multi-functional MC amplifier. The third part, Knowledge Transfer, presents new ideas on draft designs of the linear low-noise MC input stages (also an extremely low-noise one) and a range of practical measurement tools. Additionally, it includes a chapter on MM amplifiers and their noise production, and offers some surprising solutions. The brand new and extensive chapter on all the simulation models developed and used in the book rounds-out the voyage through the jungle of compromises, allowing best-in-class balanced MC phono-amplifiers to be produced. Lastly, the book also features an extensive index, and free downloads of all Mathcad worksheets are available on Springer's Extra Materials website (extra.springer.com). .
