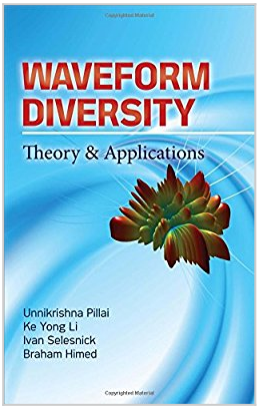

Waveform Diversity: Theory & Applications (Electronics)

By S Pillai, Ke Yong Li, Ivan Selesnick, Braham Himed

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Cutting-edge transmitter and receiver waveform design techniques

Optimum design can improve signal direction, interference, and noise suppression across various disciplines that utilize waveforms, including radar, sonar, and communications. *Waveform Diversity* explains the role of transmitter and receiver waveform design to boost overall performance. Written by experts in the field, this monograph covers joint transmitter receiver design, optimum design methods, constant envelope transmit signals, and sparsity-based receivers. Proven methods for mitigating noise and clutter and maximizing output signal power are included in this practical guide.

Waveform Diversity covers:

- Waveform design and matched filtering
- New methods for optimum transmitter and receiver design
- Transmitter threshold energy and energy-bandwidth tradeoff
- Increasing transmit power efficiency with constant envelope transmit signals
- Optimum waveform design to reduce noise and clutter
- Discrete-time waveform design
- Sparsity-based receiver design methods

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Editorial Review

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