

1. Record Nr.	UNINA9910877065103321
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Titolo	Signal processing of power quality disturbances // Math H.J. Bollen, Irene Yu-Hua Gu
Pubbl/distr/stampa	Piscataway, NJ, : IEEE Press Hoboken, NJ, : Wiley, c2006
ISBN	1-280-72233-9 9786610722334 0-471-93131-4 1-60119-520-6 0-471-93130-6
Descrizione fisica	1 online resource (883 p.)
Collana	IEEE Press series on power engineering
Altri autori (Persone)	Gulrene Yu-Hua
Disciplina	621.310285 621.319
Soggetti	Electric power system stability Electric power systems - Quality control Signal processing
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references (p. 829-847) and index.
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Sommario/riassunto

Bridging the gap between power quality and signal processing This innovative new text brings together two leading experts, one from signal processing and the other from power quality. Combining their fields of expertise, they set forth and investigate various types of power quality disturbances, how measurements of these disturbances are processed and interpreted, and, finally, the use and interpretation of power quality standards documents. As a practical aid to readers, the authors make a clear distinction between two types of power quality disturbances: * Variations: disturbances that are continuously present * Events: disturbances that occur occasionally A complete analysis and full set of tools are provided for each type of disturbance: * Detailed examination of the origin of the disturbance * Signal processing measurement techniques, including advanced techniques and those techniques set forth in standards documents * Interpretation and analysis of measurement data * Methods for further processing the features extracted from the signal processing into site and system indices The depth of coverage is outstanding: the authors present and analyze material that is not covered in the standards nor found in the scientific literature. This text is intended for two groups of readers: students and researchers in power engineering who need to use signal

processing techniques for power system applications, and students and researchers in signal processing who need to perform power system disturbance analyses and diagnostics. It is also highly recommended for any engineer or utility professional involved in power quality monitoring.
