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| Autore | Mickens Ronald E. <1943-> |
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| ISBN | 1-282-76190-0 9786612761904 981-4291-66-8 |
| Descrizione fisica | 1 online resource (260 p.) |
| Disciplina | 511/.4 |
| Soggetti | Approximation theory Nonlinear oscillations Electronic books. |
| 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 and index. |
| Nota di contenuto | Preface; Contents; List of Figures; List of Tables; 1. Background and General Comments; 2. Establishing Periodicity; 3. Harmonic Balance; 4. Parameter Expansions; 5. Iteration Methods; 6. Averaging Methods; 7. Comparative Analysis; Appendix A Mathematical Relations; Appendix B Gamma and Beta Functions; Appendix C Fourier Series; Appendix D Basic Theorems of the Theory of Second-Order Differential Equations; Appendix E Linear Second-Order Differential Equations; Appendix F Lindstedt-Poincaré Perturbation Method; Appendix G A Standard Averaging Method Appendix H Discrete Models of Two TNL Oscillators Bibliography; Index |
| Sommario/riassunto | This unique book provides a concise presentation of many of the fundamental strategies for calculating approximations to the oscillatory solutions of truly nonlinear (TNL) oscillator equations. The volume gives a general overview of the author's work on harmonic balance, iteration and combined linearization-averaging methods. However, full discussions are also presented on parameter expansion procedures and a first-order averaging technique for TNL oscillators. The calculational basis of each method is clarified by applying them to a set of standard |

TNL oscillator equations. This allows a dire
