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| Autore | Jazar Reza N |
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| Descrizione fisica | 1 online resource (695 p.) |
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| Soggetti | Multibody systems Vibration Mechanics, Applied Mechanics Multibody Systems and Mechanical Vibrations Engineering Mechanics Classical Mechanics |
| 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 | Part I Vibration Fundamentals -- Vibration Kinematics -- Vibration Dynamics -- Part II Frequency Response -- One Degree of Freedom Systems, Frequency Response -- Multi Degree of Freedom Systems, Frequency Response -- Two Degree of Freedom Systems, Frequency Response -- Part III Time Response -- First-Order Systems, Time Response -- One Degree of Freedom, Time Response -- Part IV Application -- Vibration Optimization -- Vehicle Vibrations -- Appendix A Frequency Response Curves -- Appendix B Trigonometric Formulas -- Appendix C Unit Conversions. . |
| Sommario/riassunto | Advanced Vibrations: A Modern Approach is presented at a theoretical-practical level and explains mechanical vibrations concepts in detail, concentrating on their practical use. Related theorems and formal proofs are provided, as are real-life applications. Students, researchers and practicing engineers alike will appreciate the user-friendly presentation of a wealth of topics including but not limited to practical optimization for designing vibration isolators, and transient, harmonic and random excitations. This book also: Contains unique material based on statement-proof-examples Derives equations of motion |

using Newton-Euler and Lagrange methods Presents optimization of
vibrating systems not normally covered in standard vibration books
Advanced Vibrations: A Modern Approach is an ideal book for
designers, practitioner engineers, and students of engineering.
