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| 1. Record Nr.           | UNINA9910154892503321                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| Titolo                  | Chemical and biomedical engineering calculations using Python // Jeffrey J Heys                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| Pubbl/distr/stampa      | Hoboken, N.J., : Wiley, 2017                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| ISBN                    | 1-119-26707-2<br>9781119267089                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| Descrizione fisica      | 1 online resource (278 pages) : illustrations                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| Classificazione         | 007.64<br>501.1<br>620.00285/5133                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| Disciplina              | 620.002855133                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| Soggetti                | Engineering mathematics<br>Python (Computer program language)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| Lingua di pubblicazione | Inglese                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| Formato                 | Materiale a stampa                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| Livello bibliografico   | Monografia                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| Note generali           | Includes bibliographical references and index                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| Nota di bibliografia    | Includes bibliographical references at the end of each chapters and index.                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| Nota di contenuto       | Problem solving in engineering -- Programming with python -- Programming basics -- External libraries for engineering -- Symbolic mathematics -- Linear systems -- Regression -- Nonlinear equations -- Statistics -- Numerical differentiation and integration -- Initial value problems -- Boundary value problems -- Partial differential equations -- Finite element method.                                                                                                                                                              |
| Sommario/riassunto      | Presents standard numerical approaches for solving common mathematical problems in engineering using Python. * Covers the most common numerical calculations used by engineering students * Covers Numerical Differentiation and Integration, Initial Value Problems, Boundary Value Problems, and Partial Differential Equations * Focuses on open ended, real world problems that require students to write a short report/memo as part of the solution process * Includes an electronic download of the Python codes presented in the book |