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| Autore                  | Obodan Natalia I   |
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| Altri autori (Persone)  | LebedeyevOlexandr G<br>GromovVasili A.   |
| Disciplina              | 515.355<br>515/.355  |
| Soggetti                | Thin-walled structures<br>Shells (Engineering)   |
| 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.   |
| Nota di contenuto       | 1. In lieu of introduction -- 2. Boundary problem of thin shells theory -- 3. Branching of nonlinear boundary problem solutions -- 4. Numerical method -- 5. Nonaxisymmetrically loaded cylindrical shell -- 6. Structurally nonaxisymmetric shell subjected to uniform loading -- 7. Postcritical branching patterns for cylindrical shell subjected to uniform external loading -- 8. Postbuckling behaviour and stability of anisotropic shells -- 9. Conclusion.   |
| Sommario/riassunto      | This book focuses on the nonlinear behaviour of thin-wall shells (single- and multilayered with delamination areas) under various uniform and non-uniform loadings. The dependence of critical (buckling) load upon load variability is revealed to be highly non-monotonous, showing minima when load variability is close to the eigenmode variabilities of solution branching points of the respective nonlinear boundary problem. A novel numerical approach is employed to analyze branching points and to build primary, secondary, and tertiary bifurcation paths of the nonlinear boundary problem for the case of uniform loading. The load levels of singular points belonging to the paths are considered to be critical load estimates for the case of non-uniform loadings. |

