1. Record Nr.   UNISA996393487703316

   Autore   Rohault Jacques <1618-1672.>

   Titolo   Jacobi Rohaulti Physica [[electronic resource] /] / Latine reddidit, & annotatiunculis quibusdam illustravit S. Clarke .

   Pubbl/distr/stampa   Londini, : Impensis Jacobi Knapton ..., 1697

   Descrizione fisica   [30], 184, 262, [2] p., 16 folded leaves of plates : ill

   Altri autori (Persone)   ClarkeSamuel <1675-1729.>

   Soggetti   Physics
                        Science

   Lingua di pubblicazione   Latino

   Formato   Materiale a stampa

   Livello bibliografico   Monografia

   Note generali   Translation of: Traite de physique.
                        Marginal notes.
                        Includes index.
                        Advertisement: [2] p. at end.
                        Imperfect: Tightly bound and faded, with some loss of print.
                        Errata: p. [30].
                        Reproduction of original in the Trinity College Library, Cambridge University.

   Sommario/riassunto   eebo-0120

2. Record Nr.	UNINA9910821636803321
Autore	Banichuk Nikolai Vladimirovich
Titolo	Optimal structural design : contact problems and high-speed penetration / / Nikolay V. Banichuk, Svetlana Yu. Ivanova
Pubbl/distr/stampa	Berlin, [Germany] ; ; Boston, [Massachusetts] : , : De Gruyter, , 2017 ©2017
ISBN	3-11-053090-2 3-11-053118-6
Descrizione fisica	1 online resource (192 pages) : illustrations
Classificazione	SCI018000TEC009070SCI041000MAT003000
Disciplina	624.1/771
Soggetti	Structural analysis (Engineering) Joints (Engineering) Interfaces (Physical sciences)
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Frontmatter -- Preface -- Contents -- Part I: Quasi-statics of contact interaction -- 1. Optimal contact pressure and optimal punch shape -- 2. Influence of forces applied outside contact region -- 3. Shape optimization of punch moving with friction -- 4. Optimization in contact problems under incomplete data -- 5. Application of probabilistic data -- 6. Minimization of material wear -- 7. Multiobjective optimization of contact pressure, wear of material, and energy dissipation -- Part II: High-speed penetration into deformable medium -- 8. Optimization of impactor shape -- 9. Strikers of nonaxisymmetric optimal shape -- 10. Multiobjective optimization of rigid shell -- 11. Optimization of truncated rotating strikers -- 12. Penetration into solid medium under strength constraints -- 13. Some problems of global multipurpose structural optimization -- 14. Analytical and numerical estimations of optimal parameters of layered slab -- 15. Striker shape optimization using condition of minimal ballistic limit velocity for layered slabs -- Part III: Appendices -- Appendix A. Nonadditive functionals and extremum conditions -- Appendix B. Multivariant estimation of functionals and their sensitivity -- Appendix C. Basic ideas of multicriteria optimization -- Appendix D.

Sommario/riassunto	This monograph studies optimization problems for rigid punches in elastic media and for high-speed penetration of rigid strikers into deformed elastoplastic, concrete, and composite media using variational calculations, tools from functional analysis, and stochastic and min-max (guaranteed) optimization approaches with incomplete data. The book presents analytical and numerical results developed by the authors during the last ten years.

This monograph studies optimization problems for rigid punches in elastic media and for high-speed penetration of rigid strikers into deformed elastoplastic, concrete, and composite media using variational calculations, tools from functional analysis, and stochastic and min-max (guaranteed) optimization approaches with incomplete data. The book presents analytical and numerical results developed by the authors during the last ten years. ContentsPart I: Quasi-statics of contact interactionOptimal contact pressure and optimal punch shapeInfluence of forces applied outside contact regionShape optimization of punch moving with frictionOptimization in contact problems under incomplete dataApplication of probabilistic dataMinimization of material wearMultiobjective optimization of contact pressure, wear of material, and energy dissipation Part II: High-speed penetration into deformable mediumOptimization of impactor shapeStrikers of nonaxisymmetric optimal shapeMultiobjective optimization of rigid shellOptimization of truncated rotating strikersPenetration into solid medium under strength constraintsSome problems of global multipurpose structural optimizationAnalytical and numerical estimations of optimal parameters of layered slabStriker shape optimization using condition of minimal ballistic limit velocity for layered slabs Part III: AppendicesNonadditive functionals and extremum conditionsMultivariant estimation of functionals and their sensitivityBasic ideas of multicriteria optimizationEvolutionary algorithm of global optimization