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Titolo	Advanced Problems in Mechanics : Proceedings of the XLVII International Summer School-Conference "Advanced Problems in Mechanics", June 24-29, 2019, St. Petersburg, Russia / / edited by D.A. Indeitsev, A.M. Krivtsov
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Descrizione fisica	1 online resource (VII, 266 p. 156 illus., 103 illus. in color.)
Collana	Lecture Notes in Mechanical Engineering, , 2195-4364
Disciplina	410.1 531
Soggetti	Mechanics, Applied Solids Nanotechnology Mathematical physics Solid Mechanics Theoretical, Mathematical and Computational Physics
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Influence of the sperm velocity on fertilization capacity in the oscillatory model of mouse Zona Pellucida -- Parameter Determination of Metamaterials in Generalized Mechanics as a Result of Computational Homogenization -- A model of hydraulic fractured horizontal well for debit computation of slanged gas and oil -- Double Aging of Heat-Treated Aluminum Alloy of (7075) and (6061) to increase the hardness number.
Sommario/riassunto	This book focuses on original theories and approaches in the field of mechanics. It reports on both theoretical and applied research, with a special emphasis on problems and solutions at the interfaces of mechanics and other research areas. The respective chapters highlight cutting-edge works fostering development in fields such as micro- and nanomechanics, material science, physics of solid states, molecular physics, astrophysics, and many others. Special attention has been

given to outstanding research conducted by young scientists from all over the world. Based on the 47th edition of the international conference “Advanced Problems in Mechanics”, held on June 24–29, 2019, in St. Petersburg, Russia, and organized by Peter the Great St. Petersburg Polytechnic University and Institute for Problems in Mechanical Engineering of Russian Academy of Sciences under the patronage of Russian Academy of Sciences, the book provides researchers and graduate students with an extensive overview of the latest research and a source of inspiration for future developments in various fields of mechanics.

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