

CONTENTS

VOLUME 40

NUMBER 1

2005

MECHANICS OF SOLIDS

	Russian page	English page
Deformations of a planet containing a moving internal core in the gravitational field of a central body and a satellite. A. V. Shatina	3	1
Invariant representation of the potential interaction between a rigid body with nonuniform electromagnetic field. Yu. M. Urman	13	8
Motion of a rigid body with a single fixed point in the Steklov case. A. P. Markeev	20	14
Shock isolator of maximum robustness with respect to the change in the mass of the object to be protected. V. V. Kulagin and V. A. Prourzin	34	26
A review of contact algorithms. N. G. Bourago and V. N. Kukudzhanov	45	35
Modeling of the change of the internal structure and stress state in a material subjected to high thermal loads on the basis of the particle dynamics method. A. M. Krivtsov, V. P. Myasnikov	88	72
The propagation of unsteady elastic waves in homogeneous porous media. T. I. Maslikova and V. S. Polenov	104	86
Inertial and dissipative properties of a porous medium saturated with viscous fluid. L. D. Akulenko and S. V. Nesterov	109	90
Relations of the theory of anisotropic perfectly plastic media. B. G. Mironov	120	99
Direct numerical method for solving singular integral equations of the first kind with generalized kernels. A. V. Andreev	126	104
Local buckling of plates and shallow shells on an elastic foundation. P. E. Tovstik	147	120
Effect of meridional loads on the natural vibrations and dynamic stability of a nearly-cylindrical shell of revolution. S. N. Kukudzhanov	161	132
Stability and postcritical behavior of a multilink system of rigid bodies subjected to nonpotential loading. V. V. Bolotin, A. V. Petrovskii, and V. P. Radin	174	142