

Contents

Vol. 54, No. 7, 2019

An Analytical Solution to the Problem of Optimal Control of the Reorientation of a Rigid Body (Spacecraft) Using Quaternions <i>M. V. Levskii</i>	997
On Induced Anisotropy of Mechanical Properties of Elastomers <i>K. B. Ustinov</i>	1016
Dynamics of an Inhomogeneous Ball on a Vibrating Base with Two-Component Viscous Friction <i>A. I. Munitsyn and M. A. Munitsyna</i>	1024
Bending and Cramped Torsion of Thin-Walled Rods <i>V. L. Prisekin and G. I. Rastorguev</i>	1030
Dependence of Creep-Rupture Lifetime for Rods under Tension in an Aggressive Environment on the Shape of a Single-Cell Cross-Section <i>N. S. Larin, A. M. Lokoshchenko, and L. V. Fomin</i>	1042
On the Scale Dependence of Cracking Resistance of Structured Solids (on the Example of Marine Ice Cover) <i>N. M. Osipenko</i>	1051
Maxima of the Stresses in the Longitudinal Pochhammer–Chree Waves <i>V. V. Mokryakov</i>	1063
Analytical Solution for a Problem on Approximation of Functional Dependences for Parameters of a Geodesic Line <i>P. A. Kucherenko and S. V. Sokolov</i>	1076
Solving the Stress Problem in a Sharp Wedge-Whaped Cutting Tool Using the Quick Decomposition Method and the Problem of Matching Boundary Conditions <i>V. V. Goryainov, M. I. Popov, and A. D. Chernyшов</i>	1083
Modeling of the Maximum Deflection of a Stepped Rod Having an Initial Curvature Upon Impact Against a Rigid Barrier <i>A. A. Bityurin</i>	1098
Earth Pole Motion Due to Nonstationary Perturbations <i>L. D. Akulenko and A. A. Perepelkin</i>	1108
Analytical Determination of Arc Length of an Elliptic Curve <i>K. N. Anakhaev</i>	1115
Snap-Through Buckling of Hinged-Hinged Initially Imperfect Beams Undergoing Finite Deflections Subjected to Lateral Concentrated Midpoint Loads <i>A. Tekin Atacan and R. F. Yükseler</i>	1119
