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| 1. Record Nr. | UNINA9910484091803321 |
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| Titolo | Selected Problems in the Elastodynamics of Piezoceramic Bodies // by Alexander Ya. Grigorenko, Wolfgang H. Müller, Igor A. Loza |
| Pubbl/distr/stampa | Cham : , : Springer International Publishing : , : Imprint : Springer, , 2021 |
| ISBN | 3-030-74199-0 |
| Edizione | [1st ed. 2021.] |
| Descrizione fisica | 1 online resource (239 pages) |
| Collana | Advanced Structured Materials, , 1869-8441 ; ; 154 |
| Disciplina | 537.2446 |
| Soggetti | Ceramic materials Fluid mechanics Thermodynamics Heat engineering Heat transfer Mass transfer Ceramics Engineering Fluid Dynamics Engineering Thermodynamics, Heat and Mass Transfer |
| Lingua di pubblicazione | Inglese |
| Formato | Materiale a stampa |
| Livello bibliografico | Monografia |
| Nota di bibliografia | Includes bibliographical references. |
| Nota di contenuto | Introduction to the Linear Theory of Elastoelasticity -- Some Solutions of Dynamical Problems for Finite Length Elasticity and Piezoceramic Cylinders with Inhomogeneous Properties (based on 3D theory) -- Electroelastic Waves Propagation in Heterogeneous Piezoceramic Hollow Cylinders -- Electroelastic Vibrations Heterogeneous Piezoceramic Hollow Spheres. |
| Sommario/riassunto | This book presents various dynamic processes in non-uniform piezoceramic cylindrical and spherical bodies based on numerical methods. It discusses different variants of nonhomogeneous structural polarized piezoceramic materials in the shape of cylinders and spheres, and highlights the validation of the reliability of the results obtained by numerical calculations. The content is based on an outlined theory and methods of three-dimensional electroelasticity problems. |

