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| 1. Record Nr.           | UNINA9910788569203321  |
| Autore                  | Mei Chiang C   |
| Titolo                  | Homogenization methods for multiscale mechanics [[electronic resource] /] / Chiang C. Mei, Bogdan Vernescu   |
| Pubbl/distr/stampa      | Hackensack, N.J., : World Scientific, 2010   |
| ISBN                    | 1-283-14381-X<br>9786613143815<br>981-4282-45-6  |
| Descrizione fisica      | 1 online resource (350 p.)   |
| Altri autori (Persone)  | VernescuBogdan   |
| Disciplina              | 515.3/53   |
| Soggetti                | Homogenization (Differential equations)<br>Mathematical physics  |
| Lingua di pubblicazione | Inglese  |
| Formato                 | Materiale a stampa   |
| Livello bibliografico   | Monografia   |
| Note generali           | Description based upon print version of record.  |
| Nota di bibliografia    | Includes bibliographical references and index.   |
| Nota di contenuto       | Introductory examples of homogenization method. Long waves in a layered elastic medium ; Short waves in a weakly stratified elastic medium ; Dispersion of passive solute in pipe flow ; Typical procedure of homogenization analysis -- Diffusion in a composite. Basic equations for two components in perfect contact ; Effective equation on the macroscale ; Effective boundary condition ; Symmetry and positiveness of effective conductivity ; Laminated composites ; Bounds for effective conductivity ; Hashin-Shtrikman bounds ; Other approximate results for dilute inclusions ; Thermal resistance at the interface ; Laminated composites with thermal resistance ; Bounds for the effective conductivity ; Chemical transport in aggregated soil ; Appendix 2A : heat transfer in a two-slab system -- Seepage in rigid porous media. Equations for seepage flow and Darcy's law ; Uniqueness of the cell boundary-value problem ; Symmetry and positiveness of hydraulic conductivity ; Numerical computation of the permeability tensor ; Seepage of a compressible fluid ; Two-dimensional flow through a three-dimensional matrix ; Porous media with three scales ; Brinkman's modification of Darcy's law ; Effects of weak fluid inertia ; Appendix 3A : spatial averaging theorem -- Dispersion in periodic media or flows. Passive solute in a two-scale seepage flow ; Macrodispersion in a three-scale porous medium ; Dispersion and |

transport in a wave boundary layer above the seabed ; Appendix 4A : derivation of convection-dispersion equation ; Appendix 4B : an alternate form of macrodispersion tensor -- Heterogeneous elastic materials. effective equations on the macroscale ; The effective elastic coefficients ; Application to fiber-reinforced composite ; Elastic panels with periodic microstructure ; Variational principles and bounds for the elastic moduli ; Hashin-Shtrikman bounds ; Partially cohesive composites ; Appendix 5A : properties of a tensor of fourth rank -- Deformable porous media. Basic equations for fluid and solid phases ; Scale estimates ; Multiple-scale expansions ; Averaged total momentum of the composite ; Averaged mass conservation of fluid phase ; Averaged fluid momentum ; Time-Harmonic motion ; Properties of the effective coefficients ; Computed elastic coefficients ; Boundary-layer approximation for macroscale problems ; Appendix 6A : properties of the compliance tensor ; Appendix 6B : variational principle for the elastostatic problem in a cell -- Wave propagation in inhomogeneous media. Long wave through a compact cylinder array ; Bragg scattering of short waves by a cylinder array ; Sound propagation in a bubbly liquid ; One-dimensional sound through a weakly random medium ; Weakly nonlinear dispersive waves in a random medium ; Harmonic generation in random media.

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### Sommario/riassunto

In many physical problems several scales present either in space or in time, caused by either inhomogeneity of the medium or complexity of the mechanical process. A fundamental approach is to first construct micro-scale models, and then deduce the macro-scale laws and the constitutive relations by properly averaging over the micro-scale. The perturbation method of multiple scales can be used to derive averaged equations for a much larger scale from considerations of the small scales. In the mechanics of multiscale media, the analytical scheme of upscaling is known as the Theory of Homogenization

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| 2. Record Nr.           | UNINA990009736590403321   |
| Autore                  | Orsina, Giovanni <1967- >   |
| Titolo                  | Anticlericalismo e democrazia : storia del Partito radicale in Italia e a Roma, 1901-1914 / Giovanni Orsina |
| Pubbl/distr/stampa      | Soveria Mannelli, : Rubbettino, 2002  |
| ISBN                    | 88-498-0294-3   |
| Descrizione fisica      | 284 p. ; 21 cm  |
| Collana                 | Novecento liberale  |
| Disciplina              | 324.24502   |
| Locazione               | FLFBC<br>FSPBC  |
| Collocazione            | 324.245 ORSI 02<br>XIV H 330  |
| Lingua di pubblicazione | Italiano  |
| Formato                 | Materiale a stampa  |
| Livello bibliografico   | Monografia  |

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| 3. Record Nr.           | UNICAMPANIAVAN00067844                |
| Autore                  | Costa, Pietro <1945- >                |
| Titolo                  | 3: La civiltà liberale / Pietro Costa |
| Pubbl/distr/stampa      | Roma ; Bari, : Laterza, c2001         |
| ISBN                    | 88-420-6518-8                         |
| Descrizione fisica      | xi, 662 p. ; 21 cm.                   |
| Disciplina              | 323.6                                 |
| Soggetti                | CITTADINANZA - Europa - Storia        |
| Lingua di pubblicazione | Italiano                              |
| Formato                 | Materiale a stampa                    |
| Livello bibliografico   | Monografia                            |