

Micromorphic media: Interpretation by homogenisation



Filesize: 7.51 MB

Reviews

Completely essential go through book. It really is simplistic but excitement inside the 50 % of the pdf. I am very easily will get a satisfaction of studying a composed book.

(Damian Poulos)

MICROMORPHIC MEDIA: INTERPRETATION BY HOMOGENISATION

[DOWNLOAD](#)

Shaker Verlag Okt 2010, 2010. Buch. Book Condition: Neu. 21x14.8x cm. Neuware - In order to develop more and more resource-saving strategies for engineering tasks, the efficient application of cellular materials, such as various open cell foams, is of high interest in science and technology. Strongly influenced by their underlying microtopology, cellular materials feature a complex material behaviour. Modelling aspects to be taken into account are e.g. the deformation induced evolution of anisotropy and porosity on the one hand and the description of size dependent stiff or soft boundary layers, activated by the interaction close to material interfaces, on the other hand. The present contribution is focusing on that second feature by introducing a numerical homogenisation procedure. It allows to replace the heterogeneous microcontinuum by a homogeneous micromorphic macrocontinuum. Doing so, the microstructural deformation mechanisms can be geometrically interpreted as generalised degrees of freedom, which can be transferred on the macroscopic level. In the context of a two-scale FE strategy, the macroscopic constitutive equations are replaced by the computation of a nested microscopic boundary value problem in each macroscopic material point. The power of the proposed interpretation of the micromorphic degrees of freedom in combination with the numerical homogenisation approach is demonstrated for several microstructures in various numerical experiments validated in comparison to numerical reference calculations. 156 pp. Englisch.

[Read Micromorphic media: Interpretation by homogenisation Online](#)[Download PDF Micromorphic media: Interpretation by homogenisation](#)

Related PDFs



Programming in D

Ali Cehreli Dez 2015, 2015. Buch. Book Condition: Neu. 264x182x53 mm. This item is printed on demand - Print on Demand Neuware - The main aim of this book is to teach D to readers...

[Download](#) [Document](#)

»



Fox All Week: Level 3

Penguin Putnam Inc, United States, 2004. Paperback. Book Condition: New. James Marshall (illustrator). Puffin Easy-To-Read ed.. 224 x 147 mm. Language: English . Brand New Book. Using their cache of already published easy-to-read books, Puffin...

[Download](#) [Document](#)

»



Have You Locked the Castle Gate?

Addison-Wesley Professional. Softcover. Book Condition: Neu. Gebraucht - Sehr gut Unbenutzt. Schnelle Lieferung, Kartonverpackung. Abzugsfähige Rechnung. Bei Mehrfachbestellung werden die Versandkosten anteilig erstattet. - Is your computer safe Could an intruder sneak in and steal...

[Download](#) [Document](#)

»



Psychologisches Testverfahren

Reference Series Books LLC Nov 2011, 2011. Taschenbuch. Book Condition: Neu. 249x191x7 mm. This item is printed on demand - Print on Demand Neuware - Quelle: Wikipedia. Seiten: 100. Kapitel: Myers-Briggs-Typindikator, Keirsey Temperament Sorter, DISG,...

[Download](#) [Document](#)

»



Adobe Indesign CS/Cs2 Breakthroughs

Peachpit Press, 2005. Softcover. Book Condition: Neu. Gebraucht - Sehr gut Unbenutzt. Schnelle Lieferung, Kartonverpackung. Abzugsfähige Rechnung. Bei Mehrfachbestellung werden die Versandkosten anteilig erstattet. - Adobe InDesign is taking the publishing world by storm and...

[Download](#) [Document](#)

»