

Iutam Symposium On Scaling In Solid Mechanics

[DOWNLOAD HERE](#)

CONTENTS; Preface; Universal effective toughness distribution for heterogeneous brittle materials, by S. Roux, Y. Charles, F. Hild and D. Vandembroucq; Scaling transformations in solid mechanics, by F.M. Borodich; Mathematical foundations of non-classical extensions of similarity theory, by S. Rudolph; Perturbing paths of slow cracks in PMMA by local heating, by L. Fradkin, V. Mishakin, N. Alford, A. Dobroskok, A. Linkov and G. Mishuris; Multiscale hybrid materials with negative Poisson's ratio, by E. Pasternak and A.V. Dyskin; Modelling of size effects with gradient-enriched continuum theories, by H. Askes, I.M. Gitman, A. Simone and L.J. Sluys; Internal variables and scale separation in dynamics of microstructured solids, by A. Berezovski, J. Engelbrecht and G.A. Maugin; On rational boundary conditions for higher-order long-wave models, by A.A. Pichugin and J.D. Kaplunov; Scaling of physical processes in fluid-driven fracture: perspective from the tip, by D.I. Garagash; Space and time scaling laws induced by the multiscale fracturing of the Arctic sea ice cover, by J. Weiss, D. Marsan and P. Rampal; Similarity approach to Hertz type contact problems, by B.A. Galanov; Multiscale modelling in contact mechanics, by I.G. Goryacheva; Recent progress in energetic probabilistic scaling laws for quasibrittle fracture, by Z.P. Bazant and J.-L. Le; The fractal-statistical nature of size-scale effects on material strength and toughness, by A. Carpinteri and S. Puzzi; Scaling laws for properties of materials with imperfect interfaces, by J. Wang, B.L. Karihaloo and H.L. Duan; Burst statistics as a criterion for imminent failure, by S. Pradhan, A. Hansen and P.C. Hemmer; Scaling in damage accumulation, by L.R. Botvina; Scaling of effective moduli of generalised continua; A.V. Dyskin and E. Pasternak; An influence of the elastic properties of composite components on the mechanical response of polycrystalline structures at yield level, by T. Sadowski and E. Postek; Statistical length scale in the Weibull strength theory and its interaction with other scaling lengths in quasibrittle failure, by M. Vorechovsky; Finite fracture mechanics for fractal cracks, by A. Yavari and M.P. Wnuk; Fractal geometry and mechanics of randomly folded thin sheets, by A.S. Balankin and O. Susarrey Huerta; Contact mechanics at the insect-plant interface: How do insects stick and how do plants prevent this?, by E.V. Gorb and S.N. Gorb; Morphological evolution of inhomogeneities due to diffusion and epitaxy, by H. Duan; Some new results on fibre models, by H.J.

Herrmann, F. Kun and F. Raischel; Self-similar structural systems with no unloading and scale-invariant strength distributions, by D.A. Onishchenko; Scaling and hierarchal structure of cohesive agglomerates of nanoparticles, by L.M. Keer, F.M. Borodich and B. Shah; Size-dependent bending of thin metallic films, by H.X. Zhu and B.L. Karihaloo; Appendix: The Scientific Programme. EAN/ISBN : 9781402090332
Publisher(s): Springer Netherlands Format: ePub/PDF Author(s): Gladwell, Graham M. L. - Moreau, R. - Engelbrecht, J.

[DOWNLOAD HERE](#)

Similar manuals:

[IUTAM Symposium On Scaling In Solid Mechanics](#)