Shtern Mikhail

Institute for Problems of Materials Sciences
Department of Micromechanics and Rheology for Composites and Porous Bodies
Krgiganovsky str 3a, Kiev 03142, Ukraine

Education
Doctor of Technical Sciences (1993)
Candidate of Physical and Mathematical Sciences (1978)
M.Sc,.Mechanical and Mathematical Department of Kiev State University (1970)

Career/Employment
Research Scientist (1970-1979)
Senior Scientist (1979-1986)
Head of the Laboratory of Powder Metal Forming (1986-1996),
Head of the Department of Micromechanics and Rheology of Composites and Porous Bodies (1996)

Specialisation
Main field : Micromechanics and rheology of composites and porous materials
Other fields: Nonlinear micromechanics of composites, plastisity theory, computer simulation in powder technologies, materials sciences.
Current research interests: Nanomaterials, nanotechnologies

Honours, Awards, Membership
Member of Editorial Board of "Powder Metallurgy"
Member of Academic Council of Institute for Problems of Materials Sciences
Member of High Certifying Commision of Ukraine.

Publications
Number of papers in refereed journals……..more than 100
Number of communications on scientific meetings……33
Number of books……2

List of current publications

1. M.Shtern, A. Maydanuyk, A.Cocks, The effect of third invariant of stress tensor on mechanical behaviour of porous bodies. Constitutive equations, Powder Metallurgy and Metal Ceramics, V. 41, N 7, 2001, pp.390 – 398
2. M.Shtern, A. Maydanuyk, A.Cocks, The effect of third invariant of stress tensor on mechanical behaviour of porous bodies. Unit cell analysis, Powder Metallurgy and Metal Ceramics, Vol. 41, N 5 –6, 2001, pp.315 – 324
3. M. Shtern, V Dudunov, Criterion for Exhaustion of the Ultimate Plastic Capacity, Powder Metallurgy and Metal Ceramics, Vol. 38, N 11 –12, 1999, pp.560 - 567
4. M.Shtern, V.Skorokhod, Plane cross-section Method for Modelling the Pressing of Complex Shape Powder Articles in Rigid Die, J. European Ceramic Society, 17, 1997, 113-119
5. M.Shtern, Timmermens, L. Froyen, L.Delaey, The Permeable Element Method For Modelling of Deformation Processes in Porous and Powder Materials, Powder Technology, 1997, N4, pp.19 –29
6. M.Shtern, On Constitutive Potentials for Porous Bodies and Powders/Proceeding of IUTAM Simposium On Mechanics for Granular and Porous Materials, Cambridge, July, 1996/Edited by A.C.F.Cocks and N.A.Fleck, Kluver Academic Publishers, 1997,pp71-80.