

Bernd Kröplin

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Current position

Full Professor, Head of Institute

Education

Civil Engineering, School of Engineering, Eckernförde

Research interests

Statics and Dynamics, Discretization Methods, Smart Materials, Coupled Multifield Problems, Fracture Mechanics, Fatigue, Lightweight Structures, LTA Technologies, Artificial Intelligence, Neural Networks

Career

Graduate Engineer Civil Engineering, University Braunschweig
Research in Berkeley, Seattle, USA Trondheim, Norway, Prag, CSFR
Habilitation
Prof. for Application of Numerical Methods; University Dortmund
Research in Stanford, USA
Professor and Head of Institute; ISD; University Stuttgart
Formation of the 'Centre of Production Technology'
Formation of the graduate course 'Modelling and Discretisation Methods for Continua and Flows'
Founding of CargoLifter
Founding of TAO-Technologies

Honors and awards

Heisenberg Grant of the German Research Foundation
Körber Award for European Sciences
Admission to Academia Europaea

Professional activities

Doctoral committee member, Member of the University Senate, Editorial Board Member of various organisations

Summary of journal publications (since 2001)

Journal	Impact factor	Number of papers
Physical Review Letters	7,035	1
Physical Review E	2,202	1
Mechanics of Materials	1,422	1
Computational Materials Sciences	1,003	3
Other papers in refereed journals		more than 5

Selected publications (max. 5)

F.K. Wittel, F. Kun, H.J. Herrmann, B. Kröplin: Fragmentation of Shells, Physical Review Letters, Vol. 93 (3/2004) 035504

D.Ballhause, M. D'Ottavio, B. Kröplin and E. Carrera: A Unified Formulation to Assess Multilayered Theories for Piezoelectric Plates; Computers & Structures Vol. 83/15-16 pp. 1217-1235

T. Wallmersperger, B. Kröplin, R.W. Gülch: Modeling and Analysis of Chemistry and Electromechanics. Electroactive polymer (EAP) actuators as artificial muscles – reality, potential and challenges, Y. Bar-Cohen (Ed.) SPIE press, 2004

H.M. Deuschle, F.K. Wittel, H. Gerhard, G. Busse, B. Kröplin: Combined Numerical and Experimental Investigation of Progressive Failure of Composites, submitted to Composites Science and Technology (2004)