Record Nr. UNINA9910830405303321 **Titolo** Plasticity of metals: experiments, models, computation: final report of the Collaborative Research Centre 319, "Stoffgesetze für das inelastische Verhalten metallischer Werkstoffe - Entwicklung und technische Anwendung" 1985 - 1996 Pubbl/distr/stampa [Place of publication not identified], : Wiley VCH, 2001 **ISBN** 1-280-55755-9 9786610557554 3-527-60011-6 Descrizione fisica 1 online resource (427 pages) Disciplina 620.1/633 Metals - Plastic properties Soggetti Materials Science Chemical & Materials Engineering **Engineering & Applied Sciences** Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Bibliographic Level Mode of Issuance: Monograph Note generali Sommario/riassunto This is the final report, drawing its conclusions and results from many individual papers and co-workers at the Institute for Structural Analysis of the Technical University of Braunschweig. It shows the correlation between energetic and mechanical quantities of face-centred cubic metals, cold worked and softened to different states. Constitutive models for the plastic of metals are developed and the application of these models is presented. The improvements achieved by this contribution cover the material functions, the shape of yield surfaces, and the consideration of distributed experimental data within the

mumerical analysis.