

Materials Research Solid State Physics and Engineering

Computer Modelling of Structural Transformations of Nanopores in Fcc Metals

M.D. Starostenkov, A.V. Markidonov, P.V. Zakharov, P.Y. Tabakov

PDF eBook / PDF eBook DRM Free

The book focuses on the effects of shock waves on vacancies and their clusters in fcc crystals.

Keyword: Computer Modelling of Nanopores, Molecular Dynamics, Fcc Metals, Defect Structures in Crystals, Radiation Material Science, Nano-Engineering of Materials, Ultrasonic Treatment of Materials, Radiation Induced Defects, Vacancy Clusters, Shock Wave Effects, Radiation-Resistant Materials, Thermomechanical Processing, Energy Transfer Mechanism, Nanopore Nucleation, Nanopore Based Filters, Nanopore Based Detectors, Cooling Elements in Nano-Electronics



ISBN 13: 978-1-64490-051-2, Publication Date: 2019 (11/25/2019) Direct URL: http://www.mrforum.com/product/structural-transformations-nanopores-fcc-metals 130 pages, PDF eBook DRM Free, USD 125.00 *Materials Research Foundations Vol. 63 /* BISAC: TEC021000 / BIC/Thema: TGM Imprint: Materials Research Forum LLC, *Publisher's sales rights are Wordwide*

Summary:

The book focuses on the effects of shock waves on vacancies and their clusters in fcc crystals. It is shown that high-speed cooperative atomic displacements represent a powerful tool for the purposeful modification of defect structures in crystalline bodies. The results are important for radiation material science, nano-engineering, the study of shock wave effects and the ultrasonic treatment of materials.



Materials Research Solid State Physics and Engineering

Computer Modelling of Structural Transformations of Nanopores in Fcc Metals

M.D. Starostenkov, A.V. Markidonov, P.V. Zakharov, P.Y. Tabakov

Handbook / color print, paperback

The book focuses on the effects of shock waves on vacancies and their clusters in fcc crystals.

Keyword: Computer Modelling of Nanopores, Molecular Dynamics, Fcc Metals, Defect Structures in Crystals, Radiation Material Science, Nano-Engineering of Materials, Ultrasonic Treatment of Materials, Radiation Induced Defects, Vacancy Clusters, Shock Wave Effects, Radiation-Resistant Materials, Thermomechanical Processing, Energy Transfer Mechanism, Nanopore Nucleation, Nanopore Based Filters, Nanopore Based Detectors, Cooling Elements in Nano-Electronics



ISBN 13: 978-1-64490-050-5, Publication Date: 2019 (11/25/2019) Direct URL: http://www.mrforum.com/product/structural-transformations-nanopores-fcc-metals 130 pages, color print, paperback, USD 125.00 *Materials Research Foundations Vol. 63 /* BISAC: TEC021000 / BIC/Thema: TGM Imprint: Materials Research Forum LLC, *Publisher's sales rights are Wordwide*

Summary:

The book focuses on the effects of shock waves on vacancies and their clusters in fcc crystals. It is shown that high-speed cooperative atomic displacements represent a powerful tool for the purposeful modification of defect structures in crystalline bodies. The results are important for radiation material science, nano-engineering, the study of shock wave effects and the ultrasonic treatment of materials.