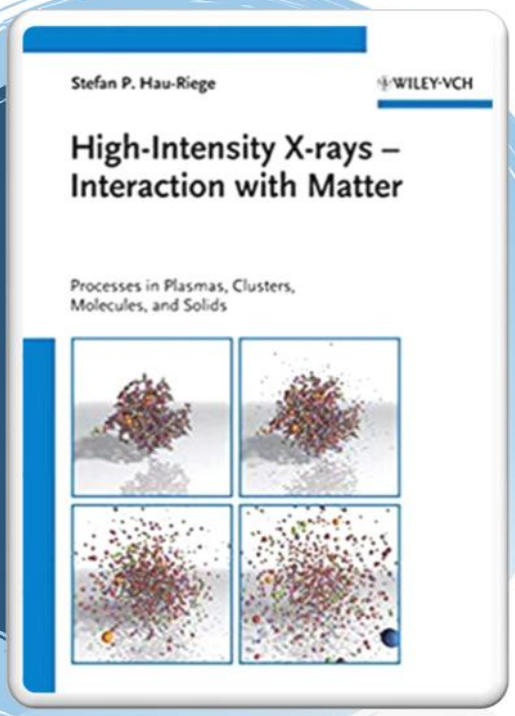

High-Intensity X-rays Interaction with Matter:

Processes in Plasmas, Clusters, Molecules, and Solids

Bibiographical Information:

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Abstract:

Filling the need for a book bridging the effect of matter on X-ray radiation and the interaction of x-rays with plasmas, this monograph provides comprehensive coverage of the topic. As such, it presents and explains such powerful new X-ray sources as X-ray free-electron lasers, as well as short pulse interactions with solids, clusters, molecules, and plasmas, and X-ray matter interactions as a diagnostic tool.
Equally useful for researchers and practitioners working in the field.
From the Content:

- **Atomic Physics**
- **Scattering of X-ray Radiation**
- **Electromagnetic Wave Propagation**
- **Electron Dynamics**
- **Short X-ray Pulses**
- **High-intensity Effects Irradiated materials**
- **Simulation of X-ray Matter Interaction**
- **Examples of X-ray Matter Interaction**

Editorial Reviews

Review

"Filling the need for a book bridging the effect of matter on X-ray radiation and the interaction of X-rays with plasmas, this monograph provides comprehensive coverage of the topic ... Equally useful for researchers and practitioners working in the field." (ETDE Energy database, 2011)

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