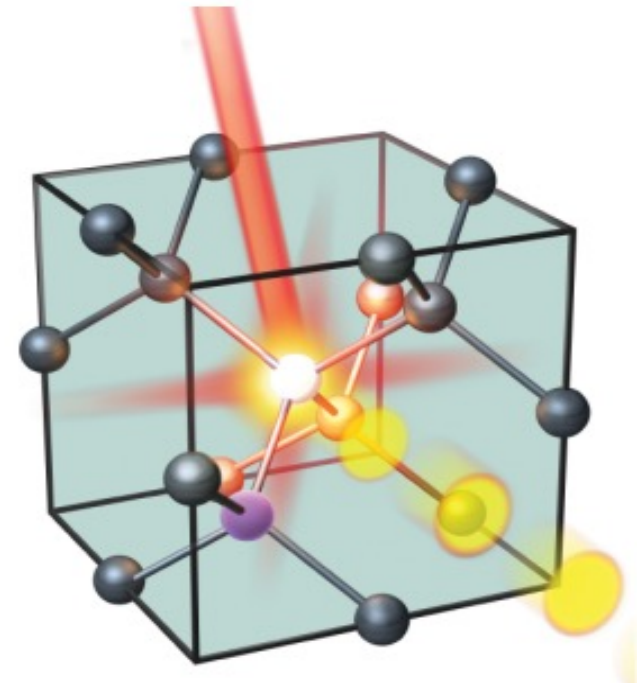
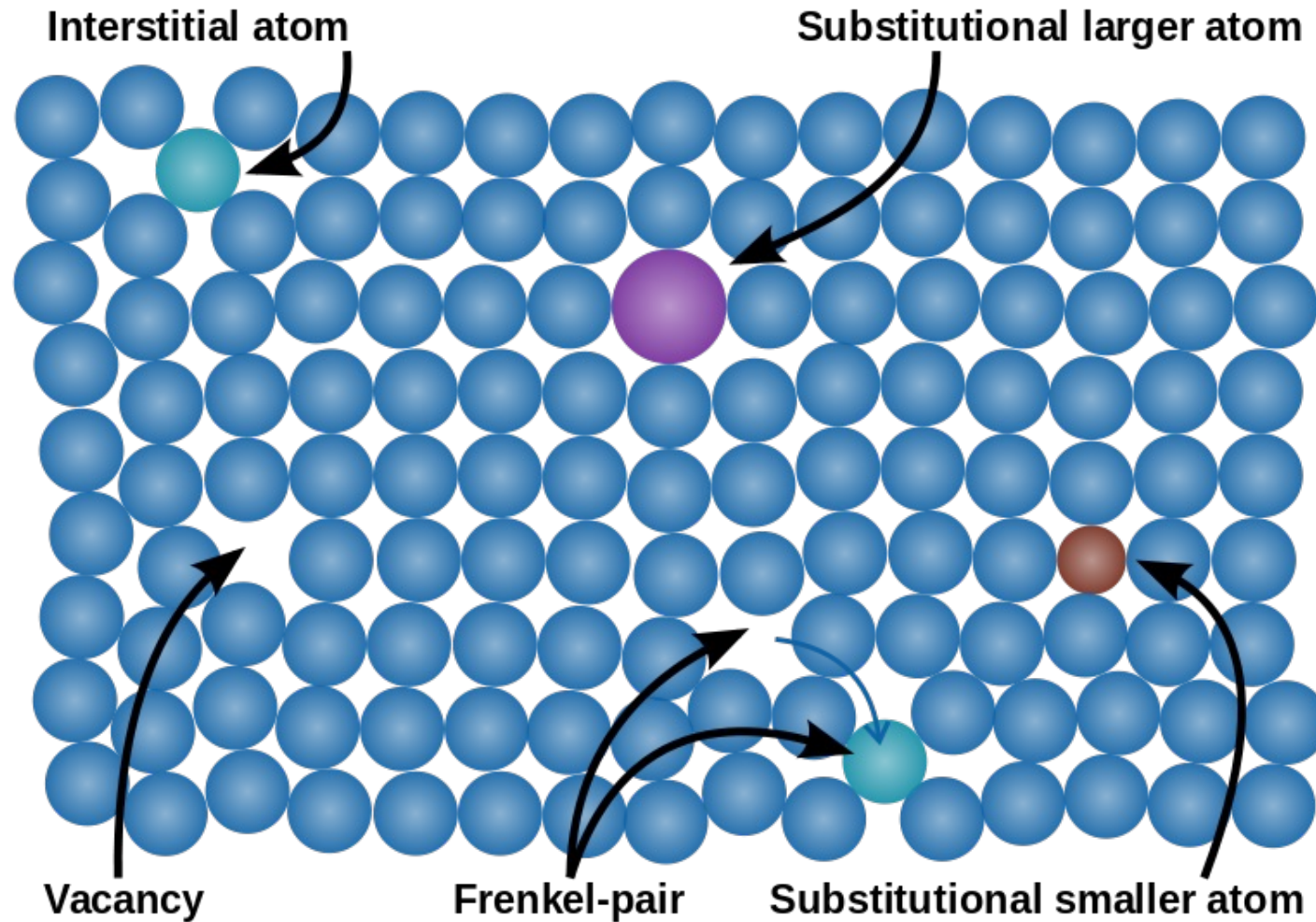


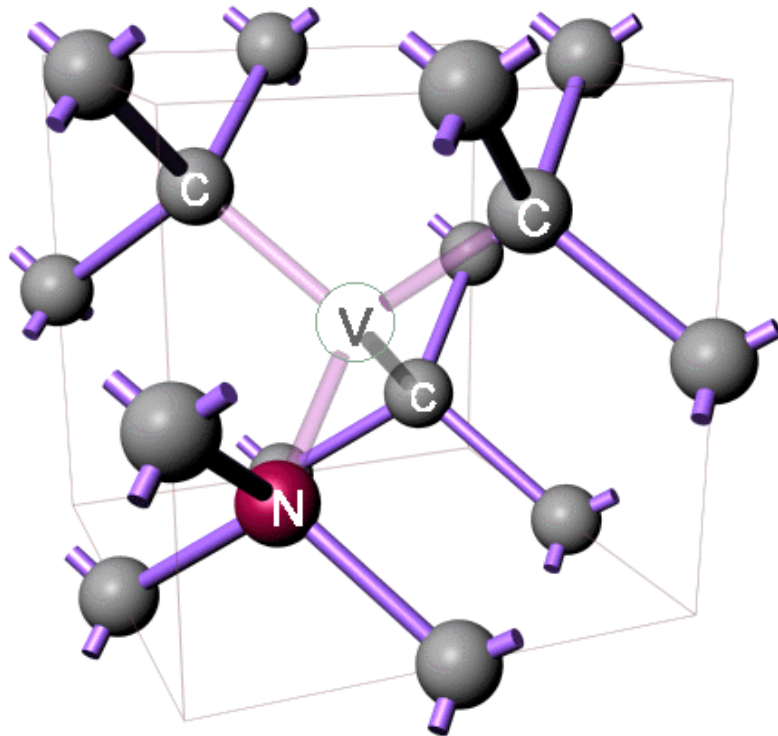
1. 0-Dimension: Punktdefekte
2. 1-Dimension: Versetzungen
3. 2-Dimension: Korngrenzen



0-Dimension: Punktdefekte

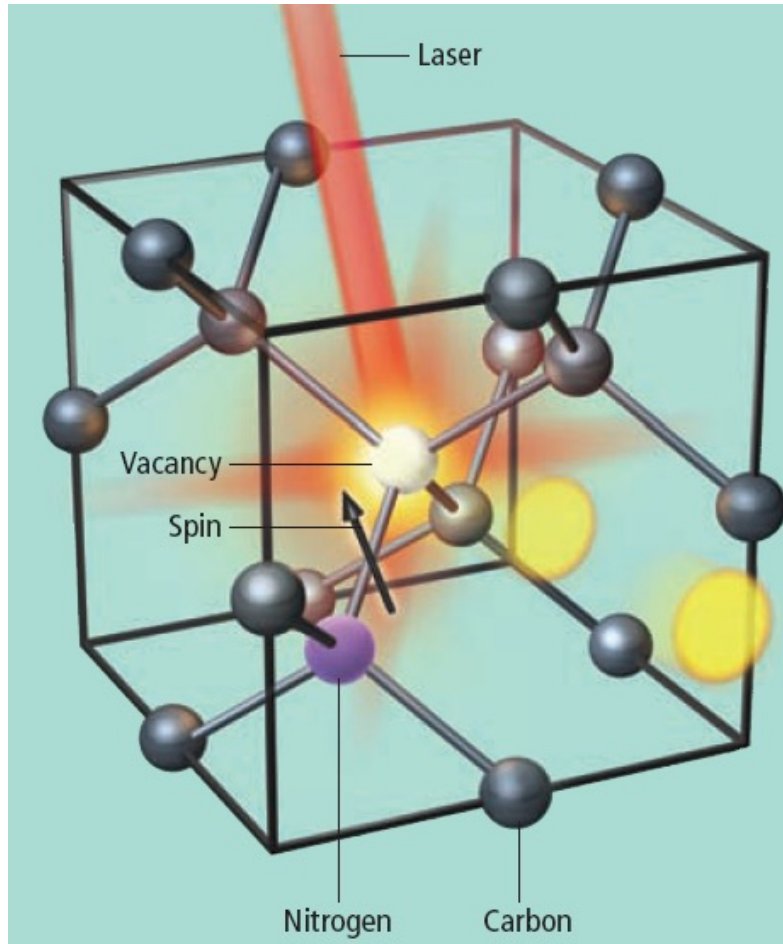


Diamant

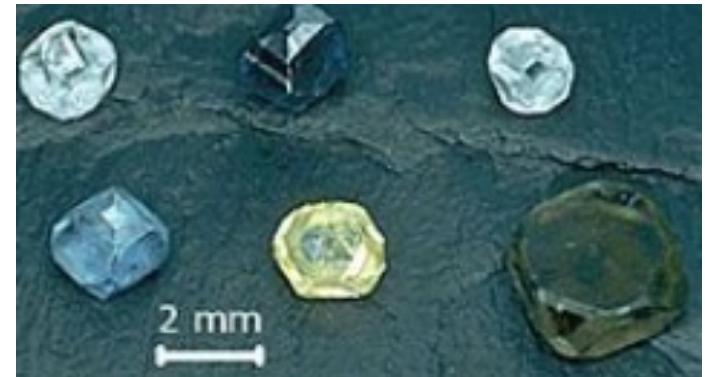


**one C atom replaced by N, combined
with a neighboring vacancy site**

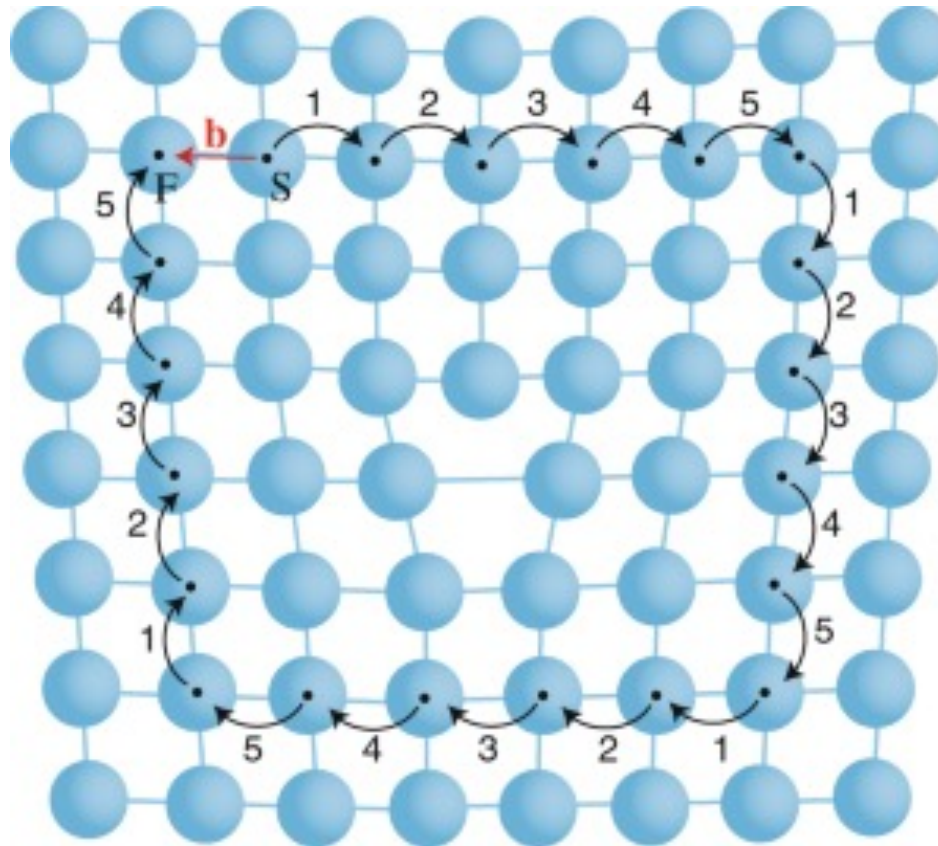
two lone electrons form a quasi-pair at
N in **NV⁻ centers**:
one extra electron localized around the
vacancy site



Diamant

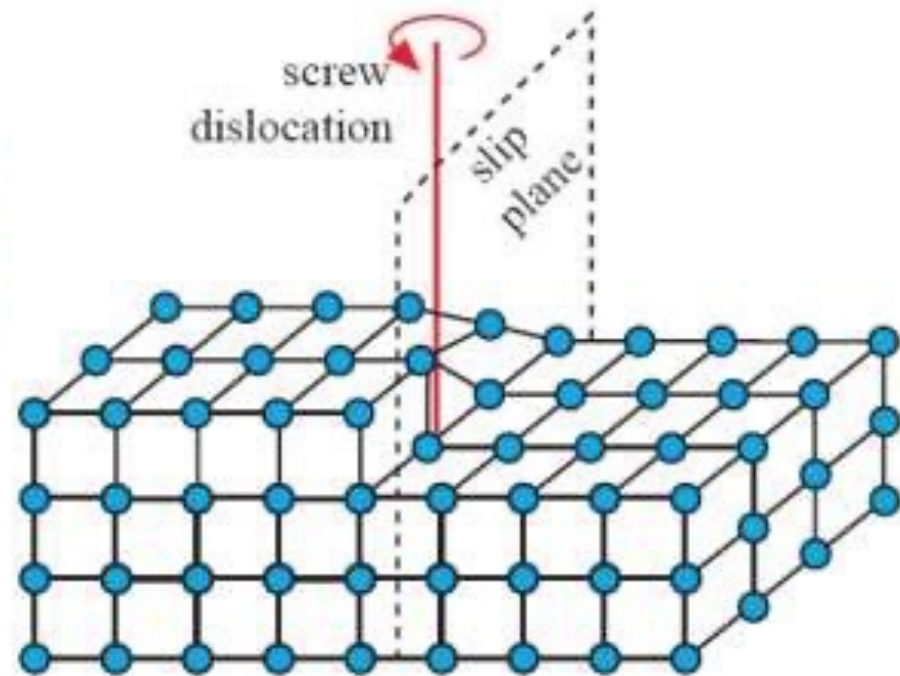
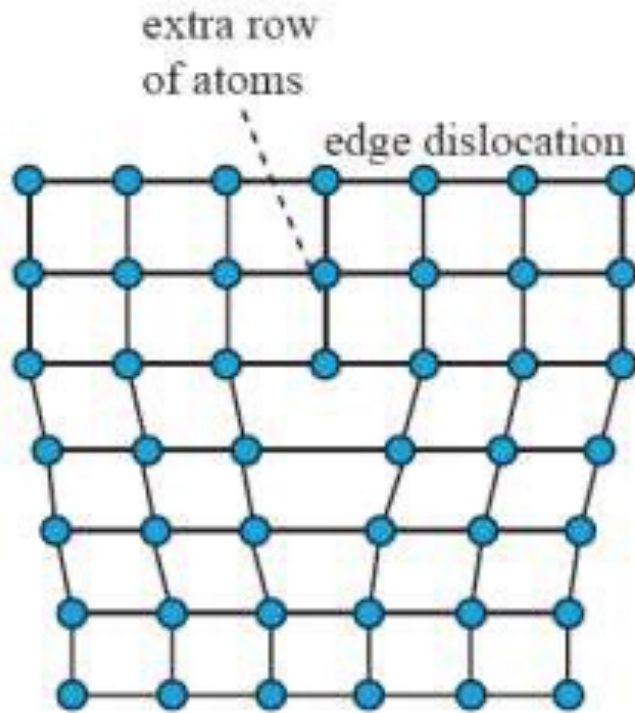


1-Dimension: Versetzungen

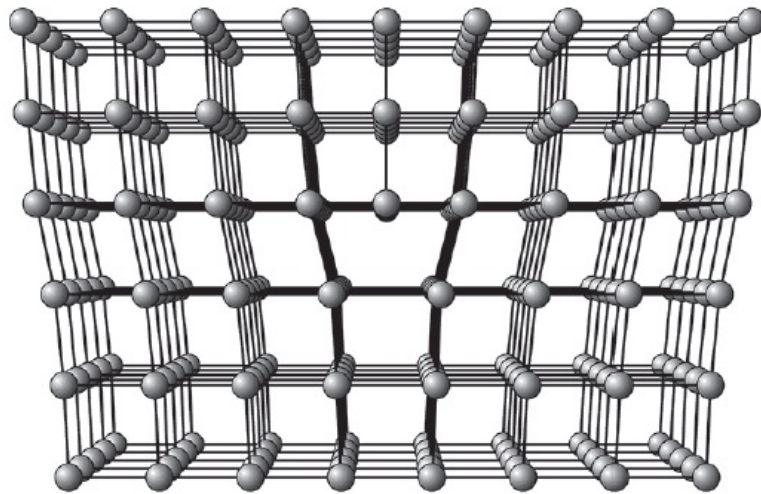


linienförmige Kristallbaufehler

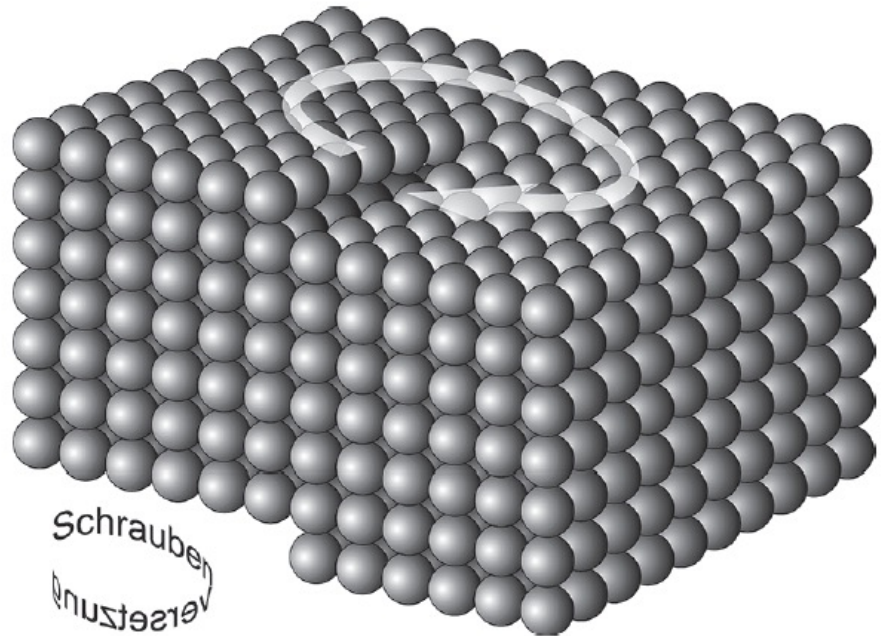
1-Dimension: Versetzungen



1-Dimension: Versetzungen

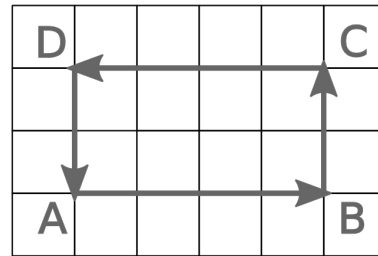


Stufenversetzung

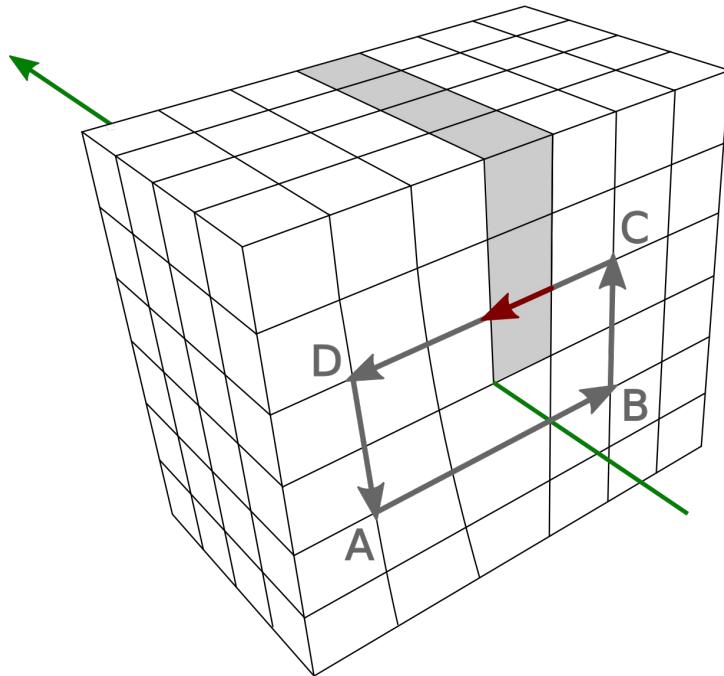


Schraubenversetzung

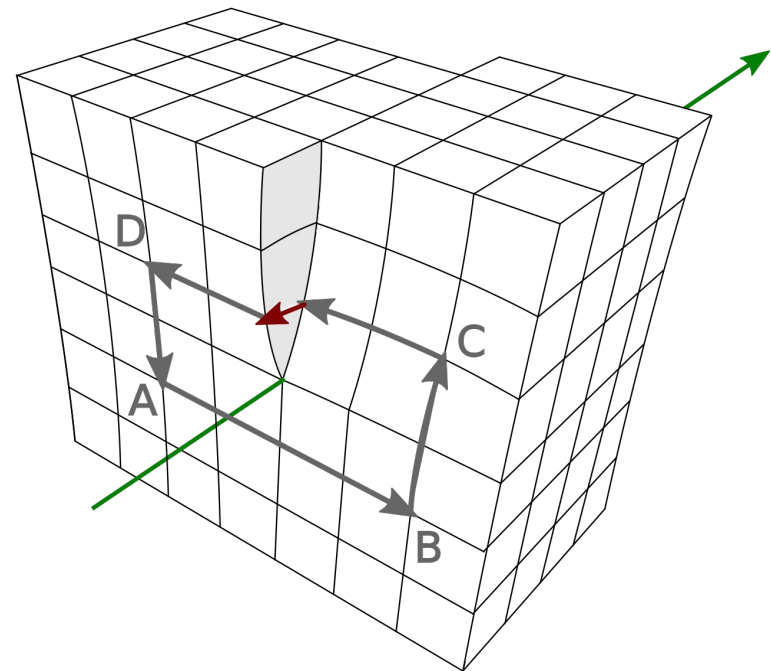
1-Dimension: Versetzungen



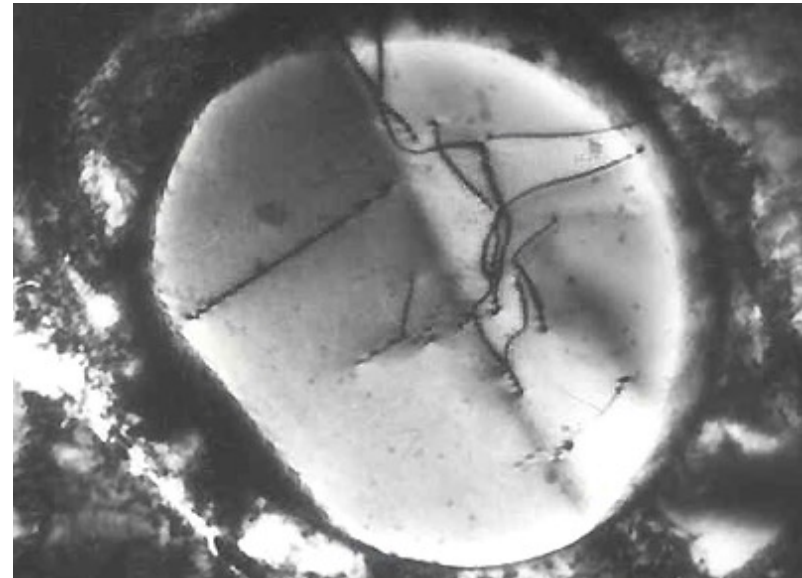
Burgers Vector $\vec{b}$
Dislocation Line Vector $\vec{L}$



$\vec{b}$
 $\vec{L}$

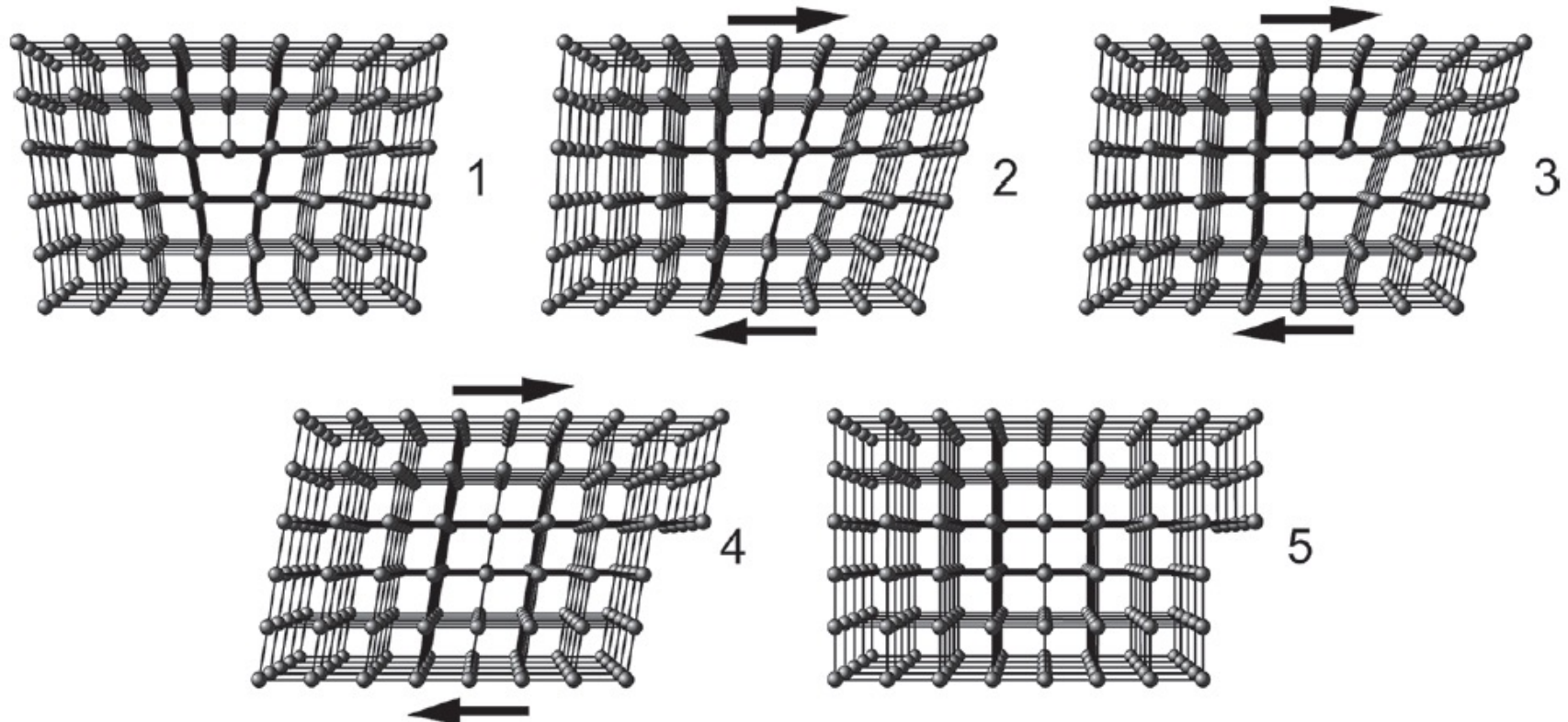


1-Dimension: Versetzungen

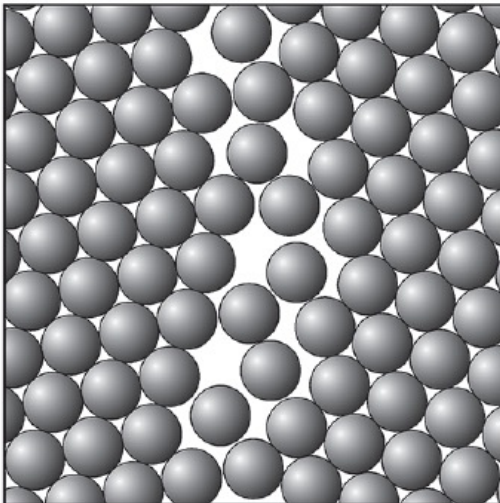


Transmissionselektronenmikroskopie (TEM):
TEM-Aufnahme von Versetzungen in Austenit.

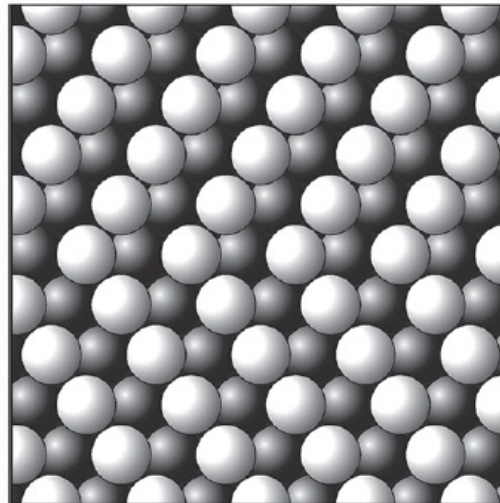
Mechanismus der plastischen Verformung durch Versetzungsbewegung



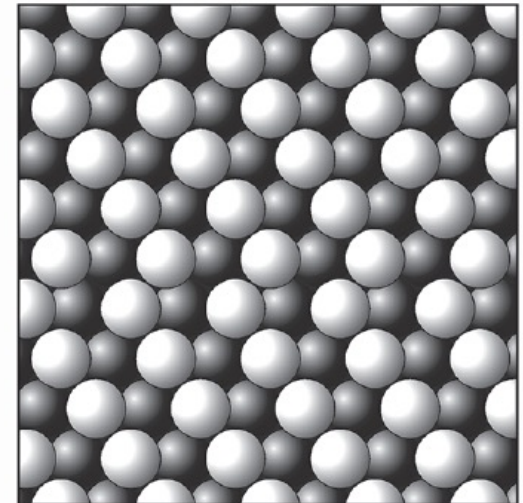
2-Dimension: flächenförmige Kristallbaufehler



Korngrenze

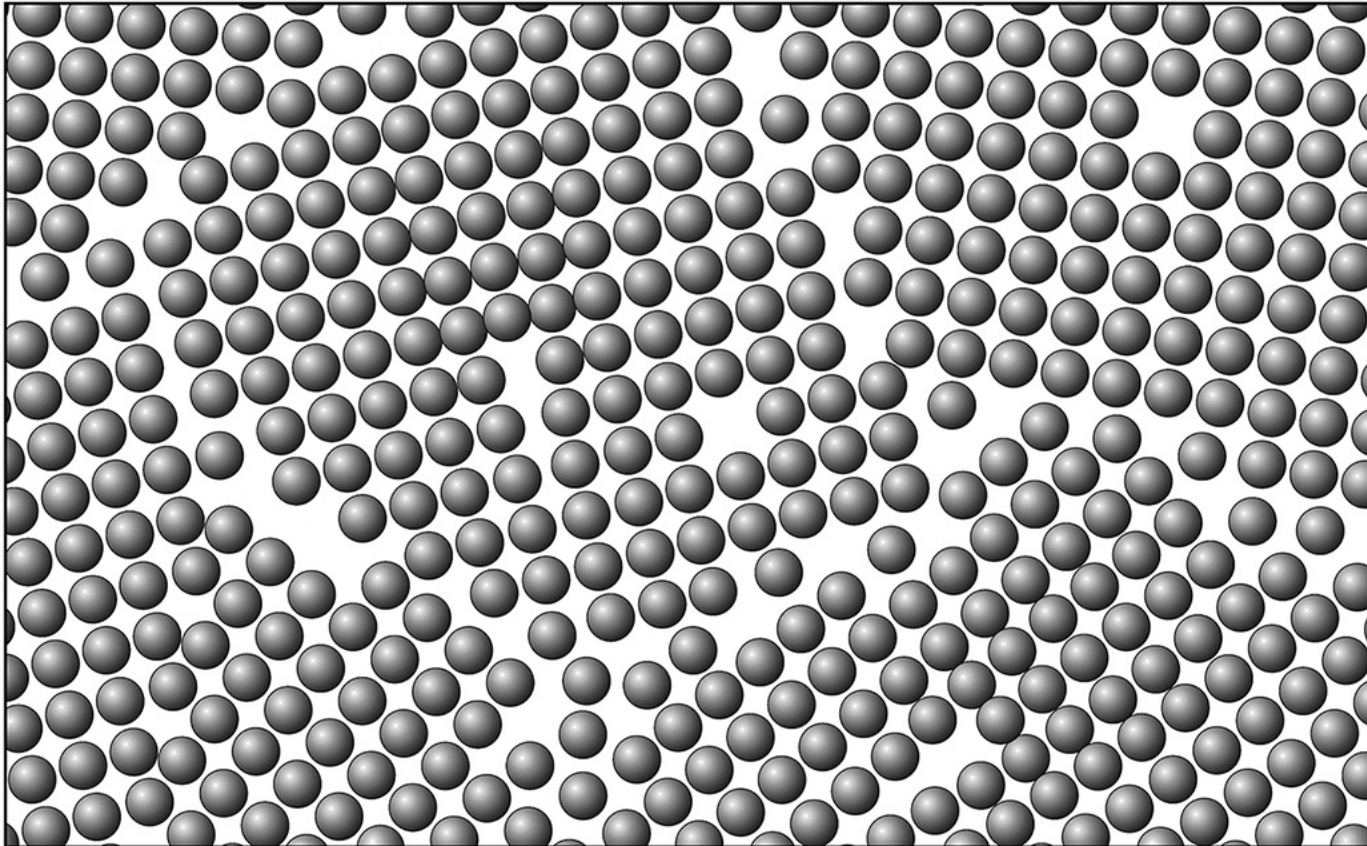


Zwillingskorngrenze



Stapelfehler

2-Dimension: Korngrenzen



Atomanordnung in einem reinen Metall

2-Dimension: Korngrenzen

