Examples of Imperfections and Impurities in crystal lattices

From Semiconductor Physics and Devices: Basic Principles (4th Edition), Donald A. Neamen, McGraw Hill, 2012, ISBN 978-0-07-352958-5.

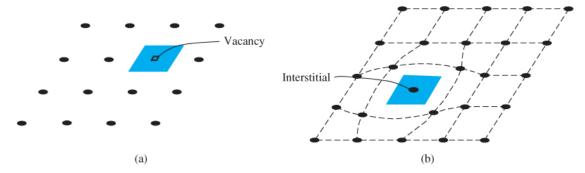


Figure 1.18 | Two-dimensional representation of a single-crystal lattice showing (a) a vacancy defect and (b) an interstitial defect.

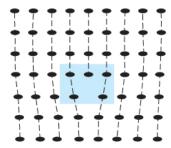
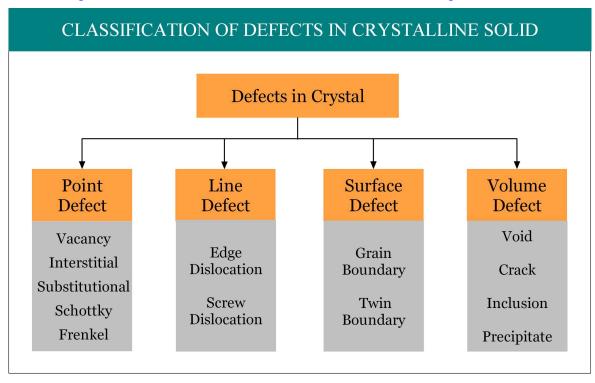


Figure 1.19 | A twodimensional representation of a line dislocation.

https://www.minaprem.com/materials-science/defects/substitutional-defect-point-defects-in-solid/



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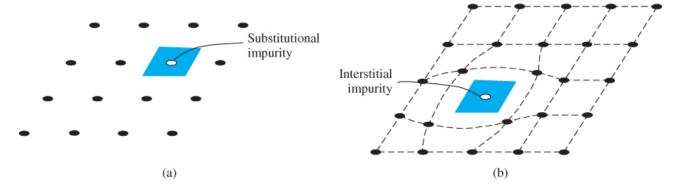


Figure 1.20 | Two-dimensional representation of a single-crystal lattice showing (a) a substitutional impurity and (b) an interstitial impurity.

From https://www.substech.com/dokuwiki/doku.php?id=imperfections of crystal structure

