

LINKS Unidade 4 – Estrutura dos Materiais Cristalinos

Aula de índice de Miller da U. Toronto

<https://www.youtube.com/watch?v=JS9ysbgr0BE>

De novo, material muito bom da Texas A&M:

Crystallographic Points {Texas A&M: Intro to Materials}

<https://www.youtube.com/watch?v=dP3LjWtoeMU&list=PL8EAOgbez9XIWGbmcihctMO4bXSB4V8hm&index=7>

Crystallographic Directions {Texas A&M: Intro to Materials}

<https://www.youtube.com/watch?v=fYK45OdnZH0&index=9&list=PL8EAOgbez9XIWGbmcihctMO4bXSB4V8hm>

Crystallographic Planes {Texas A&M: Intro to Materials}

<https://www.youtube.com/watch?v=1TG456bpUk4&index=8&list=PL8EAOgbez9XIWGbmcihctMO4bXSB4V8hm>

Indexing Crystal Planes using Miller Indices {Texas A&M: Intro to Materials}

<https://www.youtube.com/watch?v=lymHQUJ33NA>

Families of directions/planes

<https://www.youtube.com/watch?v=5f4C6e-9rgg>

Linear Density, Planar Density, Atomic Packing Factor {Texas A&M: Intro to Materials}

<https://www.youtube.com/watch?v=la6aeBwqVBM>

Atomic densities and Packing Factors {Texas A&M: Intro to Materials}

<https://www.youtube.com/watch?v=RGCqLEU2IIM>

FCC structure {Texas A&M: Intro to Materials}

<https://www.youtube.com/watch?v=pHt7--8l4bQ&index=11&list=PL8EAOgbez9XIWGbmcihctMO4bXSB4V8hm>

Ionic crystal structures {Texas A&M: Intro to Materials}

https://www.youtube.com/watch?v=A3cPHn_OgVQ&index=12&list=PL8EAOgbez9XIWGbmcihctMO4bXSB4V8hm

Interstitial Sites {Texas A&M: Intro to Materials}

<https://www.youtube.com/watch?v=LKmHqDW9-GY&list=PL8EAOgbez9XIWGbmcihctMO4bXSB4V8hm&index=13>

Single Crystal, Polycrystalline, Amorphous {Texas A&M Intro to Materials}

<https://www.youtube.com/watch?v=z9SjzRrRIwU>

Ceramic Crystal Structures {Texas A&M: Intro to Materials}

<https://www.youtube.com/watch?v=JlLO8lppZis>

Exercícios sobre Índices de Miller: Miller Indices Practice Examples

<https://www.youtube.com/watch?v=n84gzYIB0BQ>

Módulo de cristalografia do site da U. Cambridge

<https://www.doitpoms.ac.uk/tlplib/crystallography3/index.php>

Cubic Lattices and Close Packing – U.C. Davis

http://chemwiki.ucdavis.edu/Textbook_Maps/General_Chemistry_Textbook_Maps/Map%3A_Lower's_Chem1/07%3A_Solids_and_Liquids/7.8%3A_Cubic_Lattices_and_Close_Packing

...tópicos desta aula via “Muddiest Points”:

Muddiest Point- Crystal Directions

https://www.youtube.com/watch?v=9UYZSa_ftBU

Muddiest Point- Miller Indices and Planes

<https://www.youtube.com/watch?v=ElneDZrrL-Y>

Muddiest Point - Unit Cell Calculations

<https://www.youtube.com/watch?v=IIVVUHo471Q>

Calculating the optimal sphere packing density: with oranges – *dica: Pedro Rabelo – Poli2017*

<https://www.youtube.com/watch?v=3inLMXcetUA>