

LINKS Unidade 3 – Classificação dos Materiais

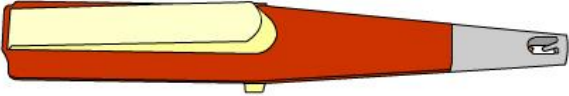
Um video bem legal sobre classificação dos materiais

<https://www.youtube.com/watch?v=OG4G8gaOTMw>


Uma boa forma de tomar contato com as diferentes categorias de materiais é desmontando um produto que encontramos no dia-a-dia. O site abaixo, da Universidade de Cambridge, faz isso com um acendedor piezoelétrico, que era muito popular umas décadas atrás – era o famoso “Magiclick”...

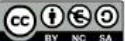

Example Artefact

This is a piezoelectric lighter. It creates sparks which are used to light gas burners. When the button is depressed a spark can be seen between the electrode and the point of the cap.



(click to depress the button)

Click the start button to begin dismantling the artefact: Start 

  www.doitpoms.ac.uk

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

Um vídeo que fala da inspiração na natureza para “design” de produtos com desempenhos especiais – o caso do trem bala japonês, que passou a gerar menos ruído com design inspirado em aves... *(colaboração do Gabriel Gelli, ingressante 2018)*

<https://www.youtube.com/watch?v=iMtXqTmfta0&feature=youtu.be>

Penn State – “River of Paradise” – sobre uma outra forma de se fazer a classificação dos materiais...

<https://courseware.e-education.psu.edu/courses/matse81/animations/lesson01/rivDelta.html>

Multiscale Modeling Examples - Integrated Computational Material Engineering (ICME)

Multiscale Modeling of Mg Extrusion Alloys

https://icme.hpc.msstate.edu/mediawiki/index.php/Multiscale_Modeling_of_ZE20_Mg_Extrusion_Alloy

Hierarchically Structured Titanium-Boron Based Armor System

[https://icme.hpc.msstate.edu/mediawiki/index.php/Coherent_Multiscale_Hierarchical_Modeling_Scheme_\(CMHM\)_for_Hierarchically_Structured_Titanium-Boron_Based_Armor_System](https://icme.hpc.msstate.edu/mediawiki/index.php/Coherent_Multiscale_Hierarchical_Modeling_Scheme_(CMHM)_for_Hierarchically_Structured_Titanium-Boron_Based_Armor_System)

ICME overview for Microstructure Evolution of Polycrystalline Materials.

https://icme.hpc.msstate.edu/mediawiki/index.php/ICME_overview_for_Microstructure_Evolution_of_Polycrystalline_Materials.

ICME Overview of Tetragonal Zirconia Polycrystals (TZP)

[https://icme.hpc.msstate.edu/mediawiki/index.php/ICME Overview of Tetragonal Zirconia Polycrystals \(TZP\)](https://icme.hpc.msstate.edu/mediawiki/index.php/ICME_Overview_of_Tetragonal_Zirconia_Polycrystals_(TZP))

ICME overview of zirconium oxide degradation

[https://icme.hpc.msstate.edu/mediawiki/index.php/ICME overview of zirconium oxide degradation](https://icme.hpc.msstate.edu/mediawiki/index.php/ICME_overview_of_zirconium_oxide_degradation)