



Cor Estrutural

Nos seres vivos

Interferência

{ Filmes finos



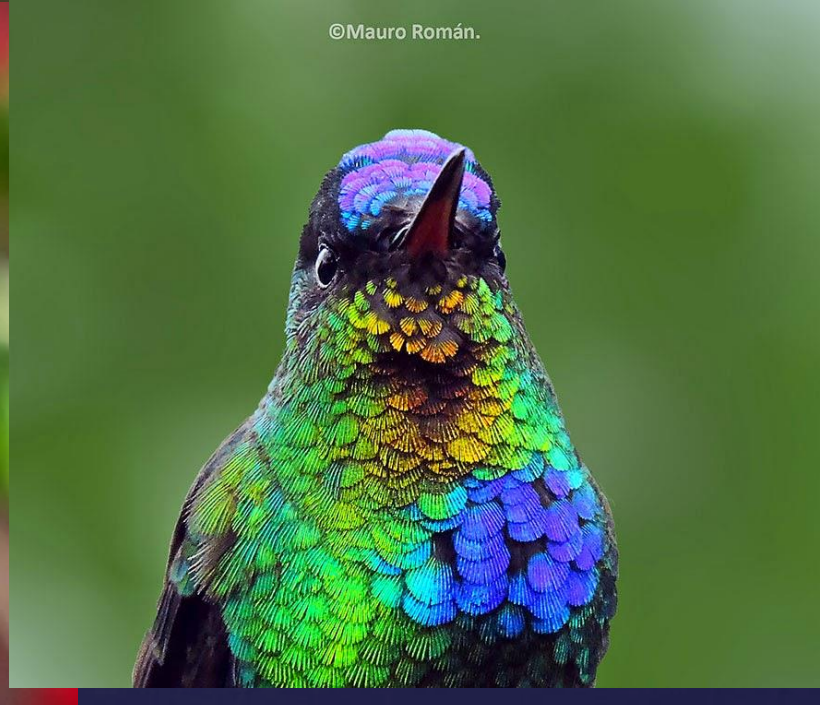
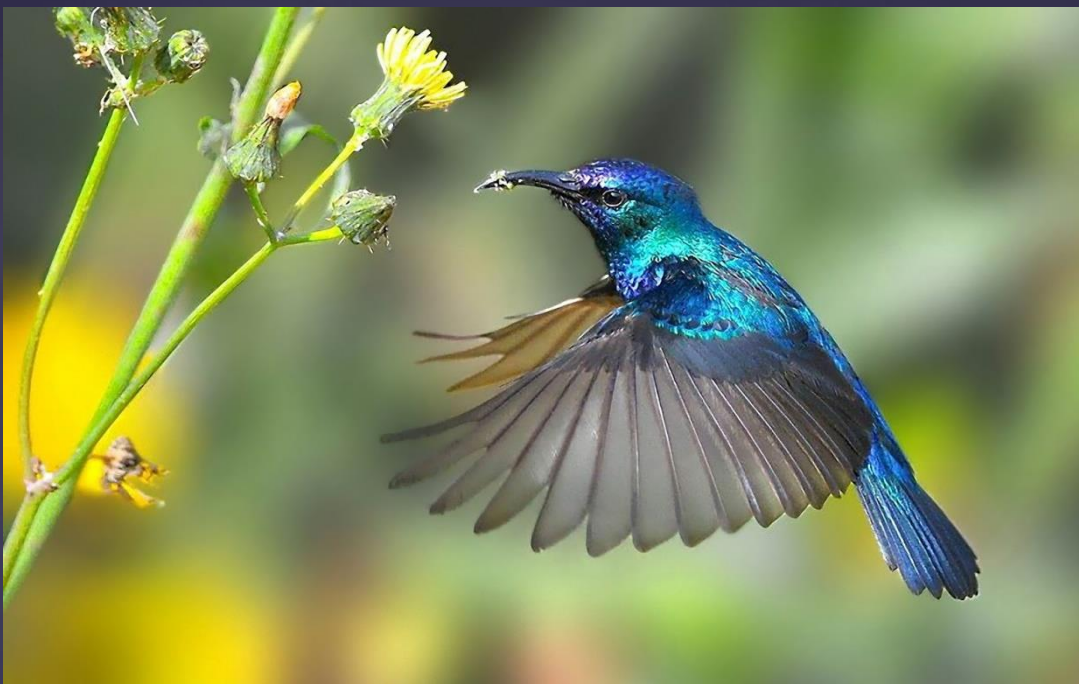


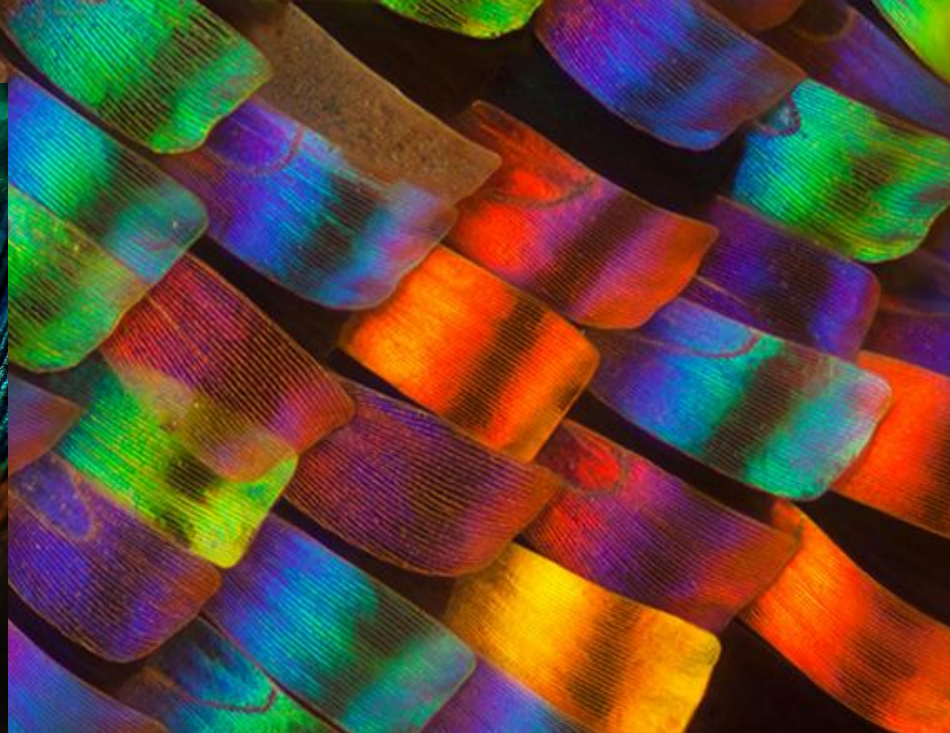
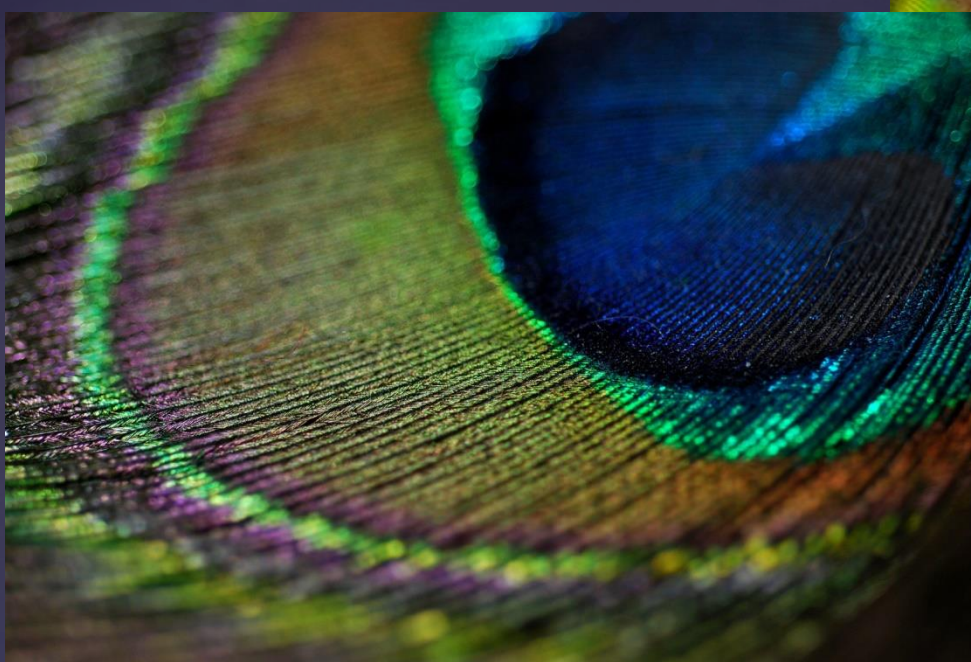
Ailanthus webworm moth | por linden.g









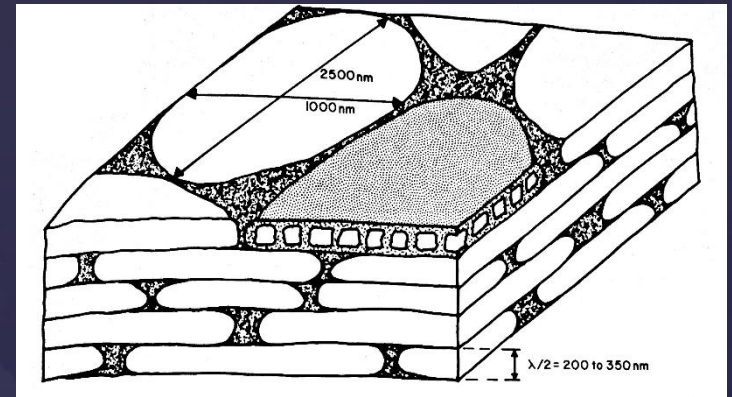
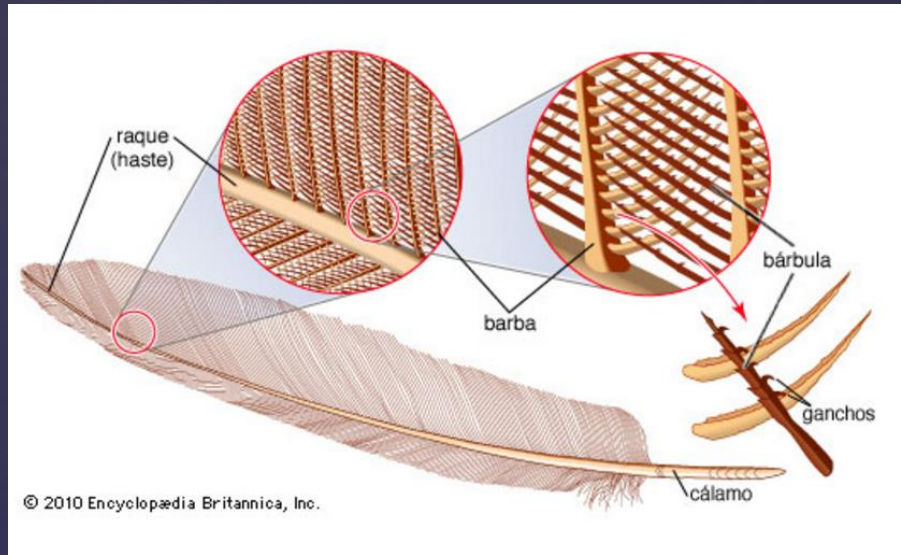


Interferência

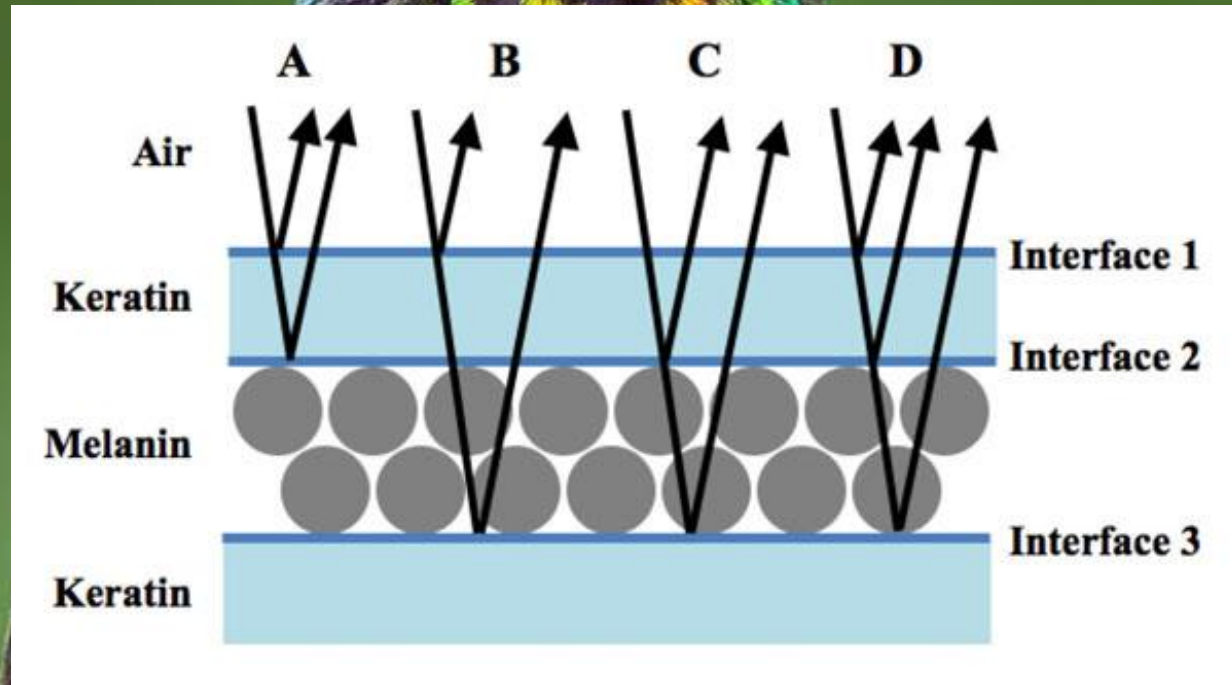
Filmes finos em múltiplas camadas

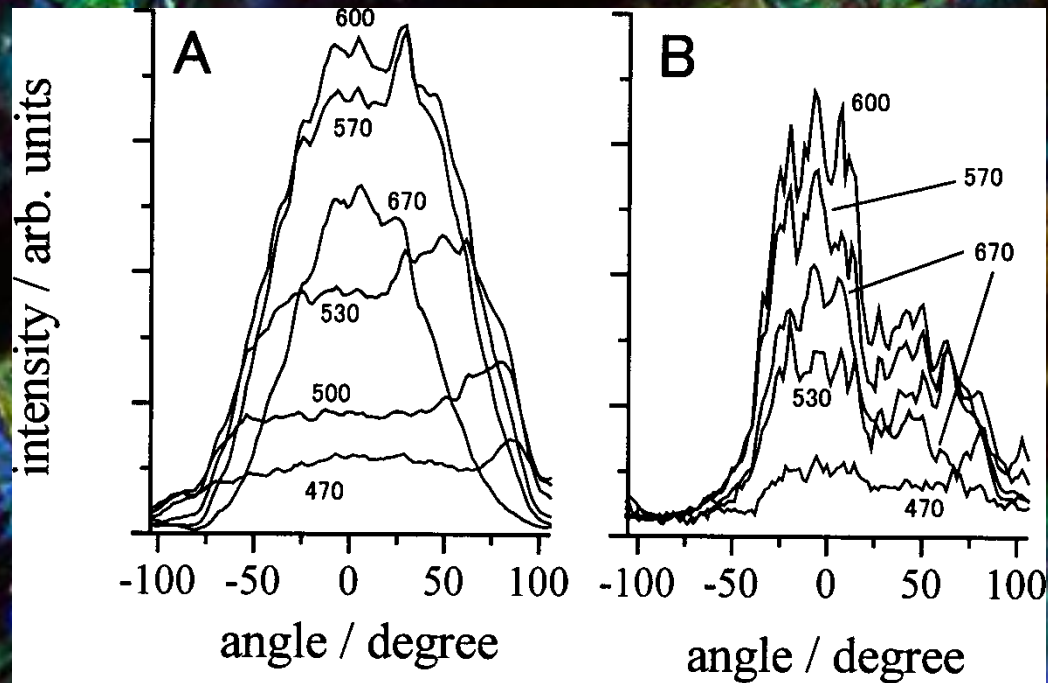


Estrutura da pena



Estrutura da superfície da
bárbula da pena de um beija flor

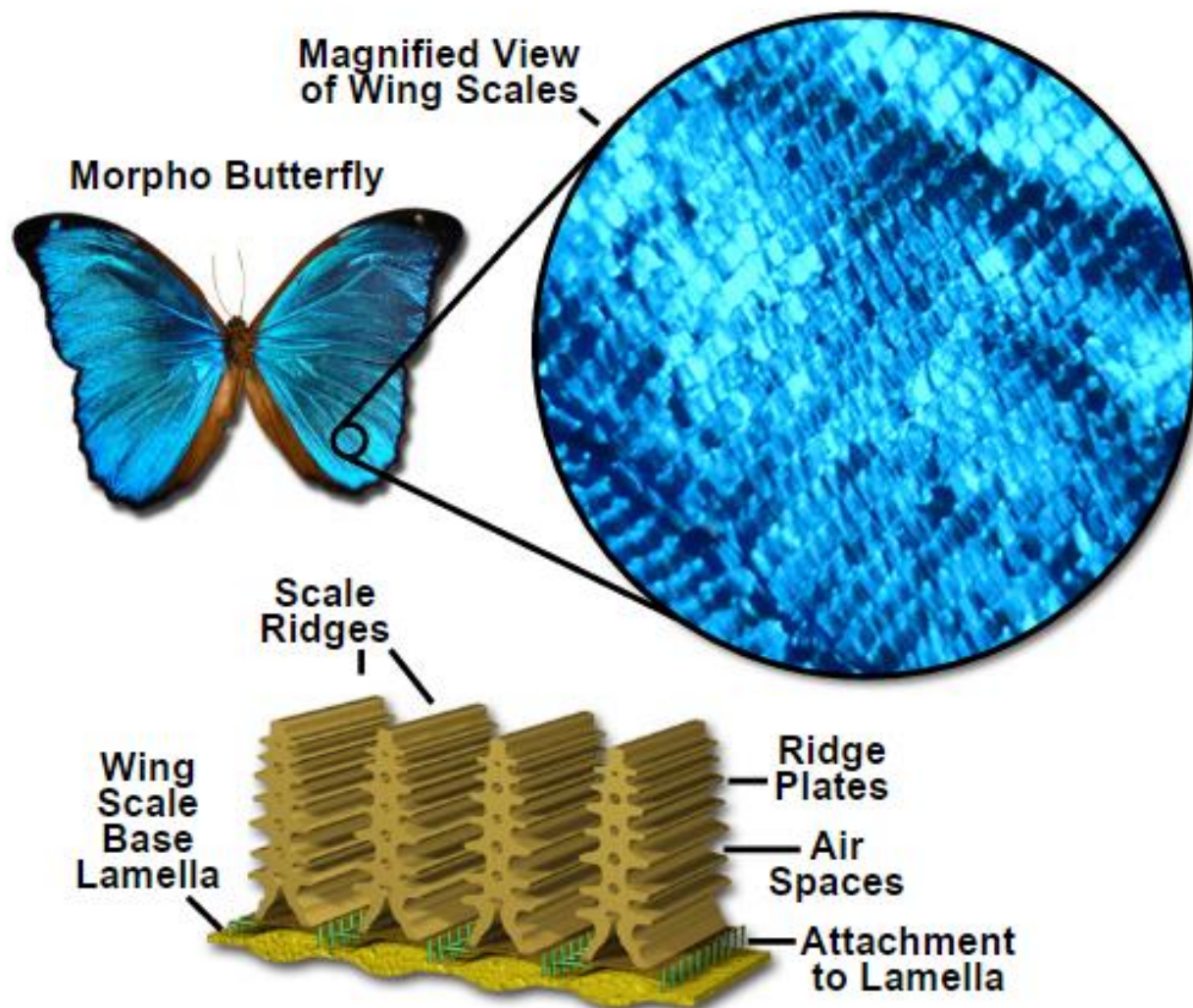




penas-de-pavão-vistas-
sob-o-microscópio



Doxocopa cyane reducta (mexican Emperor) | por linden.g





Crysolina fastuosa

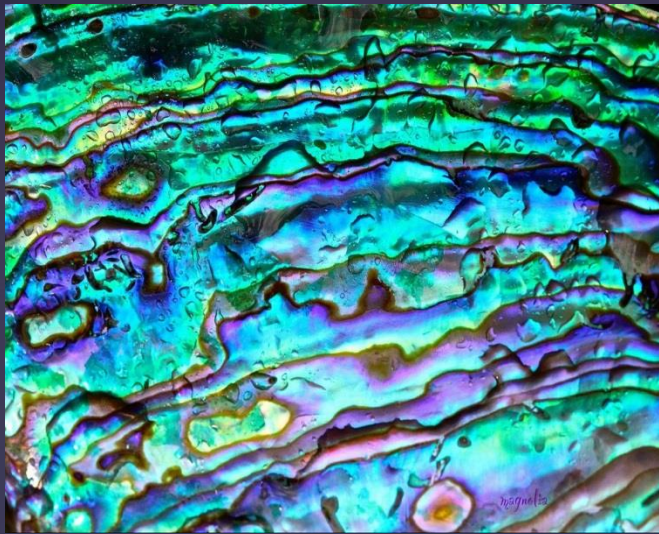


*Crysolina
americana* Linneus



*Chrysochus
auratus* Fabricius

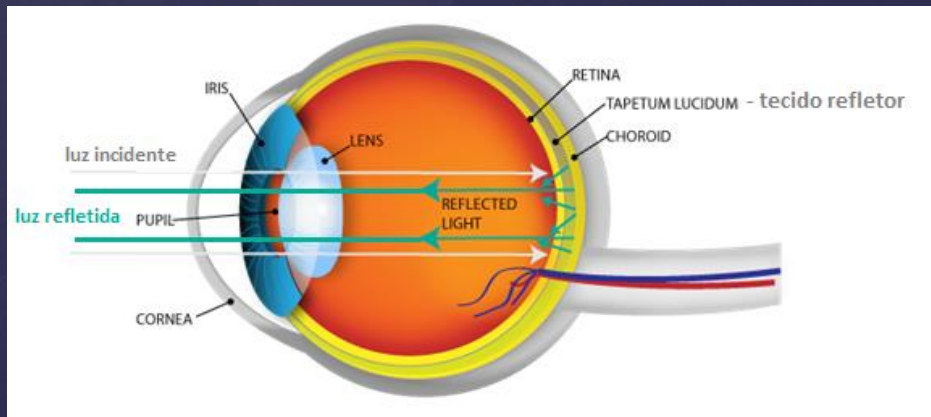
Besouros



Interferência - Nácar



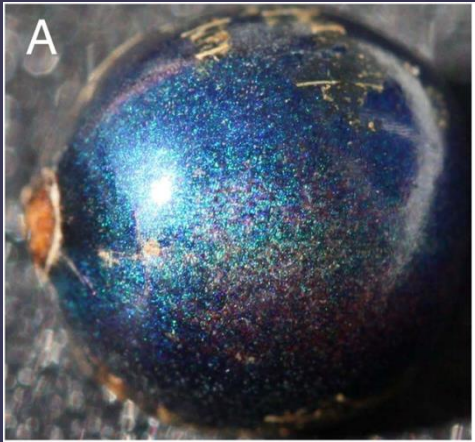
Interferência em filme
simples



Interferência - mamíferos



Interferência - mamíferos



Frutos da *Pollia condensata*, (*marble berry*) planta nativa da Etiópia.

O brilho iridescente do fruto encanta passarinhos que os levam para o ninho.

Cor estrutural no reino vegetal



Efeito lótus



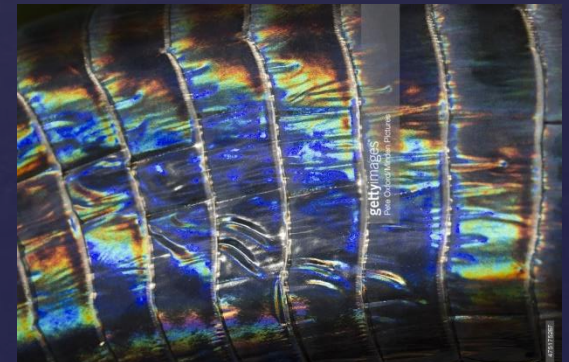
Difração

gettyimages
Pete Oxford/Minden Pictures

475175257



Drymarchon corais



Difração

- Mudança de cor
- Iridescência



Interferência

- Mudança de cor intensa conforme a direção
- Coloração visível somente em luz direta
- Iridescência



Difração

- Cor não muda com a direção
- Sem iridescência



Espalhamento
Rayleigh

Cor estrutural

<http://onlinelibrary.wiley.com/doi/10.1002/anie.200390235/full>

<http://followthecolours.com.br/art-attack/penas-de-pavao-vistas-sob-o-microscopio-revelam-cores-e-detalhes-magnificos/>
<http://australianmuseum.net.au/image/king-beetle-detail>

<http://www.imagenswiki.com/imagens/pena-pavao-gota-agua-jpg>

<https://www.flickr.com/photos/13084997@N03/29246021411/>

<http://sites.sinauer.com/animalcommunication2e/chapter04.03.html>

http://rsif.royalsocietypublishing.org/content/6/Suppl_2/S203

KINOSHITA, S.; YOSHIOKA, S. Effect of Macroscopic Structure in Iridescent Color of the Peacock Feathers. *Graduate School of Frontier Biosciences, Osaka University, Toyonaka, Osaka 560-0043, Japan Forma*, **17**, 169–181, 2002

NASSAU, K. The Physics and Chemistry of Color, 2nd Edition
John Wiley & Sons, Inc., 2001

<http://escola.britannica.com.br/assembly/134227/Ganchos-minusculos-mantem-unidas-as-penas-que-cobrem-o-corpo>

<https://www.etsy.com/listing/287397099/real-butterfly-doxocopa-cyane-reducta-in>