

sci.optics: Re: metal optics – an ununderstood chapter in optics becomes understandable

## Re: metal optics – an ununderstood chapter in optics becomes understandable

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**From:** josefmatz (josefmatz\_at\_arcor.de)

**Date:** 10/15/04

Date: Fri, 15 Oct 2004 04:14:41 +0200

Could you please tell me, which issue of stratton has energy flux formulas within the metal, maybe i have the wrong version ! All other books you refer to i know also – No energy fluxes within the metal !

"Alpha Omega" <who@where> schrieb im Newsbeitrag  
news:10mu7914glc501d@corp.supernewsay .com...

>  
> "josefmatz" <josefmatz@arcor.de> wrote  
>  
>> *Everybody has concerned with formulas having a complex index of  
> refraction.*  
>> *One of the best prooven theories is the incident wave on a homogeneous  
> bulk  
> metal. Intensity and polarization of the reflected wave – everything in  
> well  
>> agreement with the theory. But what is with the energy fluxes within  
>> the bulk metal ? The books stop here. You get no answer or only  
> qualitative  
>> answers in the books.*  
>  
> *Amazing*  
>  
>> *No serious book in electrodynamics gives those formulas. All give  
> references  
>> to very old literature. And  
>> also published new articles at top institutes just may write some  
formulas  
>> for the electric field very old stuff.  
>> Many theory professors doubt on this theory !*  
>  
> *Get yourself a few good books e.g. Jackson Electro–Dynamics, Born & Wolf  
> Principles of Optics etc.*  
>  
> *If you are really curious study the multivolume Handbuch der Physik the  
old  
> and new editions.*

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>

> *These can be found in a good university library, maybe not the old edition*  
> *in Germany as many such libraries there have been incinerated during WW*

II.

>

> *The references are old because such matters have dealt with a long time*  
*ago.*

>

> *As to the professors who doubt the classical theory... Never mind.*

>

> *Hope my suggestions will help you, particularly the first two sentences.*

>

> *Please heed my advice as this is the only one you will get from me since*  
*you*

> *just graduated to my kill file.*

>

> *Congratulations and Good Luck.*

>

>

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