

Re: features visible at low magnification are not "clear" at high magnification

Re: features visible at low magnification are not "clear" at high magnification

Source: <http://sci.tech-archive.net/Archive/sci.techniques.microscopy/2005-12/msg00098.html>

- *From:* "Kevin Cunningham" <smskjd@xxxxxxxxxxxxxxxx>
 - *Date:* Mon, 19 Dec 2005 13:36:41 GMT
-

"sanjiv" <shrivastavas@xxxxxxxxxxxxxxxx> wrote in message
news:1134956259.142792.17340@xx

> Dear microscopist,

>

> I think i have a relatively simple problem for the experts in

> optical microscopy.

>

> I'm looking at indentation in hard ceramics [opaque material] using

> simple optical microscope with x10,x20,x50,x100 using yellow light,

> observing in reflection mode.

>

> The problem I have is at low magnification x10 around the indents a

> ring like feature is visible, however at high magnification x50 or

> x100 the features is not visible. The lateral size of the indents

> ranges from 30um to 200um. measurements by different techniques

> (AFM) the vertical depth of indents range from 2um – expected 15ums.

> The ring like features ranges in height from few(10–50) nanometers

> to about 1ums.

>

>

> I would appreciate comments, literature, references etc. explaining

> this effect.

>

> since, images can not be posted, i would gladly give images for indpeth

> response.

>

>

> thanking you for the help.

>

> Warm regards

> Sanjiv

>

Sounds like its time to use reflected dark field. You might have to upgrade your microscope.

Kevin Cunningham

Re: features visible at low magnification are not "clear" at high magnification

Re: features visible at low magnification are not "clear" at high magnification

SMS

- **Follow-Ups:**

- ◆ **Re: features visible at low magnification are not "clear" at high magnification**

- ◇ From: Aaron

- **References:**

- ◆ **features visible at low magnification are not "clear" at high magnification**

- ◇ From: sanjiv

- Prev by Date: **Re: features visible at low magnification are not "clear" at high magnification**

- Next by Date: **A thank you and a question (or 2)**

- Previous by thread: **Re: features visible at low magnification are not "clear" at high magnification**

- Next by thread: **Re: features visible at low magnification are not "clear" at high magnification**

- Index(es):

- ◆ **Date**

- ◆ **Thread**