



# Optically Stimulated Luminescence: Fundamentals and Applications

By Eduardo G. Yukihiro, Stephen W. S. McKeever

Download now

Read Online ➔

**Optically Stimulated Luminescence: Fundamentals and Applications** By Eduardo G. Yukihiro, Stephen W. S. McKeever

Optically stimulated luminescence has developed into one of the leading optical techniques for the measurement and detection of ionizing radiation. This text covers, in a readable manner, advanced modern applications of the technique, how it can play a useful role in different areas of dosimetry and how to approach the challenges presented when working with optically stimulated luminescence.

The six chapters are as follows:

- Introduction, including a short history of OSL and details of successful applications
- Theory and Practical Aspects
- Personal Dosimetry
- Space Dosimetry
- Medical Dosimetry
- Other Applications and Concepts, including retrospective and accident dosimetry, environmental monitoring and UV dosimetry

Throughout the book, the underlying theory is discussed on an as-needed basis for a complete understanding of the phenomena, but with an emphasis of the practical applications of the technique. The authors also give background information and relevant key references on each method, inviting the reader to explore deeper into the subject independently.

Postgraduates, researchers, and those involved with radiation dosimetry will find this book particularly useful. The material is both relevant and accessible for both specialists and those new to the field, therefore is fundamental to any academic interested in modern advances of the subject.

↓ [Download Optically Stimulated Luminescence: Fundamentals an ...pdf](#)

📖 [Read Online Optically Stimulated Luminescence: Fundamentals ...pdf](#)



# Optically Stimulated Luminescence: Fundamentals and Applications

*By Eduardo G. Yukihiro, Stephen W. S. McKeever*

**Optically Stimulated Luminescence: Fundamentals and Applications** By Eduardo G. Yukihiro, Stephen W. S. McKeever

Optically stimulated luminescence has developed into one of the leading optical techniques for the measurement and detection of ionizing radiation. This text covers, in a readable manner, advanced modern applications of the technique, how it can play a useful role in different areas of dosimetry and how to approach the challenges presented when working with optically stimulated luminescence.

The six chapters are as follows:

- Introduction, including a short history of OSL and details of successful applications
- Theory and Practical Aspects
- Personal Dosimetry
- Space Dosimetry
- Medical Dosimetry
- Other Applications and Concepts, including retrospective and accident dosimetry, environmental monitoring and UV dosimetry

Throughout the book, the underlying theory is discussed on an as-needed basis for a complete understanding of the phenomena, but with an emphasis of the practical applications of the technique. The authors also give background information and relevant key references on each method, inviting the reader to explore deeper into the subject independently.

Postgraduates, researchers, and those involved with radiation dosimetry will find this book particularly useful. The material is both relevant and accessible for both specialists and those new to the field, therefore is fundamental to any academic interested in modern advances of the subject.

**Optically Stimulated Luminescence: Fundamentals and Applications** By Eduardo G. Yukihiro, Stephen W. S. McKeever **Bibliography**

- Sales Rank: #3826302 in Books
- Published on: 2011-02-14
- Original language: English
- Number of items: 1
- Dimensions: 9.82" h x 1.04" w x 6.93" l, 1.80 pounds
- Binding: Hardcover
- 378 pages



[Download Optically Stimulated Luminescence: Fundamentals an ...pdf](#)

 [Read Online](#) Optically Stimulated Luminescence: Fundamentals ...pdf

## **Editorial Review**

### **Review**

"In summary, the authors have done a commendable job of reviewing the recent literature and bringing it out in a form of a book. The review is comprehensive that is well written and would be useful to the intended audience of not only students or postdoctoral fellows but also researchers and the dosimetry community." (Radiation Protection Dosimetry, 16 November 2011)

### **From the Back Cover**

Optically stimulated luminescence has developed into one of the leading optical techniques for the measurement and detection of ionizing radiation. This text covers, in a readable manner, advanced modern applications of the technique, how it can play a useful role in different areas of dosimetry and how to approach the challenges presented when working with optically stimulated luminescence.

The six chapters are as follows:

- Introduction, including a short history of OSL and details of successful applications
- Theory and Practical Aspects
- Personal Dosimetry
- Space Dosimetry
- Medical Dosimetry
- Other Applications and Concepts, including retrospective and accident dosimetry, environmental monitoring and UV dosimetry

Throughout the book, the underlying theory is discussed on an as-needed basis for a complete understanding of the phenomena, but with an emphasis of the practical applications of the technique. The authors also give background information and relevant key references on each method, inviting the reader to explore deeper into the subject independently.

Postgraduates, researchers, and those involved with radiation dosimetry will find this book particularly useful. The material is both relevant and accessible for both specialists and those new to the field, therefore is fundamental to any academic interested in modern advances of the subject.

### **About the Author**

**Stephen W. S. McKeever** is Vice President for Research and Technology Transfer at Oklahoma State University (USA). He is also a Regents Professor in the department of physics. He was named a Noble Research Fellow in Optical Materials in 1987. Professor McKeever was also named the MOST (More Oklahoma Science and Technology) Chair of Experimental Physics in 1999. He is widely known for his research in optically stimulated luminescence (OSL) and thermoluminescence (TL) with specific applications to radiation dosimetry. Major accomplishments in recent years include leading a research team that developed optically stimulated luminescence as a means of personal radiation dosimetry. The patented technology was used commercially to develop a radiation dosimeter system currently used worldwide. His special interests are space radiation dosimetry to monitor radiation doses to astronauts on long-duration space flights, such as a manned mission to Mars. He has authored or co-authored over 180 scientific publications and five books.

**Eduardo G. Yukihiro** is an Assistant Professor at Oklahoma State University. He has been involved with research on OSL since 2000, and his research group currently focuses on the development of the OSL technique in various fields such as space dosimetry, medical dosimetry, accident dosimetry, neutron dosimetry, as well as investigations in basic properties of OSL materials. He has presented material relating to this book to students in short courses, colloquia, a conference summer school, and invited conference presentations. In addition, he has been invited to write a review paper on applications of OSL in medicine and biology to the journal *Physics in Medicine and Biology*.

## **Users Review**

### **From reader reviews:**

#### **Kathryn Cannon:**

Playing with family inside a park, coming to see the sea world or hanging out with good friends is thing that usually you may have done when you have spare time, and then why you don't try point that really opposite from that. Just one activity that make you not experiencing tired but still relaxing, trilling like on roller coaster you already been ride on and with addition of knowledge. Even you love Optically Stimulated Luminescence: Fundamentals and Applications, you can enjoy both. It is fine combination right, you still desire to miss it? What kind of hangout type is it? Oh can occur its mind hangout people. What? Still don't get it, oh come on its named reading friends.

#### **Arthur Seaton:**

Do you have something that you want such as book? The guide lovers usually prefer to pick book like comic, short story and the biggest you are novel. Now, why not hoping Optically Stimulated Luminescence: Fundamentals and Applications that give your pleasure preference will be satisfied through reading this book. Reading practice all over the world can be said as the way for people to know world a great deal better then how they react when it comes to the world. It can't be stated constantly that reading routine only for the geeky particular person but for all of you who wants to always be success person. So , for all you who want to start reading through as your good habit, you can pick Optically Stimulated Luminescence: Fundamentals and Applications become your personal starter.

#### **Nicole Norris:**

You can find this Optically Stimulated Luminescence: Fundamentals and Applications by check out the bookstore or Mall. Simply viewing or reviewing it could to be your solve trouble if you get difficulties for ones knowledge. Kinds of this book are various. Not only through written or printed but also can you enjoy this book by means of e-book. In the modern era including now, you just looking because of your mobile phone and searching what their problem. Right now, choose your current ways to get more information about your guide. It is most important to arrange you to ultimately make your knowledge are still update. Let's try to choose suitable ways for you.

**Mary Infante:**

A lot of publication has printed but it differs. You can get it by net on social media. You can choose the most beneficial book for you, science, amusing, novel, or whatever simply by searching from it. It is called of book Optically Stimulated Luminescence: Fundamentals and Applications. You can contribute your knowledge by it. Without making the printed book, it could possibly add your knowledge and make anyone happier to read. It is most crucial that, you must aware about book. It can bring you from one destination to other place.

**Download and Read Online Optically Stimulated Luminescence:  
Fundamentals and Applications By Eduardo G. Yukihiro, Stephen  
W. S. McKeever #6LOZ72PHBXR**

# **Read Optically Stimulated Luminescence: Fundamentals and Applications By Eduardo G. Yuki-hara, Stephen W. S. McKeever for online ebook**

Optically Stimulated Luminescence: Fundamentals and Applications By Eduardo G. Yuki-hara, Stephen W. S. McKeever Free PDF d0wnl0ad, audio books, books to read, good books to read, cheap books, good books, online books, books online, book reviews epub, read books online, books to read online, online library, greatbooks to read, PDF best books to read, top books to read Optically Stimulated Luminescence: Fundamentals and Applications By Eduardo G. Yuki-hara, Stephen W. S. McKeever books to read online.

## **Online Optically Stimulated Luminescence: Fundamentals and Applications By Eduardo G. Yuki-hara, Stephen W. S. McKeever ebook PDF download**

**Optically Stimulated Luminescence: Fundamentals and Applications By Eduardo G. Yuki-hara, Stephen W. S. McKeever Doc**

**Optically Stimulated Luminescence: Fundamentals and Applications By Eduardo G. Yuki-hara, Stephen W. S. McKeever Mobipocket**

**Optically Stimulated Luminescence: Fundamentals and Applications By Eduardo G. Yuki-hara, Stephen W. S. McKeever EPub**

**6LOZ72PHBXR: Optically Stimulated Luminescence: Fundamentals and Applications By Eduardo G. Yuki-hara, Stephen W. S. McKeever**