



Infrared Thermal Imaging: Fundamentals, Research and Applications

By Michael Vollmer, Klaus-Peter Möllmann



Infrared Thermal Imaging: Fundamentals, Research and Applications By Michael Vollmer, Klaus-Peter Möllmann

This richly illustrated hands-on guide is designed for researchers, teachers and practitioners. The huge selection of examples taken from science, basic teaching of physics, practical applications in industry and a variety of other disciplines spanning the range from medicine to volcano research allows readers to pick those that come closest to their own individual task at hand. Following a look at the fundamentals of IR thermal imaging, properties of the imaging systems, as well as basic and advanced methods, the book goes on to discuss IR imaging applications in teaching, research and industry. Specific examples include thermography of buildings, microsystems and the rather new field of IR imaging of gases.

Impartially written by expert authors in the field from a renowned applied science institution, who are in the unique position of having both experience in public and private research and in teaching, this comprehensive book can be used for teaching beginners in the field as well as providing further education to specialized staff, students and researchers.

 [Download Infrared Thermal Imaging: Fundamentals, Research a ...pdf](#)

 [Read Online Infrared Thermal Imaging: Fundamentals, Research ...pdf](#)

Infrared Thermal Imaging: Fundamentals, Research and Applications

By Michael Vollmer, Klaus-Peter Möllmann

Infrared Thermal Imaging: Fundamentals, Research and Applications By Michael Vollmer, Klaus-Peter Möllmann

This richly illustrated hands-on guide is designed for researchers, teachers and practitioners. The huge selection of examples taken from science, basic teaching of physics, practical applications in industry and a variety of other disciplines spanning the range from medicine to volcano research allows readers to pick those that come closest to their own individual task at hand. Following a look at the fundamentals of IR thermal imaging, properties of the imaging systems, as well as basic and advanced methods, the book goes on to discuss IR imaging applications in teaching, research and industry. Specific examples include thermography of buildings, microsystems and the rather new field of IR imaging of gases.

Impartially written by expert authors in the field from a renowned applied science institution, who are in the unique position of having both experience in public and private research and in teaching, this comprehensive book can be used for teaching beginners in the field as well as providing further education to specialized staff, students and researchers.

Infrared Thermal Imaging: Fundamentals, Research and Applications By Michael Vollmer, Klaus-Peter Möllmann Bibliography

- Sales Rank: #538846 in eBooks
- Published on: 2011-09-22
- Released on: 2011-09-22
- Format: Kindle eBook

 [Download Infrared Thermal Imaging: Fundamentals, Research a ...pdf](#)

 [Read Online Infrared Thermal Imaging: Fundamentals, Research ...pdf](#)

Download and Read Free Online Infrared Thermal Imaging: Fundamentals, Research and Applications By Michael Vollmer, Klaus-Peter Möllmann

Editorial Review

Review

"Insbesondere eine vergleichende Darstellung der verschiedenen Detektortypen (Photonendetektoren, Mikrobolometer) ist in dieser komprimierten und praxisnahen Form an anderer Stelle kaum zu finden."

"Von besonderem Wert sind in diesem Buch ... die vielen Tipps aus der Praxis, die auch die zahlreichen Möglichkeiten einer Fehlinterpretation thermographischer Bilder aufzeigen und den weniger erfahrenen Benutzer vor Fehlern bewahren."

"Insgesamt kann ich dieses Buch allen Lesern empfehlen, die sich einen Überblick über die Thermographie verschaffen und Hilfen für die tägliche Praxis aus ihm ziehen wollen, oder die als erfahrene Nutzer über den eigenen Tellerrand hinaus blicken möchten."

Jochen Aderhold, Braunschweig
PhiuZ, 3/2011 (42)

From the Back Cover

This richly illustrated hands-on guide is designed for researchers, teachers and practitioners. The huge selection of examples taken from science, basic teaching of physics, practical applications in industry and a variety of other disciplines spanning the range from medicine to volcano research allows readers to pick those that come closest to their own individual task at hand. Following a look at the fundamentals of IR thermal imaging, properties of the imaging systems, as well as basic and advanced methods, the book goes on to discuss IR imaging applications in teaching, research and industry. Specific examples include thermography of buildings, microsystems and the rather new field of IR imaging of gases.

Impartially written by expert authors in the field from a renowned applied science institution, who are in the unique position of having both experience in public and private research and in teaching, this comprehensive book can be used for teaching beginners in the field as well as providing further education to specialized staff, students and researchers.

About the Author

Michael Vollmer received his PhD degree for the studies of clusters on surfaces, and his habilitation on optical properties of metal clusters from the University of Heidelberg, Germany. Later assignments were with the University of Kassel, Germany, the university of California in Berkeley, USA, as well as with various institutions in the United States and Asia during sabbaticals. His research interests include atmospheric optics, spectroscopy, infrared thermal imaging, and the didactics of physics. Professor Vollmer has authored one science book and co-authored a scientific monograph and about 140 scientific papers.

Klaus-Peter Möllmann received his PhD from the Humboldt University of Berlin, Germany, studying strongly doped narrow band semiconductors at low temperatures and later, for his habilitation, MCT photo detectors. He subsequently held positions with the Humboldt University and with several businesses in industry. Professor Möllmann's research interests include MEMS technology, infrared thermal imaging, and spectroscopy. He is the co-author of about 100 scientific and didactical papers.

Both authors are professors of experimental physics at the University of Applied Sciences in Brandenburg, Germany.

Users Review

From reader reviews:

Nancy Kline:

Spent a free time to be fun activity to do! A lot of people spent their sparetime with their family, or their own friends. Usually they doing activity like watching television, gonna beach, or picnic in the park. They actually doing same every week. Do you feel it? Do you want to something different to fill your personal free time/ holiday? May be reading a book can be option to fill your free of charge time/ holiday. The first thing you ask may be what kinds of guide that you should read. If you want to try out look for book, may be the publication untitled Infrared Thermal Imaging: Fundamentals, Research and Applications can be fine book to read. May be it might be best activity to you.

Charles Powers:

Do you really one of the book lovers? If yes, do you ever feeling doubt if you are in the book store? Attempt to pick one book that you find out the inside because don't evaluate book by its handle may doesn't work at this point is difficult job because you are afraid that the inside maybe not since fantastic as in the outside search likes. Maybe you answer could be Infrared Thermal Imaging: Fundamentals, Research and Applications why because the great cover that make you consider regarding the content will not disappoint you. The inside or content is fantastic as the outside as well as cover. Your reading 6th sense will directly assist you to pick up this book.

Colton Fierros:

Are you kind of stressful person, only have 10 or maybe 15 minute in your day to upgrading your mind proficiency or thinking skill actually analytical thinking? Then you have problem with the book when compared with can satisfy your short space of time to read it because all this time you only find reserve that need more time to be learn. Infrared Thermal Imaging: Fundamentals, Research and Applications can be your answer as it can be read by you actually who have those short time problems.

Bernice Cofield:

Many people spending their time by playing outside together with friends, fun activity using family or just watching TV all day long. You can have new activity to invest your whole day by reading through a book. Ugh, do you consider reading a book can really hard because you have to bring the book everywhere? It all right you can have the e-book, getting everywhere you want in your Mobile phone. Like Infrared Thermal Imaging: Fundamentals, Research and Applications which is having the e-book version. So , try out this book? Let's find.

**Download and Read Online Infrared Thermal Imaging:
Fundamentals, Research and Applications By Michael Vollmer,
Klaus-Peter Möllmann #5VICPR2T9AD**

Read Infrared Thermal Imaging: Fundamentals, Research and Applications By Michael Vollmer, Klaus-Peter Möllmann for online ebook

Infrared Thermal Imaging: Fundamentals, Research and Applications By Michael Vollmer, Klaus-Peter Möllmann 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 Infrared Thermal Imaging: Fundamentals, Research and Applications By Michael Vollmer, Klaus-Peter Möllmann books to read online.

Online Infrared Thermal Imaging: Fundamentals, Research and Applications By Michael Vollmer, Klaus-Peter Möllmann ebook PDF download

Infrared Thermal Imaging: Fundamentals, Research and Applications By Michael Vollmer, Klaus-Peter Möllmann Doc

Infrared Thermal Imaging: Fundamentals, Research and Applications By Michael Vollmer, Klaus-Peter Möllmann Mobipocket

Infrared Thermal Imaging: Fundamentals, Research and Applications By Michael Vollmer, Klaus-Peter Möllmann EPub