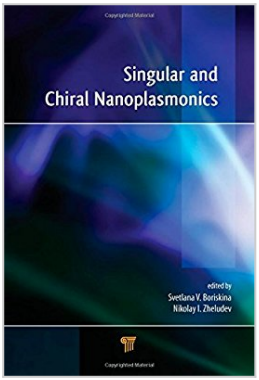

Singular and Chiral Nanoplasmonics

From Pan Stanford

Singular and Chiral Nanoplasmonics From Pan Stanford

Plasmonics has already revolutionized molecular imaging, cancer research, optical communications, sensing, spectroscopy, and metamaterials development. This book is a collective effort by several research groups to push the frontiers of plasmonics research into the emerging area of harnessing and generation of photon angular momentum on micro- and nanoscales. It offers a glimpse into the ongoing research efforts to develop new types of plasmonic vortex–pinning platforms and chiral nanostructures for light harvesting, bio(chemical) sensing, drug discovery, and nanoscale energy transfer.

Singular and Chiral Nanoplasmonics

From Pan Stanford

Singular and Chiral Nanoplasmonics From Pan Stanford

Plasmonics has already revolutionized molecular imaging, cancer research, optical communications, sensing, spectroscopy, and metamaterials development. This book is a collective effort by several research groups to push the frontiers of plasmonics research into the emerging area of harnessing and generation of photon angular momentum on micro- and nanoscales. It offers a glimpse into the ongoing research efforts to develop new types of plasmonic vortex–pinning platforms and chiral nanostructures for light harvesting, bio(chemical) sensing, drug discovery, and nanoscale energy transfer.

Singular and Chiral Nanoplasmonics From Pan Stanford Bibliography

- Sales Rank: #6337653 in Books
- Published on: 2014-10-27
- Original language: English
- Number of items: 1
- Dimensions: 9.25" h x 6.25" w x 1.50" l, .0 pounds
- Binding: Hardcover
- 536 pages

Editorial Review

Review

"*This book admirably illustrates the richness and fascinating physics of chiroptical effects in light scattering and of plasmonic vertical effects, including the generation of twisted light and concentration of light via nanoscale vortices ‘pinned’ to metallic nanostructures*."

?Prof. Federico Capasso, Harvard University, USA

"*This book provides excellent and comprehensive discussions of the rapidly emerging field of chiral nanoplasmonics and will undoubtedly serve as the standard reference for many years to come*."

?Prof. Peter Nordlander, Rice University, USA

"*This book reveals the beauty of optical phenomena associated with the twisting of photons and plasmons and introduces the readers to the state-of-the-art toolbox in theory and experiments to explore this exciting area*."

?Prof. Nicholas X. Fang, Massachusetts Institute of Technology, USA

"*This book goes a long way in making the emerging field of singular and chiral nanoplasmonics accessible to a broad audience!"*

?Prof. Mikael Käll, Chalmers University of Technology, Sweden

"*This timely book brings the most up-to-date concepts on the interaction between structured light and nanostructured matter in this rapidly evolving field*."

?Prof. Vladimir M. Shalaev, Purdue University, USA

"*Recent years have seen a burgeoning interest in the field of plasmonics. This book brings together contributions from several groups of international researchers who succeed in capturing and conveying the excitement associated with two specific aspects of plasmonics-enhanced light-matter interactions: chiro-optical effects and vortical effects. These effects are carefully elucidated in 15 highly specialized chapters. Concepts are well illustrated with figures and images and the text is supported, when necessary, by detailed mathematics. The target audience is probably advanced researchers, but the price point is very reasonable. This is a challenging read but the rewards are considerable. For example, the future of interdisciplinary research?from light harvesting to drug discovery?is treated in this volume.*"
?K. Alan Shore, Bangor University School of Electronic Engineering, Wales, UK

About the Author

Svetlana V. Boriskina is a research scientist at the Massachusetts Institute of Technology, USA. She

obtained her MSc and PhD from Kharkiv National University, Ukraine. Dr. Boriskina's research blends nanophotonics, plasmonics, hydrodynamics, thermodynamics, and mechanics to explore light–matter interactions on the nanoscale.

Nikolay I. Zheludev is a professor of physics at the University of Southampton, UK. He directs the Centre for Photonic Metamaterials at Southampton University, UK and the Centre for Disruptive Photonic Technologies at Nanyang Technological University, Singapore. Prof. Zheludev received his MSc, PhD, and DSc from Moscow State University, Russia.

Users Review

From reader reviews:

Maxine Elam:

Why don't make it to become your habit? Right now, try to ready your time to do the important behave, like looking for your favorite book and reading a publication. Beside you can solve your problem; you can add your knowledge by the publication entitled Singular and Chiral Nanoplasmonics. Try to the actual book Singular and Chiral Nanoplasmonics as your pal. It means that it can to become your friend when you feel alone and beside associated with course make you smarter than before. Yeah, it is very fortuned for you personally. The book makes you much more confidence because you can know every little thing by the book. So , let me make new experience and also knowledge with this book.

Linda Poteat:

This book untitled Singular and Chiral Nanoplasmonics to be one of several books this best seller in this year, this is because when you read this e-book you can get a lot of benefit on it. You will easily to buy this particular book in the book shop or you can order it by way of online. The publisher in this book sells the e-book too. It makes you more easily to read this book, since you can read this book in your Mobile phone. So there is no reason to your account to past this reserve from your list.

Joseph Bolden:

Many people spending their time frame by playing outside together with friends, fun activity using family or just watching TV the whole day. You can have new activity to spend your whole day by reading a book. Ugh, do you consider reading a book will surely hard because you have to take the book everywhere? It ok you can have the e-book, taking everywhere you want in your Touch screen phone. Like Singular and Chiral Nanoplasmonics which is getting the e-book version. So , try out this book? Let's see.

Livia Wilder:

Reading a guide make you to get more knowledge from the jawhorse. You can take knowledge and information from your book. Book is published or printed or highlighted from each source that will filled update of news. On this modern era like right now, many ways to get information are available for anyone.

From media social similar to newspaper, magazines, science book, encyclopedia, reference book, story and comic. You can add your knowledge by that book. Are you hip to spend your spare time to open your book? Or just in search of the Singular and Chiral Nanoplasmonics when you necessary it?

Read Singular and Chiral Nanoplasmonics From Pan Stanford for online ebook

Singular and Chiral Nanoplasmonics From Pan Stanford 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 Singular and Chiral Nanoplasmonics From Pan Stanford books to read online.

Online Singular and Chiral Nanoplasmonics From Pan Stanford ebook PDF download

Singular and Chiral Nanoplasmonics From Pan Stanford Doc

Singular and Chiral Nanoplasmonics From Pan Stanford Mobipocket

Singular and Chiral Nanoplasmonics From Pan Stanford EPub

SBKU7RQITFY: Singular and Chiral Nanoplasmonics From Pan Stanford