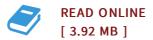




Photonic luminescent solar concentrators

By Johannes Gutmann

Fraunhofer Verlag Feb 2015, 2015. Taschenbuch. Book Condition: Neu. 241x148x20 mm. Neuware - Luminescent solar concentrators are semi-transparent plates that are able to concentrate incident sunlight on its edge faces, where solar cells are attached. This work studies how the dominant loss mechanisms of conventional devices can be mitigated by embedding the luminescent material in a photonic crystal to tailor its emission characteristics. In such a photonic luminescent solar concentrator emission is redistributed spectrally and directionally, which can strongly improve the guiding of light to the edge faces and thus increase the concentrator's efficiency. To quantitatively describe the effects of a photonic crystal on luminescent emission, new theoretical models are proposed in this work. This theoretical treatment provides significant physical understanding and insight in the interaction of light and matter, and is of large interest also for other applications that deal with the emission of light (e.g. LEDs, lasers). Furthermore, novel fabrication methods were developed to realize photonic crystals in form of Bragg stacks and opals with embedded organic dye molecules. Using dedicated photoluminescence measurements with angular resolution, an excellent agreement of calculations and experiments was found, which confirms the theoretical models presented in this work. 181 pp. Englisch.



Reviews

A top quality publication along with the font used was intriguing to read. I really could comprehended everything using this written e ebook. Its been designed in an remarkably straightforward way and it is only after i finished reading through this publication by which basically altered me, modify the way i believe.

-- Cathrine Larkin Sr.

Very useful to all of group of people. I actually have read through and so i am certain that i will planning to study yet again once again down the road. I am just very easily can get a satisfaction of looking at a created book.

-- Mark Bernier

See Also



Psychologisches Testverfahren

Reference Series Books LLC Nov 2011, 2011. Taschenbuch. Book Condition: Neu. 249x191x7 mm. This item is printed on demand - Print on Demand Neuware - Quelle: Wikipedia. Seiten: 100. Kapitel: Myers-Briggs-Typindikator, Keirsey Temperament Sorter, DISG, Eignungstest für das Medizinstudium, Adult Attachment Interview,...



Programming in D

Ali Cehreli Dez 2015, 2015. Buch. Book Condition: Neu. 264x182x53 mm. This item is printed on demand - Print on Demand Neuware - The main aim of this book is to teach D to readers who are new to computer programming. Although...



Edge] the collection stacks of children's literature: Chunhyang Qiuyun 1.2 --- Children's Literature 2004(Chinese Edition)

paperback. Book Condition: New. Ship out in 2 business day, And Fast shipping, Free Tracking number will be provided after the shipment. Paperback. Pub Date: 2005 Pages: 815 Publisher: the Chinese teenager Shop Books all book. the genuine special part of the spot...



Six Steps to Inclusive Preschool Curriculum: A UDL-Based Framework for Children's School Success

Brookes Publishing Co. Paperback. Book Condition: new. BRAND NEW, Six Steps to Inclusive Preschool Curriculum: A UDL-Based Framework for Children's School Success, Eva M. Horn, Susan B. Palmer, Gretchen D. Butera, Joan A. Lieber, How can inclusive early educators plan and deliver...



You Shouldn't Have to Say Goodbye: It's Hard Losing the Person You Love the

Sourcebooks, Inc. Paperback / softback. Book Condition: new. BRAND NEW, You Shouldn't Have to Say Goodbye: It's Hard Losing the Person You Love the Most, Patricia Hermes, Thirteen-year-old Sarah Morrow doesn't think much of the fact that her mother winced a little...



A Dog of Flanders: Unabridged; In Easy-to-Read Type (Dover Children's Thrift Classics)

Dover Publications, 2011. Paperback. Book Condition: New. No Jacket. New paperback book copy of A Dog of Flanders by Ouida (Marie Louise de la Ramee). Unabridged in easy to read type. Dover Children's Thrift Classic. Reprint of original edition. Green edition. Mineola...