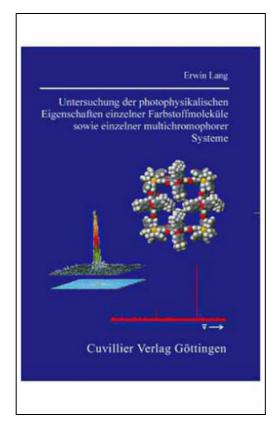
Untersuchung der photophysikalischen Eigenschaften einzelner Farbstoffmoleküle sowie einzelner multichromophorer Systeme



Filesize: 7.92 MB

Reviews

This composed book is excellent. This really is for all who statte that there had not been a worth reading through. Your life period will probably be change as soon as you total looking over this ebook.

(Cheyanne Barrows)

UNTERSUCHUNG DER PHOTOPHYSIKALISCHEN EIGENSCHAFTEN EINZELNER FARBSTOFFMOLEKÜLE SOWIE EINZELNER MULTICHROMOPHORER SYSTEME



Cuvillier Verlag Aug 2006, 2006. Taschenbuch. Condition: Neu. Neuware - In this thesis, the photophysical properties of several perylene bisimide derivatives (PBI-derivatives) and various multichromophoric systems such as supramolecular perylene bisimide squares (PBI squares) and amphiphilic pseudoisocyanine (amphi -PIC) J-aggregates were studied. Perylene bisimides feature a high fluorescence quantum yield near 100% and an extraordinary photophysical and photochemical stability. From a chemist's point of view the PBI fluorophores have attracted considerable interest for several reasons. The basic chromophore can be modified by introducing different substituents in the bay positions or it can be functionalized at the imide groups with pyridine receptor units. Therefore, the phenoxy substituted PBI represents the basic chromophore of diagonally or laterally bridged macrocyclic perylene bisimides and of the ditopic ligand in self assembled multichromophoric systems. In the presence of cis-Ptk metal centers pyridine substituted PBI-derivatives form nanosized molecular squares. These supramolecules exhibit a simple geometry with four bridging PBI ligands at the edge and four cis-Ptk complexes at each corner of the molecular square. As a model system PBI squares allow the fundamental interactions of cyclic multichromophoric assemblies to be investigated. Owing to the cyclic arrangement of several dye molecules with a very high absorption cross section these PBI squares are a promising candidate for artifical light-harvesting complexes. Another prominent example of multichromophoric systems are J-aggregates consisting of hundreds of non covalently bound monomeric units in various geometries. The electronically excited states are dominated by interesting collective effects leading to a strong red shift of the absorption band and to a drastic increase of the oscillator strength with respect to the monomeric compounds. In this regard both the electronically excited states and the structural arrangement of individual amp

Read Untersuchung der photophysikalischen Eigenschaften einzelner Farbstoffmoleküle sowie einzelner multichromophorer Systeme Online

Download PDF Untersuchung der photophysikalischen Eigenschaften einzelner Farbstoffmoleküle sowie einzelner multichromophorer Systeme

Other eBooks



Dom's Dragon - Read it Yourself with Ladybird: Level 2

Penguin Books Ltd. Paperback. Book Condition: new. BRAND NEW, Dom's Dragon - Read it Yourself with Ladybird: Level 2, Mandy Ross, One day, Dom finds a little red egg and soon he is the owner...

Save Document

»



It's Just a Date: How to Get 'em, How to Read 'em, and How to Rock 'em

HarperCollins Publishers. Paperback. Book Condition: new. BRAND NEW, It's Just a Date: How to Get 'em, How to Read 'em, and How to Rock 'em, Greg Behrendt, Amiira Ruotola-Behrendt, A fabulous new guide to dating...

Save Document

..



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...

Save Document

>>



My Brother is Autistic

Barron's Educational Series Inc., U.S. Paperback. Book Condition: new. BRAND NEW, My Brother is Autistic, Jennifer Moore-Mallinos, Medical experts are just beginning to understand varying degrees of autism and its impact on both the autistic child...

Save Document

*



Free to Learn: Introducing Steiner Waldorf Early Childhood Education

Hawthorn Press Ltd. Paperback. Book Condition: new. BRAND NEW, Free to Learn: Introducing Steiner Waldorf Early Childhood Education, Lynne Oldfield, A guide to the principles and methods of Steiner Waldorf Early Childhood education. Lynne Oldfield...

Save Document

»