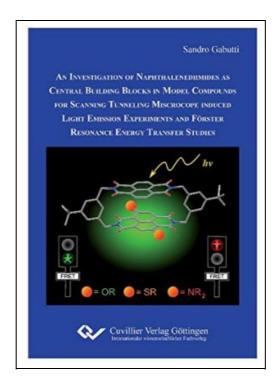
# AN INVESTIGATION OF NAPHTHALENEDIIMIDES AS CENTRAL BUILDING BLOCKS IN MODEL COMPOUNDS FOR SCANNING TUNNELING MICROSCOPE INDUCED LIGHT EMISSION EXPERIMENTS AND FÖRSTER RESONANCE ENERGY TRANSFER STUDIES



Filesize: 7.33 MB

### Reviews

An incredibly awesome publication with perfect and lucid reasons. It can be writter in simple phrases and not confusing. I am just delighted to let you know that this is actually the very best publication i actually have study during my very own lifestyle and could be he best publication for actually.

(Paula Gutkowski)

## AN INVESTIGATION OF NAPHTHALENEDIIMIDES AS CENTRAL BUILDING BLOCKS IN MODEL COMPOUNDS FOR SCANNING TUNNELING MICROSCOPE INDUCED LIGHT EMISSION EXPERIMENTS AND FÖRSTER RESONANCE ENERGY TRANSFER STUDIES



Cuvillier Verlag Mrz 2010, 2010. Taschenbuch. Condition: Neu. Neuware - Scanning tunnelling microscopy (STM) is a powerful technique to observe surfaces at the atomiclevel. The resolution of this STM technique is good enough to study the electronic properties of singlemolecules adsorbed onto metallic substrates. An important step towards controllable single moleculartechnologies is the determination of how the molecule-substrate interaction changes the localmolecular electronic structure. Since this electronic structure of molecules is strongly perturbed by theelectrons of the underlying metallic substrate, an electronic decoupling of the molecules from themetal surface is required to isolate the electronic properties of an individual molecule. Förster resonance energy transfer (FRET) has found many applications in different fields of science, because it allows the determination of the distance between two chromophores in the 1-10 nm range. In addition to other factors, this energy transfer is also dependent on the relative orientation of donorand acceptor chromophores to each other. This thesis describes the design, synthesis and investigations of model compounds for: 1). STM induced light emission experiments from single molecules and2). for FRET studies. Chapter 1 provides an introduction to cyclophanes, energy transfer and scanning tunnelling microscopy. Chapter 2 gives a description of the aims of this work, which is split into the synthesis of cyclophanesfor STM induced luminescence investigations and FRET studies. The later is complemented by thesynthesis of a linear NDI system. Chapter 3 describes the design, synthesis and characterisation of all model compounds. In the first halfSTM investigations are presented and the electronic structure of two cyclophanes and complexationstudies of the crown ether model compound are discussed. In the second half a modular synthetic routeto asymmetric N,N'-naphthalenediimides is presented for FRET studies.Chapter 4 gives a summary of this thesis and presents a short outlook.Chapter 5 provides the synthesis and characterisation of all the compounds listed in this thesis and experimental details for STM investigations....

- Read AN INVESTIGATION OF NAPHTHALENEDIIMIDES AS CENTRAL BUILDING BLOCKS IN MODEL COMPOUNDS FOR SCANNING TUNNELING MICROSCOPE INDUCED LIGHT EMISSION EXPERIMENTS AND FÖRSTER RESONANCE ENERGY TRANSFER STUDIES Online
- Download PDF AN INVESTIGATION OF NAPHTHALENEDIIMIDES AS CENTRAL BUILDING BLOCKS IN MODEL COMPOUNDS FOR SCANNING TUNNELING MICROSCOPE INDUCED LIGHT EMISSION EXPERIMENTS AND FÖRSTER RESONANCE ENERGY TRANSFER STUDIES

#### Related eBooks



#### Because It Is Bitter, and Because It Is My Heart (Plume)

Plume. PAPERBACK. Book Condition: New. 0452265819 12+ Year Old paperback book-Never Read-may have light shelf or handling wear-has a price sticker or price written inside front or back cover-publishers mark-Good Copy-Iship FAST with...

Download Book »



#### Tales from Little Ness - Book One: Book 1

Lulu.com, United Kingdom, 2015. Paperback. Book Condition: New. 210 x 148 mm. Language: English . Brand New Book \*\*\*\*\* Print on Demand \*\*\*\*\*.Two of a series of short Bedtime Stories for 3 to 5 year...

Download Book »



Childrens Educational Book Junior Vincent van Gogh A Kids Introduction to the Artist and his Paintings. Age 7 8 9 10 year-olds SMART READS for . - Expand Inspire Young Minds Volume 1

Download Book »



RCadvisor s Modifly: Design and Build From Scratch Your Own Modern Flying Model Airplane In One Day for Just

Rcadvisor.com, United States, 2009. Paperback. Book Condition: New. 238 x 166 mm. Language: English. Brand New Book \*\*\*\*\* Print on Demand \*\*\*\*\*. Experience firsthand the joys of building and flying your very own model airplane...

Download Book »



Minecraft Box Set 2 in 1: Minecraft Redstone. Minecraft Ultimate Redstone Step-By-Step Guide + All Secret Survival Tricks and Secrets: (Minecraft, Minecraft Secrets, Minecraft Stories, Minecraft Books

Createspace, United States, 2015. Paperback. Book Condition: New. 229 x 152 mm. Language: English . Brand New Book \*\*\*\*\* Print on Demand \*\*\*\*\*.Minecraft BOX SET 2 IN 1: Minecraft Redstone. Minecraft Ultimate Redstone Step-by-Step Guide...

Download Book »