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Universiteit Leiden



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Exposing biomolecular properties one molecule at a time

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This thesis is dedicated to the memory of Marten Durieux, whose spirit touched all who knew him.

Table of Contents

List of Abbreviations	3
Chapter 1:	5
1.1 Single molecule detection	6
1.2 Single molecule fluorescence microscopy	7
1.3 Experimental setup	9
1.4 Scope of this thesis	11
1.4.1 Phycobilisomes	12
1.4.2 The FluRedox principle	13
1.4.3 Fluorescently labeled azurin on a gold surface	14
1.4.4 Nitrite reductase, one by one.	16
References	18
Chapter 2	23
2.1 Introduction	24
2.2 Materials and Methods	26
2.2.1 Sample separation	26
2.2.2 Spectral analysis	26
2.2.3 Experimental Setup	27
2.3 Results	28
2.3.1 Fluorescence photobleaching of single PBsomes	28
2.3.2 Power-dependence of single PBsome fluorescence	30
2.3.3 Green laser induces an energetic decoupling of the PBsome	32
2.3.4 Fluorescence photobleaching of mutant PBsome	35
2.4 Discussion and Conclusions	37
References	39
Chapter 3	43
3.1 Introduction	44
3.2 Experimental Methods	45
3.3 Results	50
3.3.1 Fluorescence intensity vs. film thickness	50
3.3.2 Fluorescence life time vs. SAM thickness	52
3.3.3 Fluorescence life time vs. Au film thickness	53
3.3.4 Effect of redox state	54
3.4 Discussion	56
3.5 Conclusion	60
Acknowledgment	60
References	60

Chapter 4	65
1. Introduction	66
2. Experimental methods	67
3. Results	71
3.1 Optical characterization of Az-AuNPs in solution.	71
3.2 Fluorescence images and time traces	73
3.3 Lifetime measurements and fluorescence enhancement	76
3.4 Single-molecule redox state detection	77
4. Discussion	78
References	84
Chapter 5	91
5.1 Introduction	92
5.2 Materials and Methods	93
5.2.1 Protein labeling	93
5.2.2 Determination of switching ratios	94
5.2.3 Sample separation of single molecule studies	94
5.2.4 Single molecule setup	95
5.2.5 Data collection	95
5.2.6 Data analysis	96
5.3 Results	97
5.4 Discussion	101
5.5 Conclusion	103
5.6 Appendix	104
5.6.1 Site directed mutagenesis	104
5.6.2 Over-expression, isolation and purification of the wt and K39C bNiR	104
5.6.3 Protein characterization	104
5.6.4 Waiting time histograms	107
References	112
Summary	115
Samenvatting	119
Curriculum Vitae	123
List of Publications	125

List of abbreviations

AFM	atomic force microscopy
APC	allophycocyanin
APD	avalanche photodiode
APTS	aminopropyltrimethoxysilane
AuNP	gold nanoparticle
Az	azurin
Az-AuNPs	azurin-gold nanoparticle constructs
bNiR	blue nitrite reductase
CCD	charge-coupled device
Chl	chlorophyll
CuNiR	copper-containing nitrite reductase
FCV	fluorescence-detected cyclovoltammetry
FLIM	fluorescence lifetime imaging microscopy
FRET	Förster resonance energy transfer
GA	glutaraldehyde
GFP	green fluorescent protein
gNiR	green nitrite reductase
IRF	instrument response function
MPTS	mercaptopropyl trimethoxysilane
NiR	nitrite reductase
NP	Nanoparticle
NPQ	non-photochemical quenching
OCP	orange carotenoid protein
PBS	phycobiliproteins
PBsomes	phycobilisomes
PC	phycocyanins
PE	phycoerythrins
PVA	polyvinyl alcohol
RCs	reaction centers
SAM	self-assembled monolayer
SCM	scanning confocal microscopy
SMD	Single molecule detection
SPR	surface plasmon resonance
T3R	Time-Tagged Time-Resolved
TCSPC	Time-Correlated Single-Photon Counting
TES	triethoxysilane
WFM	wide-field microscopy

