

**Dynamic Recognition and Verification of DNA  
Lesions by the NER Pathway in Chromatin**

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**Dissertation**

**zur**

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(Dr. sc. nat.)**

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**der**

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**von**

**Nina Kaczmarek**

**aus**

**Deutschland**

**Promotionskomitee**

Prof. Dr. Hanspeter Nägeli (Leitung und Vorsitz)

Prof. Dr. Primo Schär

Prof. Dr. Michael Hengartner

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Artikel1:

Regulation of Nucleotide Excision Repair by UV-DDB: Prioritization of Damage Recognition to Internucleosomal DNA

Artikel2:

The ubiquitin-dependent segregase VCP/p97 modulates nucleotide excision repair efficiency

Artikel3:

Dissection of the Xeroderma Pigmentosum Group C Protein Function by Site-directed Mutagenesis

Artikel4:

Dynamic two-stage mechanism of versatile DNA damage recognition by xeroderma pigmentosum group C protein

Artikel5:

Strand- and site-specific DNA lesion demarcation by the xeroderma pigmentosum group D helicase

Artikel6:

DNA quality control by a lesion sensor pocket of the xeroderma pigmentosum group D helicase subunit of TFIIH