

(講座) 環境薬科学  
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### 【研究テーマ】

1. 遺伝子疾患の治療を目的とした核酸誘導体の合成と生化学的応用
2. 生体内の超微量機能性分子を検出する発光性プローブの創製
3. ペプチド・タンパク質の簡便かつ高感度なマニュアルシーケンシング法の開発

### 【論文発表】

#### A 欧文

##### (A-a) 原著論文

1. Takayuki Shibata, Niklaas J. Buurma, John A. Brazier, Peter Thompson, Ihtshamul Haq, and David M. Williams: 7,8-Dihydropyrido[2,3-d]pyrimidin-2-one; a bicyclic cytosine analogue capable of enhanced stabilisation of DNA duplexes, *Chem. Commun.*, **33**, 3516–3518 (2006). (IF: 4.426)
2. Steven J. Pearson, Stephen Wharton, Amanda J. Watson, Ghazala Begum, Amna Butt, Nicola Glynn, David M. Williams, Takayuki Shibata, Mauro F. Santibanez-Koref and Geoffrey P. Margison: A novel DNA damage recognition protein in *Schizosaccharomyces pombe*, *Nucleic Acids Res.*, **34**(8), 2347–2354 (2006). (IF: 7.552)
3. Ana R. Hornillo-Araujo, Adam J. M. Burrell, Miren K. Aiertz, Takayuki Shibata, David M. Hammond, Dolorès Edmont, Harry Adams, Geoffrey P. Margison and David M. Williams: The syntheses and properties of tricyclic pyrrolo[2,3-d]pyrimidine analogues of S<sup>6</sup>-methylthioguanine and O<sup>6</sup>-methylguanine, *Org. Biomol. Chem.*, **4**(9), 1723–1729 (2006). (IF: 2.547)
4. Takayuki Shibata, Nicola Glynn, T. Brian H. McMurry, R. Stanley McElhinney, Geoffrey P. Margison and David M. Williams: Novel synthesis of O<sup>6</sup>-alkylguanine containing oligodeoxyribonucleotides as substrates for the human DNA repair protein, O<sup>6</sup>-methylguanine DNA methyltransferase (MGMT), *Nucleic Acids Res.*, **34**(6), 1884–1891 (2006). (IF: 7.552)
5. Xiao Ma, Taizo Kurose, Ella Czarina M. Juan, Takayuki Shibata, David M. Williams, and Akio Takenaka: X-Ray analyses of DNA duplexes stabilized by bicyclic-C residues, *Nucleic Acids Symp. Ser.*, **50**, 213–214 (2006). (IF: 0)

### 【学会発表】

#### A 国際学会

##### (A-b) 一般講演

1. Takayuki Shibata, Niklaas J. Buurma, John A. Brazier, Peter Thompson, Ihtshamul Haq and David M Williams: 7,8-Dihydropyrido[2,3-d]pyrimidin-2-one; a bicyclic cytosine analogue capable of enhanced stabilisation of DNA duplexes, *The Nucleic*

*Acids Forum*, Manchester (UK), 7 Jul (2006)

2. Xiao Ma, Taizo Kurose, Ella Czarina M. Juan, Takayuki Shibata, David M. Williams, and Akio Takenaka: X-Ray analyses of DNA duplexes stabilized by bicyclic-C residues, *33rd Symposium on Nucleic Acids Chemistry*, Osaka (Japan), 20-22 Nov (2006)

**【過去の研究業績総計】**

原著論文 (欧文)	9 編	(邦文)	0 編
総説 (欧文)	0 編	(邦文)	0 編
著書 (欧文)	0 編	(邦文)	0 編
紀要 (欧文)	0 編	(邦文)	0 編
特許	0 件		