

## Supporting Information

### Fabrication of Anion Complexes from **5,6-Dihydrodiindolo[3,2-a:2',3'-c]phenazine as a Building Block**

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#### X-Ray Crystallographic Studies of Complexes

Single crystals of **DIPZ**·EtOAc were obtained by slow evaporation of a solution of **DIPZ** in EtOAc/MeCN at room temperature. Single crystals of **DIPZ**·TBAF, **DIPZ**·TBABr, **DIPZ**·TBAOAc, **DIPZ**·TBABzO, **DIPZ**·TBANO<sub>3</sub>, **DIPZ**·TBAHSO<sub>4</sub> and **DIPZ**·TBAH<sub>2</sub>PO<sub>4</sub> complexes were obtained by slow evaporation of a solution of **DIPZ** in EtOAc/MeCN in the presence of slight excess corresponding anions at room temperature within several days. Single crystals of **DIPZ**·(TBA)<sub>2</sub>SiF<sub>6</sub> complex were obtained by slow diffusion of n-hexane into a chloroform solution of **DIPZ** and fluoride anion at room temperature. The X-ray single crystal diffraction data for them were collected on a Rigaku MicroMAX007 with Mo K $\alpha$  radiation ( $\lambda = 0.71073 \text{ \AA}$ ) in the  $\omega$ -2 $\theta$  scanning mode. The structures were solved by direct methods using the SHELXS-97 program and refined by full-matrix least-squares techniques (SHELXL-97) on  $F^2$  (Sheldrick, G. M. *SHELXS97, A Program for Crystal Structure Solution*; University of Göttingen: Germany, 1997; Sheldrick, G. M. *SHELXL97, A Program for Crystal Structure Refinement*; University of Göttingen: Germany, 1997). Anisotropic thermal parameters were assigned to all non-hydrogen atoms.. Details of crystal data, data collections, and structure refinements are summarized in Tables S1 to S9. The structures of **DIPZ**·TBANO<sub>3</sub> and **DIPZ**·TBAH<sub>2</sub>PO<sub>4</sub> complexes are reported as partial determinations. Restraints are made to fix the bonds at proper

length, including the N-H bond in indole group and the bonds in the disorder of tetrabutylammonium.

**Table S1.** Crystal data and structure refinement for **DIPZ·EtOAc**

Empirical formula	$C_{28} H_{22} N_4 O_2$	
Formula weight	446.50	
Temperature	113(2) K	
Wavelength	0.71073 Å	
Crystal system, space group	Triclinic, P-1	
Unit cell dimensions	$a = 7.9968(16)$ Å	$\alpha = 74.18(3)^\circ$
	$b = 11.764(2)$ Å	$\beta = 88.87(3)^\circ$
	$c = 11.929(2)$ Å	$\gamma = 89.89(3)^\circ$
Volume	1079.5(4) Å <sup>3</sup>	
Z, Calculated density	2, 1.374 Mg/m <sup>3</sup>	
Absorption coefficient	0.089 mm <sup>-1</sup>	
F(000)	468	
Crystal size	0.18 × 0.16 × 0.08 mm	
Theta range for data collection	1.77 to 25.02°	
Limiting indices	-9<=h<=5, -14<=k<=14, -13<=l<=14	
Reflections collected / unique	6832 / 3779 [R (int) = 0.0612]	
Completeness to theta = 25.02	99.3 %	
Absorption correction	Semi-empirical from equivalents	
Max. and min. transmission	0.9929 and 0.9842	
Refinement method	Full-matrix least-squares on F <sup>2</sup>	
Data / restraints / parameters	3779 / 2 / 317	
Goodness-of-fit on F <sup>2</sup>	0.971	
Final R indices [I>2sigma(I)]	R1 = 0.0543, wR2 = 0.1147	
R indices (all data)	R1 = 0.0969, wR2 = 0.1328	
Largest diff. peak and hole	0.191 and -0.232 e.Å <sup>-3</sup>	

**Table S2.** Crystal data and structure refinement for **DIPZ·TBAF**

Empirical formula	$C_{40} H_{50} F N_5$	
Formula weight	619.85	
Temperature	113(2) K	
Wavelength	0.71073 Å	
Crystal system, space group	Monoclinic, Cc	
Unit cell dimensions	$a = 22.428(6)$ Å	$\alpha = 90^\circ$
	$b = 8.4214(17)$ Å	$\beta = 113.21(3)^\circ$
	$c = 19.787(8)$ Å	$\gamma = 90^\circ$
Volume	$3434.8(18)$ Å <sup>3</sup>	
Z, Calculated density	4, 1.199 Mg/m <sup>3</sup>	
Absorption coefficient	0.075 mm <sup>-1</sup>	
F(000)	1336	
Crystal size	$0.26 \times 0.18 \times 0.10$ mm	
Theta range for data collection	2.24 to 25.02°	
Limiting indices	$-26 \leq h \leq 26, -6 \leq k \leq 10, -23 \leq l \leq 23$	
Reflections collected / unique	11141 / 5863 [R (int) = 0.1137]	
Completeness to theta = 25.02	100.0 %	
Absorption correction	Semi-empirical from equivalents	
Max. and min. transmission	0.9926 and 0.9809	
Refinement method	Full-matrix least-squares on $F^2$	
Data / restraints / parameters	5863 / 4 / 427	
Goodness-of-fit on $F^2$	1.011	
Final R indices [ $I > 2\sigma(I)$ ]	$R_1 = 0.0626, wR_2 = 0.1297$	
R indices (all data)	$R_1 = 0.0972, wR_2 = 0.1400$	
Largest diff. peak and hole	0.595 and -0.205 e.Å <sup>-3</sup>	

**Table S3** Crystal data and structure refinement for **DIPZ·TBABr**

Empirical formula	$C_{40} H_{50} Br N_5$	
Formula weight	680.76	
Temperature	113(2) K	
Wavelength	0.71073 Å	
Crystal system, space group	Orthorhombic, P2(1)2(1)2(1)	
Unit cell dimensions	$a = 13.188(3)$ Å	$\alpha = 90^\circ$
	$b = 14.799(3)$ Å	$\beta = 90^\circ$
	$c = 18.574(4)$ Å	$\gamma = 90^\circ$
Volume	3625.2(13) Å <sup>3</sup>	
Z, Calculated density	4, 1.247 Mg/m <sup>3</sup>	
Absorption coefficient	1.168 mm <sup>-1</sup>	
F(000)	1440	
Crystal size	0.18 × 0.12 × 0.10 mm	
Theta range for data collection	3.02 to 25.02°	
Limiting indices	-10<=h<=15, -17<=k<=17, -20<=l<=21	
Reflections collected / unique	22179 / 6360 [R (int) = 0.1426]	
Completeness to theta = 25.02	99.1 %	
Absorption correction	Semi-empirical from equivalents	
Max. and min. transmission	0.8925 and 0.8179	
Refinement method	Full-matrix least-squares on F <sup>2</sup>	
Data / restraints / parameters	6360 / 312 / 515	
Goodness-of-fit on F <sup>2</sup>	0.986	
Final R indices [I>2sigma(I)]	R1 = 0.0752, wR2 = 0.1594	
R indices (all data)	R1 = 0.1193, wR2 = 0.1833	
Largest diff. peak and hole	0.601 and -0.653 e.Å <sup>-3</sup>	

**Table S4** Crystal data and structure refinement for **DIPZ·TBAAcO**

Empirical formula	$C_{42} H_{53} N_5 O_2$	
Formula weight	659.89	
Temperature	113(2) K	
Wavelength	0.71073 Å	
Crystal system, space group	Monoclinic, P2(1)/c	
Unit cell dimensions	$a = 21.802(4)$ Å	$\alpha = 90^\circ$
	$b = 8.4417(17)$ Å	$\beta = 118.82(3)^\circ$
	$c = 22.560(5)$ Å	$\gamma = 90^\circ$
Volume	$3637.9(13)$ Å <sup>3</sup>	
Z, Calculated density	4, 1.205 Mg/m <sup>3</sup>	
Absorption coefficient	0.075 mm <sup>-1</sup>	
F(000)	1424	
Crystal size	0.28 × 0.22 × 0.12 mm	
Theta range for data collection	3.01 to 25.01°	
Limiting indices	-24≤=h≤=25, -9≤=k≤=10, -26≤=l≤=24	
Reflections collected / unique	23862 / 6398 [R (int) = 0.0485]	
Completeness to theta = 25.01	99.7 %	
Absorption correction	Semi-empirical from equivalents	
Max. and min. transmission	0.9911 and 0.9794	
Refinement method	Full-matrix least-squares on F <sup>2</sup>	
Data / restraints / parameters	6398 / 2 / 455	
Goodness-of-fit on F <sup>2</sup>	1.058	
Final R indices [I>2sigma(I)]	R1 = 0.0521, wR2 = 0.1266	
R indices (all data)	R1 = 0.0715, wR2 = 0.1389	
Largest diff. peak and hole	0.170 and -0.262 e.Å <sup>-3</sup>	

**Table S5** Crystal data and structure refinement for **DIPZ·TBABzO**

Empirical formula	$C_{51} H_{63} N_5 O_4$	
Formula weight	810.08	
Temperature	113(2) K	
Wavelength	0.71073 Å	
Crystal system, space group	Monoclinic, P2(1)/c	
Unit cell dimensions	$a = 13.965(3)$ Å	$\alpha = 90^\circ$
	$b = 20.364(4)$ Å	$\beta = 94.42(3)^\circ$
	$c = 15.881(3)$ Å	$\gamma = 90^\circ$
Volume	4502.8(16) Å <sup>3</sup>	
Z, Calculated density	4, 1.192 Mg/m <sup>3</sup>	
Absorption coefficient	0.076 mm <sup>-1</sup>	
F(000)	1736	
Crystal size	0.16 × 0.12 × 0.06 mm	
Theta range for data collection	1.63 to 25.02°	
Limiting indices	-16<=h<=15, -24<=k<=24, -16<=l<=18	
Reflections collected / unique	30429 / 7943 [R (int) = 0.1483]	
Completeness to theta = 25.02	100.0 %	
Absorption correction	Semi-empirical from equivalents	
Max. and min. transmission	0.9955 and 0.9880	
Refinement method	Full-matrix least-squares on F F <sup>2</sup>	
Data / restraints / parameters	7943 / 266 / 613	
Goodness-of-fit on F <sup>2</sup>	1.002	
Final R indices [I>2sigma(I)]	R1 = 0.0969, wR2 = 0.2470	
R indices (all data)	R1 = 0.1777, wR2 = 0.2948	
Largest diff. peak and hole	0.455 and -0.582 e.Å <sup>-3</sup>	

**Table S6** Crystal data and structure refinement for partially determined structure **DIPZ·TBANO<sub>3</sub>**

Empirical formula	C <sub>40</sub> H <sub>50</sub> N <sub>6</sub> O <sub>3</sub>		
Formula weight	662.86		
Temperature	113(2) K		
Wavelength	0.71073 Å		
Crystal system, space group	Tetragonal, P4(1)		
Unit cell dimensions	a = 11.2848(16) Å	α = 90°	
	b = 11.2848(16) Å	β = 90°	
	c = 27.542(6) Å	γ = 90°	

**Table S7** Crystal data and structure refinement for **DIPZ·TBAHSO<sub>4</sub>**

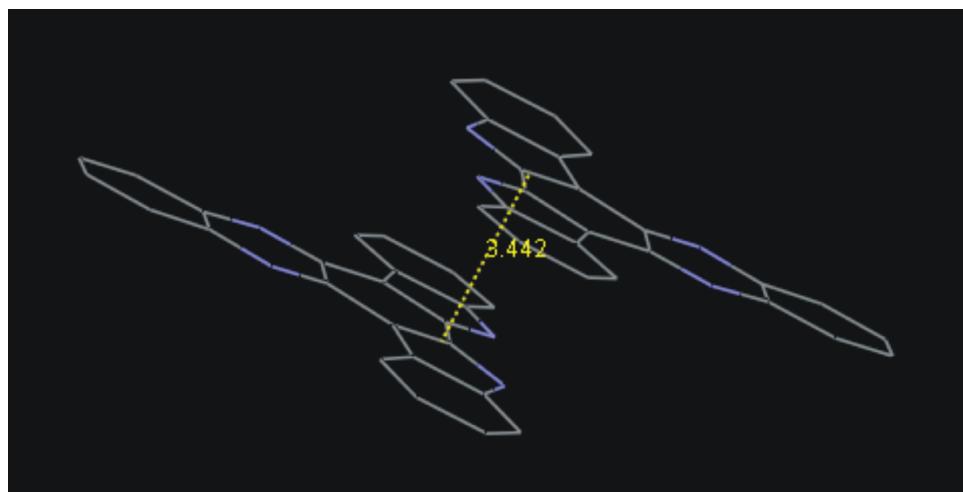
Empirical formula	C <sub>40</sub> H <sub>51</sub> N <sub>5</sub> O <sub>4</sub> S	
Formula weight	697.92	
Temperature	293(2) K	
Wavelength	0.71073 Å	
Crystal system, space group	Monoclinic, C2/c	
Unit cell dimensions	a = 41.692(8) Å	α = 90°
	b = 8.3351(17) Å	β = 95.70(3)°
	c = 22.227(4) Å	γ = 90°
Volume	7686(3) Å <sup>3</sup>	
Z, Calculated density	8, 1.206 Mg/m <sup>3</sup>	
Absorption coefficient	0.130 mm <sup>-1</sup>	
F(000)	2992	
Crystal size	0.20 × 0.16 × 0.10 mm	
Theta range for data collection	3.04 to 25.02°	
Limiting indices	-49<=h<=49, -9<=k<=9, -23<=l<=26	
Reflections collected / unique	29260 / 6768 [R (int) = 0.0503]	
Completeness to theta = 25.02	99.8 %	
Absorption correction	Semi-empirical from equivalents	
Max. and min. transmission	0.9871 and 0.9744	
Refinement method	Full-matrix least-squares on F <sup>2</sup>	
Data / restraints / parameters	6768 / 3 / 516	
Goodness-of-fit on F <sup>2</sup>	1.057	
Final R indices [I>2sigma(I)]	R1 = 0.0686, wR2 = 0.1930	
R indices (all data)	R1 = 0.1007, wR2 = 0.2171	
Largest diff. peak and hole	0.739 and -0.426 e.Å <sup>-3</sup>	

**Table S8** Crystal data and structure refinement for partially determined structure **DIPZ·TBAH<sub>2</sub>PO<sub>4</sub>**

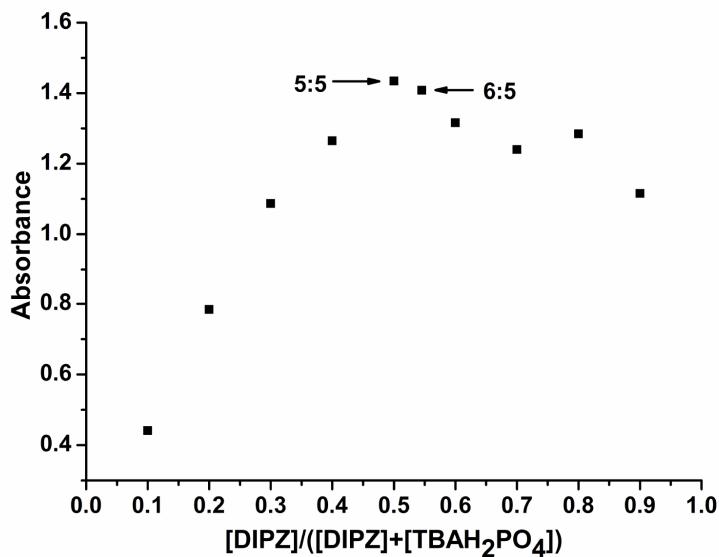
Empirical formula	C <sub>117</sub> H <sub>139.50</sub> N <sub>17</sub> O <sub>10</sub> P <sub>2.50</sub>	
Formula weight	2021.38	
Temperature	113(2) K	
Wavelength	0.71073 Å	
Crystal system, space group	Triclinic, P1	
Unit cell dimensions	a = 17.937(4) Å	α = 84.16(3)°
	b = 17.994(4) Å	β = 67.95(3)°
	c = 20.503(4) Å	γ = 63.22(3)°

**Table S9** Crystal data and structure refinement for **DIPZ·(TBA)<sub>2</sub>SiF<sub>6</sub>**

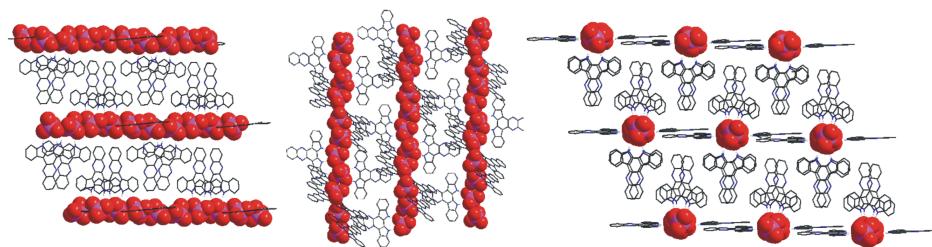
Empirical formula	$C_{80} H_{100} F_6 N_{10} Si$	
Formula weight	1343.79	
Temperature	294(2) K	
Wavelength	0.71073 Å	
Crystal system, space group	Monoclinic, P2(1)/c	
Unit cell dimensions	$a = 9.5475(19)$ Å	$\alpha = 90^\circ$
	$b = 21.996(5)$ Å	$\beta = 96.892(4)^\circ$
	$c = 17.778(4)$ Å	$\gamma = 90^\circ$
Volume	3706.5(13) Å <sup>3</sup>	
Z, Calculated density	2, 1.204 Mg/m <sup>3</sup>	
Absorption coefficient	0.097 mm <sup>-1</sup>	
F(000)	1436	
Crystal size	0.22 × 0.18 × 0.16 mm	
Theta range for data collection	1.48 to 25.02°	
Limiting indices	-11<=h<=10, -26<=k<=26, -9<=l<=21	
Reflections collected / unique	18786 / 6538 [R (int) = 0.0536]	
Completeness to theta = 25.02	99.9 %	
Absorption correction	Semi-empirical from equivalents	
Max. and min. transmission	0.9846 and 0.9790	
Refinement method	Full-matrix least-squares on F <sup>2</sup>	
Data / restraints / parameters	6538 / 2 / 451	
Goodness-of-fit on F <sup>2</sup>	1.003	
Final R indices [I>2sigma(I)]	R1 = 0.0500, wR2 = 0.1108	
R indices (all data)	R1 = 0.1230, wR2 = 0.1446	
Largest diff. peak and hole	0.227 and -0.267 e.Å <sup>-3</sup>	



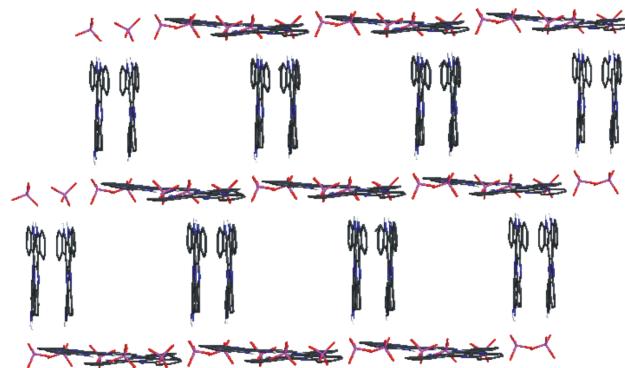
**Fig. S1.** View of the  $\pi-\pi$  stacking in **DIPZ·EtOAc**. Hydrogen atoms and solvent molecules have been removed for clarity. Dashed yellow line indicates the vertical distance of the two **DIPZ** planes at the side of indolocarbazole moiety.



**Fig. S2.** Job's plot for receptor **DIPZ** with dihydrogen phosphate anion, indicating 1:1 binding stoichiometry in solution.  $[\text{DIPZ}] + [\text{TBAH}_2\text{PO}_4] = 1.5 \times 10^{-4} \text{ M}$ .



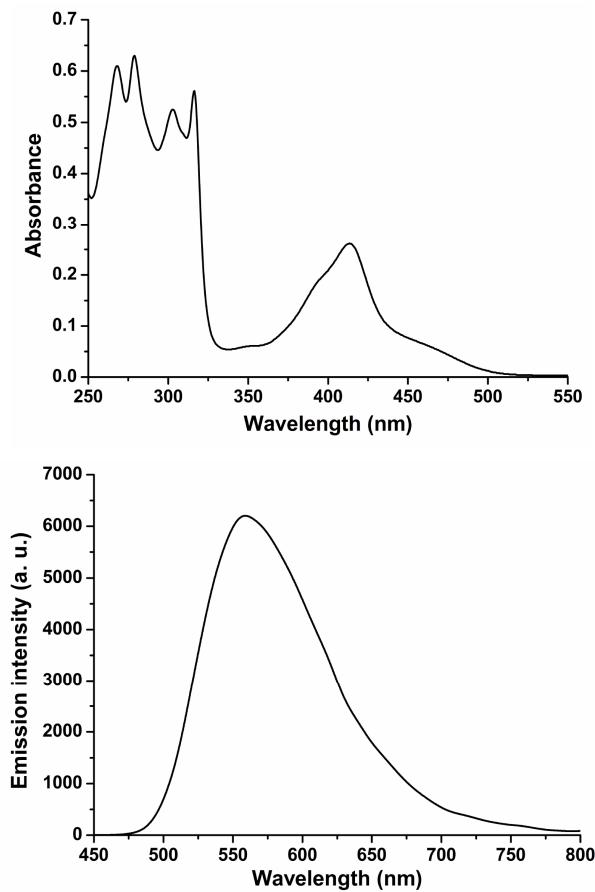
**Fig. S3.** View showing the infinite phosphate chains viewed along from *a* (left), *b* (middle) and *c* (left) axes. Non-acidic hydrogen atoms, counter cations and free solvent molecules have been removed for clarity.



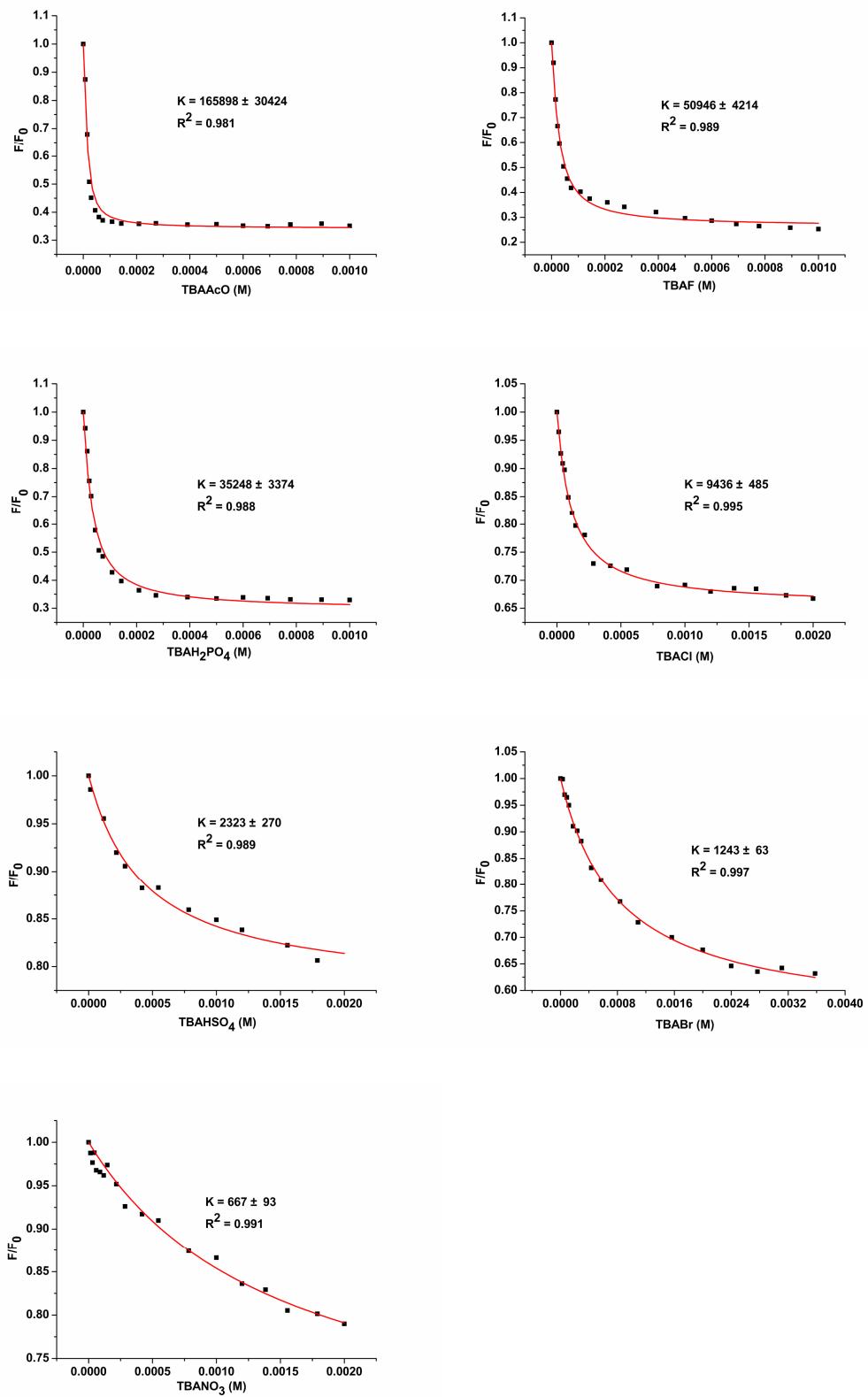
**Fig. S4.** View showing the cationic channels. Non-acidic hydrogen atoms, counter cations and free solvent molecules have been removed for clarity.

## Anion Binding Study

Stock solutions of the host receptor **DIPZ** being studied were made up in MeCN with the final concentrations being  $1.5 \times 10^{-5}$  M. Stock solution of guest was prepared by dissolving 200, 400 and 800 equivalents of the TBAF, TBACl, TBABr, TBAAcO, TBANO<sub>3</sub>, TBAH<sub>2</sub>PO<sub>4</sub> and TBAHSO<sub>4</sub> in 5 mL of a stock solution of the host, respectively. Making up the anion source solutions in this way allowed the binding studies to be carried out without having to make mathematical corrections to account for changes in host concentration as the result of dilution effects. The general procedure for the fluorescence studies involved making sequential additions of titrant (anionic guest) using Hamilton pipettes to a 2 mL aliquot of the host stock solution in the spectrometric cell.



**Fig. S5.** UV-vis and fluorescence ( $\lambda_{\text{exc}} = 413 \text{ nm}$  and  $\lambda_{\text{em}} = 560 \text{ nm}$ ) spectra of receptor **DIPZ** ( $1.5 \times 10^{-5} \text{ M}$ ) in MeCN.



**Fig. S6.** Association constants of various anions determined by fluorescence titration.

Partially determined cif for **DIPZ·TBANO<sub>3</sub>**

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F^2^ > 2sigma(F^2^) is used only for calculating R-factors(gt) etc. and
is
not relevant to the choice of reflections for refinement. R-factors
based
on F^2^ are statistically about twice as large as those based on F, and
R-
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C1 C 0.2312(3) 0.7765(3) 0.19837(12) 0.0291(7) Uani 1 1 d U . .
C2 C 0.1998(3) 0.8082(3) 0.27712(13) 0.0419(8) Uani 1 1 d U . .
C3 C 0.1540(3) 0.8543(4) 0.32270(14) 0.0572(9) Uani 1 1 d U . .
H3 H 0.0932 0.9098 0.3243 0.069 Uiso 1 1 calc R . .
C4 C 0.2082(4) 0.8087(4) 0.36316(16) 0.0631(10) Uani 1 1 d U . .
H4 H 0.1846 0.8354 0.3936 0.076 Uiso 1 1 calc R . .
C5 C 0.2988(4) 0.7226(4) 0.36024(15) 0.0638(10) Uani 1 1 d U . .
H5 H 0.3284 0.6892 0.3886 0.077 Uiso 1 1 calc R . .
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C6 C 0.3438(3) 0.6873(4) 0.31627(13) 0.0478(9) Uani 1 1 d U . .  
H6 H 0.4086 0.6364 0.3150 0.057 Uiso 1 1 calc R . .  
C7 C 0.2933(3) 0.7270(3) 0.27500(12) 0.0376(7) Uani 1 1 d U . .  
C8 C 0.3093(3) 0.7023(3) 0.22351(11) 0.0289(7) Uani 1 1 d U . .  
C9 C 0.3899(2) 0.6231(3) 0.19892(12) 0.0282(7) Uani 1 1 d U . .  
C10 C 0.5405(3) 0.4835(3) 0.19820(12) 0.0321(7) Uani 1 1 d U . .  
C11 C 0.6250(3) 0.4226(3) 0.22176(13) 0.0416(8) Uani 1 1 d U . .  
H11 H 0.6398 0.4384 0.2544 0.050 Uiso 1 1 calc R . .  
C12 C 0.6894(3) 0.3380(3) 0.19837(14) 0.0398(8) Uani 1 1 d U . .  
H12 H 0.7477 0.2963 0.2150 0.048 Uiso 1 1 calc R . .  
C13 C 0.6672(3) 0.3135(3) 0.14821(13) 0.0375(8) Uani 1 1 d U . .  
H13 H 0.7123 0.2577 0.1316 0.045 Uiso 1 1 calc R . .  
C14 C 0.5802(3) 0.3724(3) 0.12578(13) 0.0378(8) Uani 1 1 d U . .  
H14 H 0.5618 0.3514 0.0940 0.045 Uiso 1 1 calc R . .  
C15 C 0.5143(2) 0.4655(2) 0.14780(12) 0.0246(7) Uani 1 1 d U . .  
C16 C 0.3737(3) 0.6153(3) 0.14718(12) 0.0295(7) Uani 1 1 d U . .  
C17 C 0.2955(3) 0.6892(3) 0.12194(11) 0.0292(7) Uani 1 1 d U . .  
C18 C 0.2620(3) 0.7033(3) 0.07119(13) 0.0390(8) Uani 1 1 d U . .  
C19 C 0.3126(4) 0.6563(3) 0.02795(14) 0.0535(9) Uani 1 1 d U . .  
H19 H 0.3768 0.6047 0.0292 0.064 Uiso 1 1 calc R . .  
C20 C 0.2643(4) 0.6891(4) -0.01498(19) 0.0752(11) Uani 1 1 d U . .  
H20 H 0.2871 0.6509 -0.0434 0.090 Uiso 1 1 calc R . .  
C21 C 0.1749(4) 0.7859(4) -0.01685(19) 0.0768(11) Uani 1 1 d U . .  
H21 H 0.1393 0.8068 -0.0461 0.092 Uiso 1 1 calc R . .  
C22 C 0.1471(4) 0.8414(4) 0.02372(17) 0.0644(10) Uani 1 1 d U . .  
H22 H 0.0992 0.9083 0.0220 0.077 Uiso 1 1 calc R . .  
C23 C 0.1866(3) 0.8038(3) 0.06918(13) 0.0451(8) Uani 1 1 d U . .  
C24 C 0.2303(2) 0.7651(2) 0.14808(11) 0.0272(7) Uani 1 1 d U . .  
C25 C 1.0631(5) 0.4339(3) 0.00130(13) 0.0691(11) Uani 0.50 1 d PDU A 1  
H25A H 1.0437 0.3761 -0.0235 0.083 Uiso 0.50 1 calc PR A 1  
H25B H 1.1487 0.4383 0.0037 0.083 Uiso 0.50 1 calc PR A 1  
C26 C 1.0138(6) 0.5560(4) -0.01365(11) 0.0670(12) Uani 0.50 1 d PDU A 1  
H26A H 1.0499 0.6178 0.0059 0.080 Uiso 0.50 1 calc PR A 1  
H26B H 0.9288 0.5585 -0.0086 0.080 Uiso 0.50 1 calc PR A 1  
C27 C 1.0429(5) 0.5756(4) -0.06778(11) 0.0702(13) Uani 0.50 1 d PDU A 1  
H27A H 1.0353 0.6590 -0.0758 0.084 Uiso 0.50 1 calc PR A 1  
H27B H 1.1238 0.5514 -0.0743 0.084 Uiso 0.50 1 calc PR A 1  
C28 C 0.9575(5) 0.5029(6) -0.09882(15) 0.0751(18) Uani 0.50 1 d PDU A 1  
H28A H 0.9739 0.5167 -0.1326 0.113 Uiso 0.50 1 calc PR A 1  
H28B H 0.8775 0.5260 -0.0917 0.113 Uiso 0.50 1 calc PR A 1  
H28C H 0.9676 0.4202 -0.0917 0.113 Uiso 0.50 1 calc PR A 1  
C29 C 0.9349(5) 0.4264(3) 0.09138(14) 0.0771(11) Uani 0.50 1 d PDU A 1  
H29A H 0.9437 0.3701 0.1178 0.093 Uiso 0.50 1 calc PR A 1  
H29B H 0.8522 0.4293 0.0818 0.093 Uiso 0.50 1 calc PR A 1

C30 C 0.9795(6) 0.5491(4) 0.10623(11) 0.0724(11) Uani 0.50 1 d PDU A 1  
H30A H 1.0650 0.5524 0.1028 0.087 Uiso 0.50 1 calc PR A 1  
H30B H 0.9452 0.6087 0.0851 0.087 Uiso 0.50 1 calc PR A 1  
C31 C 0.9456(5) 0.5753(4) 0.15874(11) 0.0799(16) Uani 0.50 1 d PDU A 1  
H31A H 0.8645 0.5502 0.1644 0.096 Uiso 0.50 1 calc PR A 1  
H31B H 0.9501 0.6599 0.1645 0.096 Uiso 0.50 1 calc PR A 1  
C32 C 1.0283(5) 0.5106(6) 0.19383(14) 0.0824(18) Uani 0.50 1 d PDU A 1  
H32A H 1.0059 0.5285 0.2266 0.124 Uiso 0.50 1 calc PR A 1  
H32B H 1.1084 0.5360 0.1884 0.124 Uiso 0.50 1 calc PR A 1  
H32C H 1.0226 0.4267 0.1885 0.124 Uiso 0.50 1 calc PR A 1  
C33 C 0.8985(3) 0.3308(5) 0.04216(17) 0.1152(13) Uani 0.50 1 d PDU A 1  
H33A H 0.8412 0.3786 0.0597 0.138 Uiso 0.50 1 calc PR A 1  
H33B H 0.9069 0.2585 0.0609 0.138 Uiso 0.50 1 calc PR A 1  
C34 C 0.8332(3) 0.2924(5) -0.00384(12) 0.1212(11) Uani 0.50 1 d PDU A 1  
H34A H 0.8242 0.3597 -0.0255 0.145 Uiso 0.50 1 calc PR A 1  
H34B H 0.8788 0.2322 -0.0206 0.145 Uiso 0.50 1 calc PR A 1  
C35 C 0.7112(3) 0.2432(6) 0.00933(14) 0.1269(14) Uani 0.50 1 d PDU A 1  
H35A H 0.6914 0.1780 -0.0122 0.152 Uiso 0.50 1 calc PR A 1  
H35B H 0.6517 0.3045 0.0054 0.152 Uiso 0.50 1 calc PR A 1  
C36 C 0.7121(5) 0.1998(6) 0.06218(13) 0.155(2) Uani 0.50 1 d PDU A 1  
H36A H 0.6353 0.1693 0.0704 0.233 Uiso 0.50 1 calc PR A 1  
H36B H 0.7313 0.2646 0.0833 0.233 Uiso 0.50 1 calc PR A 1  
H36C H 0.7702 0.1383 0.0658 0.233 Uiso 0.50 1 calc PR A 1  
C37 C 1.0623(3) 0.2707(4) 0.05459(16) 0.0848(12) Uani 0.50 1 d PDU A 1  
H37A H 1.1122 0.2473 0.0276 0.102 Uiso 0.50 1 calc PR A 1  
H37B H 1.0015 0.2116 0.0603 0.102 Uiso 0.50 1 calc PR A 1  
C38 C 1.1338(3) 0.3014(5) 0.10086(17) 0.0814(12) Uani 0.50 1 d PDU A 1  
H38A H 1.1198 0.3830 0.1103 0.098 Uiso 0.50 1 calc PR A 1  
H38B H 1.1104 0.2502 0.1275 0.098 Uiso 0.50 1 calc PR A 1  
C39 C 1.2655(3) 0.2824(4) 0.0884(3) 0.0796(12) Uani 0.50 1 d PDU A 1  
H39A H 1.3152 0.3163 0.1136 0.096 Uiso 0.50 1 calc PR A 1  
H39B H 1.2845 0.3207 0.0579 0.096 Uiso 0.50 1 calc PR A 1  
C40 C 1.2878(5) 0.1476(3) 0.0845(3) 0.0679(17) Uani 0.50 1 d PDU A 1  
H40A H 1.3693 0.1337 0.0764 0.102 Uiso 0.50 1 calc PR A 1  
H40B H 1.2378 0.1148 0.0598 0.102 Uiso 0.50 1 calc PR A 1  
H40C H 1.2701 0.1107 0.1151 0.102 Uiso 0.50 1 calc PR A 1  
C25' C 0.9667(6) 0.4686(5) 0.00684(10) 0.0678(12) Uani 0.50 1 d PDU A 2  
H25C H 1.0002 0.5474 0.0097 0.081 Uiso 0.50 1 calc PR A 2  
H25D H 0.8815 0.4761 0.0103 0.081 Uiso 0.50 1 calc PR A 2  
C26' C 0.9929(6) 0.4225(5) -0.04480(10) 0.0688(12) Uani 0.50 1 d PDU A 2  
H26C H 1.0778 0.4195 -0.0500 0.083 Uiso 0.50 1 calc PR A 2  
H26D H 0.9616 0.3429 -0.0484 0.083 Uiso 0.50 1 calc PR A 2

C27' C 0.9359(6) 0.5042(5) -0.08234(10) 0.0771(13) Uani 0.50 1 d PDU A 2  
H27C H 0.9697 0.5830 -0.0798 0.093 Uiso 0.50 1 calc PR A 2  
H27D H 0.8514 0.5100 -0.0763 0.093 Uiso 0.50 1 calc PR A 2  
C28' C 0.9578(9) 0.4544(7) -0.13373(11) 0.083(2) Uani 0.50 1 d PDU A 2  
H28D H 0.9351 0.5124 -0.1575 0.125 Uiso 0.50 1 calc PR A 2  
H28E H 0.9115 0.3838 -0.1382 0.125 Uiso 0.50 1 calc PR A 2  
H28F H 1.0403 0.4359 -0.1375 0.125 Uiso 0.50 1 calc PR A 2  
C29' C 1.0481(6) 0.4751(5) 0.09037(10) 0.0682(12) Uani 0.50 1 d PDU A 2  
H29C H 1.0218 0.5549 0.0829 0.082 Uiso 0.50 1 calc PR A 2  
H29D H 1.1339 0.4767 0.0927 0.082 Uiso 0.50 1 calc PR A 2  
C30' C 0.9970(5) 0.4387(6) 0.13959(13) 0.0736(11) Uani 0.50 1 d PDU A 2  
H30C H 0.9974 0.3531 0.1424 0.088 Uiso 0.50 1 calc PR A 2  
H30D H 0.9157 0.4659 0.1422 0.088 Uiso 0.50 1 calc PR A 2  
C31' C 1.0718(6) 0.4934(6) 0.18069(10) 0.0825(15) Uani 0.50 1 d PDU A 2  
H31C H 1.0595 0.5785 0.1812 0.099 Uiso 0.50 1 calc PR A 2  
H31D H 1.1551 0.4790 0.1742 0.099 Uiso 0.50 1 calc PR A 2  
C32' C 1.0396(8) 0.4415(7) 0.23106(17) 0.086(2) Uani 0.50 1 d PDU A 2  
H32D H 1.0911 0.4746 0.2553 0.129 Uiso 0.50 1 calc PR A 2  
H32E H 1.0489 0.3570 0.2304 0.129 Uiso 0.50 1 calc PR A 2  
H32F H 0.9589 0.4608 0.2387 0.129 Uiso 0.50 1 calc PR A 2  
C33' C 0.8840(3) 0.3710(3) 0.0478(2) 0.1015(13) Uani 0.50 1 d PDU A 2  
H33C H 0.8429 0.4288 0.0279 0.122 Uiso 0.50 1 calc PR A 2  
H33D H 0.8500 0.3705 0.0801 0.122 Uiso 0.50 1 calc PR A 2  
C34' C 0.8812(3) 0.2458(4) 0.0244(3) 0.1156(11) Uani 0.50 1 d PDU A 2  
H34C H 0.9089 0.1866 0.0472 0.139 Uiso 0.50 1 calc PR A 2  
H34D H 0.9313 0.2434 -0.0042 0.139 Uiso 0.50 1 calc PR A 2  
C35' C 0.7493(3) 0.2223(3) 0.0104(3) 0.1260(12) Uani 0.50 1 d PDU A 2  
H35C H 0.7429 0.2024 -0.0237 0.151 Uiso 0.50 1 calc PR A 2  
H35D H 0.7175 0.1572 0.0294 0.151 Uiso 0.50 1 calc PR A 2  
C36' C 0.6810(4) 0.3378(4) 0.0214(5) 0.144(2) Uani 0.50 1 d PDU A 2  
H36D H 0.6000 0.3293 0.0113 0.216 Uiso 0.50 1 calc PR A 2  
H36E H 0.7169 0.4024 0.0042 0.216 Uiso 0.50 1 calc PR A 2  
H36F H 0.6835 0.3534 0.0557 0.216 Uiso 0.50 1 calc PR A 2  
C37' C 1.1379(3) 0.3598(4) 0.03988(16) 0.0812(12) Uani 0.50 1 d PDU A 2  
H37C H 1.1931 0.4245 0.0451 0.097 Uiso 0.50 1 calc PR A 2  
H37D H 1.1498 0.3251 0.0080 0.097 Uiso 0.50 1 calc PR A 2  
C38' C 1.1401(3) 0.2684(4) 0.08070(19) 0.0845(10) Uani 0.50 1 d PDU A 2  
H38C H 1.0879 0.2029 0.0727 0.101 Uiso 0.50 1 calc PR A 2  
H38D H 1.1121 0.3042 0.1106 0.101 Uiso 0.50 1 calc PR A 2  
C39' C 1.2671(3) 0.2225(4) 0.08771(18) 0.0811(13) Uani 0.50 1 d PDU A 2  
H39C H 1.3233 0.2853 0.0808 0.097 Uiso 0.50 1 calc PR A 2  
H39D H 1.2783 0.1972 0.1211 0.097 Uiso 0.50 1 calc PR A 2  
C40' C 1.2880(5) 0.1179(4) 0.0532(2) 0.0707(18) Uani 0.50 1 d PDU A 2

H40D H 1.3678 0.0900 0.0568 0.106 Uiso 0.50 1 calc PR A 2  
H40E H 1.2754 0.1431 0.0203 0.106 Uiso 0.50 1 calc PR A 2  
H40F H 1.2338 0.0551 0.0609 0.106 Uiso 0.50 1 calc PR A 2  
N1 N 0.1638(2) 0.8429(3) 0.23277(10) 0.0384(8) Uani 1 1 d . . .  
H1 H 0.1105 0.8951 0.2264 0.046 Uiso 1 1 calc R . . .  
N2 N 0.4693(2) 0.5669(2) 0.22476(11) 0.0363(8) Uani 1 1 d . . .  
N3 N 0.4382(2) 0.5297(2) 0.12279(10) 0.0354(7) Uani 1 1 d . . .  
N4 N 0.1617(2) 0.8367(2) 0.11642(10) 0.0369(8) Uani 1 1 d . . .  
H4A H 0.1130 0.8913 0.1251 0.044 Uiso 1 1 calc R . . .  
N5 N 0.0520(2) 0.0499(2) 0.92285(13) 0.0389(7) Uani 1 1 d . . .  
N6 N 1.0129(2) 0.3938(2) 0.04907(9) 0.0884(13) Uani 1 1 d DU . . .  
O2 O -0.0217(2) 0.0412(2) 0.95971(11) 0.0565(9) Uani 1 1 d . . .  
O3 O 0.0416(2) -0.0206(2) 0.88888(11) 0.0529(8) Uani 1 1 d . . .

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\_atom\_site\_aniso\_U\_12  
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C2 0.0344(14) 0.0566(15) 0.0345(15) -0.0082(14) 0.0080(13) 0.0140(13)  
C3 0.0613(16) 0.0722(16) 0.0382(16) -0.0147(15) 0.0024(14) 0.0402(14)  
C4 0.0624(16) 0.0832(17) 0.0436(17) -0.0072(15) 0.0084(15) 0.0440(15)  
C5 0.0605(17) 0.0922(19) 0.0387(17) -0.0045(16) 0.0053(15) 0.0381(15)  
C6 0.0304(13) 0.0756(17) 0.0374(15) -0.0092(14) 0.0068(13) 0.0209(13)  
C7 0.0268(12) 0.0522(14) 0.0337(14) -0.0076(13) 0.0074(11) 0.0118(12)  
C8 0.0253(12) 0.0308(12) 0.0307(13) 0.0002(11) 0.0021(11) 0.0061(11)  
C9 0.0247(12) 0.0290(13) 0.0307(13) -0.0027(11) -0.0015(11) 0.0049(10)  
C10 0.0289(13) 0.0357(13) 0.0316(14) 0.0036(12) 0.0078(12) -0.0005(11)  
C11 0.0397(15) 0.0488(15) 0.0364(15) 0.0076(13) 0.0041(13) 0.0014(13)  
C12 0.0361(13) 0.0419(14) 0.0412(15) 0.0070(13) 0.0125(13) 0.0174(12)  
C13 0.0291(13) 0.0401(14) 0.0433(15) 0.0009(13) 0.0047(12) 0.0095(12)  
C14 0.0405(14) 0.0331(13) 0.0398(15) 0.0006(12) 0.0077(13) 0.0048(12)  
C15 0.0177(11) 0.0248(12) 0.0312(13) -0.0002(11) -0.0015(11) 0.0027(10)  
C16 0.0295(13) 0.0281(12) 0.0308(14) -0.0025(12) 0.0008(11) -0.0068(11)  
C17 0.0350(12) 0.0264(12) 0.0262(13) -0.0019(11) 0.0106(11) -0.0034(11)  
C18 0.0563(15) 0.0337(13) 0.0270(13) 0.0001(12) -0.0032(13) 0.0126(12)  
C19 0.0734(17) 0.0498(15) 0.0373(16) 0.0005(14) -0.0074(15) 0.0312(14)  
C20 0.093(2) 0.0818(19) 0.0513(18) -0.0053(17) 0.0022(18) 0.0266(17)  
C21 0.0871(19) 0.089(2) 0.0544(18) 0.0089(17) -0.0140(17) 0.0331(17)  
C22 0.0750(17) 0.0692(17) 0.0492(17) 0.0064(15) -0.0137(16) 0.0422(15)

C23 0.0609(16) 0.0513(15) 0.0230(14) 0.0048(13) -0.0055(14) 0.0172(14)  
C24 0.0265(12) 0.0256(12) 0.0296(13) -0.0007(12) 0.0031(11) -0.0053(11)  
C25 0.0685(18) 0.0680(18) 0.0709(19) -0.0005(18) 0.0120(18) 0.0019(17)  
C26 0.065(2) 0.064(2) 0.072(2) -0.0041(19) 0.0089(19) 0.0021(19)  
C27 0.067(2) 0.073(2) 0.071(2) -0.002(2) -0.005(2) 0.008(2)  
C28 0.084(3) 0.070(3) 0.071(3) -0.007(3) 0.001(3) 0.009(3)  
C29 0.0767(19) 0.0755(19) 0.0792(19) 0.0019(18) 0.0070(18) -0.0069(18)  
C30 0.0673(18) 0.0718(18) 0.0780(19) 0.0050(18) 0.0101(18) -0.0116(18)  
C31 0.078(3) 0.080(3) 0.082(3) 0.009(3) 0.012(3) -0.009(2)  
C32 0.082(3) 0.081(3) 0.085(3) -0.004(3) 0.005(3) -0.005(3)  
C33 0.119(2) 0.117(2) 0.109(2) 0.006(2) 0.003(2) 0.002(2)  
C34 0.1249(19) 0.1230(19) 0.1156(19) 0.0066(19) -0.0004(19) 0.0043(19)  
C35 0.130(2) 0.129(2) 0.122(2) 0.008(2) 0.005(2) 0.012(2)  
C36 0.153(4) 0.166(4) 0.148(4) 0.010(3) 0.004(3) -0.001(3)  
C37 0.090(2) 0.080(2) 0.085(2) 0.002(2) 0.007(2) 0.001(2)  
C38 0.084(2) 0.077(2) 0.083(2) -0.005(2) 0.008(2) -0.009(2)  
C39 0.082(2) 0.077(2) 0.080(2) -0.0003(19) 0.0128(19) -0.0119(19)  
C40 0.077(3) 0.053(3) 0.074(3) 0.006(3) 0.018(3) -0.002(3)  
C25' 0.066(2) 0.067(2) 0.071(2) 0.0037(19) 0.0135(19) 0.0002(19)  
C26' 0.067(2) 0.070(2) 0.070(2) 0.000(2) 0.0096(19) -0.0029(19)  
C27' 0.080(2) 0.075(2) 0.075(2) -0.005(2) 0.004(2) 0.004(2)  
C28' 0.088(3) 0.076(3) 0.086(3) 0.014(3) 0.000(3) -0.005(3)  
C29' 0.068(2) 0.063(2) 0.073(2) -0.0035(19) 0.0066(19) -0.0063(19)  
C30' 0.0712(19) 0.0728(19) 0.0770(19) -0.0024(18) 0.0094(18) -0.0058(18)  
C31' 0.083(3) 0.078(3) 0.087(3) -0.004(2) 0.007(2) 0.002(2)  
C32' 0.086(3) 0.085(3) 0.087(3) -0.008(3) 0.001(3) 0.016(3)  
C33' 0.109(2) 0.097(2) 0.098(2) 0.002(2) 0.008(2) 0.001(2)  
C34' 0.1201(19) 0.1175(19) 0.1092(19) 0.0046(19) 0.0054(19) 0.0040(19)  
C35' 0.127(2) 0.132(2) 0.118(2) 0.006(2) 0.005(2) 0.006(2)  
C36' 0.148(4) 0.145(4) 0.140(4) -0.006(3) 0.005(3) -0.004(3)  
C37' 0.085(2) 0.075(2) 0.083(2) -0.006(2) 0.000(2) -0.001(2)  
C38' 0.0861(17) 0.0810(17) 0.0866(17) -0.0022(17) 0.0093(17) -0.0075(17)  
C39' 0.084(2) 0.081(2) 0.078(2) -0.002(2) 0.008(2) -0.011(2)  
C40' 0.090(3) 0.058(3) 0.064(3) 0.016(3) -0.013(3) -0.010(3)  
N1 0.0307(13) 0.0573(16) 0.0273(14) -0.0088(13) 0.0052(12) 0.0034(12)  
N2 0.0197(12) 0.0456(15) 0.0434(17) -0.0062(13) -0.0026(12) 0.0031(11)  
N3 0.0541(15) 0.0181(11) 0.0340(14) 0.0023(11) 0.0220(12) 0.0105(11)  
N4 0.0498(15) 0.0238(12) 0.0373(16) 0.0102(11) -0.0081(13) 0.0202(11)  
N5 0.0327(13) 0.0469(14) 0.0371(13) 0.0124(14) 0.0002(13) -0.0168(11)  
N6 0.142(3) 0.0542(18) 0.069(2) 0.0115(19) 0.025(2) -0.002(2)  
O2 0.0449(13) 0.0598(16) 0.0649(17) -0.0051(13) 0.0210(13) -0.0065(12)  
O3 0.0341(12) 0.0551(14) 0.0696(19) -0.0087(14) -0.0122(12) -0.0161(11)

\_geom\_special\_details

;

All esds (except the esd in the dihedral angle between two l.s. planes) are estimated using the full covariance matrix. The cell esds are taken into account individually in the estimation of esds in distances, angles and torsion angles; correlations between esds in cell parameters are only used when they are defined by crystal symmetry. An approximate (isotropic) treatment of cell esds is used for estimating esds involving l.s. planes.

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loop\_

\_geom\_bond\_atom\_site\_label\_1

\_geom\_bond\_atom\_site\_label\_2

\_geom\_bond\_distance

\_geom\_bond\_site\_symmetry\_2

\_geom\_bond\_publ\_flag

O1 N5 1.167(4) . ?

C1 C24 1.391(4) . ?

C1 C8 1.399(4) . ?

C1 N1 1.428(4) . ?

C2 N1 1.345(4) . ?

C2 C7 1.399(5) . ?

C2 C3 1.453(5) . ?

C3 C4 1.371(6) . ?

C3 H3 0.9300 . ?

C4 C5 1.412(6) . ?

C4 H4 0.9300 . ?

C5 C6 1.372(5) . ?

C5 H5 0.9300 . ?

C6 C7 1.348(5) . ?

C6 H6 0.9300 . ?

C7 C8 1.456(5) . ?

C8 C9 1.444(4) . ?

C9 N2 1.308(4) . ?

C9 C16 1.439(5) . ?

C10 C11 1.343(5) . ?

C10 C15 1.433(4) . ?

C10 N2 1.437(4) . ?

C11 C12 1.362(5) . ?

C11 H11 0.9300 . ?

C12 C13 1.431(5) . ?

C12 H12 0.9300 . ?

C13 C14 1.337(5) . ?

C13 H13 0.9300 . ?

C14 C15 1.423(4) . ?  
C14 H14 0.9300 . ?  
C15 N3 1.318(4) . ?  
C16 N3 1.383(4) . ?  
C16 C17 1.399(4) . ?  
C17 C24 1.340(4) . ?  
C17 C18 1.457(5) . ?  
C18 C23 1.419(5) . ?  
C18 C19 1.423(5) . ?  
C19 C20 1.353(6) . ?  
C19 H19 0.9300 . ?  
C20 C21 1.489(7) . ?  
C20 H20 0.9300 . ?  
C21 C22 1.319(7) . ?  
C21 H21 0.9300 . ?  
C22 C23 1.395(6) . ?  
C22 H22 0.9300 . ?  
C23 N4 1.382(5) . ?  
C24 N4 1.419(4) . ?  
C25 N6 1.502(4) . ?  
C25 C26 1.542(5) . ?  
C25 H25A 0.9700 . ?  
C25 H25B 0.9700 . ?  
C26 C27 1.542(4) . ?  
C26 H26A 0.9700 . ?  
C26 H26B 0.9700 . ?  
C27 C28 1.527(6) . ?  
C27 H27A 0.9700 . ?  
C27 H27B 0.9700 . ?  
C28 H28A 0.9600 . ?  
C28 H28B 0.9600 . ?  
C28 H28C 0.9600 . ?  
C29 N6 1.506(5) . ?  
C29 C30 1.530(5) . ?  
C29 H29A 0.9700 . ?  
C29 H29B 0.9700 . ?  
C30 C31 1.525(4) . ?  
C30 H30A 0.9700 . ?  
C30 H30B 0.9700 . ?  
C31 C32 1.529(6) . ?  
C31 H31A 0.9700 . ?  
C31 H31B 0.9700 . ?  
C32 H32A 0.9600 . ?  
C32 H32B 0.9600 . ?

C32 H32C 0.9600 . ?  
C33 N6 1.487(4) . ?  
C33 C34 1.528(5) . ?  
C33 H33A 0.9700 . ?  
C33 H33B 0.9700 . ?  
C34 C35 1.528(5) . ?  
C34 H34A 0.9700 . ?  
C34 H34B 0.9700 . ?  
C35 C36 1.536(5) . ?  
C35 H35A 0.9700 . ?  
C35 H35B 0.9700 . ?  
C36 H36A 0.9600 . ?  
C36 H36B 0.9600 . ?  
C36 H36C 0.9600 . ?  
C37 N6 1.504(4) . ?  
C37 C38 1.547(5) . ?  
C37 H37A 0.9700 . ?  
C37 H37B 0.9700 . ?  
C38 C39 1.541(5) . ?  
C38 H38A 0.9700 . ?  
C38 H38B 0.9700 . ?  
C39 C40 1.545(5) . ?  
C39 H39A 0.9700 . ?  
C39 H39B 0.9700 . ?  
C40 H40A 0.9600 . ?  
C40 H40B 0.9600 . ?  
C40 H40C 0.9600 . ?  
C25' N6 1.529(5) . ?  
C25' C26' 1.543(4) . ?  
C25' H25C 0.9700 . ?  
C25' H25D 0.9700 . ?  
C26' C27' 1.528(6) . ?  
C26' H26C 0.9700 . ?  
C26' H26D 0.9700 . ?  
C27' C28' 1.543(5) . ?  
C27' H27C 0.9700 . ?  
C27' H27D 0.9700 . ?  
C28' H28D 0.9600 . ?  
C28' H28E 0.9600 . ?  
C28' H28F 0.9600 . ?  
C29' N6 1.514(4) . ?  
C29' C30' 1.529(5) . ?  
C29' H29C 0.9700 . ?  
C29' H29D 0.9700 . ?

C30' C31' 1.541(6) . ?  
C30' H30C 0.9700 . ?  
C30' H30D 0.9700 . ?  
C31' C32' 1.549(6) . ?  
C31' H31C 0.9700 . ?  
C31' H31D 0.9700 . ?  
C32' H32D 0.9600 . ?  
C32' H32E 0.9600 . ?  
C32' H32F 0.9600 . ?  
C33' N6 1.478(4) . ?  
C33' C34' 1.553(5) . ?  
C33' H33C 0.9700 . ?  
C33' H33D 0.9700 . ?  
C34' C35' 1.560(5) . ?  
C34' H34C 0.9700 . ?  
C34' H34D 0.9700 . ?  
C35' C36' 1.544(6) . ?  
C35' H35C 0.9700 . ?  
C35' H35D 0.9700 . ?  
C36' H36D 0.9600 . ?  
C36' H36E 0.9600 . ?  
C36' H36F 0.9600 . ?  
C37' N6 1.484(4) . ?  
C37' C38' 1.526(6) . ?  
C37' H37C 0.9700 . ?  
C37' H37D 0.9700 . ?  
C38' C39' 1.536(5) . ?  
C38' H38C 0.9700 . ?  
C38' H38D 0.9700 . ?  
C39' C40' 1.534(6) . ?  
C39' H39C 0.9700 . ?  
C39' H39D 0.9700 . ?  
C40' H40D 0.9600 . ?  
C40' H40E 0.9600 . ?  
C40' H40F 0.9600 . ?  
N1 H1 0.8600 . ?  
N4 H4A 0.8600 . ?  
N5 O3 1.234(4) . ?  
N5 O2 1.316(4) . ?

loop\_  
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\_geom\_angle\_atom\_site\_label\_2  
\_geom\_angle\_atom\_site\_label\_3

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\_geom\_angle\_site\_symmetry\_3  
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C24 C1 C8 116.3(3) . . ?  
C24 C1 N1 134.8(3) . . ?  
C8 C1 N1 108.7(3) . . ?  
N1 C2 C7 112.4(3) . . ?  
N1 C2 C3 124.9(3) . . ?  
C7 C2 C3 122.6(3) . . ?  
C4 C3 C2 114.2(3) . . ?  
C4 C3 H3 122.9 . . ?  
C2 C3 H3 122.9 . . ?  
C3 C4 C5 122.3(4) . . ?  
C3 C4 H4 118.9 . . ?  
C5 C4 H4 118.8 . . ?  
C6 C5 C4 121.2(4) . . ?  
C6 C5 H5 119.4 . . ?  
C4 C5 H5 119.4 . . ?  
C7 C6 C5 119.4(3) . . ?  
C7 C6 H6 120.3 . . ?  
C5 C6 H6 120.3 . . ?  
C6 C7 C2 120.1(3) . . ?  
C6 C7 C8 134.8(3) . . ?  
C2 C7 C8 105.0(3) . . ?  
C1 C8 C9 122.4(3) . . ?  
C1 C8 C7 106.8(3) . . ?  
C9 C8 C7 130.8(3) . . ?  
N2 C9 C16 126.6(3) . . ?  
N2 C9 C8 118.4(3) . . ?  
C16 C9 C8 115.0(3) . . ?  
C11 C10 C15 122.8(3) . . ?  
C11 C10 N2 119.1(3) . . ?  
C15 C10 N2 118.1(3) . . ?  
C10 C11 C12 120.6(3) . . ?  
C10 C11 H11 119.7 . . ?  
C12 C11 H11 119.7 . . ?  
C11 C12 C13 120.0(3) . . ?  
C11 C12 H12 120.0 . . ?  
C13 C12 H12 120.0 . . ?  
C14 C13 C12 118.6(3) . . ?  
C14 C13 H13 120.7 . . ?  
C12 C13 H13 120.7 . . ?  
C13 C14 C15 123.6(3) . . ?

C13 C14 H14 118.2 . . ?  
C15 C14 H14 118.2 . . ?  
N3 C15 C14 121.6(3) . . ?  
N3 C15 C10 124.2(3) . . ?  
C14 C15 C10 114.2(3) . . ?  
N3 C16 C17 120.4(3) . . ?  
N3 C16 C9 117.2(3) . . ?  
C17 C16 C9 122.4(3) . . ?  
C24 C17 C16 117.4(3) . . ?  
C24 C17 C18 107.6(3) . . ?  
C16 C17 C18 134.9(3) . . ?  
C23 C18 C19 120.4(3) . . ?  
C23 C18 C17 106.3(3) . . ?  
C19 C18 C17 131.2(3) . . ?  
C20 C19 C18 117.9(4) . . ?  
C20 C19 H19 121.0 . . ?  
C18 C19 H19 121.0 . . ?  
C19 C20 C21 120.2(4) . . ?  
C19 C20 H20 119.9 . . ?  
C21 C20 H20 119.9 . . ?  
C22 C21 C20 118.7(4) . . ?  
C22 C21 H21 120.6 . . ?  
C20 C21 H21 120.6 . . ?  
C21 C22 C23 122.7(4) . . ?  
C21 C22 H22 118.7 . . ?  
C23 C22 H22 118.7 . . ?  
N4 C23 C22 134.3(3) . . ?  
N4 C23 C18 107.5(3) . . ?  
C22 C23 C18 118.0(3) . . ?  
C17 C24 C1 126.2(3) . . ?  
C17 C24 N4 109.5(3) . . ?  
C1 C24 N4 124.3(3) . . ?  
N6 C25 C26 111.6(3) . . ?  
N6 C25 H25A 109.3 . . ?  
C26 C25 H25A 109.3 . . ?  
N6 C25 H25B 109.3 . . ?  
C26 C25 H25B 109.3 . . ?  
H25A C25 H25B 108.0 . . ?  
C25 C26 C27 108.0(3) . . ?  
C25 C26 H26A 110.1 . . ?  
C27 C26 H26A 110.1 . . ?  
C25 C26 H26B 110.1 . . ?  
C27 C26 H26B 110.1 . . ?  
H26A C26 H26B 108.4 . . ?

C28 C27 C26 109.3(4) . . ?  
C28 C27 H27A 109.8 . . ?  
C26 C27 H27A 109.8 . . ?  
C28 C27 H27B 109.8 . . ?  
C26 C27 H27B 109.8 . . ?  
H27A C27 H27B 108.3 . . ?  
C27 C28 H28A 109.5 . . ?  
C27 C28 H28B 109.4 . . ?  
H28A C28 H28B 109.5 . . ?  
C27 C28 H28C 109.5 . . ?  
H28A C28 H28C 109.5 . . ?  
H28B C28 H28C 109.5 . . ?  
N6 C29 C30 103.6(3) . . ?  
N6 C29 H29A 111.0 . . ?  
C30 C29 H29A 111.0 . . ?  
N6 C29 H29B 111.0 . . ?  
C30 C29 H29B 111.0 . . ?  
H29A C29 H29B 109.0 . . ?  
C31 C30 C29 110.2(4) . . ?  
C31 C30 H30A 109.6 . . ?  
C29 C30 H30A 109.6 . . ?  
C31 C30 H30B 109.6 . . ?  
C29 C30 H30B 109.6 . . ?  
H30A C30 H30B 108.1 . . ?  
C30 C31 C32 110.7(4) . . ?  
C30 C31 H31A 109.5 . . ?  
C32 C31 H31A 109.5 . . ?  
C30 C31 H31B 109.5 . . ?  
C32 C31 H31B 109.5 . . ?  
H31A C31 H31B 108.1 . . ?  
C31 C32 H32A 109.5 . . ?  
C31 C32 H32B 109.5 . . ?  
H32A C32 H32B 109.5 . . ?  
C31 C32 H32C 109.5 . . ?  
H32A C32 H32C 109.5 . . ?  
H32B C32 H32C 109.5 . . ?  
N6 C33 C34 131.4(4) . . ?  
N6 C33 H33A 104.4 . . ?  
C34 C33 H33A 104.4 . . ?  
N6 C33 H33B 104.4 . . ?  
C34 C33 H33B 104.4 . . ?  
H33A C33 H33B 105.6 . . ?  
C35 C34 C33 109.9(3) . . ?  
C35 C34 H34A 109.7 . . ?

C33 C34 H34A 109.7 . . ?  
C35 C34 H34B 109.7 . . ?  
C33 C34 H34B 109.7 . . ?  
H34A C34 H34B 108.2 . . ?  
C34 C35 C36 109.6(3) . . ?  
C34 C35 H35A 109.7 . . ?  
C36 C35 H35A 109.5 . . ?  
C34 C35 H35B 109.8 . . ?  
C36 C35 H35B 110.0 . . ?  
H35A C35 H35B 108.2 . . ?  
C35 C36 H36A 109.4 . . ?  
C35 C36 H36B 109.3 . . ?  
H36A C36 H36B 109.5 . . ?  
C35 C36 H36C 109.7 . . ?  
H36A C36 H36C 109.5 . . ?  
H36B C36 H36C 109.5 . . ?  
N6 C37 C38 94.0(3) . . ?  
N6 C37 H37A 112.9 . . ?  
C38 C37 H37A 112.9 . . ?  
N6 C37 H37B 112.9 . . ?  
C38 C37 H37B 112.9 . . ?  
H37A C37 H37B 110.3 . . ?  
C39 C38 C37 106.8(4) . . ?  
C39 C38 H38A 110.4 . . ?  
C37 C38 H38A 110.4 . . ?  
C39 C38 H38B 110.4 . . ?  
C37 C38 H38B 110.4 . . ?  
H38A C38 H38B 108.6 . . ?  
C38 C39 C40 108.0(4) . . ?  
C38 C39 H39A 110.1 . . ?  
C40 C39 H39A 110.1 . . ?  
C38 C39 H39B 110.1 . . ?  
C40 C39 H39B 110.1 . . ?  
H39A C39 H39B 108.4 . . ?  
C39 C40 H40A 109.5 . . ?  
C39 C40 H40B 109.5 . . ?  
H40A C40 H40B 109.5 . . ?  
C39 C40 H40C 109.5 . . ?  
H40A C40 H40C 109.5 . . ?  
H40B C40 H40C 109.5 . . ?  
N6 C25' C26' 116.8(4) . . ?  
N6 C25' H25C 108.1 . . ?  
C26' C25' H25C 108.1 . . ?  
N6 C25' H25D 108.1 . . ?

C26' C25' H25D 108.1 . . ?  
H25C C25' H25D 107.3 . . ?  
C27' C26' C25' 109.9(4) . . ?  
C27' C26' H26C 109.7 . . ?  
C25' C26' H26C 109.7 . . ?  
C27' C26' H26D 109.7 . . ?  
C25' C26' H26D 109.7 . . ?  
H26C C26' H26D 108.2 . . ?  
C26' C27' C28' 109.5(4) . . ?  
C26' C27' H27C 109.8 . . ?  
C28' C27' H27C 109.8 . . ?  
C26' C27' H27D 109.8 . . ?  
C28' C27' H27D 109.8 . . ?  
H27C C27' H27D 108.2 . . ?  
C27' C28' H28D 109.5 . . ?  
C27' C28' H28E 109.4 . . ?  
H28D C28' H28E 109.5 . . ?  
C27' C28' H28F 109.5 . . ?  
H28D C28' H28F 109.5 . . ?  
H28E C28' H28F 109.5 . . ?  
N6 C29' C30' 113.8(4) . . ?  
N6 C29' H29C 108.8 . . ?  
C30' C29' H29C 108.8 . . ?  
N6 C29' H29D 108.8 . . ?  
C30' C29' H29D 108.8 . . ?  
H29C C29' H29D 107.7 . . ?  
C29' C30' C31' 109.7(4) . . ?  
C29' C30' H30C 109.7 . . ?  
C31' C30' H30C 109.7 . . ?  
C29' C30' H30D 109.7 . . ?  
C31' C30' H30D 109.7 . . ?  
H30C C30' H30D 108.2 . . ?  
C30' C31' C32' 112.2(5) . . ?  
C30' C31' H31C 109.2 . . ?  
C32' C31' H31C 109.2 . . ?  
C30' C31' H31D 109.2 . . ?  
C32' C31' H31D 109.1 . . ?  
H31C C31' H31D 107.9 . . ?  
C31' C32' H32D 109.5 . . ?  
C31' C32' H32E 109.5 . . ?  
H32D C32' H32E 109.5 . . ?  
C31' C32' H32F 109.5 . . ?  
H32D C32' H32F 109.5 . . ?  
H32E C32' H32F 109.5 . . ?

N6 C33' C34' 100.9(3) . . ?  
N6 C33' H33C 111.6 . . ?  
C34' C33' H33C 111.6 . . ?  
N6 C33' H33D 111.5 . . ?  
C34' C33' H33D 111.5 . . ?  
H33C C33' H33D 109.4 . . ?  
C33' C34' C35' 106.0(3) . . ?  
C33' C34' H34C 110.6 . . ?  
C35' C34' H34C 110.5 . . ?  
C33' C34' H34D 110.5 . . ?  
C35' C34' H34D 110.5 . . ?  
H34C C34' H34D 108.7 . . ?  
C36' C35' C34' 106.5(3) . . ?  
C36' C35' H35C 110.4 . . ?  
C34' C35' H35C 110.4 . . ?  
C36' C35' H35D 110.4 . . ?  
C34' C35' H35D 110.4 . . ?  
H35C C35' H35D 108.6 . . ?  
C35' C36' H36D 109.5 . . ?  
C35' C36' H36E 109.5 . . ?  
H36D C36' H36E 109.5 . . ?  
C35' C36' H36F 109.5 . . ?  
H36D C36' H36F 109.5 . . ?  
H36E C36' H36F 109.5 . . ?  
N6 C37' C38' 93.7(3) . . ?  
N6 C37' H37C 113.0 . . ?  
C38' C37' H37C 113.0 . . ?  
N6 C37' H37D 113.0 . . ?  
C38' C37' H37D 113.0 . . ?  
H37C C37' H37D 110.4 . . ?  
C37' C38' C39' 109.6(3) . . ?  
C37' C38' H38C 109.8 . . ?  
C39' C38' H38C 109.8 . . ?  
C37' C38' H38D 109.7 . . ?  
C39' C38' H38D 109.7 . . ?  
H38C C38' H38D 108.2 . . ?  
C40' C39' C38' 109.0(4) . . ?  
C40' C39' H39C 109.9 . . ?  
C38' C39' H39C 109.9 . . ?  
C40' C39' H39D 109.9 . . ?  
C38' C39' H39D 109.9 . . ?  
H39C C39' H39D 108.3 . . ?  
C39' C40' H40D 109.5 . . ?  
C39' C40' H40E 109.5 . . ?

H40D C40' H40E 109.5 . . ?  
C39' C40' H40F 109.5 . . ?  
H40D C40' H40F 109.5 . . ?  
H40E C40' H40F 109.5 . . ?  
C2 N1 C1 106.8(3) . . ?  
C2 N1 H1 126.6 . . ?  
C1 N1 H1 126.6 . . ?  
C9 N2 C10 115.0(3) . . ?  
C15 N3 C16 118.2(3) . . ?  
C23 N4 C24 108.3(3) . . ?  
C23 N4 H4A 125.8 . . ?  
C24 N4 H4A 125.8 . . ?  
O1 N5 O3 123.0(3) . . ?  
O1 N5 O2 118.5(3) . . ?  
O3 N5 O2 118.5(3) . . ?  
C33' N6 C37' 152.5(3) . . ?  
C33' N6 C33 19.6(3) . . ?  
C37' N6 C33 132.9(3) . . ?  
C33' N6 C25 113.7(4) . . ?  
C37' N6 C25 64.5(3) . . ?  
C33 N6 C25 111.0(3) . . ?  
C33' N6 C37 101.9(2) . . ?  
C37' N6 C37 55.0(2) . . ?  
C33 N6 C37 83.9(3) . . ?  
C25 N6 C37 103.1(3) . . ?  
C33' N6 C29 59.0(3) . . ?  
C37' N6 C29 138.7(3) . . ?  
C33 N6 C29 73.0(3) . . ?  
C25 N6 C29 145.5(3) . . ?  
C37 N6 C29 111.3(3) . . ?  
C33' N6 C29' 112.5(3) . . ?  
C37' N6 C29' 92.0(3) . . ?  
C33 N6 C29' 127.9(3) . . ?  
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'Xiu-Ping Yan'
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_publ_contact_author_address
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Research Center for Analytical Science, College of Chemistry
Nankai University
94 Weijin Road, Tianjin 300071 (China)
;

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on F, with F set to zero for negative F^2. The threshold expression of  
F^2 > 2sigma(F^2) is used only for calculating R-factors(gt) etc. and  
is

not relevant to the choice of reflections for refinement. R-factors based on  $F^2$  are statistically about twice as large as those based on  $F$ , and R-factors based on ALL data will be even larger.

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N7 N 0.5701(6) 0.5624(6) 0.7890(5) 0.036(2) Uani 1 1 d . . .  
N8 N 0.4448(6) 0.8550(6) 0.7904(6) 0.039(2) Uani 1 1 d . . .  
H8 H 0.4084 0.9074 0.8004 0.046 Uiso 1 1 calc R . .  
N9 N 0.9953(6) 0.0952(6) 0.8469(5) 0.032(2) Uani 1 1 d . . .

H9 H 1.0485 0.0868 0.8414 0.038 Uiso 1 1 calc R . . .  
N10 N 0.7023(6) 0.1225(6) 0.9429(5) 0.031(2) Uani 1 1 d . . .  
N11 N 0.7010(5) 0.1185(5) 1.0837(5) 0.029(2) Uani 1 1 d . . .  
N12 N 0.9932(6) 0.0937(6) 1.0026(5) 0.029(2) Uani 1 1 d . . .  
H12A H 1.0459 0.0887 0.9766 0.035 Uiso 1 1 calc R . . .  
N13 N 0.5027(6) 0.0560(7) 0.5005(5) 0.035(2) Uani 1 1 d . . .  
H13 H 0.4503 0.0619 0.5282 0.042 Uiso 1 1 calc R . . .  
N14 N 0.7901(7) 0.0406(6) 0.4159(6) 0.041(2) Uani 1 1 d . . .  
N15 N 0.7780(6) 0.0663(6) 0.5556(6) 0.038(2) Uani 1 1 d . . .  
N16 N 0.4941(6) 0.0770(6) 0.6545(5) 0.031(2) Uani 1 1 d . . .  
H16 H 0.4434 0.0784 0.6602 0.037 Uiso 1 1 calc R . . .  
N17 N 0.4588(6) 0.8566(7) -0.0257(7) 0.048(3) Uani 1 1 d . . .  
H17 H 0.4199 0.9080 -0.0131 0.058 Uiso 1 1 calc R . . .  
N18 N 0.6032(6) 0.5659(6) -0.0437(6) 0.041(2) Uani 1 1 d . . .  
N19 N 0.4583(6) 0.5596(6) 0.0767(6) 0.038(2) Uani 1 1 d . . .  
N20 N 0.2981(6) 0.8492(6) 0.1064(6) 0.039(2) Uani 1 1 d . . .  
H20 H 0.2816 0.9018 0.1022 0.046 Uiso 1 1 calc R . . .  
N21 N 0.2118(6) 0.3270(7) 0.4124(6) 0.040(2) Uani 1 1 d . . .  
H21' H 0.2211 0.2759 0.4183 0.048 Uiso 1 1 calc R . . .  
N22 N 0.0935(6) 0.6164(6) 0.4379(5) 0.034(2) Uani 1 1 d . . .  
N23 N -0.0448(7) 0.6241(6) 0.5719(6) 0.043(3) Uani 1 1 d . . .  
N24 N 0.0629(6) 0.3327(6) 0.5582(6) 0.041(2) Uani 1 1 d . . .  
H24 H 0.0931 0.2804 0.5447 0.049 Uiso 1 1 calc R . . .  
C1 C -0.0327(8) 0.3274(7) 0.4429(7) 0.040(3) Uani 1 1 d . . .  
C2 C -0.0600(8) 0.2752(8) 0.4902(7) 0.045(3) Uani 1 1 d . . .  
H2 H -0.0282 0.2174 0.4816 0.054 Uiso 1 1 calc R . . .  
C3 C -0.1352(12) 0.3118(13) 0.5500(9) 0.071(5) Uani 1 1 d . . .  
H3 H -0.1552 0.2778 0.5817 0.085 Uiso 1 1 calc R . . .  
C4 C -0.1836(9) 0.3999(10) 0.5651(7) 0.049(3) Uani 1 1 d . . .  
H4A H -0.2331 0.4220 0.6071 0.059 Uiso 1 1 calc R . . .  
C5 C -0.1585(8) 0.4539(9) 0.5182(7) 0.046(3) Uani 1 1 d . . .  
H5A H -0.1908 0.5116 0.5279 0.055 Uiso 1 1 calc R . . .  
C6 C -0.0841(8) 0.4186(8) 0.4572(6) 0.038(3) Uani 1 1 d . . .  
C7 C -0.0358(7) 0.4518(7) 0.3969(6) 0.038(3) Uani 1 1 d . . .  
C8 C -0.0463(7) 0.5323(7) 0.3787(6) 0.033(2) Uani 1 1 d . . .  
C9 C -0.1231(8) 0.6746(8) 0.4057(6) 0.039(3) Uani 1 1 d . . .  
C10 C -0.1967(9) 0.7494(8) 0.4513(8) 0.048(3) Uani 1 1 d . . .  
H10 H -0.2389 0.7444 0.4927 0.058 Uiso 1 1 calc R . . .  
C11 C -0.2027(10) 0.8256(9) 0.4328(8) 0.056(4) Uani 1 1 d . . .  
H11 H -0.2487 0.8723 0.4628 0.067 Uiso 1 1 calc R . . .  
C12 C -0.1431(8) 0.8369(8) 0.3709(7) 0.047(3) Uani 1 1 d . . .  
H12 H -0.1485 0.8903 0.3610 0.057 Uiso 1 1 calc R . . .  
C13 C -0.0761(8) 0.7700(8) 0.3242(7) 0.046(3) Uani 1 1 d . . .  
H13A H -0.0397 0.7783 0.2808 0.056 Uiso 1 1 calc R . . .

C14 C -0.0627(7) 0.6882(7) 0.3424(7) 0.036(3) Uani 1 1 d . . .  
C15 C 0.0159(8) 0.5447(7) 0.3135(7) 0.036(3) Uani 1 1 d . . .  
C16 C 0.0854(7) 0.4746(7) 0.2682(6) 0.029(2) Uani 1 1 d . . .  
C17 C 0.1605(7) 0.4633(7) 0.2017(6) 0.033(2) Uani 1 1 d . . .  
C18 C 0.1920(8) 0.5184(9) 0.1607(7) 0.043(3) Uani 1 1 d . . .  
H18 H 0.1605 0.5758 0.1721 0.051 Uiso 1 1 calc R . .  
C19 C 0.2725(9) 0.4830(9) 0.1023(7) 0.048(3) Uani 1 1 d . . .  
H19 H 0.2971 0.5173 0.0761 0.057 Uiso 1 1 calc R . .  
C20 C 0.3171(9) 0.3974(8) 0.0823(7) 0.046(3) Uani 1 1 d . . .  
H20' H 0.3663 0.3770 0.0399 0.055 Uiso 1 1 calc R . .  
C21 C 0.2895(8) 0.3426(8) 0.1241(7) 0.040(3) Uani 1 1 d . . .  
H21 H 0.3228 0.2852 0.1126 0.048 Uiso 1 1 calc R . .  
C22 C 0.2112(8) 0.3745(8) 0.1835(7) 0.040(3) Uani 1 1 d . . .  
C23 C 0.0977(7) 0.3913(7) 0.2879(6) 0.036(3) Uani 1 1 d . . .  
C24 C 0.0397(7) 0.3780(7) 0.3504(6) 0.036(3) Uani 1 1 d . . .  
C25 C 0.2257(8) 0.8379(8) 0.9760(6) 0.041(3) Uani 1 1 d . . .  
C26 C 0.1397(7) 0.8866(8) 1.0269(8) 0.051(4) Uani 1 1 d . . .  
H26 H 0.1116 0.9444 1.0272 0.062 Uiso 1 1 calc R . .  
C27 C 0.0994(9) 0.8451(9) 1.0758(8) 0.052(3) Uani 1 1 d . . .  
H27 H 0.0452 0.8758 1.1123 0.062 Uiso 1 1 calc R . .  
C28 C 0.1389(8) 0.7546(10) 1.0721(7) 0.052(4) Uani 1 1 d . . .  
H28 H 0.1082 0.7279 1.1039 0.063 Uiso 1 1 calc R . .  
C29 C 0.2215(8) 0.7087(8) 1.0214(7) 0.043(3) Uani 1 1 d . . .  
H29 H 0.2471 0.6507 1.0190 0.052 Uiso 1 1 calc R . .  
C30 C 0.2669(7) 0.7482(9) 0.9739(7) 0.042(3) Uani 1 1 d . . .  
C31 C 0.3525(7) 0.7211(7) 0.9130(6) 0.034(2) Uani 1 1 d . . .  
C32 C 0.4236(7) 0.6407(7) 0.8822(7) 0.036(3) Uani 1 1 d . . .  
C33 C 0.4901(8) 0.4965(8) 0.8777(7) 0.046(3) Uani 1 1 d . . .  
C34 C 0.4849(9) 0.4239(8) 0.9034(8) 0.057(4) Uani 1 1 d . . .  
H34 H 0.4352 0.4263 0.9419 0.068 Uiso 1 1 calc R . .  
C35 C 0.5571(10) 0.3459(10) 0.8696(9) 0.071(5) Uani 1 1 d . . .  
H35 H 0.5562 0.2962 0.8866 0.086 Uiso 1 1 calc R . .  
C36 C 0.6309(13) 0.3446(12) 0.8094(13) 0.096(7) Uani 1 1 d . . .  
H36 H 0.6783 0.2931 0.7882 0.115 Uiso 1 1 calc R . .  
C37 C 0.6353(9) 0.4130(8) 0.7823(9) 0.057(4) Uani 1 1 d . . .  
H37 H 0.6840 0.4087 0.7419 0.069 Uiso 1 1 calc R . .  
C38 C 0.5645(7) 0.4950(7) 0.8153(7) 0.040(3) Uani 1 1 d . . .  
C39 C 0.4996(7) 0.6382(6) 0.8232(6) 0.031(2) Uani 1 1 d . . .  
C40 C 0.5003(7) 0.7145(8) 0.7944(6) 0.034(3) Uani 1 1 d . . .  
C41 C 0.5662(8) 0.7317(8) 0.7374(7) 0.043(3) Uani 1 1 d . . .  
C42 C 0.6516(8) 0.6834(8) 0.6893(7) 0.048(3) Uani 1 1 d . . .  
H42 H 0.6774 0.6255 0.6896 0.058 Uiso 1 1 calc R . .  
C43 C 0.6977(7) 0.7204(7) 0.6417(7) 0.040(3) Uani 1 1 d . . .  
H43 H 0.7543 0.6868 0.6090 0.048 Uiso 1 1 calc R . .

C44 C 0.6627(9) 0.8092(9) 0.6397(7) 0.051(3) Uani 1 1 d . . .  
H44 H 0.6965 0.8331 0.6075 0.061 Uiso 1 1 calc R . . .  
C45 C 0.5750(7) 0.8598(7) 0.6884(7) 0.039(3) Uani 1 1 d . . .  
H45 H 0.5492 0.9177 0.6891 0.047 Uiso 1 1 calc R . . .  
C46 C 0.5299(8) 0.8199(8) 0.7342(7) 0.040(3) Uani 1 1 d . . .  
C47 C 0.4302(7) 0.7887(7) 0.8271(6) 0.035(3) Uani 1 1 d . . .  
C48 C 0.3538(7) 0.7945(7) 0.8853(8) 0.040(3) Uani 1 1 d . . .  
C49 C 0.9649(7) 0.1042(7) 0.7927(6) 0.029(2) Uani 1 1 d . . .  
C50 C 1.0092(8) 0.1013(8) 0.7222(6) 0.039(3) Uani 1 1 d . . .  
H50 H 1.0693 0.0907 0.7034 0.047 Uiso 1 1 calc R . . .  
C51 C 0.9600(7) 0.1151(8) 0.6792(6) 0.037(3) Uani 1 1 d . . .  
H51 H 0.9882 0.1156 0.6308 0.044 Uiso 1 1 calc R . . .  
C52 C 0.8700(7) 0.1283(8) 0.7054(7) 0.042(3) Uani 1 1 d . . .  
H52 H 0.8385 0.1404 0.6755 0.051 Uiso 1 1 calc R . . .  
C53 C 0.8285(7) 0.1228(8) 0.7783(6) 0.033(3) Uani 1 1 d . . .  
H53 H 0.7712 0.1257 0.7963 0.040 Uiso 1 1 calc R . . .  
C54 C 0.8755(6) 0.1127(6) 0.8238(6) 0.027(2) Uani 1 1 d . . .  
C55 C 0.8518(7) 0.1132(6) 0.8998(5) 0.026(2) Uani 1 1 d . . .  
C56 C 0.7732(6) 0.1163(7) 0.9567(6) 0.027(2) Uani 1 1 d . . .  
C57 C 0.6300(7) 0.1275(7) 0.9991(6) 0.030(2) Uani 1 1 d . . .  
C58 C 0.5530(7) 0.1353(8) 0.9901(7) 0.038(3) Uani 1 1 d . . .  
H58 H 0.5510 0.1399 0.9452 0.046 Uiso 1 1 calc R . . .  
C59 C 0.4800(7) 0.1362(8) 1.0471(7) 0.042(3) Uani 1 1 d . . .  
H59 H 0.4317 0.1367 1.0398 0.050 Uiso 1 1 calc R . . .  
C60 C 0.4787(8) 0.1364(10) 1.1161(8) 0.053(4) Uani 1 1 d . . .  
H60 H 0.4285 0.1392 1.1543 0.063 Uiso 1 1 calc R . . .  
C61 C 0.5515(7) 0.1326(7) 1.1277(7) 0.036(3) Uani 1 1 d . . .  
H61 H 0.5495 0.1338 1.1736 0.043 Uiso 1 1 calc R . . .  
C62 C 0.6295(7) 0.1270(7) 1.0695(6) 0.033(2) Uani 1 1 d . . .  
C63 C 0.7746(6) 0.1130(6) 1.0260(6) 0.024(2) Uani 1 1 d . . .  
C64 C 0.8523(7) 0.1039(7) 1.0369(6) 0.030(2) Uani 1 1 d . . .  
C65 C 0.8717(6) 0.1004(7) 1.1002(5) 0.028(2) Uani 1 1 d . . .  
C66 C 0.8217(7) 0.1044(7) 1.1725(6) 0.034(3) Uani 1 1 d . . .  
H66 H 0.7624 0.1129 1.1886 0.041 Uiso 1 1 calc R . . .  
C67 C 0.8642(7) 0.0954(8) 1.2185(6) 0.036(3) Uani 1 1 d . . .  
H67 H 0.8344 0.0933 1.2663 0.043 Uiso 1 1 calc R . . .  
C68 C 0.9528(7) 0.0891(7) 1.1951(6) 0.032(2) Uani 1 1 d . . .  
H68 H 0.9787 0.0847 1.2279 0.038 Uiso 1 1 calc R . . .  
C69 C 1.0001(7) 0.0896(8) 1.1248(6) 0.038(3) Uani 1 1 d . . .  
H69 H 1.0577 0.0856 1.1094 0.045 Uiso 1 1 calc R . . .  
C70 C 0.9584(7) 0.0962(7) 1.0764(6) 0.028(2) Uani 1 1 d . . .  
C71 C 0.9267(6) 0.1007(7) 0.9791(6) 0.029(2) Uani 1 1 d . . .  
C72 C 0.9279(7) 0.1016(7) 0.9119(6) 0.031(2) Uani 1 1 d . . .  
C73 C 0.5359(7) 0.0457(9) 0.4271(6) 0.040(3) Uani 1 1 d . . .

C74 C 0.4959(8) 0.0442(9) 0.3790(6) 0.043(3) Uani 1 1 d . . .  
H74 H 0.4391 0.0464 0.3949 0.052 Uiso 1 1 calc R . . .  
C75 C 0.5437(8) 0.0396(9) 0.3105(8) 0.050(3) Uani 1 1 d . . .  
H75 H 0.5166 0.0429 0.2788 0.059 Uiso 1 1 calc R . . .  
C76 C 0.6320(8) 0.0301(9) 0.2830(7) 0.050(3) Uani 1 1 d . . .  
H76 H 0.6642 0.0194 0.2345 0.060 Uiso 1 1 calc R . . .  
C77 C 0.6731(6) 0.0368(7) 0.3280(5) 0.031(2) Uani 1 1 d . . .  
H77 H 0.7281 0.0385 0.3100 0.038 Uiso 1 1 calc R . . .  
C78 C 0.6261(7) 0.0406(7) 0.4016(6) 0.032(2) Uani 1 1 d . . .  
C79 C 0.6423(7) 0.0492(7) 0.4614(6) 0.033(2) Uani 1 1 d . . .  
C80 C 0.7174(6) 0.0508(7) 0.4709(5) 0.026(2) Uani 1 1 d . . .  
C81 C 0.8605(7) 0.0422(7) 0.4282(6) 0.031(2) Uani 1 1 d . . .  
C82 C 0.9395(7) 0.0262(7) 0.3701(7) 0.039(3) Uani 1 1 d . . .  
H82 H 0.9452 0.0134 0.3251 0.047 Uiso 1 1 calc R . . .  
C83 C 1.0103(7) 0.0301(7) 0.3817(7) 0.037(3) Uani 1 1 d . . .  
H83 H 1.0629 0.0215 0.3435 0.044 Uiso 1 1 calc R . . .  
C84 C 1.0035(8) 0.0462(7) 0.4478(8) 0.045(3) Uani 1 1 d . . .  
H84 H 1.0506 0.0502 0.4536 0.054 Uiso 1 1 calc R . . .  
C85 C 0.9270(7) 0.0568(7) 0.5071(7) 0.038(3) Uani 1 1 d . . .  
H85 H 0.9248 0.0640 0.5521 0.045 Uiso 1 1 calc R . . .  
C86 C 0.8515(7) 0.0563(8) 0.4976(7) 0.040(3) Uani 1 1 d . . .  
C87 C 0.7108(6) 0.0613(7) 0.5428(6) 0.027(2) Uani 1 1 d . . .  
C88 C 0.6326(7) 0.0703(9) 0.6017(7) 0.041(3) Uani 1 1 d . . .  
C89 C 0.6082(7) 0.0775(7) 0.6763(7) 0.036(3) Uani 1 1 d . . .  
C90 C 0.6517(7) 0.0826(8) 0.7203(6) 0.036(3) Uani 1 1 d . . .  
H90 H 0.7089 0.0799 0.7012 0.044 Uiso 1 1 calc R . . .  
C91 C 0.6040(8) 0.0918(9) 0.7941(7) 0.046(3) Uani 1 1 d . . .  
H91 H 0.6300 0.0963 0.8242 0.056 Uiso 1 1 calc R . . .  
C92 C 0.5184(8) 0.0944(8) 0.8230(7) 0.045(3) Uani 1 1 d . . .  
H92 H 0.4894 0.0995 0.8718 0.054 Uiso 1 1 calc R . . .  
C93 C 0.4766(8) 0.0895(7) 0.7811(6) 0.032(2) Uani 1 1 d . . .  
H93 H 0.4205 0.0900 0.8010 0.039 Uiso 1 1 calc R . . .  
C94 C 0.5191(7) 0.0838(7) 0.7085(6) 0.029(2) Uani 1 1 d . . .  
C95 C 0.5592(6) 0.0678(7) 0.5922(7) 0.036(3) Uani 1 1 d . . .  
C96 C 0.5674(7) 0.0553(7) 0.5216(6) 0.032(2) Uani 1 1 d . . .  
C97 C 0.5367(9) 0.8306(8) -0.0793(8) 0.048(3) Uani 1 1 d . . .  
C98 C 0.5768(10) 0.8738(10) -0.1292(9) 0.059(4) Uani 1 1 d . . .  
H98 H 0.5465 0.9318 -0.1258 0.071 Uiso 1 1 calc R . . .  
C99 C 0.6543(12) 0.8365(11) -0.1802(9) 0.065(4) Uani 1 1 d . . .  
H99 H 0.6784 0.8679 -0.2120 0.078 Uiso 1 1 calc R . . .  
C100 C 0.7053(10) 0.7430(10) -0.1880(8) 0.056(4) Uani 1 1 d . . .  
H100 H 0.7617 0.7162 -0.2235 0.067 Uiso 1 1 calc R . . .  
C101 C 0.6667(8) 0.6968(8) -0.1411(7) 0.044(3) Uani 1 1 d . . .  
H101 H 0.6945 0.6387 -0.1460 0.052 Uiso 1 1 calc R . . .

C102 C 0.5838(7) 0.7423(7) -0.0861(7) 0.036(3) Uani 1 1 d . . .  
C103 C 0.5240(7) 0.7150(7) -0.0305(7) 0.034(3) Uani 1 1 d . . .  
C104 C 0.5305(7) 0.6353(7) -0.0076(6) 0.032(2) Uani 1 1 d . . .  
C105 C 0.6035(7) 0.4926(7) -0.0180(7) 0.040(3) Uani 1 1 d . . .  
C106 C 0.6824(8) 0.4149(8) -0.0556(8) 0.054(4) Uani 1 1 d . . .  
H106 H 0.7295 0.4160 -0.0949 0.065 Uiso 1 1 calc R . .  
C107 C 0.6838(10) 0.3413(9) -0.0303(10) 0.067(5) Uani 1 1 d . . .  
H107 H 0.7329 0.2917 -0.0539 0.080 Uiso 1 1 calc R . .  
C108 C 0.6165(8) 0.3364(8) 0.0283(9) 0.062(5) Uani 1 1 d . . .  
H108 H 0.6220 0.2845 0.0441 0.074 Uiso 1 1 calc R . .  
C109 C 0.5398(8) 0.4089(7) 0.0641(8) 0.051(4) Uani 1 1 d . . .  
H109 H 0.4939 0.4057 0.1033 0.061 Uiso 1 1 calc R . .  
C110 C 0.5334(7) 0.4863(7) 0.0400(7) 0.040(3) Uani 1 1 d . . .  
C111 C 0.4569(7) 0.6317(7) 0.0521(7) 0.036(3) Uani 1 1 d . . .  
C112 C 0.3803(8) 0.7084(7) 0.0884(7) 0.040(3) Uani 1 1 d . . .  
C113 C 0.2980(8) 0.7249(7) 0.1447(7) 0.042(3) Uani 1 1 d . . .  
C114 C 0.2562(9) 0.6777(9) 0.1872(7) 0.048(3) Uani 1 1 d . . .  
H114 H 0.2850 0.6197 0.1797 0.058 Uiso 1 1 calc R . .  
C115 C 0.1715(8) 0.7175(8) 0.2409(8) 0.052(3) Uani 1 1 d . . .  
H115 H 0.1455 0.6858 0.2702 0.063 Uiso 1 1 calc R . .  
C116 C 0.1234(9) 0.8088(8) 0.2510(7) 0.048(3) Uani 1 1 d . . .  
H116 H 0.0660 0.8350 0.2853 0.058 Uiso 1 1 calc R . .  
C117 C 0.1627(8) 0.8552(9) 0.2105(8) 0.051(4) Uani 1 1 d . . .  
H117 H 0.1328 0.9132 0.2170 0.062 Uiso 1 1 calc R . .  
C118 C 0.2498(8) 0.8141(8) 0.1581(7) 0.038(3) Uani 1 1 d . . .  
C119 C 0.3766(6) 0.7857(7) 0.0632(7) 0.040(3) Uani 1 1 d . . .  
C120 C 0.4497(7) 0.7901(7) 0.0062(7) 0.038(3) Uani 1 1 d . . .  
C121 C 0.2637(7) 0.3539(7) 0.3525(7) 0.035(3) Uani 1 1 d . . .  
C122 C 0.3388(8) 0.3057(8) 0.2947(7) 0.039(3) Uani 1 1 d . . .  
H122 H 0.3630 0.2478 0.2902 0.047 Uiso 1 1 calc R . .  
C123 C 0.3754(9) 0.3497(9) 0.2441(9) 0.056(4) Uani 1 1 d . . .  
H123 H 0.4256 0.3207 0.2040 0.067 Uiso 1 1 calc R . .  
C124 C 0.3382(8) 0.4373(9) 0.2521(7) 0.045(3) Uani 1 1 d . . .  
H124 H 0.3641 0.4647 0.2168 0.054 Uiso 1 1 calc R . .  
C125 C 0.2641(8) 0.4843(8) 0.3110(7) 0.038(3) Uani 1 1 d . . .  
H125 H 0.2406 0.5421 0.3156 0.046 Uiso 1 1 calc R . .  
C126 C 0.2259(7) 0.4414(6) 0.3631(6) 0.029(2) Uani 1 1 d . . .  
C127 C 0.1512(7) 0.4662(7) 0.4289(6) 0.035(2) Uani 1 1 d . . .  
C128 C 0.0860(7) 0.5457(7) 0.4667(6) 0.035(3) Uani 1 1 d . . .  
C129 C 0.0289(8) 0.6895(7) 0.4782(7) 0.041(3) Uani 1 1 d . . .  
C130 C 0.0326(8) 0.7669(8) 0.4515(7) 0.042(3) Uani 1 1 d . . .  
H130 H 0.0770 0.7651 0.4086 0.051 Uiso 1 1 calc R . .  
C131 C -0.0268(9) 0.8392(8) 0.4879(8) 0.054(4) Uani 1 1 d . . .  
H131 H -0.0233 0.8875 0.4696 0.065 Uiso 1 1 calc R . .

C132 C -0.0961(9) 0.8464(8) 0.5544(8) 0.048(3) Uani 1 1 d . . .  
H132 H -0.1372 0.8984 0.5787 0.058 Uiso 1 1 calc R . . .  
C133 C -0.1012(9) 0.7731(8) 0.5824(8) 0.049(3) Uani 1 1 d . . .  
H133 H -0.1444 0.7751 0.6261 0.059 Uiso 1 1 calc R . . .  
C134 C -0.0376(8) 0.6960(7) 0.5413(7) 0.041(3) Uani 1 1 d . . .  
C135 C 0.0150(8) 0.5541(8) 0.5329(7) 0.041(3) Uani 1 1 d . . .  
C136 C 0.0130(6) 0.4758(6) 0.5604(6) 0.029(2) Uani 1 1 d . . .  
C137 C -0.0476(8) 0.4584(8) 0.6221(7) 0.042(3) Uani 1 1 d . . .  
C138 C -0.1257(8) 0.5087(8) 0.6792(7) 0.042(3) Uani 1 1 d . . .  
H138 H -0.1478 0.5664 0.6826 0.051 Uiso 1 1 calc R . . .  
C139 C -0.1674(9) 0.4699(8) 0.7288(7) 0.048(3) Uani 1 1 d . . .  
H139 H -0.2196 0.5023 0.7662 0.057 Uiso 1 1 calc R . . .  
C140 C -0.1343(9) 0.3809(9) 0.7260(8) 0.050(3) Uani 1 1 d . . .  
H140 H -0.1655 0.3568 0.7606 0.061 Uiso 1 1 calc R . . .  
C141 C -0.0556(8) 0.3308(8) 0.6715(7) 0.043(3) Uani 1 1 d . . .  
H141 H -0.0330 0.2729 0.6694 0.052 Uiso 1 1 calc R . . .  
C142 C -0.0110(8) 0.3697(8) 0.6196(6) 0.040(3) Uani 1 1 d . . .  
C143 C 0.0787(7) 0.3977(7) 0.5227(6) 0.033(2) Uani 1 1 d . . .  
C144 C 0.1453(7) 0.3934(6) 0.4590(6) 0.029(2) Uani 1 1 d . . .  
N25 N 0.7737(8) 0.8427(6) 0.9844(6) 0.064(4) Uani 1 1 d D . . .  
N26 N 0.3227(8) 0.7755(7) 0.6592(6) 0.068(4) Uani 1 1 d D . . .  
N27 N 0.4817(7) 0.5668(7) 0.2898(8) 0.083(5) Uani 1 1 d D . . .  
N28 N 0.1963(9) 0.3768(8) 0.7005(7) 0.094(6) Uani 1 1 d D . . .  
N29 N 0.0226(6) 0.3714(6) 0.0829(5) 0.051(3) Uani 1 1 d D . . .  
N30 N 0.6774(10) 0.7869(11) 0.2099(8) 0.080(4) Uani 1 1 d . . .  
N31 N 0.5054(18) 0.7526(14) 0.3734(11) 0.122(8) Uani 1 1 d . . .  
N32 N 0.7728(17) 0.5032(17) 0.2679(12) 0.149(11) Uani 1 1 d . . .  
N33 N 0.6034(18) 0.4213(18) 0.4590(15) 0.148(9) Uani 1 1 d . . .  
N34 N 0.237(3) 0.554(3) 0.923(2) 0.30(3) Uani 1 1 d . . .  
C145 C 0.6872(9) 0.8438(9) 1.0329(8) 0.080(6) Uani 1 1 d D . . .  
H14A H 0.7002 0.8011 1.0654 0.096 Uiso 1 1 calc R . . .  
H14B H 0.6625 0.8280 1.0050 0.096 Uiso 1 1 calc R . . .  
C146 C 0.6146(9) 0.9259(10) 1.0762(10) 0.078(5) Uani 1 1 d D . . .  
H14C H 0.6159 0.9722 1.0479 0.093 Uiso 1 1 calc R . . .  
H14D H 0.6269 0.9314 1.1172 0.093 Uiso 1 1 calc R . . .  
C147 C 0.5202(11) 0.9296(11) 1.1006(12) 0.094(6) Uani 1 1 d D . . .  
H14E H 0.4786 0.9780 1.1341 0.113 Uiso 1 1 calc R . . .  
H14F H 0.5028 0.9397 1.0598 0.113 Uiso 1 1 calc R . . .  
C148 C 0.5054(13) 0.8547(11) 1.1344(12) 0.093(6) Uani 1 1 d D . . .  
H14G H 0.5151 0.8175 1.0985 0.139 Uiso 1 1 calc R . . .  
H14H H 0.4449 0.8742 1.1682 0.139 Uiso 1 1 calc R . . .  
H14I H 0.5468 0.8257 1.1578 0.139 Uiso 1 1 calc R . . .  
C149 C 0.8061(10) 0.8862(9) 1.0196(8) 0.068(4) Uani 1 1 d D . . .  
H14J H 0.7607 0.9438 1.0327 0.082 Uiso 1 1 calc R . . .

H14K H 0.8601 0.8870 0.9846 0.082 Uiso 1 1 calc R . .  
C150 C 0.8271(12) 0.8498(9) 1.0852(9) 0.094(7) Uani 1 1 d D . .  
H15A H 0.7746 0.8476 1.1213 0.112 Uiso 1 1 calc R . .  
H15B H 0.8757 0.7935 1.0731 0.112 Uiso 1 1 calc R . .  
C151 C 0.8540(12) 0.9056(11) 1.1127(12) 0.085(6) Uani 1 1 d D . .  
H15C H 0.8060 0.9622 1.1235 0.101 Uiso 1 1 calc R . .  
H15D H 0.9074 0.9067 1.0770 0.101 Uiso 1 1 calc R . .  
C152 C 0.8729(14) 0.8719(12) 1.1795(10) 0.113(10) Uani 1 1 d D . .  
H15E H 0.8231 0.8634 1.2122 0.170 Uiso 1 1 calc R . .  
H15F H 0.8810 0.9113 1.2010 0.170 Uiso 1 1 calc R . .  
H15G H 0.9265 0.8197 1.1673 0.170 Uiso 1 1 calc R . .  
C153 C 0.8470(9) 0.7531(8) 0.9628(10) 0.068(4) Uani 1 1 d D . .  
H15H H 0.9038 0.7546 0.9359 0.082 Uiso 1 1 calc R . .  
H15I H 0.8522 0.7257 1.0053 0.082 Uiso 1 1 calc R . .  
C154 C 0.8340(12) 0.7012(9) 0.9206(11) 0.085(6) Uani 1 1 d D . .  
H15J H 0.8379 0.7229 0.8748 0.102 Uiso 1 1 calc R . .  
H15K H 0.7746 0.7041 0.9442 0.102 Uiso 1 1 calc R . .  
C155 C 0.9055(12) 0.6095(9) 0.9107(12) 0.104(8) Uani 1 1 d D . .  
H15L H 0.9641 0.6058 0.8813 0.125 Uiso 1 1 calc R . .  
H15M H 0.9076 0.5906 0.9563 0.125 Uiso 1 1 calc R . .  
C156 C 0.8855(16) 0.5519(11) 0.8765(15) 0.115(9) Uani 1 1 d D . .  
H15N H 0.8247 0.5607 0.9021 0.173 Uiso 1 1 calc R . .  
H15O H 0.9261 0.4947 0.8775 0.173 Uiso 1 1 calc R . .  
H15P H 0.8932 0.5644 0.8284 0.173 Uiso 1 1 calc R . .  
C157 C 0.7550(9) 0.8892(9) 0.9229(7) 0.070(5) Uani 1 1 d D . .  
H15Q H 0.7116 0.9469 0.9387 0.084 Uiso 1 1 calc R . .  
H15R H 0.7299 0.8644 0.9024 0.084 Uiso 1 1 calc R . .  
C158 C 0.8434(8) 0.8855(12) 0.8668(7) 0.089(7) Uani 1 1 d D . .  
H15S H 0.8617 0.9205 0.8837 0.107 Uiso 1 1 calc R . .  
H15T H 0.8907 0.8286 0.8584 0.107 Uiso 1 1 calc R . .  
C159 C 0.8283(11) 0.9158(13) 0.7984(9) 0.100(8) Uani 1 1 d D . .  
H15U H 0.7816 0.9730 0.8077 0.120 Uiso 1 1 calc R . .  
H15V H 0.8066 0.8821 0.7839 0.120 Uiso 1 1 calc R . .  
C160 C 0.9123(12) 0.9119(14) 0.7373(9) 0.092(6) Uani 1 1 d D . .  
H16A H 0.9443 0.9306 0.7548 0.138 Uiso 1 1 calc R . .  
H16B H 0.8948 0.9472 0.7021 0.138 Uiso 1 1 calc R . .  
H16C H 0.9506 0.8554 0.7169 0.138 Uiso 1 1 calc R . .  
C161 C 0.2718(14) 0.8187(13) 0.7326(8) 0.097(7) Uani 1 1 d D . .  
H16D H 0.2586 0.8772 0.7297 0.117 Uiso 1 1 calc R . .  
H16E H 0.3098 0.7945 0.7600 0.117 Uiso 1 1 calc R . .  
C162 C 0.1832(11) 0.8123(13) 0.7712(8) 0.095(7) Uani 1 1 d D . .  
H16F H 0.1422 0.8398 0.7465 0.114 Uiso 1 1 calc R . .  
H16G H 0.1945 0.7542 0.7739 0.114 Uiso 1 1 calc R . .  
C163 C 0.1429(12) 0.8554(12) 0.8455(7) 0.090(7) Uani 1 1 d D . .

H16H H 0.1785 0.8213 0.8727 0.108 Uiso 1 1 calc R . .  
H16I H 0.1446 0.9088 0.8422 0.108 Uiso 1 1 calc R . .  
C164 C 0.0457(13) 0.8690(18) 0.8831(12) 0.123(10) Uani 1 1 d D . .  
H16J H 0.0060 0.9215 0.8721 0.184 Uiso 1 1 calc R . .  
H16K H 0.0313 0.8695 0.9332 0.184 Uiso 1 1 calc R . .  
H16L H 0.0388 0.8246 0.8677 0.184 Uiso 1 1 calc R . .  
C165 C 0.3517(12) 0.6827(7) 0.6644(10) 0.073(5) Uani 1 1 d D . .  
H16M H 0.3909 0.6550 0.6175 0.088 Uiso 1 1 calc R . .  
H16N H 0.2985 0.6739 0.6780 0.088 Uiso 1 1 calc R . .  
C166 C 0.4002(19) 0.6382(10) 0.7152(14) 0.119(9) Uani 1 1 d D . .  
H16O H 0.3583 0.6572 0.7635 0.143 Uiso 1 1 calc R . .  
H16P H 0.4486 0.6529 0.7073 0.143 Uiso 1 1 calc R . .  
C167 C 0.4393(15) 0.5423(10) 0.7049(15) 0.146(13) Uani 1 1 d D . .  
H16Q H 0.4430 0.5164 0.7482 0.175 Uiso 1 1 calc R . .  
H16R H 0.4038 0.5265 0.6886 0.175 Uiso 1 1 calc R . .  
C168 C 0.5333(16) 0.519(3) 0.6480(18) 0.24(3) Uani 1 1 d D . .  
H16S H 0.5580 0.5518 0.6587 0.354 Uiso 1 1 d R . .  
H16T H 0.5281 0.5314 0.6028 0.354 Uiso 1 1 d R . .  
H16U H 0.5722 0.4608 0.6470 0.354 Uiso 1 1 d R . .  
C169 C 0.2695(13) 0.7998(9) 0.6111(10) 0.081(6) Uani 1 1 d D . .  
H16V H 0.2213 0.7834 0.6309 0.097 Uiso 1 1 calc R . .  
H16W H 0.3088 0.7688 0.5654 0.097 Uiso 1 1 calc R . .  
C170 C 0.2286(13) 0.8943(9) 0.6004(10) 0.079(6) Uani 1 1 d D . .  
H17A H 0.1858 0.9261 0.6451 0.095 Uiso 1 1 calc R . .  
H17B H 0.2757 0.9123 0.5820 0.095 Uiso 1 1 calc R . .  
C171 C 0.1813(15) 0.9092(16) 0.5479(11) 0.108(8) Uani 1 1 d D . .  
H17C H 0.1628 0.9666 0.5356 0.129 Uiso 1 1 calc R . .  
H17D H 0.2237 0.8732 0.5050 0.129 Uiso 1 1 calc R . .  
C172 C 0.0986(12) 0.8921(14) 0.5775(15) 0.114(9) Uani 1 1 d D . .  
H17E H 0.1178 0.8330 0.5753 0.171 Uiso 1 1 calc R . .  
H17F H 0.0616 0.9177 0.5500 0.171 Uiso 1 1 calc R . .  
H17G H 0.0647 0.9150 0.6257 0.171 Uiso 1 1 calc R . .  
C173 C 0.3996(11) 0.7981(14) 0.6303(9) 0.090(7) Uani 1 1 d D . .  
H17H H 0.4315 0.7825 0.6624 0.108 Uiso 1 1 calc R . .  
H17I H 0.3759 0.8581 0.6279 0.108 Uiso 1 1 calc R . .  
C174 C 0.4659(13) 0.755(2) 0.5565(9) 0.157(15) Uani 1 1 d D . .  
H17J H 0.4800 0.6959 0.5567 0.188 Uiso 1 1 calc R . .  
H17K H 0.4370 0.7786 0.5227 0.188 Uiso 1 1 calc R . .  
C175 C 0.5536(15) 0.7629(11) 0.5321(15) 0.127(10) Uani 1 1 d D . .  
H17L H 0.5953 0.7293 0.4879 0.153 Uiso 1 1 calc R . .  
H17M H 0.5812 0.7427 0.5670 0.153 Uiso 1 1 calc R . .  
C176 C 0.5332(10) 0.8549(8) 0.5223(11) 0.074(5) Uani 1 1 d D . .  
H17N H 0.4965 0.8773 0.4943 0.111 Uiso 1 1 calc R . .  
H17O H 0.5885 0.8589 0.4987 0.111 Uiso 1 1 calc R . .

H17P H 0.5018 0.8859 0.5676 0.111 Uiso 1 1 calc R . .  
C177 C 0.4040(10) 0.6252(8) 0.2686(9) 0.070(5) Uani 1 1 d D . .  
H17Q H 0.3548 0.6110 0.2930 0.084 Uiso 1 1 calc R . .  
H17R H 0.4222 0.6124 0.2186 0.084 Uiso 1 1 calc R . .  
C178 C 0.3656(11) 0.7208(8) 0.2806(11) 0.085(6) Uani 1 1 d D . .  
H17S H 0.4106 0.7335 0.2852 0.102 Uiso 1 1 calc R . .  
H17T H 0.3529 0.7466 0.2397 0.102 Uiso 1 1 calc R . .  
C179 C 0.2795(14) 0.7585(12) 0.3466(13) 0.20(2) Uani 1 1 d D . .  
H17U H 0.2930 0.7358 0.3880 0.239 Uiso 1 1 calc R . .  
H17V H 0.2358 0.7425 0.3437 0.239 Uiso 1 1 calc R . .  
C180 C 0.2378(14) 0.8548(11) 0.3552(10) 0.090(6) Uani 1 1 d D . .  
H18A H 0.2820 0.8711 0.3552 0.135 Uiso 1 1 calc R . .  
H18B H 0.1872 0.8753 0.3991 0.135 Uiso 1 1 calc R . .  
H18C H 0.2185 0.8779 0.3168 0.135 Uiso 1 1 calc R . .  
C181 C 0.5619(10) 0.5846(13) 0.2536(9) 0.083(6) Uani 1 1 d D . .  
H18D H 0.6132 0.5401 0.2617 0.099 Uiso 1 1 calc R . .  
H18E H 0.5495 0.6359 0.2761 0.099 Uiso 1 1 calc R . .  
C182 C 0.5889(11) 0.5933(12) 0.1731(8) 0.085(6) Uani 1 1 d D . .  
H18F H 0.5970 0.5447 0.1496 0.101 Uiso 1 1 calc R . .  
H18G H 0.5419 0.6423 0.1639 0.101 Uiso 1 1 calc R . .  
C183 C 0.6771(12) 0.6013(17) 0.1449(11) 0.101(7) Uani 1 1 d D . .  
H18H H 0.7225 0.5543 0.1576 0.122 Uiso 1 1 calc R . .  
H18I H 0.6675 0.6520 0.1666 0.122 Uiso 1 1 calc R . .  
C184 C 0.7110(18) 0.604(2) 0.0639(11) 0.133(10) Uani 1 1 d D . .  
H18J H 0.7438 0.5481 0.0419 0.200 Uiso 1 1 calc R . .  
H18K H 0.7497 0.6309 0.0497 0.200 Uiso 1 1 calc R . .  
H18L H 0.6606 0.6348 0.0497 0.200 Uiso 1 1 calc R . .  
C185 C 0.5049(15) 0.4787(9) 0.2689(15) 0.123(10) Uani 1 1 d D . .  
H18M H 0.5301 0.4705 0.2177 0.148 Uiso 1 1 calc R . .  
H18N H 0.4496 0.4730 0.2849 0.148 Uiso 1 1 calc R . .  
C186 C 0.5714(16) 0.4084(13) 0.2976(13) 0.114(8) Uani 1 1 d D . .  
H18O H 0.6288 0.4104 0.2784 0.137 Uiso 1 1 calc R . .  
H18P H 0.5487 0.4180 0.3485 0.137 Uiso 1 1 calc R . .  
C187 C 0.5860(15) 0.3207(15) 0.2787(14) 0.115(9) Uani 1 1 d D . .  
H18Q H 0.5286 0.3192 0.2936 0.138 Uiso 1 1 calc R . .  
H18R H 0.6158 0.3072 0.2280 0.138 Uiso 1 1 calc R . .  
C188 C 0.645(2) 0.257(2) 0.3166(18) 0.175(14) Uani 1 1 d DU . .  
H18S H 0.7054 0.2494 0.2939 0.262 Uiso 1 1 calc R . .  
H18T H 0.6431 0.2048 0.3146 0.262 Uiso 1 1 calc R . .  
H18U H 0.6217 0.2776 0.3650 0.262 Uiso 1 1 calc R . .  
C189 C 0.465(2) 0.568(4) 0.3674(10) 0.37(5) Uani 1 1 d D . .  
H18V H 0.4571 0.6209 0.3828 0.445 Uiso 1 1 calc R . .  
H18W H 0.5184 0.5245 0.3741 0.445 Uiso 1 1 calc R . .  
C190 C 0.3832(14) 0.5537(13) 0.4151(10) 0.099(7) Uani 1 1 d D . .

H19A H 0.3972 0.4955 0.4091 0.119 Uiso 1 1 calc R . .  
H19B H 0.3326 0.5873 0.4009 0.119 Uiso 1 1 calc R . .  
C191 C 0.357(2) 0.577(3) 0.4936(12) 0.186(15) Uani 1 1 d DU . .  
H19C H 0.3505 0.6334 0.4984 0.224 Uiso 1 1 calc R . .  
H19D H 0.4053 0.5395 0.5089 0.224 Uiso 1 1 calc R . .  
C192 C 0.269(3) 0.574(3) 0.542(2) 0.216(18) Uani 1 1 d DU . .  
H19E H 0.2268 0.6278 0.5681 0.324 Uiso 1 1 calc R . .  
H19F H 0.2810 0.5324 0.5749 0.324 Uiso 1 1 calc R . .  
H19G H 0.2432 0.5609 0.5143 0.324 Uiso 1 1 calc R . .  
C193 C 0.2311(13) 0.3155(11) 0.6398(8) 0.088(6) Uani 1 1 d D . .  
H19H H 0.1808 0.3144 0.6333 0.105 Uiso 1 1 calc R . .  
H19I H 0.2673 0.2602 0.6505 0.105 Uiso 1 1 calc R . .  
C194 C 0.2883(18) 0.3377(18) 0.5709(9) 0.129(11) Uani 1 1 d D . .  
H19J H 0.3340 0.3479 0.5771 0.155 Uiso 1 1 calc R . .  
H19K H 0.2516 0.3855 0.5518 0.155 Uiso 1 1 calc R . .  
C195 C 0.3294(17) 0.2558(14) 0.5250(15) 0.118(10) Uani 1 1 d D . .  
H19L H 0.3606 0.2077 0.5471 0.142 Uiso 1 1 calc R . .  
H19M H 0.2838 0.2485 0.5157 0.142 Uiso 1 1 calc R . .  
C196 C 0.3954(14) 0.2702(13) 0.4571(13) 0.117(10) Uani 1 1 d D . .  
H19N H 0.3641 0.3224 0.4403 0.176 Uiso 1 1 calc R . .  
H19O H 0.4201 0.2256 0.4217 0.176 Uiso 1 1 calc R . .  
H19P H 0.4431 0.2714 0.4670 0.176 Uiso 1 1 calc R . .  
C197 C 0.1472(11) 0.3487(11) 0.7690(8) 0.085(6) Uani 1 1 d D . .  
H19Q H 0.1254 0.3904 0.8067 0.102 Uiso 1 1 calc R . .  
H19R H 0.1912 0.2973 0.7788 0.102 Uiso 1 1 calc R . .  
C198 C 0.0676(10) 0.3335(10) 0.7736(9) 0.072(5) Uani 1 1 d D . .  
H19S H 0.0880 0.2872 0.7405 0.086 Uiso 1 1 calc R . .  
H19T H 0.0229 0.3829 0.7623 0.086 Uiso 1 1 calc R . .  
C199 C 0.0269(10) 0.3133(10) 0.8498(10) 0.083(6) Uani 1 1 d D . .  
H19U H 0.0708 0.2614 0.8590 0.100 Uiso 1 1 calc R . .  
H19V H 0.0131 0.3572 0.8825 0.100 Uiso 1 1 calc R . .  
C200 C -0.0589(13) 0.3053(15) 0.8623(13) 0.107(8) Uani 1 1 d D . .  
H20A H -0.1021 0.3564 0.8525 0.161 Uiso 1 1 calc R . .  
H20B H -0.0836 0.2945 0.9105 0.161 Uiso 1 1 calc R . .  
H20C H -0.0449 0.2601 0.8316 0.161 Uiso 1 1 calc R . .  
C201 C 0.1360(16) 0.4574(12) 0.6802(12) 0.111(8) Uani 1 1 d D . .  
H20D H 0.0872 0.4501 0.6767 0.134 Uiso 1 1 calc R . .  
H20E H 0.1701 0.4663 0.6332 0.134 Uiso 1 1 calc R . .  
C202 C 0.094(2) 0.5374(15) 0.7274(18) 0.187(15) Uani 1 1 d DU . .  
H20F H 0.1408 0.5524 0.7250 0.224 Uiso 1 1 calc R . .  
H20G H 0.0655 0.5286 0.7760 0.224 Uiso 1 1 calc R . .  
C203 C 0.0247(19) 0.608(2) 0.702(2) 0.173(15) Uani 1 1 d D . .  
H20H H 0.0206 0.5892 0.6615 0.207 Uiso 1 1 calc R . .  
H20I H -0.0343 0.6326 0.7395 0.207 Uiso 1 1 calc R . .

C204 C 0.068(3) 0.668(3) 0.683(3) 0.23(2) Uani 1 1 d DU . .  
H20J H 0.1314 0.6378 0.6582 0.344 Uiso 1 1 d R . .  
H20K H 0.0560 0.6964 0.7255 0.344 Uiso 1 1 d R . .  
H20L H 0.0414 0.7079 0.6537 0.344 Uiso 1 1 d R . .  
C205 C 0.2692(13) 0.3903(16) 0.7085(12) 0.131(11) Uani 1 1 d D . .  
H20M H 0.2420 0.4299 0.7491 0.157 Uiso 1 1 calc R . .  
H20N H 0.2929 0.4163 0.6673 0.157 Uiso 1 1 calc R . .  
C206 C 0.3485(17) 0.3133(13) 0.718(3) 0.30(4) Uani 1 1 d D . .  
H20O H 0.3706 0.2708 0.6805 0.361 Uiso 1 1 calc R . .  
H20P H 0.3260 0.2919 0.7622 0.361 Uiso 1 1 calc R . .  
C207 C 0.4286(16) 0.326(2) 0.7161(15) 0.138(11) Uani 1 1 d D . .  
H20Q H 0.4201 0.3754 0.6907 0.166 Uiso 1 1 calc R . .  
H20R H 0.4077 0.3453 0.7649 0.166 Uiso 1 1 calc R . .  
C208 C 0.5307(18) 0.285(4) 0.697(3) 0.30(3) Uani 1 1 d DU . .  
H20S H 0.5578 0.3124 0.6596 0.445 Uiso 1 1 d R . .  
H20T H 0.5561 0.2271 0.6820 0.445 Uiso 1 1 d R . .  
H20U H 0.5420 0.2901 0.7380 0.445 Uiso 1 1 d R . .  
C209 C -0.0643(7) 0.3839(7) 0.0780(8) 0.049(3) Uani 1 1 d D . .  
H20V H -0.0776 0.4250 0.0443 0.059 Uiso 1 1 calc R . .  
H20W H -0.1121 0.4075 0.1236 0.059 Uiso 1 1 calc R . .  
C210 C -0.0673(7) 0.3060(7) 0.0563(8) 0.046(3) Uani 1 1 d D . .  
H21A H -0.0213 0.2822 0.0100 0.055 Uiso 1 1 calc R . .  
H21B H -0.0551 0.2642 0.0897 0.055 Uiso 1 1 calc R . .  
C211 C -0.1599(8) 0.3296(11) 0.0545(9) 0.079(5) Uani 1 1 d D . .  
H21C H -0.1771 0.3794 0.0292 0.094 Uiso 1 1 calc R . .  
H21D H -0.1560 0.2848 0.0288 0.094 Uiso 1 1 calc R . .  
C212 C -0.2330(11) 0.3460(16) 0.1282(11) 0.129(12) Uani 1 1 d D . .  
H21E H -0.2341 0.2944 0.1443 0.194 Uiso 1 1 calc R . .  
H21F H -0.2904 0.3843 0.1263 0.194 Uiso 1 1 calc R . .  
H21G H -0.2203 0.3697 0.1603 0.194 Uiso 1 1 calc R . .  
C213 C 0.0474(8) 0.3054(8) 0.1326(6) 0.055(4) Uani 1 1 d D . .  
H21H H 0.0970 0.3051 0.1415 0.066 Uiso 1 1 calc R . .  
H21I H 0.0689 0.2514 0.1092 0.066 Uiso 1 1 calc R . .  
C214 C -0.0281(8) 0.3150(9) 0.2041(7) 0.063(4) Uani 1 1 d D . .  
H21J H -0.0798 0.3193 0.1960 0.075 Uiso 1 1 calc R . .  
H21K H -0.0462 0.3663 0.2301 0.075 Uiso 1 1 calc R . .  
C215 C 0.0011(10) 0.2411(8) 0.2488(7) 0.061(4) Uani 1 1 d D . .  
H21L H 0.0504 0.2386 0.2595 0.074 Uiso 1 1 calc R . .  
H21M H 0.0223 0.1894 0.2220 0.074 Uiso 1 1 calc R . .  
C216 C -0.0777(10) 0.2501(11) 0.3182(7) 0.066(4) Uani 1 1 d D . .  
H21N H -0.0866 0.2907 0.3508 0.098 Uiso 1 1 calc R . .  
H21O H -0.0641 0.1972 0.3384 0.098 Uiso 1 1 calc R . .  
H21P H -0.1315 0.2678 0.3086 0.098 Uiso 1 1 calc R . .  
C217 C 0.0100(10) 0.4504(7) 0.1143(8) 0.062(4) Uani 1 1 d D . .

H21Q H 0.0626 0.4389 0.1245 0.074 Uiso 1 1 calc R . .  
H21R H -0.0415 0.4684 0.1585 0.074 Uiso 1 1 calc R . .  
C218 C -0.0046(11) 0.5213(8) 0.0648(9) 0.068(5) Uani 1 1 d D . .  
H21S H -0.0612 0.5381 0.0590 0.082 Uiso 1 1 calc R . .  
H21T H 0.0434 0.5020 0.0187 0.082 Uiso 1 1 calc R . .  
C219 C -0.0059(12) 0.5962(9) 0.0961(12) 0.098(8) Uani 1 1 d D . .  
H21U H 0.0503 0.5779 0.1029 0.117 Uiso 1 1 calc R . .  
H21V H -0.0090 0.6382 0.0621 0.117 Uiso 1 1 calc R . .  
C220 C -0.0835(18) 0.6365(13) 0.1661(10) 0.135(12) Uani 1 1 d D . .  
H22A H -0.1351 0.6780 0.1572 0.203 Uiso 1 1 calc R . .  
H22B H -0.0662 0.6624 0.1928 0.203 Uiso 1 1 calc R . .  
H22C H -0.0982 0.5945 0.1925 0.203 Uiso 1 1 calc R . .  
C221 C 0.0972(6) 0.3408(8) 0.0110(7) 0.052(3) Uani 1 1 d D . .  
H22D H 0.0782 0.3795 -0.0226 0.062 Uiso 1 1 calc R . .  
H22E H 0.1047 0.2872 -0.0029 0.062 Uiso 1 1 calc R . .  
C222 C 0.1886(7) 0.3310(9) 0.0051(7) 0.056(4) Uani 1 1 d D . .  
H22F H 0.2080 0.2937 0.0393 0.067 Uiso 1 1 calc R . .  
H22G H 0.1832 0.3849 0.0159 0.067 Uiso 1 1 calc R . .  
C223 C 0.2592(8) 0.2959(9) -0.0695(7) 0.061(4) Uani 1 1 d D . .  
H22H H 0.2689 0.2397 -0.0781 0.073 Uiso 1 1 calc R . .  
H22I H 0.2364 0.3299 -0.1038 0.073 Uiso 1 1 calc R . .  
C224 C 0.3493(8) 0.2942(11) -0.0799(10) 0.069(5) Uani 1 1 d D . .  
H22J H 0.3408 0.3503 -0.0753 0.103 Uiso 1 1 d R . .  
H22K H 0.3919 0.2689 -0.1262 0.103 Uiso 1 1 d R . .  
H22L H 0.3715 0.2625 -0.0450 0.103 Uiso 1 1 d R . .  
C225 C 0.6836(11) 0.7961(11) 0.2647(11) 0.071(5) Uani 1 1 d . . .  
C226 C 0.6906(11) 0.8046(12) 0.3287(9) 0.069(4) Uani 1 1 d . . .  
H22M H 0.7484 0.7638 0.3282 0.104 Uiso 1 1 d R . .  
H22N H 0.6442 0.7962 0.3664 0.104 Uiso 1 1 d R . .  
H22O H 0.6840 0.8596 0.3356 0.104 Uiso 1 1 d R . .  
C227 C 0.4658(16) 0.8223(18) 0.3563(9) 0.089(7) Uani 1 1 d . . .  
C228 C 0.4239(12) 0.9027(12) 0.3350(12) 0.086(6) Uani 1 1 d . . .  
H22P H 0.3979 0.9435 0.3738 0.129 Uiso 1 1 d R . .  
H22Q H 0.3775 0.9058 0.3207 0.129 Uiso 1 1 d R . .  
H22R H 0.4675 0.9136 0.2962 0.129 Uiso 1 1 d R . .  
C229 C 0.7541(14) 0.5252(17) 0.3230(15) 0.106(8) Uani 1 1 d . . .  
C230 C 0.719(3) 0.553(3) 0.4029(19) 0.24(3) Uani 1 1 d . . .  
H23A H 0.7204 0.6041 0.4085 0.358 Uiso 1 1 d R . .  
H23B H 0.7559 0.5099 0.4245 0.358 Uiso 1 1 d R . .  
H23C H 0.6580 0.5600 0.4250 0.358 Uiso 1 1 d R . .  
C231 C 0.652(3) 0.3620(18) 0.466(3) 0.27(3) Uani 1 1 d . . .  
C232 C 0.7207(18) 0.2705(15) 0.4788(16) 0.135(10) Uani 1 1 d . . .  
H23D H 0.6982 0.2606 0.5276 0.202 Uiso 1 1 d R . .  
H23E H 0.7791 0.2677 0.4667 0.202 Uiso 1 1 d R . .

H23F H 0.7249 0.2289 0.4499 0.202 Uiso 1 1 d R . . .  
C233 C 0.192(2) 0.542(2) 0.891(2) 0.19(2) Uani 1 1 d . . .  
C234 C 0.150(2) 0.509(3) 0.877(2) 0.22(2) Uani 1 1 d . . .  
H23G H 0.1886 0.4751 0.8328 0.323 Uiso 1 1 d R . . .  
H23H H 0.0964 0.5516 0.8725 0.323 Uiso 1 1 d R . . .  
H23I H 0.1355 0.4741 0.9133 0.323 Uiso 1 1 d R . . .

loop\_  
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\_atom\_site\_aniso\_U\_11  
\_atom\_site\_aniso\_U\_22  
\_atom\_site\_aniso\_U\_33  
\_atom\_site\_aniso\_U\_23  
\_atom\_site\_aniso\_U\_13  
\_atom\_site\_aniso\_U\_12  
P1 0.0334(14) 0.0372(16) 0.0239(15) 0.0077(12) -0.0144(12) -0.0195(12)  
P2 0.0482(17) 0.0374(18) 0.0230(15) 0.0010(12) -0.0144(13) -0.0149(14)  
P3 0.0289(13) 0.0323(15) 0.0226(14) 0.0035(11) -0.0092(11) -0.0166(11)  
P4 0.0282(13) 0.0547(19) 0.0206(14) 0.0067(12) -0.0112(11) -0.0255(13)  
P5 0.0254(13) 0.0407(16) 0.0171(13) 0.0030(11) -0.0063(10) -0.0178(12)  
O1 0.018(4) 0.112(9) 0.040(5) -0.010(5) -0.011(4) -0.022(5)  
O2 0.024(4) 0.059(6) 0.052(6) -0.027(5) -0.007(4) 0.002(4)  
O3 0.052(5) 0.051(5) 0.029(4) -0.003(4) -0.007(4) -0.035(4)  
O4 0.176(12) 0.044(6) 0.050(6) 0.031(5) -0.059(8) -0.065(7)  
O5 0.069(5) 0.032(4) 0.033(5) 0.012(4) -0.025(4) -0.029(4)  
O6 0.118(8) 0.031(5) 0.036(5) 0.008(4) -0.043(5) -0.030(5)  
O7 0.032(4) 0.063(6) 0.041(5) -0.014(4) -0.013(4) -0.014(4)  
O8 0.043(4) 0.078(6) 0.020(4) 0.004(4) -0.007(3) -0.045(4)  
O9 0.023(3) 0.046(5) 0.038(5) 0.017(4) -0.001(3) -0.025(3)  
O10 0.047(4) 0.059(5) 0.037(5) 0.021(4) -0.029(4) -0.037(4)  
O11 0.035(4) 0.034(5) 0.037(5) 0.003(4) -0.009(4) -0.002(3)  
O12 0.041(4) 0.025(4) 0.042(5) 0.008(3) -0.022(4) -0.018(3)  
O13 0.021(3) 0.052(5) 0.014(4) 0.001(3) 0.000(3) -0.012(3)  
O14 0.026(4) 0.052(5) 0.035(5) -0.014(4) -0.013(3) -0.011(3)  
O15 0.044(4) 0.035(5) 0.055(6) 0.015(4) -0.021(4) -0.021(4)  
O16 0.035(4) 0.073(6) 0.011(4) 0.000(4) -0.003(3) -0.034(4)  
O17 0.029(4) 0.043(5) 0.025(4) 0.008(3) -0.009(3) -0.019(3)  
O18 0.033(4) 0.049(5) 0.036(4) 0.002(4) -0.021(3) -0.022(4)  
O19 0.019(3) 0.033(4) 0.017(4) 0.000(3) 0.004(3) -0.008(3)  
O20 0.024(3) 0.026(4) 0.031(4) -0.008(3) -0.009(3) -0.007(3)  
N1 0.039(5) 0.039(6) 0.041(6) -0.002(4) -0.013(4) -0.028(4)  
N2 0.035(5) 0.037(6) 0.044(6) 0.005(5) -0.013(5) -0.003(4)  
N3 0.054(6) 0.016(5) 0.037(6) -0.003(4) -0.015(5) -0.009(4)  
N4 0.028(4) 0.035(5) 0.047(6) 0.002(4) -0.009(4) -0.018(4)

N5 0.026(5) 0.028(5) 0.069(8) -0.004(5) -0.011(5) -0.006(4)  
N6 0.045(6) 0.042(6) 0.056(7) 0.015(5) -0.022(5) -0.028(5)  
N7 0.029(4) 0.028(5) 0.033(5) 0.011(4) -0.005(4) -0.005(4)  
N8 0.037(5) 0.027(5) 0.052(7) 0.008(4) -0.019(5) -0.012(4)  
N9 0.029(4) 0.054(6) 0.021(5) 0.000(4) -0.011(4) -0.024(4)  
N10 0.029(4) 0.030(5) 0.025(5) 0.002(4) 0.000(4) -0.014(4)  
N11 0.028(4) 0.027(5) 0.034(5) 0.004(4) -0.017(4) -0.009(4)  
N12 0.028(4) 0.039(5) 0.025(5) -0.005(4) -0.008(4) -0.017(4)  
N13 0.028(5) 0.061(7) 0.023(5) -0.003(4) -0.008(4) -0.025(4)  
N14 0.044(5) 0.040(6) 0.042(6) 0.007(5) -0.017(5) -0.020(5)  
N15 0.022(4) 0.046(6) 0.051(6) 0.010(5) -0.014(4) -0.020(4)  
N16 0.032(5) 0.040(5) 0.034(5) 0.006(4) -0.017(4) -0.024(4)  
N17 0.020(4) 0.031(5) 0.087(9) 0.009(5) -0.011(5) -0.014(4)  
N18 0.025(4) 0.024(5) 0.063(7) 0.008(5) -0.008(5) -0.011(4)  
N19 0.036(5) 0.019(5) 0.053(7) -0.003(4) -0.010(5) -0.011(4)  
N20 0.035(5) 0.019(5) 0.056(7) -0.005(4) -0.019(5) -0.005(4)  
N21 0.034(5) 0.048(6) 0.051(6) 0.002(5) -0.018(5) -0.026(4)  
N22 0.039(5) 0.030(5) 0.031(5) 0.004(4) -0.003(4) -0.022(4)  
N23 0.046(6) 0.021(5) 0.063(7) 0.007(5) -0.019(5) -0.016(4)  
N24 0.032(5) 0.020(5) 0.045(6) 0.002(4) -0.004(4) 0.002(4)  
C1 0.045(6) 0.031(6) 0.046(7) -0.002(5) -0.021(6) -0.014(5)  
C2 0.039(6) 0.045(7) 0.050(8) 0.011(6) -0.015(6) -0.021(6)  
C3 0.083(11) 0.115(15) 0.056(10) 0.038(10) -0.040(9) -0.072(11)  
C4 0.054(7) 0.067(10) 0.033(7) -0.003(6) -0.010(6) -0.037(7)  
C5 0.047(7) 0.064(9) 0.036(7) 0.019(6) -0.024(6) -0.028(6)  
C6 0.038(6) 0.049(7) 0.036(7) 0.011(5) -0.018(5) -0.024(5)  
C7 0.033(6) 0.035(6) 0.033(6) 0.014(5) -0.010(5) -0.010(5)  
C8 0.032(5) 0.027(6) 0.037(6) 0.005(5) -0.013(5) -0.009(5)  
C9 0.039(6) 0.034(7) 0.034(6) -0.006(5) -0.014(5) -0.007(5)  
C10 0.050(7) 0.036(7) 0.050(8) -0.004(6) -0.025(6) -0.005(6)  
C11 0.059(8) 0.042(8) 0.060(9) 0.001(7) -0.023(7) -0.016(6)  
C12 0.036(6) 0.034(7) 0.055(8) 0.006(6) -0.016(6) -0.003(5)  
C13 0.043(7) 0.041(7) 0.044(7) -0.002(6) -0.019(6) -0.006(5)  
C14 0.040(6) 0.030(6) 0.044(7) 0.007(5) -0.020(5) -0.018(5)  
C15 0.046(6) 0.023(6) 0.039(7) -0.003(5) -0.017(5) -0.012(5)  
C16 0.038(6) 0.028(6) 0.030(6) 0.009(4) -0.014(5) -0.022(5)  
C17 0.042(6) 0.031(6) 0.040(7) 0.017(5) -0.019(5) -0.029(5)  
C18 0.051(7) 0.050(8) 0.036(7) 0.008(6) -0.011(6) -0.036(6)  
C19 0.048(7) 0.044(8) 0.039(7) 0.002(6) -0.001(6) -0.024(6)  
C20 0.064(8) 0.044(7) 0.033(7) 0.009(6) -0.011(6) -0.033(6)  
C21 0.033(6) 0.048(7) 0.040(7) -0.001(6) -0.009(5) -0.021(5)  
C22 0.037(6) 0.038(7) 0.046(7) -0.006(6) -0.011(5) -0.020(5)  
C23 0.032(5) 0.026(6) 0.041(7) 0.004(5) -0.008(5) -0.010(4)  
C24 0.034(6) 0.036(6) 0.041(7) 0.001(5) -0.017(5) -0.017(5)

C25 0.036(6) 0.044(7) 0.028(6) 0.010(5) -0.006(5) -0.011(5)  
C26 0.017(5) 0.041(8) 0.070(10) -0.007(7) -0.016(6) 0.011(5)  
C27 0.038(7) 0.055(9) 0.045(8) -0.006(7) -0.003(6) -0.016(6)  
C28 0.037(6) 0.088(11) 0.036(7) 0.015(7) -0.008(6) -0.038(7)  
C29 0.051(7) 0.049(8) 0.041(7) 0.024(6) -0.014(6) -0.038(6)  
C30 0.028(6) 0.064(8) 0.037(7) 0.006(6) -0.001(5) -0.032(6)  
C31 0.025(5) 0.035(6) 0.038(7) 0.003(5) -0.007(5) -0.014(5)  
C32 0.025(5) 0.037(7) 0.047(7) 0.008(5) -0.012(5) -0.017(5)  
C33 0.041(6) 0.038(7) 0.054(8) 0.019(6) -0.016(6) -0.018(6)  
C34 0.060(8) 0.035(7) 0.063(9) 0.014(6) 0.000(7) -0.033(6)  
C35 0.067(9) 0.047(9) 0.079(12) 0.033(8) -0.006(8) -0.031(7)  
C36 0.076(11) 0.050(10) 0.15(2) 0.045(12) -0.033(12) -0.029(9)  
C37 0.050(7) 0.031(7) 0.074(11) -0.003(7) 0.002(7) -0.022(6)  
C38 0.026(5) 0.020(6) 0.056(8) 0.001(5) -0.003(5) -0.006(4)  
C39 0.028(5) 0.014(5) 0.043(7) 0.008(4) -0.008(5) -0.009(4)  
C40 0.037(6) 0.048(7) 0.035(6) 0.023(5) -0.016(5) -0.035(5)  
C41 0.044(6) 0.045(7) 0.040(7) 0.018(6) -0.009(6) -0.030(6)  
C42 0.046(7) 0.035(7) 0.055(9) 0.011(6) -0.011(6) -0.020(6)  
C43 0.034(6) 0.028(6) 0.042(7) 0.003(5) -0.011(5) -0.003(5)  
C44 0.063(8) 0.048(8) 0.036(7) 0.017(6) -0.011(6) -0.030(7)  
C45 0.036(6) 0.021(6) 0.055(8) 0.005(5) -0.016(6) -0.009(5)  
C46 0.037(6) 0.039(7) 0.037(7) 0.004(5) -0.009(5) -0.014(5)  
C47 0.030(5) 0.032(6) 0.038(6) 0.001(5) -0.013(5) -0.008(5)  
C48 0.023(5) 0.035(6) 0.074(9) 0.008(6) -0.024(6) -0.019(5)  
C49 0.032(5) 0.040(6) 0.024(6) 0.005(5) -0.011(4) -0.024(5)  
C50 0.035(6) 0.063(8) 0.033(6) 0.005(6) -0.019(5) -0.030(6)  
C51 0.037(6) 0.064(8) 0.030(6) 0.003(5) -0.015(5) -0.038(6)  
C52 0.031(6) 0.052(8) 0.050(8) 0.012(6) -0.020(6) -0.021(5)  
C53 0.021(5) 0.049(7) 0.027(6) -0.005(5) 0.001(4) -0.021(5)  
C54 0.017(5) 0.029(6) 0.033(6) 0.005(5) -0.007(4) -0.011(4)  
C55 0.030(5) 0.019(5) 0.016(5) -0.003(4) 0.007(4) -0.012(4)  
C56 0.026(5) 0.031(6) 0.034(6) 0.005(4) -0.013(4) -0.018(4)  
C57 0.031(5) 0.027(6) 0.036(6) -0.006(5) -0.016(5) -0.011(4)  
C58 0.019(5) 0.052(8) 0.036(7) 0.001(5) -0.009(5) -0.011(5)  
C59 0.029(6) 0.057(8) 0.039(7) -0.009(6) -0.013(5) -0.016(5)  
C60 0.033(6) 0.077(10) 0.052(9) 0.011(7) -0.020(6) -0.026(6)  
C61 0.024(5) 0.040(7) 0.050(7) 0.008(5) -0.014(5) -0.020(5)  
C62 0.031(5) 0.044(7) 0.028(6) 0.013(5) -0.004(5) -0.028(5)  
C63 0.019(4) 0.028(5) 0.029(5) 0.007(4) -0.012(4) -0.012(4)  
C64 0.036(6) 0.028(6) 0.027(6) -0.010(4) -0.013(5) -0.011(5)  
C65 0.020(5) 0.054(7) 0.014(5) 0.002(5) -0.001(4) -0.025(5)  
C66 0.031(5) 0.045(7) 0.025(6) 0.005(5) 0.001(5) -0.026(5)  
C67 0.037(6) 0.053(7) 0.019(6) 0.012(5) -0.003(5) -0.028(5)  
C68 0.035(5) 0.049(7) 0.027(6) -0.004(5) -0.014(5) -0.028(5)

C69 0.024(5) 0.051(7) 0.027(6) 0.011(5) 0.005(4) -0.020(5)  
C70 0.027(5) 0.042(6) 0.024(6) 0.003(5) -0.009(4) -0.024(5)  
C71 0.019(5) 0.042(6) 0.021(5) 0.002(5) 0.000(4) -0.016(4)  
C72 0.021(5) 0.028(6) 0.038(7) 0.002(5) -0.003(5) -0.014(4)  
C73 0.026(5) 0.067(9) 0.034(7) 0.022(6) -0.016(5) -0.025(6)  
C74 0.030(6) 0.075(9) 0.028(6) -0.001(6) -0.005(5) -0.031(6)  
C75 0.047(7) 0.065(9) 0.073(10) 0.029(7) -0.040(7) -0.046(7)  
C76 0.043(7) 0.072(10) 0.035(7) 0.016(7) -0.005(6) -0.036(7)  
C77 0.014(4) 0.047(7) 0.019(5) -0.002(5) 0.002(4) -0.008(4)  
C78 0.022(5) 0.045(7) 0.023(6) 0.007(5) -0.010(4) -0.010(4)  
C79 0.030(5) 0.031(6) 0.042(7) -0.006(5) -0.016(5) -0.013(4)  
C80 0.014(4) 0.031(6) 0.027(6) 0.000(4) -0.002(4) -0.010(4)  
C81 0.023(5) 0.040(6) 0.037(6) 0.000(5) -0.009(5) -0.019(5)  
C82 0.037(6) 0.031(6) 0.048(7) 0.011(5) -0.019(5) -0.013(5)  
C83 0.026(5) 0.030(6) 0.057(8) 0.016(5) -0.020(5) -0.013(5)  
C84 0.033(6) 0.031(6) 0.085(10) 0.013(6) -0.034(7) -0.017(5)  
C85 0.034(6) 0.038(7) 0.053(8) -0.005(5) -0.019(5) -0.021(5)  
C86 0.014(5) 0.041(7) 0.064(9) 0.001(6) -0.016(5) -0.010(5)  
C87 0.025(5) 0.035(6) 0.032(6) 0.003(4) -0.016(4) -0.017(4)  
C88 0.024(5) 0.067(9) 0.037(7) -0.003(6) -0.005(5) -0.029(6)  
C89 0.034(6) 0.031(6) 0.043(7) 0.005(5) -0.015(5) -0.014(5)  
C90 0.030(5) 0.067(8) 0.020(6) 0.008(5) -0.005(5) -0.034(6)  
C91 0.039(6) 0.068(9) 0.039(7) -0.014(6) -0.016(6) -0.025(6)  
C92 0.036(6) 0.040(7) 0.040(7) 0.005(6) 0.006(5) -0.017(5)  
C93 0.042(6) 0.037(6) 0.023(6) 0.000(5) -0.018(5) -0.017(5)  
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C95 0.015(5) 0.042(7) 0.052(8) 0.002(6) -0.010(5) -0.014(4)  
C96 0.023(5) 0.047(7) 0.032(6) -0.001(5) -0.005(4) -0.023(5)  
C97 0.063(8) 0.036(7) 0.069(9) 0.018(6) -0.039(8) -0.033(6)  
C98 0.055(8) 0.069(10) 0.092(12) 0.043(9) -0.053(9) -0.047(8)  
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C100 0.065(8) 0.085(11) 0.046(8) 0.020(7) -0.012(7) -0.067(8)  
C101 0.052(7) 0.042(7) 0.051(8) 0.009(6) -0.028(6) -0.027(6)  
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C105 0.031(6) 0.021(6) 0.064(9) -0.011(5) -0.007(5) -0.014(5)  
C106 0.032(6) 0.029(7) 0.073(10) -0.004(6) 0.007(6) -0.008(5)  
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C112 0.034(6) 0.026(6) 0.063(8) 0.009(6) -0.026(6) -0.011(5)

C113 0.046(7) 0.025(6) 0.059(8) -0.004(5) -0.036(6) -0.004(5)  
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C117 0.024(6) 0.042(8) 0.075(10) -0.006(7) -0.012(6) -0.007(5)  
C118 0.044(6) 0.036(7) 0.036(7) 0.003(5) -0.016(5) -0.017(5)  
C119 0.016(5) 0.036(6) 0.060(8) -0.006(6) -0.009(5) -0.008(4)  
C120 0.030(5) 0.023(6) 0.060(8) -0.003(5) -0.007(5) -0.017(5)  
C121 0.031(5) 0.034(6) 0.044(7) 0.010(5) -0.015(5) -0.019(5)  
C122 0.039(6) 0.032(6) 0.040(7) -0.004(5) -0.008(5) -0.014(5)  
C123 0.044(7) 0.053(9) 0.070(10) -0.004(7) -0.015(7) -0.024(6)  
C124 0.040(6) 0.054(8) 0.039(7) 0.004(6) -0.005(5) -0.027(6)  
C125 0.054(7) 0.035(6) 0.047(7) 0.018(5) -0.024(6) -0.036(6)  
C126 0.034(5) 0.023(5) 0.028(6) 0.011(4) -0.006(4) -0.018(4)  
C127 0.037(6) 0.034(6) 0.027(6) 0.006(5) -0.007(5) -0.016(5)  
C128 0.039(6) 0.027(6) 0.036(6) 0.004(5) -0.008(5) -0.016(5)  
C129 0.042(6) 0.030(6) 0.044(7) -0.003(5) -0.008(5) -0.017(5)  
C130 0.052(7) 0.049(8) 0.038(7) 0.007(6) -0.021(6) -0.029(6)  
C131 0.068(9) 0.022(6) 0.071(10) 0.006(6) -0.032(8) -0.014(6)  
C132 0.058(8) 0.031(7) 0.059(9) 0.006(6) -0.022(7) -0.022(6)  
C133 0.049(7) 0.024(6) 0.051(8) -0.003(6) -0.013(6) 0.000(5)  
C134 0.054(7) 0.022(6) 0.054(8) 0.000(5) -0.022(6) -0.020(5)  
C135 0.037(6) 0.035(7) 0.042(7) 0.005(5) -0.006(5) -0.017(5)  
C136 0.025(5) 0.017(5) 0.033(6) -0.004(4) -0.007(4) -0.002(4)  
C137 0.044(6) 0.035(7) 0.047(8) 0.021(6) -0.025(6) -0.015(5)  
C138 0.050(7) 0.035(7) 0.039(7) 0.007(5) -0.019(6) -0.014(5)  
C139 0.058(8) 0.037(7) 0.046(8) 0.008(6) -0.025(6) -0.016(6)  
C140 0.050(7) 0.042(8) 0.053(9) 0.008(6) -0.014(6) -0.021(6)  
C141 0.048(7) 0.034(7) 0.047(8) 0.019(6) -0.014(6) -0.025(5)  
C142 0.043(6) 0.048(7) 0.024(6) -0.011(5) 0.008(5) -0.030(6)  
C143 0.032(5) 0.031(6) 0.039(7) 0.014(5) -0.017(5) -0.016(5)  
C144 0.031(5) 0.017(5) 0.035(6) -0.003(4) -0.009(5) -0.009(4)  
N25 0.078(9) 0.041(7) 0.069(9) -0.005(6) -0.051(7) -0.002(6)  
N26 0.106(10) 0.054(8) 0.066(9) 0.016(7) -0.055(8) -0.038(7)  
N27 0.060(8) 0.046(8) 0.105(13) -0.005(8) 0.000(8) -0.015(6)  
N28 0.132(13) 0.070(10) 0.144(16) 0.023(10) -0.119(13) -0.047(10)  
N29 0.063(7) 0.044(6) 0.061(8) 0.009(6) -0.039(6) -0.024(5)  
N30 0.080(9) 0.110(13) 0.050(9) 0.015(8) -0.018(8) -0.050(9)  
N31 0.24(3) 0.109(16) 0.111(16) 0.066(13) -0.119(18) -0.126(18)  
N32 0.17(2) 0.14(2) 0.073(13) -0.004(14) -0.044(14) -0.008(16)  
N33 0.15(2) 0.13(2) 0.16(2) 0.003(18) -0.081(18) -0.035(17)  
N34 0.33(5) 0.32(5) 0.35(5) -0.14(4) -0.21(4) -0.13(4)  
C145 0.105(14) 0.071(12) 0.117(16) 0.043(11) -0.091(13) -0.049(11)  
C146 0.072(10) 0.078(13) 0.072(12) 0.006(10) -0.014(9) -0.033(9)

C147 0.099(14) 0.062(12) 0.111(17) 0.005(11) -0.041(13) -0.024(10)  
C148 0.086(13) 0.056(11) 0.126(19) 0.013(12) -0.055(13) -0.012(10)  
C149 0.052(8) 0.059(10) 0.089(13) 0.018(9) -0.033(9) -0.017(7)  
C150 0.073(11) 0.043(10) 0.14(2) -0.028(11) -0.049(13) 0.005(8)  
C151 0.074(11) 0.070(12) 0.15(2) 0.020(12) -0.071(13) -0.040(10)  
C152 0.108(15) 0.055(12) 0.13(2) -0.008(12) 0.032(14) -0.055(11)  
C153 0.047(8) 0.069(11) 0.079(12) -0.002(9) -0.020(8) -0.019(7)  
C154 0.094(13) 0.059(11) 0.092(15) 0.000(10) -0.046(11) -0.016(9)  
C155 0.091(13) 0.088(15) 0.116(18) -0.047(13) -0.064(13) 0.005(11)  
C156 0.135(18) 0.047(11) 0.18(3) -0.005(14) -0.108(19) -0.017(12)  
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C158 0.059(10) 0.076(13) 0.069(12) -0.003(9) -0.027(9) 0.025(9)  
C159 0.102(14) 0.082(14) 0.16(2) 0.076(14) -0.088(15) -0.058(12)  
C160 0.105(14) 0.092(15) 0.056(11) -0.017(10) -0.011(10) -0.035(12)  
C161 0.17(2) 0.102(16) 0.074(13) 0.031(11) -0.047(14) -0.113(16)  
C162 0.125(17) 0.087(15) 0.080(14) 0.014(11) -0.072(13) -0.026(12)  
C163 0.17(2) 0.116(16) 0.069(12) 0.059(11) -0.074(13) -0.124(16)  
C164 0.135(19) 0.17(3) 0.066(14) 0.004(15) 0.012(13) -0.11(2)  
C165 0.096(12) 0.041(9) 0.112(15) 0.020(9) -0.068(11) -0.035(8)  
C166 0.18(2) 0.044(11) 0.16(2) 0.012(13) -0.12(2) -0.027(13)  
C167 0.19(3) 0.064(14) 0.25(4) 0.042(18) -0.18(3) -0.031(16)  
C168 0.078(17) 0.26(5) 0.18(3) 0.06(3) -0.01(2) 0.05(2)  
C169 0.104(13) 0.083(13) 0.096(14) 0.051(11) -0.074(12) -0.055(11)  
C170 0.139(16) 0.075(12) 0.093(13) 0.040(10) -0.086(13) -0.077(12)  
C171 0.152(19) 0.133(19) 0.133(19) 0.103(16) -0.107(17) -0.117(17)  
C172 0.098(15) 0.080(15) 0.19(3) 0.066(16) -0.087(17) -0.041(12)  
C173 0.075(11) 0.137(19) 0.087(14) -0.019(13) -0.024(10) -0.070(12)  
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C175 0.18(2) 0.115(19) 0.16(3) 0.098(19) -0.09(2) -0.120(19)  
C176 0.044(8) 0.044(9) 0.110(15) 0.020(9) -0.020(9) -0.010(6)  
C177 0.080(11) 0.082(12) 0.060(10) -0.005(9) -0.021(9) -0.048(10)  
C178 0.080(11) 0.052(11) 0.119(17) -0.009(11) -0.036(12) -0.023(9)  
C179 0.108(18) 0.13(3) 0.30(5) -0.16(3) -0.09(2) 0.035(17)  
C180 0.113(15) 0.105(17) 0.049(11) -0.004(10) -0.025(10) -0.048(13)  
C181 0.068(10) 0.090(14) 0.108(16) 0.001(12) -0.040(11) -0.043(10)  
C182 0.091(12) 0.071(12) 0.085(14) -0.013(10) -0.009(11) -0.047(10)  
C183 0.095(14) 0.13(2) 0.093(16) -0.004(15) -0.035(13) -0.064(14)  
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C189 0.16(3) 0.93(16) 0.08(2) 0.15(5) -0.07(2) -0.29(6)  
C190 0.116(16) 0.070(13) 0.077(14) -0.018(11) -0.018(12) -0.023(11)

C191 0.185(17) 0.189(18) 0.177(18) 0.006(10) -0.064(11) -0.078(11)  
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C193 0.117(15) 0.076(13) 0.105(16) 0.010(11) -0.064(13) -0.055(12)  
C194 0.17(2) 0.22(4) 0.058(13) 0.069(18) -0.062(16) -0.14(3)  
C195 0.14(2) 0.095(18) 0.17(3) 0.083(19) -0.10(2) -0.082(17)  
C196 0.128(18) 0.058(12) 0.19(3) -0.018(15) -0.11(2) -0.013(12)  
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C198 0.070(10) 0.048(9) 0.089(13) -0.010(9) -0.026(9) -0.020(8)  
C199 0.082(11) 0.042(9) 0.146(19) 0.039(10) -0.072(13) -0.027(8)  
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C209 0.041(7) 0.035(7) 0.064(9) 0.012(6) -0.023(6) -0.010(5)  
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C214 0.051(8) 0.057(10) 0.073(11) 0.022(8) -0.027(8) -0.018(7)  
C215 0.091(11) 0.053(9) 0.072(11) 0.023(8) -0.058(9) -0.039(8)  
C216 0.082(10) 0.070(11) 0.070(11) 0.027(8) -0.053(9) -0.039(9)  
C217 0.056(8) 0.056(9) 0.089(12) -0.006(8) -0.042(8) -0.023(7)  
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C223 0.072(9) 0.042(8) 0.063(10) -0.003(7) -0.019(8) -0.025(7)  
C224 0.055(8) 0.066(11) 0.075(12) -0.021(9) -0.013(8) -0.021(8)  
C225 0.071(10) 0.066(11) 0.087(14) 0.027(10) -0.034(10) -0.039(9)  
C226 0.067(10) 0.085(13) 0.064(11) 0.003(9) -0.022(8) -0.041(9)  
C227 0.125(17) 0.14(2) 0.043(10) -0.004(12) -0.027(11) -0.093(17)  
C228 0.069(10) 0.055(11) 0.111(17) -0.033(11) -0.012(10) -0.018(9)  
C229 0.074(12) 0.14(2) 0.107(19) -0.022(16) -0.022(13) -0.050(13)  
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C232 0.14(2) 0.077(17) 0.15(3) 0.013(16) -0.053(19) -0.019(15)  
C233 0.14(2) 0.14(3) 0.23(4) -0.12(3) -0.12(3) 0.05(2)  
C234 0.15(3) 0.31(6) 0.27(5) 0.17(4) -0.17(3) -0.13(3)

```
_geom_special_details
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All esds (except the esd in the dihedral angle between two l.s. planes)
are estimated using the full covariance matrix. The cell esds are taken
into account individually in the estimation of esds in distances, angles
and torsion angles; correlations between esds in cell parameters are only
used when they are defined by crystal symmetry. An approximate
(isotropic)
treatment of cell esds is used for estimating esds involving l.s. planes.
;

loop_
  _geom_bond_atom_site_label_1
  _geom_bond_atom_site_label_2
  _geom_bond_distance
  _geom_bond_site_symmetry_2
  _geom_bond_publ_flag
P1 O4 1.462(10) . ?
P1 O1 1.527(8) . ?
P1 O3 1.558(8) . ?
P1 O2 1.565(9) . ?
P2 O5 1.514(8) . ?
P2 O8 1.514(8) . ?
P2 O6 1.545(9) . ?
P2 O7 1.546(9) . ?
P3 O11 1.484(8) . ?
P3 O9 1.503(7) . ?
P3 O10 1.549(8) . ?
P3 O12 1.567(8) . ?
P4 O16 1.519(8) . ?
P4 O14 1.525(8) . ?
P4 O13 1.557(8) . ?
P4 O15 1.589(9) . ?
P5 O20 1.514(7) . ?
P5 O18 1.516(7) . ?
P5 O19 1.540(7) . ?
P5 O17 1.594(8) . ?
N1 C24 1.340(15) . ?
N1 C1 1.371(16) . ?
N1 H1 0.8600 . ?
N2 C9 1.324(16) . ?
N2 C8 1.367(15) . ?
N3 C15 1.319(15) . ?
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N3 C14 1.404(15) . ?  
N4 C22 1.373(16) . ?  
N4 C23 1.397(14) . ?  
N4 H4 0.8600 . ?  
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N5 H5 0.8600 . ?  
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N6 C33 1.354(17) . ?  
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N7 C39 1.388(14) . ?  
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N23 C134 1.417(15) . ?  
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C80 N14 C81 117.8(10) . . ?  
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C97 N17 C120 109.4(10) . . ?  
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C119 N20 C118 108.5(10) . . ?  
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N2 C8 C7 118.8(10) . . ?  
N2 C8 C15 120.2(10) . . ?  
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N2 C9 C14 123.3(10) . . ?  
N2 C9 C10 120.3(12) . . ?  
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C66 C65 C70 121.3(9) . . ?  
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C67 C68 H68 119.5 . . ?  
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N12 C70 C65 110.1(9) . . ?  
N12 C70 C69 129.2(9) . . ?  
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N9 C72 C55 108.4(10) . . ?  
N13 C73 C74 131.6(9) . . ?  
N13 C73 C78 107.2(9) . . ?  
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C79 C78 C77 133.9(10) . . ?  
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N15 C86 C81 124.0(10) . . ?  
N15 C86 C85 118.6(12) . . ?  
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C129 C134 C133 123.4(11) . . ?  
N23 C134 C133 115.5(12) . . ?

N23 C135 C128 125.8(11) . . ?  
N23 C135 C136 118.0(10) . . ?  
C128 C135 C136 116.1(10) . . ?  
C143 C136 C137 106.4(10) . . ?  
C143 C136 C135 120.8(10) . . ?  
C137 C136 C135 132.8(10) . . ?  
C138 C137 C142 120.8(11) . . ?  
C138 C137 C136 133.9(11) . . ?  
C142 C137 C136 105.3(10) . . ?  
C139 C138 C137 117.7(12) . . ?  
C139 C138 H138 121.2 . . ?  
C137 C138 H138 121.2 . . ?  
C138 C139 C140 122.7(13) . . ?  
C138 C139 H139 118.7 . . ?  
C140 C139 H139 118.7 . . ?  
C141 C140 C139 120.0(13) . . ?  
C141 C140 H140 120.0 . . ?  
C139 C140 H140 120.0 . . ?  
C140 C141 C142 118.3(12) . . ?  
C140 C141 H141 120.9 . . ?  
C142 C141 H141 120.9 . . ?  
N24 C142 C141 127.8(12) . . ?  
N24 C142 C137 111.4(11) . . ?  
C141 C142 C137 120.4(11) . . ?  
C144 C143 N24 128.7(10) . . ?  
C144 C143 C136 120.6(10) . . ?  
N24 C143 C136 110.7(9) . . ?  
N21 C144 C143 131.0(10) . . ?  
N21 C144 C127 107.1(10) . . ?  
C143 C144 C127 121.9(9) . . ?  
C145 N25 C157 105.9(11) . . ?  
C145 N25 C149 111.7(11) . . ?  
C157 N25 C149 109.3(11) . . ?  
C145 N25 C153 110.3(11) . . ?  
C157 N25 C153 112.9(12) . . ?  
C149 N25 C153 106.8(11) . . ?  
C173 N26 C161 103.2(11) . . ?  
C173 N26 C165 113.9(14) . . ?  
C161 N26 C165 108.7(13) . . ?  
C173 N26 C169 111.1(13) . . ?  
C161 N26 C169 115.9(14) . . ?  
C165 N26 C169 104.3(9) . . ?  
C189 N27 C177 117(2) . . ?  
C189 N27 C185 105(3) . . ?

C177 N27 C185 107.5(12) . . ?  
C189 N27 C181 106.5(14) . . ?  
C177 N27 C181 110.6(12) . . ?  
C185 N27 C181 110.5(15) . . ?  
C193 N28 C201 103.9(15) . . ?  
C193 N28 C205 112.6(15) . . ?  
C201 N28 C205 106.8(17) . . ?  
C193 N28 C197 110.5(12) . . ?  
C201 N28 C197 113.1(14) . . ?  
C205 N28 C197 109.8(13) . . ?  
C213 N29 C217 106.3(9) . . ?  
C213 N29 C221 107.7(9) . . ?  
C217 N29 C221 113.8(10) . . ?  
C213 N29 C209 109.6(10) . . ?  
C217 N29 C209 110.0(9) . . ?  
C221 N29 C209 109.3(9) . . ?  
N25 C145 C146 117.1(11) . . ?  
N25 C145 H14A 108.0 . . ?  
C146 C145 H14A 108.0 . . ?  
N25 C145 H14B 108.0 . . ?  
C146 C145 H14B 108.0 . . ?  
H14A C145 H14B 107.3 . . ?  
C145 C146 C147 111.2(13) . . ?  
C145 C146 H14C 109.4 . . ?  
C147 C146 H14C 109.4 . . ?  
C145 C146 H14D 109.4 . . ?  
C147 C146 H14D 109.4 . . ?  
H14C C146 H14D 108.0 . . ?  
C148 C147 C146 119.6(15) . . ?  
C148 C147 H14E 107.4 . . ?  
C146 C147 H14E 107.4 . . ?  
C148 C147 H14F 107.4 . . ?  
C146 C147 H14F 107.4 . . ?  
H14E C147 H14F 107.0 . . ?  
C147 C148 H14G 109.5 . . ?  
C147 C148 H14H 109.5 . . ?  
H14G C148 H14H 109.5 . . ?  
C147 C148 H14I 109.5 . . ?  
H14G C148 H14I 109.5 . . ?  
H14H C148 H14I 109.5 . . ?  
N25 C149 C150 117.8(11) . . ?  
N25 C149 H14J 107.8 . . ?  
C150 C149 H14J 107.8 . . ?  
N25 C149 H14K 107.8 . . ?

C150 C149 H14K 107.8 . . ?  
H14J C149 H14K 107.2 . . ?  
C151 C150 C149 108.3(13) . . ?  
C151 C150 H15A 110.0 . . ?  
C149 C150 H15A 110.0 . . ?  
C151 C150 H15B 110.0 . . ?  
C149 C150 H15B 110.0 . . ?  
H15A C150 H15B 108.4 . . ?  
C150 C151 C152 109.3(16) . . ?  
C150 C151 H15C 109.8 . . ?  
C152 C151 H15C 109.8 . . ?  
C150 C151 H15D 109.8 . . ?  
C152 C151 H15D 109.8 . . ?  
H15C C151 H15D 108.3 . . ?  
C151 C152 H15E 109.5 . . ?  
C151 C152 H15F 109.5 . . ?  
H15E C152 H15F 109.5 . . ?  
C151 C152 H15G 109.5 . . ?  
H15E C152 H15G 109.5 . . ?  
H15F C152 H15G 109.5 . . ?  
C154 C153 N25 116.2(12) . . ?  
C154 C153 H15H 108.2 . . ?  
N25 C153 H15H 108.2 . . ?  
C154 C153 H15I 108.2 . . ?  
N25 C153 H15I 108.2 . . ?  
H15H C153 H15I 107.4 . . ?  
C153 C154 C155 111.0(13) . . ?  
C153 C154 H15J 109.4 . . ?  
C155 C154 H15J 109.4 . . ?  
C153 C154 H15K 109.4 . . ?  
C155 C154 H15K 109.4 . . ?  
H15J C154 H15K 108.0 . . ?  
C156 C155 C154 112.0(14) . . ?  
C156 C155 H15L 109.2 . . ?  
C154 C155 H15L 109.2 . . ?  
C156 C155 H15M 109.2 . . ?  
C154 C155 H15M 109.2 . . ?  
H15L C155 H15M 107.9 . . ?  
C155 C156 H15N 109.5 . . ?  
C155 C156 H15O 109.5 . . ?  
H15N C156 H15O 109.5 . . ?  
C155 C156 H15P 109.5 . . ?  
H15N C156 H15P 109.5 . . ?  
H15O C156 H15P 109.5 . . ?

N25 C157 C158 109.5(11) . . ?  
N25 C157 H15Q 109.8 . . ?  
C158 C157 H15Q 109.8 . . ?  
N25 C157 H15R 109.8 . . ?  
C158 C157 H15R 109.8 . . ?  
H15Q C157 H15R 108.2 . . ?  
C159 C158 C157 109.1(12) . . ?  
C159 C158 H15S 109.9 . . ?  
C157 C158 H15S 109.9 . . ?  
C159 C158 H15T 109.9 . . ?  
C157 C158 H15T 109.9 . . ?  
H15S C158 H15T 108.3 . . ?  
C158 C159 C160 114.3(14) . . ?  
C158 C159 H15U 108.7 . . ?  
C160 C159 H15U 108.7 . . ?  
C158 C159 H15V 108.7 . . ?  
C160 C159 H15V 108.7 . . ?  
H15U C159 H15V 107.6 . . ?  
C159 C160 H16A 109.5 . . ?  
C159 C160 H16B 109.5 . . ?  
H16A C160 H16B 109.5 . . ?  
C159 C160 H16C 109.5 . . ?  
H16A C160 H16C 109.5 . . ?  
H16B C160 H16C 109.5 . . ?  
N26 C161 C162 113.3(12) . . ?  
N26 C161 H16D 108.9 . . ?  
C162 C161 H16D 108.9 . . ?  
N26 C161 H16E 108.9 . . ?  
C162 C161 H16E 108.9 . . ?  
H16D C161 H16E 107.7 . . ?  
C163 C162 C161 106.4(12) . . ?  
C163 C162 H16F 110.5 . . ?  
C161 C162 H16F 110.5 . . ?  
C163 C162 H16G 110.5 . . ?  
C161 C162 H16G 110.5 . . ?  
H16F C162 H16G 108.6 . . ?  
C164 C163 C162 110.6(14) . . ?  
C164 C163 H16H 109.5 . . ?  
C162 C163 H16H 109.5 . . ?  
C164 C163 H16I 109.5 . . ?  
C162 C163 H16I 109.5 . . ?  
H16H C163 H16I 108.1 . . ?  
C163 C164 H16J 109.5 . . ?  
C163 C164 H16K 109.5 . . ?

H16J C164 H16K 109.5 . . ?  
C163 C164 H16L 109.5 . . ?  
H16J C164 H16L 109.5 . . ?  
H16K C164 H16L 109.5 . . ?  
N26 C165 C166 118.5(11) . . ?  
N26 C165 H16M 107.7 . . ?  
C166 C165 H16M 107.7 . . ?  
N26 C165 H16N 107.7 . . ?  
C166 C165 H16N 107.7 . . ?  
H16M C165 H16N 107.1 . . ?  
C165 C166 C167 111.8(13) . . ?  
C165 C166 H16O 109.3 . . ?  
C167 C166 H16O 109.3 . . ?  
C165 C166 H16P 109.3 . . ?  
C167 C166 H16P 109.3 . . ?  
H16O C166 H16P 107.9 . . ?  
C168 C167 C166 102(2) . . ?  
C168 C167 H16Q 111.5 . . ?  
C166 C167 H16Q 111.5 . . ?  
C168 C167 H16R 111.4 . . ?  
C166 C167 H16R 111.5 . . ?  
H16Q C167 H16R 109.3 . . ?  
C167 C168 H16S 108.7 . . ?  
C167 C168 H16T 109.2 . . ?  
H16S C168 H16T 109.5 . . ?  
C167 C168 H16U 110.5 . . ?  
H16S C168 H16U 109.5 . . ?  
H16T C168 H16U 109.5 . . ?  
N26 C169 C170 113.8(11) . . ?  
N26 C169 H16V 108.8 . . ?  
C170 C169 H16V 108.8 . . ?  
N26 C169 H16W 108.8 . . ?  
C170 C169 H16W 108.8 . . ?  
H16V C169 H16W 107.7 . . ?  
C171 C170 C169 108.2(12) . . ?  
C171 C170 H17A 110.1 . . ?  
C169 C170 H17A 110.1 . . ?  
C171 C170 H17B 110.1 . . ?  
C169 C170 H17B 110.1 . . ?  
H17A C170 H17B 108.4 . . ?  
C172 C171 C170 112.8(16) . . ?  
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C170 C171 H17C 109.0 . . ?  
C172 C171 H17D 109.0 . . ?

C170 C171 H17D 109.0 . . ?  
H17C C171 H17D 107.8 . . ?  
C171 C172 H17E 109.5 . . ?  
C171 C172 H17F 109.5 . . ?  
H17E C172 H17F 109.5 . . ?  
C171 C172 H17G 109.5 . . ?  
H17E C172 H17G 109.5 . . ?  
H17F C172 H17G 109.5 . . ?  
N26 C173 C174 112.6(13) . . ?  
N26 C173 H17H 109.1 . . ?  
C174 C173 H17H 109.1 . . ?  
N26 C173 H17I 109.1 . . ?  
C174 C173 H17I 109.1 . . ?  
H17H C173 H17I 107.8 . . ?  
C175 C174 C173 113.4(19) . . ?  
C175 C174 H17J 108.9 . . ?  
C173 C174 H17J 108.9 . . ?  
C175 C174 H17K 108.9 . . ?  
C173 C174 H17K 108.9 . . ?  
H17J C174 H17K 107.7 . . ?  
C174 C175 C176 109(2) . . ?  
C174 C175 H17L 109.8 . . ?  
C176 C175 H17L 109.8 . . ?  
C174 C175 H17M 109.8 . . ?  
C176 C175 H17M 109.8 . . ?  
H17L C175 H17M 108.3 . . ?  
C175 C176 H17N 109.5 . . ?  
C175 C176 H17O 109.5 . . ?  
H17N C176 H17O 109.5 . . ?  
C175 C176 H17P 109.5 . . ?  
H17N C176 H17P 109.5 . . ?  
H17O C176 H17P 109.5 . . ?  
N27 C177 C178 120.7(13) . . ?  
N27 C177 H17Q 107.2 . . ?  
C178 C177 H17Q 107.2 . . ?  
N27 C177 H17R 107.2 . . ?  
C178 C177 H17R 107.2 . . ?  
H17Q C177 H17R 106.8 . . ?  
C179 C178 C177 112.9(13) . . ?  
C179 C178 H17S 109.0 . . ?  
C177 C178 H17S 109.0 . . ?  
C179 C178 H17T 109.0 . . ?  
C177 C178 H17T 109.0 . . ?  
H17S C178 H17T 107.8 . . ?

C178 C179 C180 112.4(17) . . ?  
C178 C179 H17U 109.1 . . ?  
C180 C179 H17U 109.1 . . ?  
C178 C179 H17V 109.1 . . ?  
C180 C179 H17V 109.1 . . ?  
H17U C179 H17V 107.9 . . ?  
C179 C180 H18A 109.5 . . ?  
C179 C180 H18B 109.5 . . ?  
H18A C180 H18B 109.5 . . ?  
C179 C180 H18C 109.5 . . ?  
H18A C180 H18C 109.5 . . ?  
H18B C180 H18C 109.5 . . ?  
N27 C181 C182 116.8(12) . . ?  
N27 C181 H18D 108.1 . . ?  
C182 C181 H18D 108.1 . . ?  
N27 C181 H18E 108.1 . . ?  
C182 C181 H18E 108.1 . . ?  
H18D C181 H18E 107.3 . . ?  
C183 C182 C181 108.9(14) . . ?  
C183 C182 H18F 109.9 . . ?  
C181 C182 H18F 109.9 . . ?  
C183 C182 H18G 109.9 . . ?  
C181 C182 H18G 109.9 . . ?  
H18F C182 H18G 108.3 . . ?  
C182 C183 C184 111.2(16) . . ?  
C182 C183 H18H 109.4 . . ?  
C184 C183 H18H 109.4 . . ?  
C182 C183 H18I 109.4 . . ?  
C184 C183 H18I 109.4 . . ?  
H18H C183 H18I 108.0 . . ?  
C183 C184 H18J 109.5 . . ?  
C183 C184 H18K 109.5 . . ?  
H18J C184 H18K 109.5 . . ?  
C183 C184 H18L 109.5 . . ?  
H18J C184 H18L 109.5 . . ?  
H18K C184 H18L 109.5 . . ?  
N27 C185 C186 115.9(16) . . ?  
N27 C185 H18M 108.3 . . ?  
C186 C185 H18M 108.3 . . ?  
N27 C185 H18N 108.3 . . ?  
C186 C185 H18N 108.3 . . ?  
H18M C185 H18N 107.4 . . ?  
C187 C186 C185 112.8(17) . . ?  
C187 C186 H18O 109.0 . . ?

C185 C186 H18O 109.0 . . ?  
C187 C186 H18P 109.0 . . ?  
C185 C186 H18P 109.0 . . ?  
H18O C186 H18P 107.8 . . ?  
C188 C187 C186 108(2) . . ?  
C188 C187 H18Q 110.1 . . ?  
C186 C187 H18Q 110.1 . . ?  
C188 C187 H18R 110.1 . . ?  
C186 C187 H18R 110.1 . . ?  
H18Q C187 H18R 108.4 . . ?  
C187 C188 H18S 109.5 . . ?  
C187 C188 H18T 109.5 . . ?  
H18S C188 H18T 109.5 . . ?  
C187 C188 H18U 109.5 . . ?  
H18S C188 H18U 109.5 . . ?  
H18T C188 H18U 109.5 . . ?  
N27 C189 C190 115.0(17) . . ?  
N27 C189 H18V 108.5 . . ?  
C190 C189 H18V 108.5 . . ?  
N27 C189 H18W 108.5 . . ?  
C190 C189 H18W 108.5 . . ?  
H18V C189 H18W 107.5 . . ?  
C189 C190 C191 111.2(19) . . ?  
C189 C190 H19A 109.4 . . ?  
C191 C190 H19A 109.4 . . ?  
C189 C190 H19B 109.4 . . ?  
C191 C190 H19B 109.4 . . ?  
H19A C190 H19B 108.0 . . ?  
C190 C191 C192 113(3) . . ?  
C190 C191 H19C 109.0 . . ?  
C192 C191 H19C 109.0 . . ?  
C190 C191 H19D 109.0 . . ?  
C192 C191 H19D 109.0 . . ?  
H19C C191 H19D 107.8 . . ?  
C191 C192 H19E 109.5 . . ?  
C191 C192 H19F 109.5 . . ?  
H19E C192 H19F 109.5 . . ?  
C191 C192 H19G 109.5 . . ?  
H19E C192 H19G 109.5 . . ?  
H19F C192 H19G 109.5 . . ?  
N28 C193 C194 111.9(15) . . ?  
N28 C193 H19H 109.2 . . ?  
C194 C193 H19H 109.2 . . ?  
N28 C193 H19I 109.2 . . ?

C194 C193 H19I 109.2 . . ?  
H19H C193 H19I 107.9 . . ?  
C193 C194 C195 99.0(19) . . ?  
C193 C194 H19J 112.0 . . ?  
C195 C194 H19J 112.0 . . ?  
C193 C194 H19K 112.0 . . ?  
C195 C194 H19K 112.0 . . ?  
H19J C194 H19K 109.7 . . ?  
C196 C195 C194 101.8(15) . . ?  
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C194 C195 H19L 111.4 . . ?  
C196 C195 H19M 111.4 . . ?  
C194 C195 H19M 111.4 . . ?  
H19L C195 H19M 109.3 . . ?  
C195 C196 H19N 109.5 . . ?  
C195 C196 H19O 109.5 . . ?  
H19N C196 H19O 109.5 . . ?  
C195 C196 H19P 109.5 . . ?  
H19N C196 H19P 109.5 . . ?  
H19O C196 H19P 109.5 . . ?  
N28 C197 C198 118.8(12) . . ?  
N28 C197 H19Q 107.6 . . ?  
C198 C197 H19Q 107.6 . . ?  
N28 C197 H19R 107.6 . . ?  
C198 C197 H19R 107.6 . . ?  
H19Q C197 H19R 107.0 . . ?  
C197 C198 C199 107.2(12) . . ?  
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C197 C198 H19T 110.3 . . ?  
C199 C198 H19T 110.3 . . ?  
H19S C198 H19T 108.5 . . ?  
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C198 C199 H19U 109.3 . . ?  
C200 C199 H19V 109.3 . . ?  
C198 C199 H19V 109.3 . . ?  
H19U C199 H19V 108.0 . . ?  
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C199 C200 H20B 109.5 . . ?  
H20A C200 H20B 109.5 . . ?  
C199 C200 H20C 109.5 . . ?  
H20A C200 H20C 109.5 . . ?  
H20B C200 H20C 109.5 . . ?

N28 C201 C202 118.9(17) . . ?  
N28 C201 H20D 107.6 . . ?  
C202 C201 H20D 107.6 . . ?  
N28 C201 H20E 107.6 . . ?  
C202 C201 H20E 107.6 . . ?  
H20D C201 H20E 107.0 . . ?  
C201 C202 C203 109(2) . . ?  
C201 C202 H20F 109.9 . . ?  
C203 C202 H20F 109.9 . . ?  
C201 C202 H20G 109.9 . . ?  
C203 C202 H20G 109.9 . . ?  
H20F C202 H20G 108.3 . . ?  
C204 C203 C202 99(3) . . ?  
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C202 C203 H20H 112.0 . . ?  
C204 C203 H20I 112.0 . . ?  
C202 C203 H20I 112.0 . . ?  
H20H C203 H20I 109.6 . . ?  
C203 C204 H20J 110.4 . . ?  
C203 C204 H20K 109.3 . . ?  
H20J C204 H20K 109.5 . . ?  
C203 C204 H20L 108.7 . . ?  
H20J C204 H20L 109.5 . . ?  
H20K C204 H20L 109.5 . . ?  
N28 C205 C206 117.2(16) . . ?  
N28 C205 H20M 108.0 . . ?  
C206 C205 H20M 108.0 . . ?  
N28 C205 H20N 108.0 . . ?  
C206 C205 H20N 108.0 . . ?  
H20M C205 H20N 107.2 . . ?  
C205 C206 C207 117(2) . . ?  
C205 C206 H20O 108.0 . . ?  
C207 C206 H20O 108.0 . . ?  
C205 C206 H20P 108.0 . . ?  
C207 C206 H20P 108.0 . . ?  
H20O C206 H20P 107.3 . . ?  
C208 C207 C206 146(3) . . ?  
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C206 C207 H20Q 100.4 . . ?  
C208 C207 H20R 100.4 . . ?  
C206 C207 H20R 100.4 . . ?  
H20Q C207 H20R 104.3 . . ?  
C207 C208 H20S 110.6 . . ?  
C207 C208 H20T 109.5 . . ?

H20S C208 H20T 109.5 . . ?  
C207 C208 H20U 108.3 . . ?  
H20S C208 H20U 109.5 . . ?  
H20T C208 H20U 109.5 . . ?  
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N29 C209 H20V 108.1 . . ?  
C210 C209 H20V 108.1 . . ?  
N29 C209 H20W 108.1 . . ?  
C210 C209 H20W 108.1 . . ?  
H20V C209 H20W 107.3 . . ?  
C211 C210 C209 110.1(10) . . ?  
C211 C210 H21A 109.6 . . ?  
C209 C210 H21A 109.6 . . ?  
C211 C210 H21B 109.6 . . ?  
C209 C210 H21B 109.6 . . ?  
H21A C210 H21B 108.2 . . ?  
C212 C211 C210 113.0(12) . . ?  
C212 C211 H21C 109.0 . . ?  
C210 C211 H21C 109.0 . . ?  
C212 C211 H21D 109.0 . . ?  
C210 C211 H21D 109.0 . . ?  
H21C C211 H21D 107.8 . . ?  
C211 C212 H21E 109.5 . . ?  
C211 C212 H21F 109.5 . . ?  
H21E C212 H21F 109.5 . . ?  
C211 C212 H21G 109.5 . . ?  
H21E C212 H21G 109.5 . . ?  
H21F C212 H21G 109.5 . . ?  
N29 C213 C214 115.9(10) . . ?  
N29 C213 H21H 108.3 . . ?  
C214 C213 H21H 108.3 . . ?  
N29 C213 H21I 108.3 . . ?  
C214 C213 H21I 108.3 . . ?  
H21H C213 H21I 107.4 . . ?  
C213 C214 C215 112.2(10) . . ?  
C213 C214 H21J 109.2 . . ?  
C215 C214 H21J 109.2 . . ?  
C213 C214 H21K 109.2 . . ?  
C215 C214 H21K 109.2 . . ?  
H21J C214 H21K 107.9 . . ?  
C214 C215 C216 111.0(11) . . ?  
C214 C215 H21L 109.4 . . ?  
C216 C215 H21L 109.4 . . ?  
C214 C215 H21M 109.4 . . ?

C216 C215 H21M 109.4 . . ?  
H21L C215 H21M 108.0 . . ?  
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C215 C216 H21O 109.5 . . ?  
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H23G C234 H23H 109.5 . . ?

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H23H C234 H23I 109.5 . . ?

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C1 C6 C7 C24 1.3(12) . . . . ?  
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C8 N2 C9 C10 178.8(11) . . . . ?  
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C91 C92 C93 C94 -1.5(19) . . . . ?  
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C90 C89 C94 N16 -180.0(11) . . . . ?  
C88 C89 C94 N16 2.4(13) . . . . ?  
C90 C89 C94 C93 -4.0(17) . . . . ?  
C88 C89 C94 C93 178.3(11) . . . . ?  
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C94 N16 C95 C96 177.4(12) . . . . ?  
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C87 C88 C95 C96 0.3(19) . . . . ?  
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C73 N13 C96 C95 176.9(12) . . . . ?  
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C78 C79 C96 C95 -177.7(11) . . . . ?  
C80 C79 C96 C95 3.7(18) . . . . ?  
N16 C95 C96 N13 5(2) . . . . ?  
C88 C95 C96 N13 -175.6(12) . . . . ?  
N16 C95 C96 C79 178.1(12) . . . . ?  
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C100 C101 C102 C103 177.2(13) . . . . ?  
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C101 C102 C103 C104 7(2) . . . . ?  
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C108 C109 C110 C105 -2(2) . . . . ?  
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