

Supplementary information for

Photonics of Halogenated Zinc(II) and Cadmium(II) Dipyrrromethene Complexes

Iuliia Aksenova ^{1,*}, Elena Bocharnikova ¹, Maria Ashmarina ¹

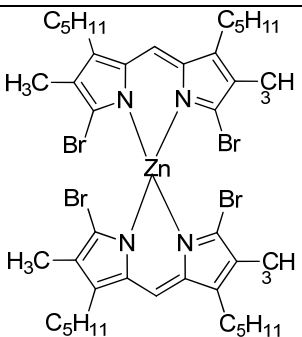
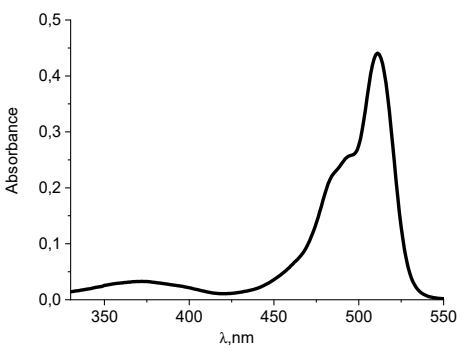
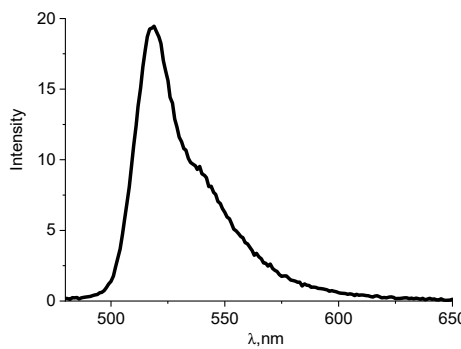
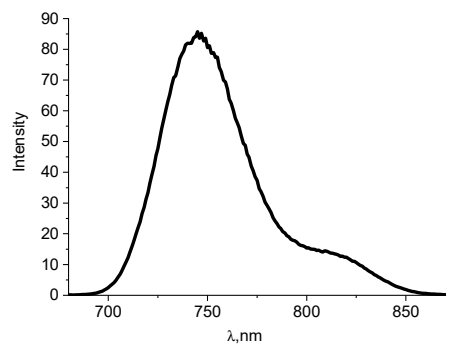
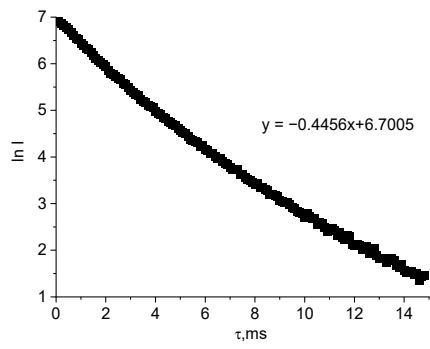
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Table S1. Structural formulas, absorption and luminescence spectra of zinc(II) dipyrromethene complexes.

Zn[Br ₂ (CH ₃) ₂ (C ₅ H ₁₁) ₂ dpm] ₂	
	<p>complexes of zinc(II) with</p> <p>3,3'-dipenthyl-4,4'-dimethyl- 5,5'-dibromo-2,2'-dipyrromethene</p>
	
Absorption spectra in propanol-2 solution	Fluorescence spectra in propanol-2 solution at λ _{ex} = 480 nm, 298K
	
Phosphorescence spectra in propanol-2 solution at λ _{ex} = 470 nm, 77K	Dependence of the logarithm of phosphorescence attenuation on the lifetime (λ _{ex} = 470 nm, λ _{em} = 740 nm) in propanol-2 solutions at 77K

Zn[Br ₂ (CH ₃) ₄ dpm] ₂	
	<p>complexes of zinc(II) with 3,3',5,5'-tetramethyl-4,4'-dibromo- 2,2'-dipyromethene</p>
<p>Absorption spectra in propanol-2 solution</p>	<p>Fluorescence spectra in propanol-2 solution at λ_{ex} = 470 nm, 298K</p>
<p>Phosphorescence spectra in propanol-2 solution at λ_{ex} = 470 nm, 77K</p>	<p>Dependence of the logarithm of phosphorescence attenuation on the lifetime (λ_{ex} = 470 nm, λ_{em} = 740 nm) in propanol-2 solutions at 77K</p>

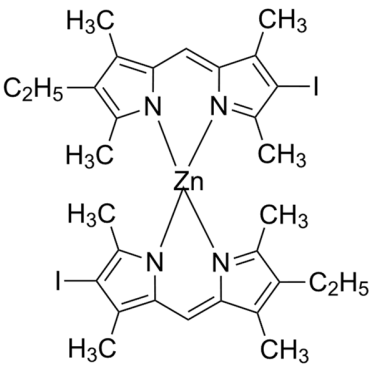
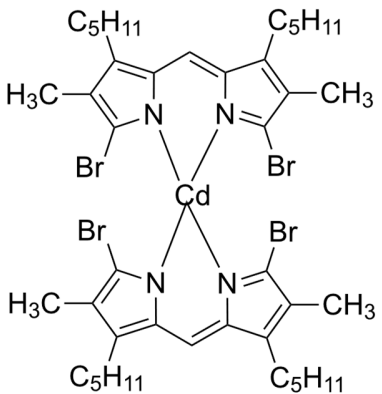
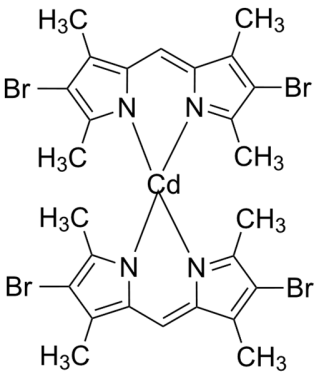
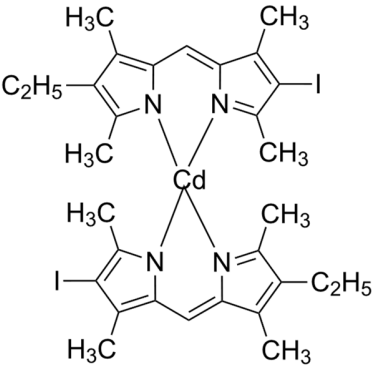
Zn[I(CH ₃) ₄ (C ₂ H ₅)dpm] ₂	
	<p>complexes of zinc(II) with 3,3',5,5'-tetramethyl-4-ethyl- 4'-iodo-2,2'-dipyrrromethene</p>
Absorption spectra in propanol-2 solution	Fluorescence spectra in propanol-2 solution at $\lambda_{\text{ex}} = 470 \text{ nm}$, 298K
Phosphorescence spectra in propanol-2 solution at $\lambda_{\text{ex}} = 470 \text{ nm}$, 77K	Dependence of the logarithm of phosphorescence attenuation on the lifetime ($\lambda_{\text{ex}} = 470 \text{ nm}$, $\lambda_{\text{em}} = 740$ nm) in propanol-2 solutions at 77K

Table S2. Structural formulas, absorption and luminescence spectra of cadmium(II) dipyrromethene complexes.

Cd[Br ₂ (CH ₃) ₂ (C ₅ H ₁₁) ₂ dpm] ₂	
	<p>complexes of cadmium (II) with 3,3'-dipenthyl-4,4'-dimethyl- 5,5'-dibromo-2,2'-dipyrromethene</p>
Absorption spectra in propanol-2 solution	Fluorescence spectra in propanol-2 solution at $\lambda_{ex} = 470$ nm, 298K
Phosphorescence spectra in propanol-2 solution at $\lambda_{ex} = 470$ nm, 77K	Dependence of the logarithm of phosphorescence attenuation on the lifetime ($\lambda_{ex} = 470$ nm, $\lambda_{em} = 740$ nm) in propanol-2 solutions at 77K

Cd[Br ₂ (CH ₃) ₄ dpm] ₂	
	<p>complexes of cadmium (II) with 3,3',5,5'-tetramethyl-4,4'-dibromo- 2,2'-dipyrrromethene</p>
Absorption spectra in propanol-2 solution	Fluorescence spectra in propanol-2 solution at $\lambda_{\text{ex}} = 470 \text{ nm}$, 298K
Phosphorescence spectra in propanol-2 solution at $\lambda_{\text{ex}} = 470 \text{ nm}$, 77K	Dependence of the logarithm of phosphorescence attenuation on the lifetime ($\lambda_{\text{ex}} = 470 \text{ nm}$, $\lambda_{\text{em}} = 740$ nm) in propanol-2 solutions at 77K

Cd[I(CH ₃) ₄ (C ₂ H ₅)dpm] ₂	
	<p>complexes of cadmium (II) with 3,3',5,5'-tetramethyl-4-ethyl- 4'-iodo-2,2'-dipyrromethene</p>
Absorption spectra in propanol-2 solution	Fluorescence spectra in propanol-2 solution at $\lambda_{\text{ex}} = 470 \text{ nm}$, 298K
Phosphorescence spectra in propanol-2 solution at $\lambda_{\text{ex}} = 470 \text{ nm}$, 77K	Dependence of the logarithm of phosphorescence attenuation on the lifetime ($\lambda_{\text{ex}} = 470 \text{ nm}$, $\lambda_{\text{em}} = 740$ nm) in propanol-2 solutions at 77K