Figure captions

Fig. 1. Chemical structures of pyrazine derivatives **1**–**3e**.

Fig. 2. Photographs of fifteen crystal forms under room light (left) and UV light (right) conditions. **Y**, **O**, **OR**, **RO**, and **R** represent the colours of the respective crystals: yellow, orange, orange-red, reddish-orange, and red.

Fig. 3. Absorption spectra of crystalline **1**–**3e**, (a) yellow crystals, (b) orange-red and orange crystals (c) red and reddish-orange crystals.

Fig. 4. (a) Absorption spectra and (b) HOMOs and LUMOs of **2eY** and **2eR**.

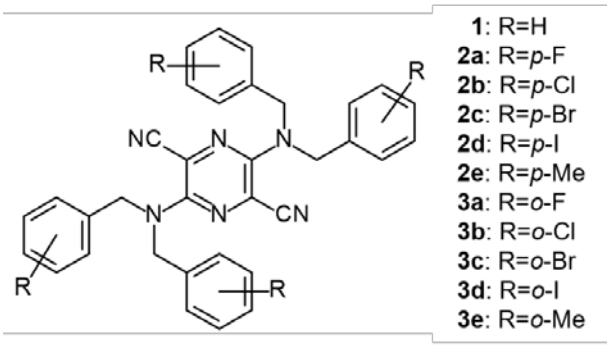
Fig. 5. Relationship between amino group geometries and absorption maxima.

Fig. 6. Fluorescence spectra of **2bR**, **2eR**, **3cR**, **3eR**, **2bY,** and **2eY**.

Fig. 7. Relationship between amino group geometries and fluorescence maxima.

Table captions

Table 1. Optical properties of **1**–**3e**.



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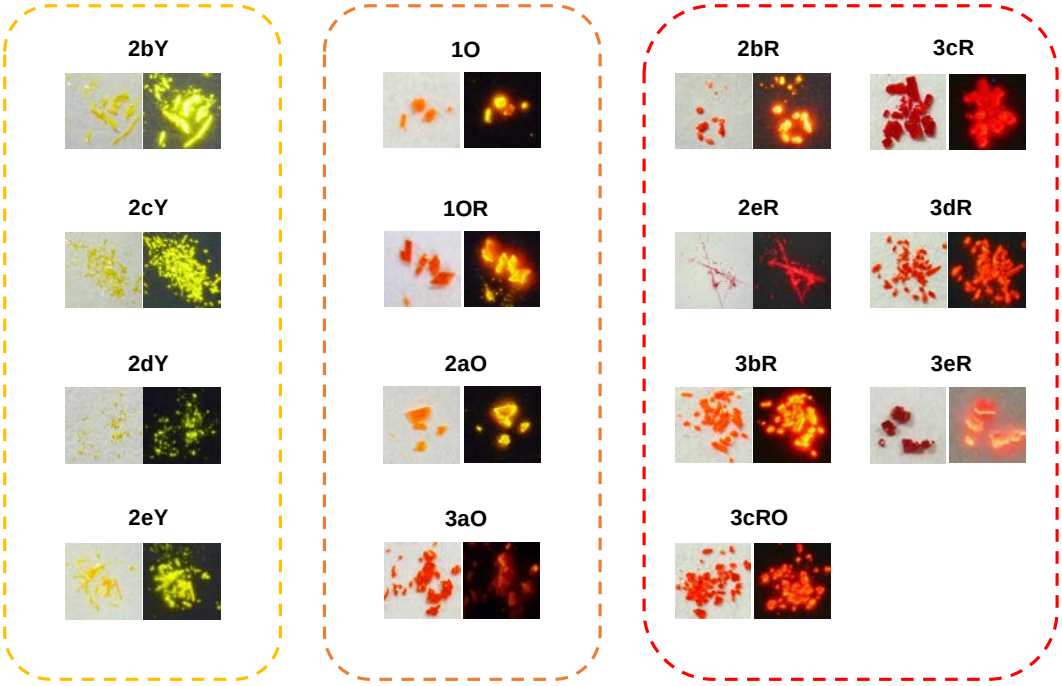

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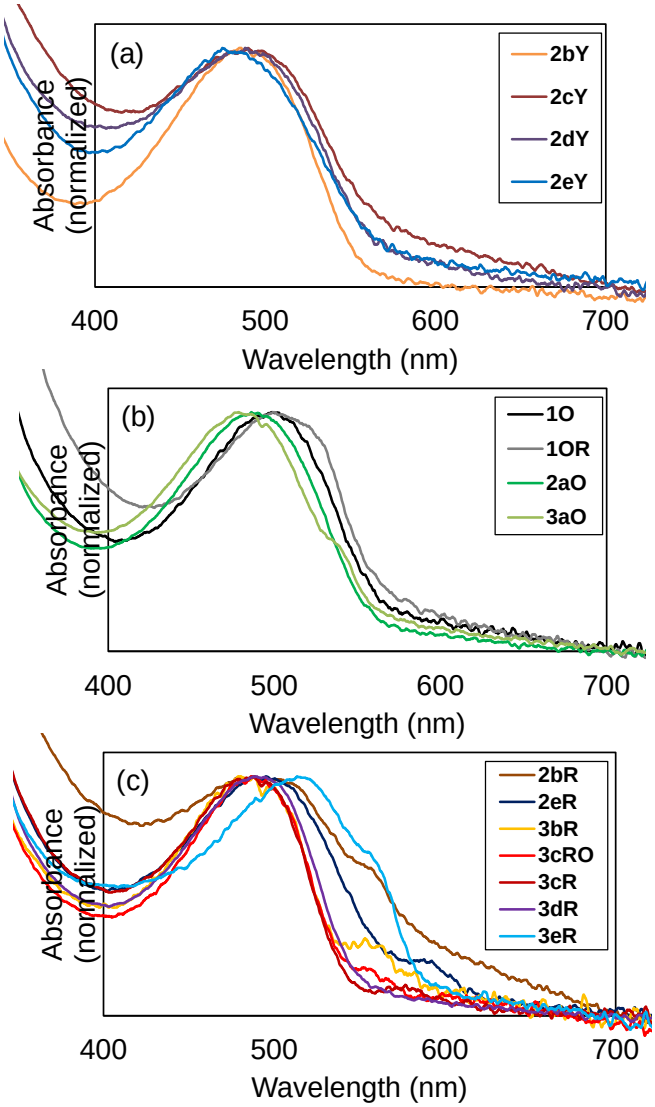

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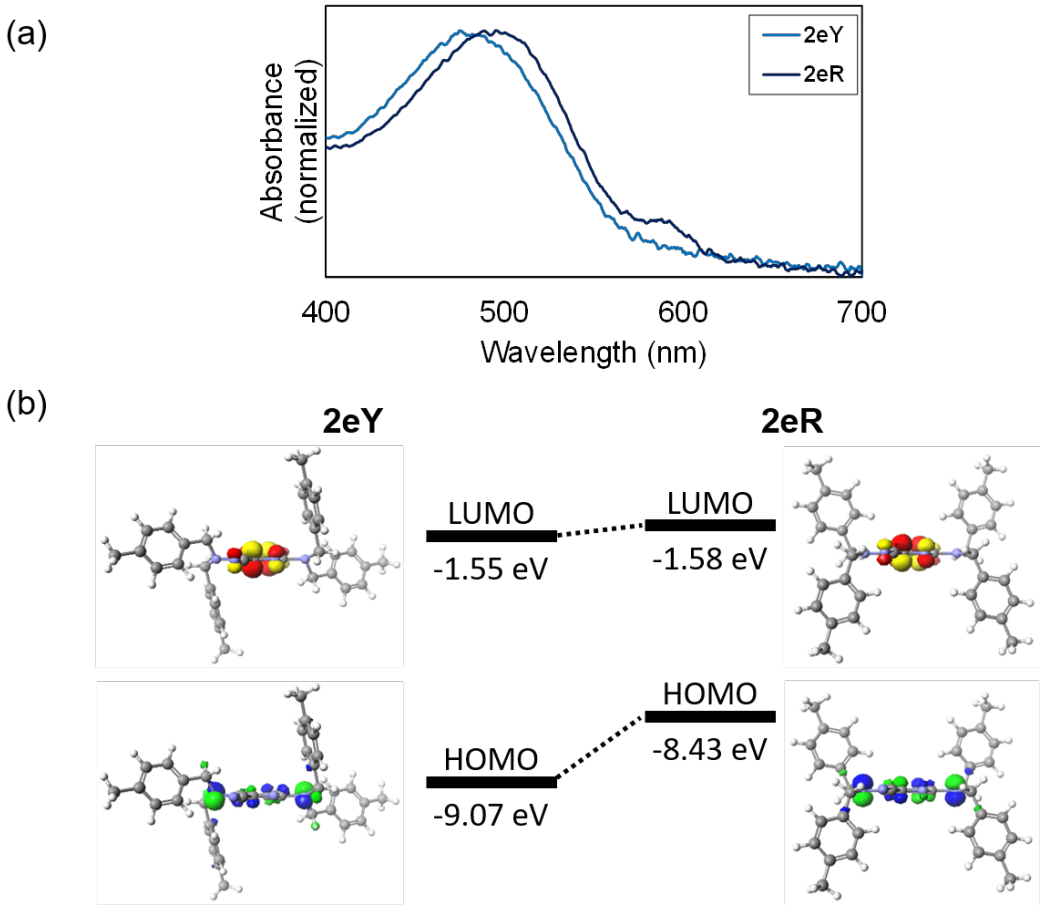

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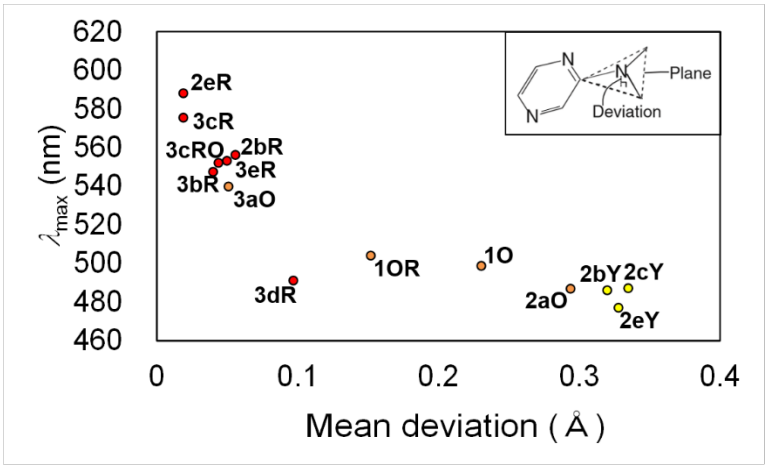

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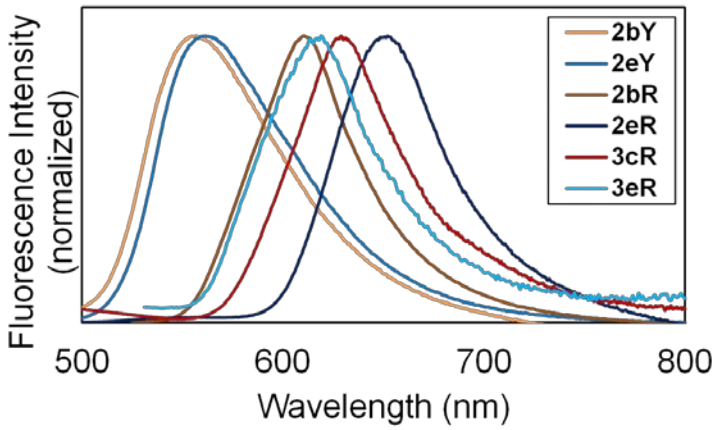

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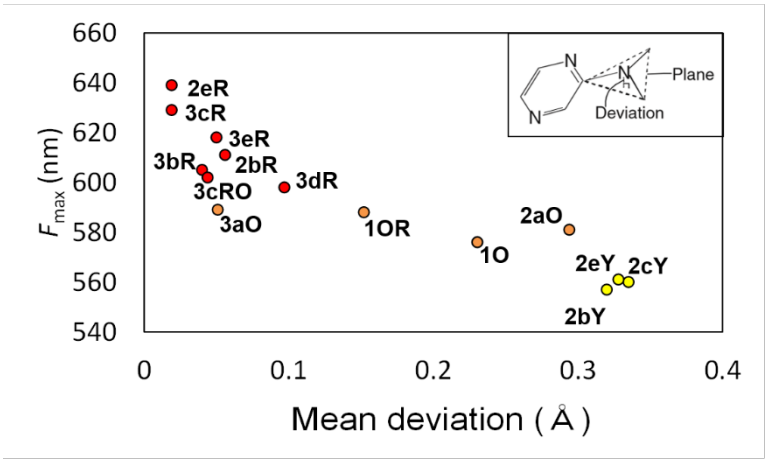

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	In chloroform solution						In crystalline state			
	λ_{max} (nm)	ε_{max}	F_{max} (nm)	Φ_f	SS (nm)		λ_{max} (nm)	F_{max} (nm)	Φ_f	SS (nm)
1	493	4600	588	0.76	95	**1O**	499	576	0.63	77
						1OR	504	588	0.46	84
2a	487	4100	577	0.76	90	**2aO**	487	581	0.74	94
2b	485	4300	577	0.81	92	**2bY**	484	557	0.64	71
						2bR	554, 487	611	0.78	55
2c	485	4100	575	0.81	90	**2cY**	487	560	0.33	73
2d	484	4200	574	0.79	90	**2dY**	488	559	0.23	71
2e	496	3300	592	0.69	96	**2eY**	477	561	0.65	84
						2eR	588, 495	639	0.58	51
3a	479	4800	570	0.79	91	**3aO**	540, 501	589	0.14	49
3b	485	5600	567	0.78	82	**3bR**	547, 488	605	0.91	58
3c	485	4400	565	0.77	80	**3cRO**	552, 488	602	0.39	50
						3cR	575, 488	629	0.38	53
3d	487	5100	567	0.61	80	**3dR**	491	598	0.25	107
3e	501	4300	582	0.73	81	**3eR**	553, 508	618	0.42	65

SS (nm) = F_{max} (nm)-λ_{max} (nm)