

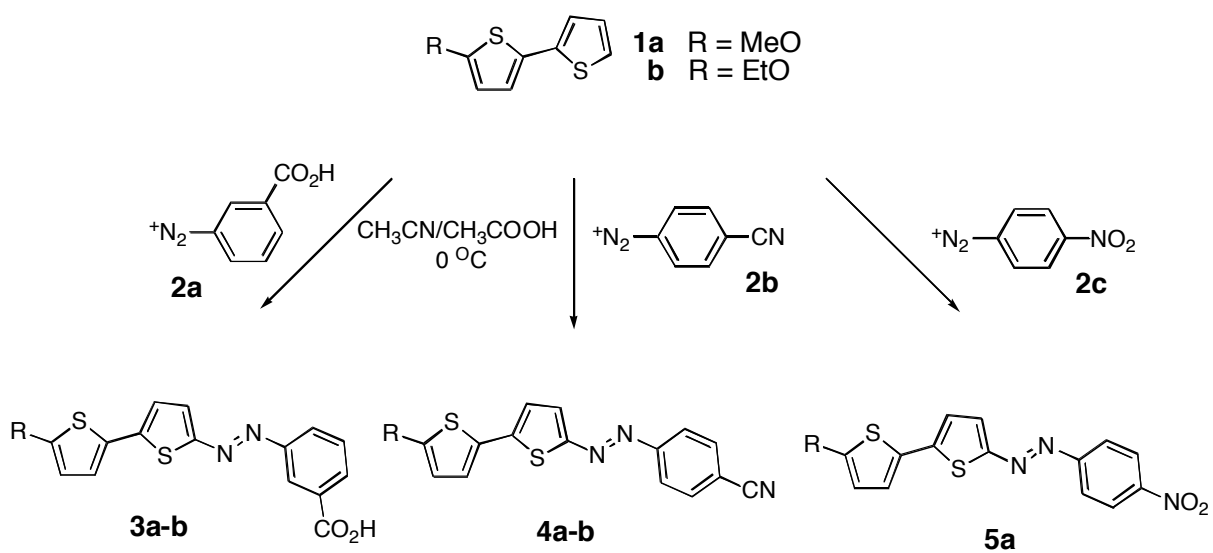
Table 3

Solvents ^a	π^{*b}	Compound 3a		Compound 3b		Compound 4a	
		λ_{\max} [nm]	ν_{\max} [cm ⁻¹]	λ_{\max} [nm]	ν_{\max} [cm ⁻¹]	λ_{\max} [nm]	ν_{\max} [cm ⁻¹]
diethyl ether	0.27	459.5	21,762	461.0	21,691	485.5	20,597
toluene	0.54	468.5	21,344	474.5	21,074	495.5	20,181
ethanol	0.54	467.0	21,413	471.5	21,208	496.0	20,161
dioxane	0.55	468.5	21,344	471.0	21,231	494.5	20,222
ethyl acetate	0.55	462.5	21,621	469.0	21,321	489.0	20,449
tetrahydrofuran	0.58	472.0	21,186	474.0	21,180	499.5	20,020
acetone	0.71	471.5	21,208	478.0	20,920	494.0	20,242
acetonitrile	0.75	465.5	21,482	473.5	21,119	489.5	20,429
chloroform	0.76 ^{13b}	471.5	21,208	475.0	21,052	496.0	20,161
dichloromethane	0.82	475.5	21,030	480.5	20,811	501.0	19,960
dimethylformamide	0.88	476.0	21,008	481.5	20,768	505.0	19,801
dimethylsulfoxide	1.00	488.0	20,491	486.0	20,576	515.0	19,417

Table 4

Entry	Azobithiophene	λ_{\max} (nm)	β^b (10^{-30} esu)	β_0^c (10^{-30} esu)	T_d ($^{\circ}\text{C}$) ^d
1	3a	468.5	240	43	232
2	3b	472.5	220	37	230
3	4a	494.5	270	29	249
4	4b	497.0	260	26	263
5	5a	505.5	260	20	239
6	<i>p</i> NA	352.0	16.9 ¹⁶⁻¹⁷	8.5	---

Schemes



Scheme 1

Figure 1

