Impact of Self-Assembled Structure on Ionic Conductivity of an Azobenzene-Containing Electrolyte

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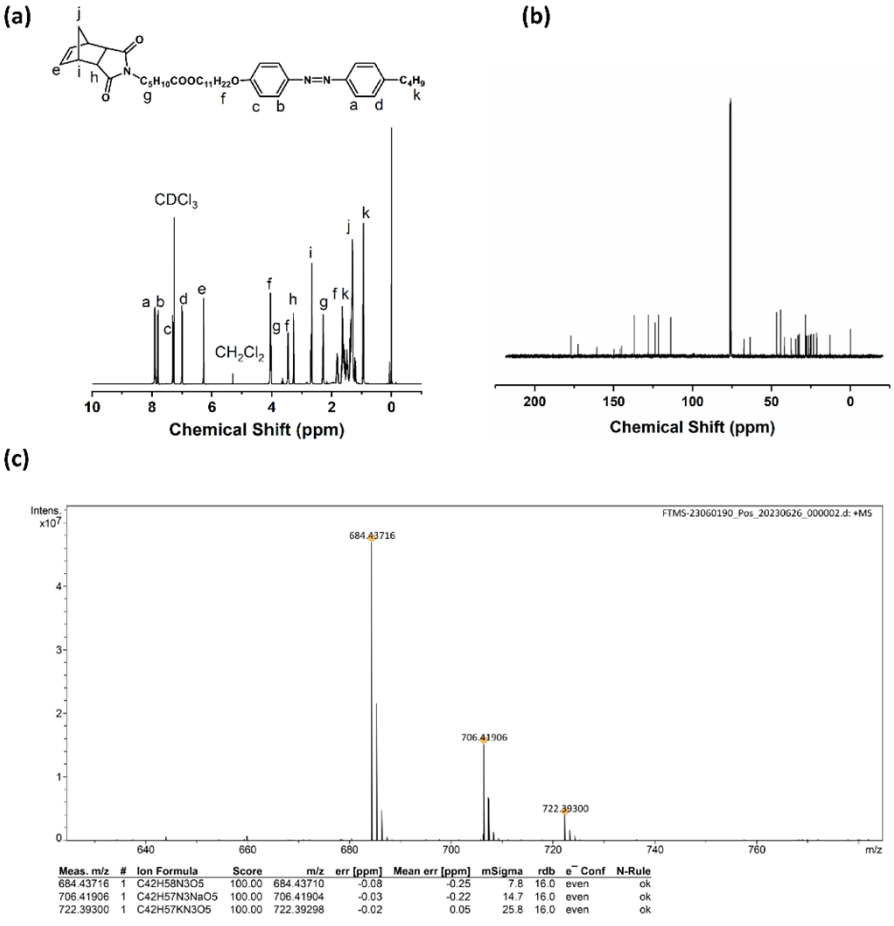

Figure S1. ^{1}H NMR (a), ^{13}C NMR (b), and MS (c) spectra of NbAzo.

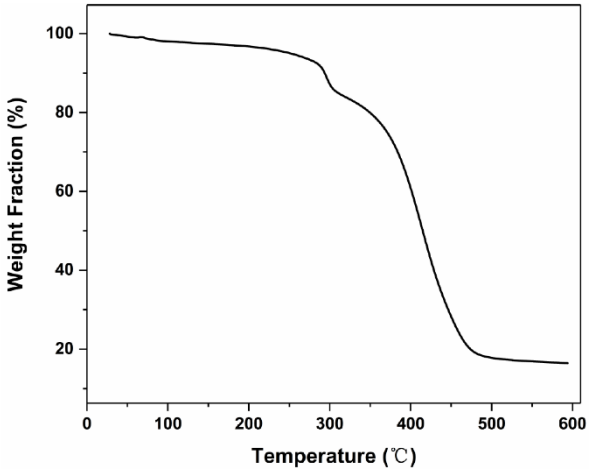

Figure S2. TGA thermogram with the sample with N:P = 4:1 and r_{Li} = 0.

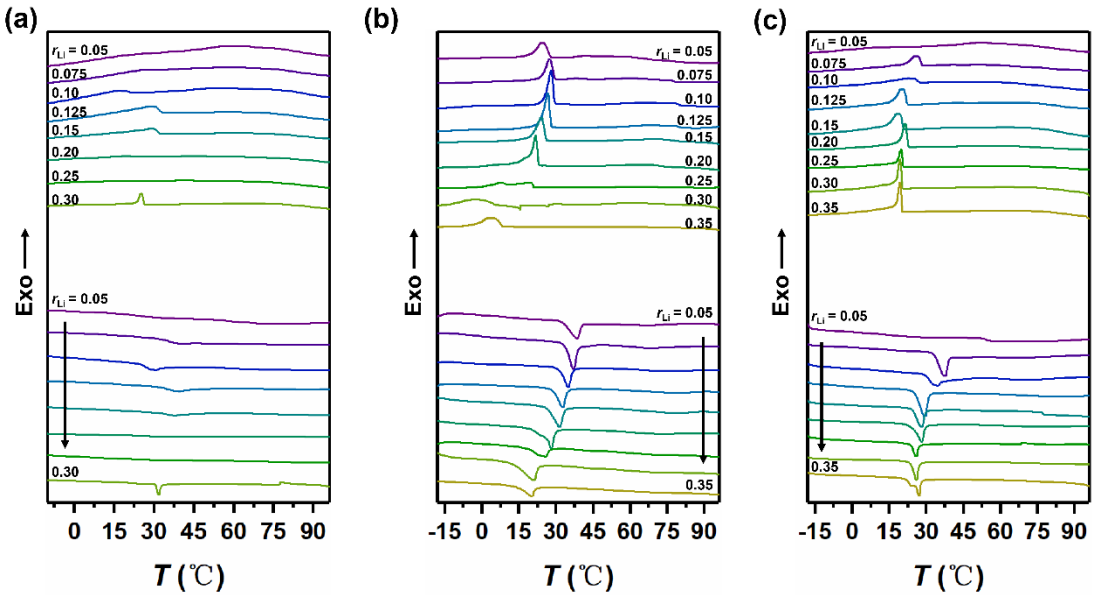

Figure S3. DSC thermograms of different samples with N:P = 3:1 (a), 4:1 (b), and 5:1 (c) at a scanning rate of 10 ^{o}C min^{-1} during the first cooling (above) and second heating (below).

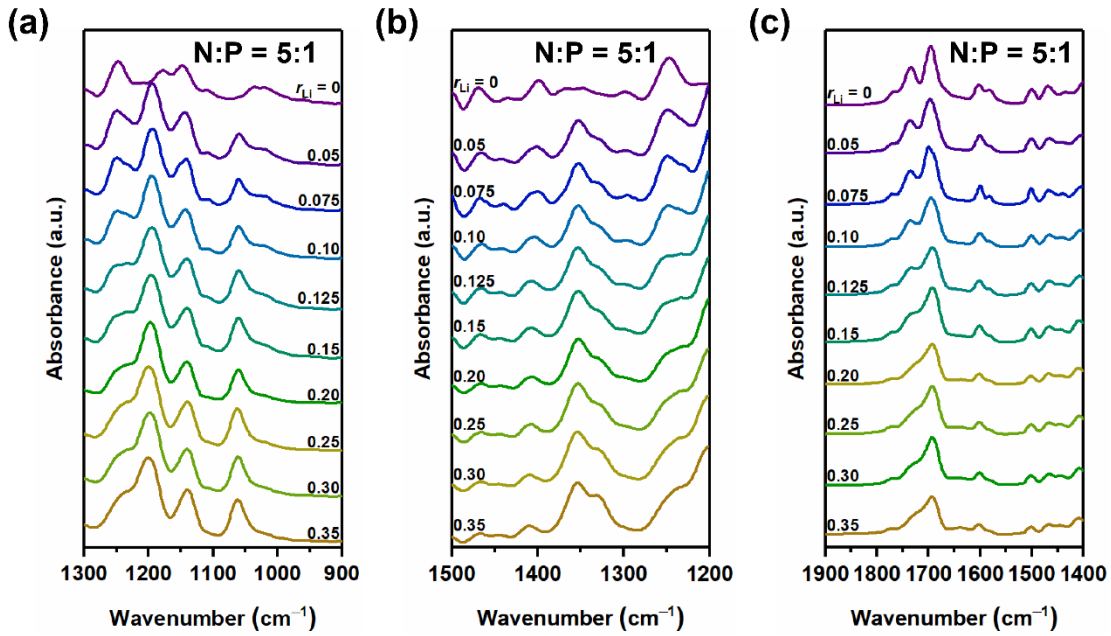

Figure S4. FT-IR spectra of the samples with N:P = 3:1 having different contents of the lithium salt in the range of 1300 to 900 cm^{-1} (a), 1500 to 1200 cm^{-1} (b), and 1900 to 1400 cm^{-1} (c).

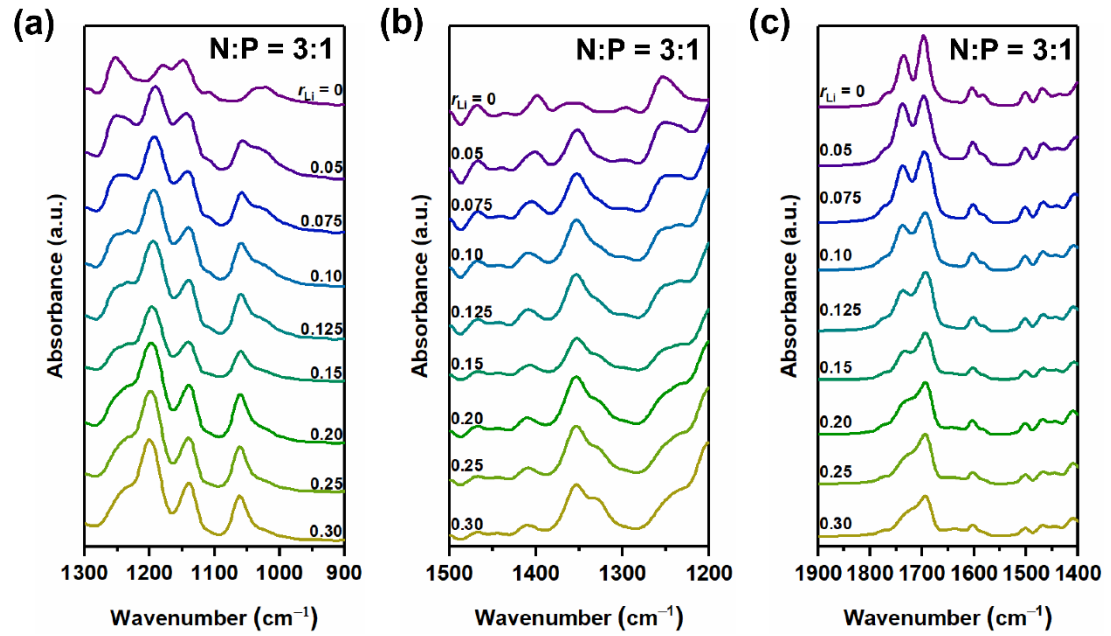

Figure S5. FT-IR spectra of the samples with N:P = 5:1 having different contents of the lithium salt in the range of 1300 to 900 cm^{-1} (a), 1500 to 1200 cm^{-1} (b), and 1900 to 1400 cm^{-1} (c).

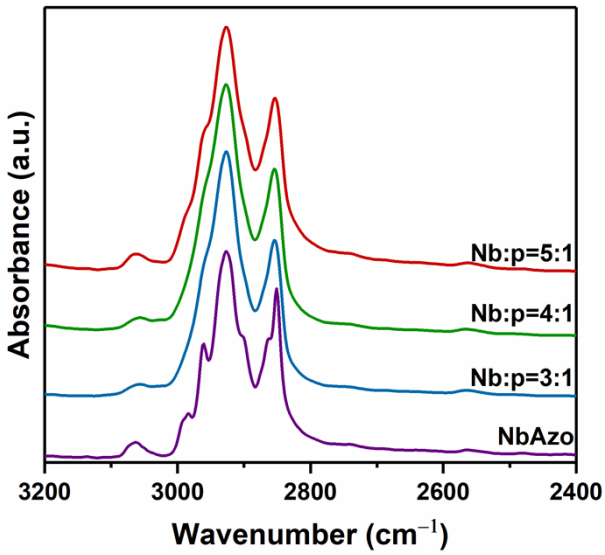

Figure S6. FT-IR spectra of NbAzo and electrolyte samples with N:P = 3:1, 4:1, and 5:1 in the range of 3200 to 2400 cm^{-1}.

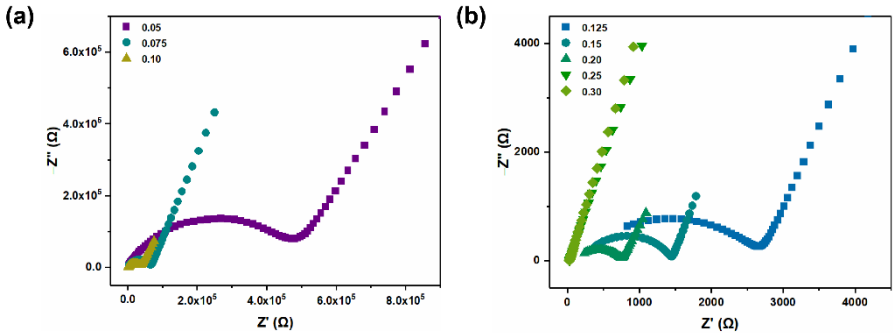

Figure S7. EIS Nyquist curves of samples with N:P = 3:1 and r_{Li} = 0.05–0.10 (a) and 0.125–0.30 (b).

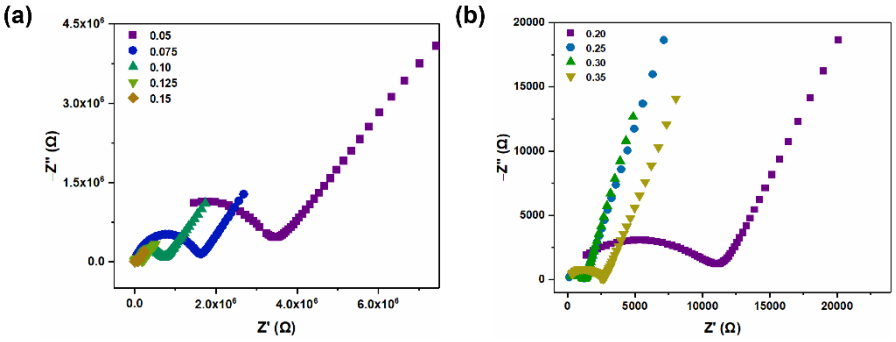

Figure S8. EIS Nyquist curves of samples with N:P = 4:1 and r_{Li} = 0.05–0.15 (a) and 0.20–0.35 (b).

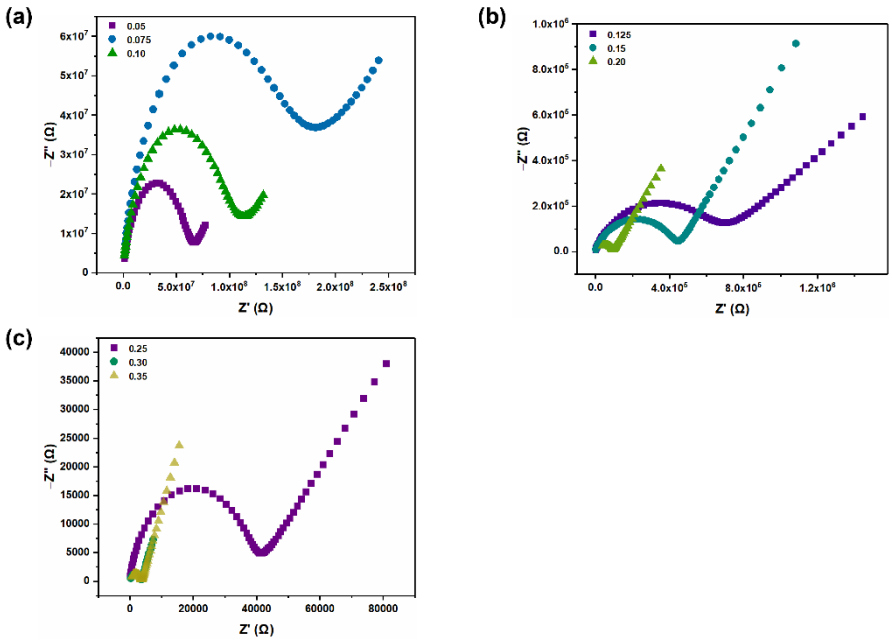

Figure S9. EIS Nyquist curves of the sample with N:P = 5:1 and r_{Li} = 0.05–0.10 (a), 0.125–0.20 (b), and 0.25–0.35 (c).