Room temperature ionic liquids based on cationic porphyrin derivatives and tetrakis(pentafluorophenyl)borate anion

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Part. 1. \textsuperscript{1}H and \textsuperscript{19}F NMR spectra

Figure S1. 300 MHz \textsuperscript{1}H NMR spectrum of 3\textsubscript{a} in CDCl\textsubscript{3}
Figure S2. 300 MHz \textsuperscript{1}H NMR spectrum of 3\textsubscript{b} in CDCl\textsubscript{3}
Figure S3. 300 MHz \textsuperscript{1}H NMR spectrum of 4\textsubscript{a} in CDCl\textsubscript{3}
Figure S4. 300 MHz \textsuperscript{1}H NMR spectrum of 4\textsubscript{b} in CDCl\textsubscript{3}
Figure S5. 300 MHz \textsuperscript{1}H NMR spectrum of 5\textsubscript{a} in CDCl\textsubscript{3}
Figure S6. 300 MHz \textsuperscript{1}H NMR spectrum of 5\textsubscript{b} in CDCl\textsubscript{3}
Figure S7. 300 MHz \textsuperscript{1}H NMR spectrum of 6\textsubscript{a} in CDCl\textsubscript{3}
Figure S8. 300 MHz \textsuperscript{19}F NMR spectra of 6\textsubscript{a} in CDCl\textsubscript{3}
Figure S9. 300 MHz \textsuperscript{1}H NMR spectrum of 6\textsubscript{b} in CDCl\textsubscript{3}
Figure S10. 300 MHz \textsuperscript{19}F NMR spectrum of 6\textsubscript{b} in CDCl\textsubscript{3}
Figure S11. 300 MHz \textsuperscript{1}H NMR spectrum of 7 in CDCl\textsubscript{3}
Figure S12. 300 MHz \textsuperscript{1}H NMR spectrum of 8 in CDCl\textsubscript{3}
Figure S13. 300 MHz \textsuperscript{19}F NMR spectrum of 8 in CDCl\textsubscript{3}
Figure S14. 300 MHz \textsuperscript{1}H NMR spectrum of 9\textsubscript{a} in d\textsubscript{6}-DMSO
Figure S15. 300 MHz \textsuperscript{1}H NMR spectrum of 9\textsubscript{b} in CDCl\textsubscript{3}
Figure S16. 300 MHz \textsuperscript{1}H NMR spectrum of 10 in CDCl\textsubscript{3}
Figure S17. 300 MHz \textsuperscript{19}F NMR spectrum of 10 in CDCl\textsubscript{3}
Figure S18. 300 MHz \textsuperscript{1}H NMR spectrum of 11 in CDCl\textsubscript{3}
Figure S19. 300 MHz \textsuperscript{1}H NMR spectrum of 12 in CDCl\textsubscript{3}
Figure S20. 300 MHz \textsuperscript{19}F NMR spectrum of 12 in CDCl\textsubscript{3}

Part. 2. MALDI-TOF mass spectra

Figure S21. MALDI-TOF mass spectrum of 3\textsubscript{a}
Figure S22. MALDI-TOF mass spectrum of 3\textsubscript{b}
Figure S23. MALDI-TOF mass spectrum of 4\textsubscript{a}
Figure S24. MALDI-TOF mass spectrum of 4\textsubscript{b}
Figure S25. MALDI-TOF mass spectrum of 5\textsubscript{a} (cationic part)
Figure S26. MALDI-TOF mass spectrum of 5\textsubscript{b} (cationic part)
Part 3. Thermal analyses

Differential Scanning Calorimetry (DSC) measurements were performed on a Perkin Elmer Diamond DSC instrument.

Figure S36. DSC traces on first heating for porphyrin 5a
Figure S37. DSC traces on first heating for porphyrin 5b
Figure S38. DSC traces on first heating for porphyrin 6a
Figure S39. DSC traces on second cooling for porphyrin 6b
Figure S40. DSC traces on first heating for porphyrin 7
Figure S41. DSC traces on second cooling for porphyrin 8
Figure S42. DSC traces on second heating for porphyrin 9a
Figure S43. DSC traces on second heating for porphyrin 9b
Figure S44. DSC traces on first heating for porphyrin 10
Figure S45. DSC traces on second cooling for porphyrin 11
Figure S46. DSC traces on first heating for porphyrin 12
Part. 1. $^1$H and $^19$F NMR spectra

Figure S1. 300 MHz $^1$H NMR spectrum of 3a in CDCl$_3$
Figure S2. 300 MHz $^1$H NMR spectrum of 3b in CDCl$_3$
Figure S3. 300 MHz $^1$H NMR spectrum of 4a in CDCl$_3$. 
Figure S4. 300 MHz $^1$H NMR spectrum of 4b in CDCl$_3$
Figure S5. 300 MHz $^1$H NMR spectrum of 5a in CDCl$_3$. 
Figure S6. 300 MHz $^1$H NMR spectrum of 5b in CDCl$_3$
Figure S7. 300 MHz $^1$H NMR spectrum of 6a in CDCl$_3$. 
Figure S8. 300 MHz $^{19}$F NMR spectra of 6a in CDCl$_3$. 
Figure S9. 300 MHz $^1$H NMR spectrum of 6b in CDCl$_3$.
Figure S10. 300 MHz $^{19}$F NMR spectrum of 6b in CDCl$_3$. 
Figure S11. 300 MHz $^1$H NMR spectrum of 7 in CDCl$_3$.
Figure S12. 300 MHz $^1$H NMR spectrum of 8 in CDCl$_3$. 

![300 MHz $^1$H NMR spectrum of 8 in CDCl$_3$](image-url)
Figure S13. 300 MHz $^{19}$F NMR spectrum of 8 in CDCl$_3$. 
**Figure S14.** 300 MHz $^1$H NMR spectrum of 9a in $d_6$-DMSO
Figure S15. 300 MHz $^1$H NMR spectrum of 9b in CDCl$_3$. 
Figure S16. 300 MHz $^1$H NMR spectrum of 10 in CDCl$_3$. 
**Figure S17.** 300 MHz $^{19}$F NMR spectrum of 10 in CDCl$_3$. 
Figure S18. 300 MHz $^1$H NMR spectrum of 11 in CDCl$_3$. 
Figure S19. 300 MHz $^1$H NMR spectrum of 12 in CDCl$_3$. 
Figure S20. 300 MHz $^{19}$F NMR spectrum of 12 in CDCl$_3$. 
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Figure S26. MALDI-TOF mass spectrum of 5b (cationic part)
Figure S27. MALDI-TOF mass spectrum of 6a (cationic part)
Figure S28. MALDI-TOF mass spectrum of 6b (cationic part)
Figure S29. MALDI-TOF mass spectrum of 7 (cationic part)
Figure S30. MALDI-TOF mass spectrum of 8 (cationic part)
Figure S31. MALDI-TOF mass spectrum of 9a (cationic part)
Figure S32. MALDI-TOF mass spectrum of 9b (cationic part)
Figure S33. MALDI-TOF mass spectrum of 10 (cationic part)
Figure S34. MALDI-TOF mass spectrum of 11 (cationic part)
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Figure S43. DSC traces on second heating for porphyrin 9b

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**Figure S45.** DSC traces on second cooling for porphyrin 11

**Figure S46.** DSC traces on first heating for porphyrin 12