Supporting Information

63257 Ba(CO3) 15196 Ba(CO3) 261703 Ba(C204) 65801 BaCuO2 262674 BaCl2 35495 Ba(NO3)2 54129 (CuO2)4 54126 CuO2 69757 CuO 188351 Cu608YCl 27772 Y2O3 202877 Y2Cu2O5 39456 Y0.98Ba1.98Cu2.91O6.47 67860 YBa2Cu2.78O7 62463 YBa2Cu2.78O7 67860 YBa2Cu3O6.9 67860 YBa2Cu2.78O7 62463 YBa2Cu2.78O7 62550 Y0.5Ba3Cu1.5O5.5 65550 Y0.5Ba3Cu1.5O5.5		
261703 Ba(C2O4) 65801 BaCuO2 262674 BaCl2 35495 Ba(NO3)2 54129 (CuO2)4 54126 CuO2 69757 CuO 188351 Cu6O8YCl 27772 Y2O3 202877 Y2Cu2O5 39456 Y0.98Ba1.98Cu2.91O6.47 67860 YBa2Cu2.78O7 62463 YBa2Cu2.86O6.6 39359 YBa2Cu2.80O7 67860 YBa2Cu2.78O7 62463 YBa2Cu2.78O7 62463 YBa2Cu2.78O7 62463 YBa2Cu2.78O7 62550 Y0.5Ba3Cu1.5O5.5	63257	Ba(CO ₃)
65801 BaCuO2 262674 BaCl2 35495 Ba(NO3)2 54129 (CuO2)4 54126 CuO2 69757 CuO 188351 Cu6O8YCl 27772 Y2O3 202877 Y2Cu2O5 39456 Y098Ba1.98Cu2.91O6.47 67860 YBa2Cu2.78O7 62463 YBa2Cu2.86O6.6 39359 YBa2Cu2.807 67860 YBa2Cu2.807 62463 YBa2Cu2.807 62463 YBa2Cu2.807 62463 YBa2Cu2.807 62463 YBa2Cu2.807 67860 YBa2Cu2.807 67860 YBa2Cu2.807 67860 YBa2Cu2.7807 62915 YBa2Cu2.8706.76 32707 Y2BaCu05 65550 Y0.5Ba3Cu1.505.5	15196	Ba(CO ₃)
262674 BaCl2 35495 Ba(NO3)2 54129 (CuO2)4 54126 CuO2 69757 CuO 188351 Cu6O8YCl 27772 Y2O3 202877 Y2Cu2O5 39456 Y0.98Ba1.98Cu2.91O6.47 67860 YBa2Cu2.78O7 62463 YBa2Cu2.86O6.6 39359 YBa2Cu2.86O6.6 39359 YBa2Cu2.78O7 62915 YBa2Cu2.87O6.76 32707 Y2BaCuO5 65550 Y0.5Ba3Cu1.5O5.5	261703	$Ba(C_2O_4)$
35495 Ba(NO3)2 54129 (CuO2)4 54126 CuO2 69757 CuO 188351 Cu608YCl 27772 Y2O3 202877 Y2Cu2O5 39456 Y0.98Ba1.98Cu2.91O6.47 67860 YBa2Cu2.78O7 62463 YBa2Cu2.06.8 68449 YBa2Cu2.86O6.6 39359 YBa2Cu3.06.9 67860 YBa2Cu2.78O7 62915 YBa2Cu2.78O7 62915 YBa2Cu2.78O7 62915 YBa2Cu2.87O6.76 32707 Y2BaCuO5 65550 Y0.5Ba3Cu1.5O5.5	65801	BaCuO ₂
54129 (CuO ₂) ₄ 54126 CuO ₂ 69757 CuO 188351 Cu ₆ O ₈ YCl 27772 Y ₂ O ₃ 202877 Y ₂ Cu ₂ Os 39456 Y _{0.98} Ba _{1.98} Cu _{2.91} O _{6.47} 67860 YBa ₂ Cu _{2.78} O ₇ 62463 YBa ₂ Cu _{2.86} O _{6.6} 39359 YBa ₂ Cu _{2.86} O _{6.6} 39359 YBa ₂ Cu _{2.78} O ₇ 67860 YBa ₂ Cu _{2.87} O _{6.76} 32707 Y ₂ BaCuO ₅ 65550 Y _{0.5} Ba ₃ Cu _{1.5} O _{5.5}	262674	BaCl ₂
54126 CuO2 69757 CuO 188351 Cu6O8YCl 27772 Y2O3 202877 Y2Cu2O5 39456 Y0.98Ba1.98Cu2.91O6.47 67860 YBa2Cu2.78O7 62463 YBa2Cu2.86O6.6 39359 YBa2Cu2.86O6.6 39359 YBa2Cu2.78O7 67860 YBa2Cu2.86O6.6 39359 YBa2Cu2.86O7 62915 YBa2Cu2.87O6.76 32707 Y2BaCuO5 65550 Y0.5Ba3Cu1.5O5.5	35495	Ba(NO3) 2
69757 CuO 188351 Cu ₆ O ₈ YCl 27772 Y ₂ O ₃ 202877 Y ₂ Cu ₂ O ₅ 39456 Y _{0.98} Ba _{1.98} Cu _{2.91} O _{6.47} 67860 YBa ₂ Cu _{2.78} O ₇ 62463 YBa ₂ Cu _{2.86} O _{6.6} 39359 YBa ₂ Cu _{2.86} O _{6.6} 67860 YBa ₂ Cu _{2.86} O _{6.76} 39359 YBa ₂ Cu _{2.87} O _{6.76} 32707 Y ₂ BaCuO ₅ 65550 Y _{0.5} Ba ₃ Cu _{1.5} O _{5.5}	54129	(CuO ₂)4
188351 Cu6O8YCl 27772 Y2O3 202877 Y2Cu2O5 39456 Y0.98Ba1.98Cu2.91O6.47 67860 YBa2Cu2.78O7 62463 YBa2Cu2.86O6.6 68449 YBa2Cu2.86O6.6 39359 YBa2Cu2.86O6.9 67860 YBa2Cu2.78O7 62915 YBa2Cu2.87O6.76 32707 Y2BaCuO5 65550 Y0.5Ba3Cu1.5O5.5	54126	CuO ₂
27772 Y2O3 202877 Y2Cu2O5 39456 Y0.98Ba1.98Cu2.91O6.47 67860 YBa2Cu2.78O7 62463 YBa2 Cu3O6.8 68449 YBa2Cu2.86O6.6 39359 YBa2Cu2.78O7 67860 YBa2Cu2.86O6.9 67860 YBa2Cu2.78O7 62915 YBa2Cu2.87O6.76 32707 Y2BaCuO5 65550 Y0.5Ba3Cu1.5O5.5	69757	CuO
202877 Y2Cu2O5 39456 Y0.98Ba1.98Cu2.91O6.47 67860 YBa2Cu2.78O7 62463 YBa2 Cu3O6.8 68449 YBa2Cu2.86O6.6 39359 YBa2Cu2.06.9 67860 YBa2Cu2.78O7 62915 YBa2Cu2.87O6.76 32707 Y2BaCuO5 65550 Y0.5Ba3Cu1.5O5.5	188351	Cu ₆ O ₈ YCl
39456 Y0.98Ba1.98Cu2.91O6.47 67860 YBa2Cu2.78O7 62463 YBa2Cu3O6.8 68449 YBa2Cu2.86O6.6 39359 YBa2Cu3O6.9 67860 YBa2Cu2.78O7 62915 YBa2Cu2.87O6.76 32707 Y2BaCuO5 65550 Y0.5Ba3Cu1.5O5.5	27772	Y2O3
67860 YBa2Cu2.78O7 62463 YBa2Cu3O6.8 68449 YBa2Cu2.86O6.6 39359 YBa2Cu3O6.9 67860 YBa2Cu2.78O7 62915 YBa2Cu2.87O6.76 32707 Y2BaCuO5 65550 Y0.5Ba3Cu1.5O5.5	202877	Y2Cu2O5
62463 YBa2 Cu3O6.8 68449 YBa2Cu2.86O6.6 39359 YBa2Cu3O6.9 67860 YBa2Cu2.78O7 62915 YBa2Cu2.87O6.76 32707 Y2BaCuO5 65550 Y0.5Ba3Cu1.5O5.5	39456	Y0.98Ba1.98Cu2.91O6.47
68449 YBa2Cu2.86O6.6 39359 YBa2Cu3O6.9 67860 YBa2Cu2.78O7 62915 YBa2Cu2.87O6.76 32707 Y2BaCuO5 65550 Y0.5Ba3Cu1.5O5.5	67860	YBa2Cu2.78O7
39359 YBa2Cu3O6.9 67860 YBa2Cu2.78O7 62915 YBa2Cu2.87O6.76 32707 Y2BaCuO5 65550 Y0.5Ba3Cu1.5O5.5	62463	YBa2 Cu3O6.8
67860 YBa2Cu2.78O7 62915 YBa2Cu2.87O6.76 32707 Y2BaCuO5 65550 Y0.5Ba3Cu1.5O5.5	68449	YBa2Cu2.86O6.6
62915 YBa2Cu2.87O6.76 32707 Y2BaCuO5 65550 Y0.5Ba3Cu1.5O5.5	39359	YBa2Cu3O6.9
32707 Y2BaCuO5 65550 Y0.5Ba3Cu1.5O5.5	67860	YBa2Cu2.78O7
65550 Y0.5Ba3Cu1.5O5.5	62915	YBa2Cu2.87O6.76
	32707	Y2BaCuO5
65549 Y0.25BaCu0.75O2.25	65550	Y0.5Ba3Cu1.5O5.5
	65549	Y0.25BaCu0.75O2.25

 Table S1. ICSD numbers (Left) with the corresponding crystal phases (Right)

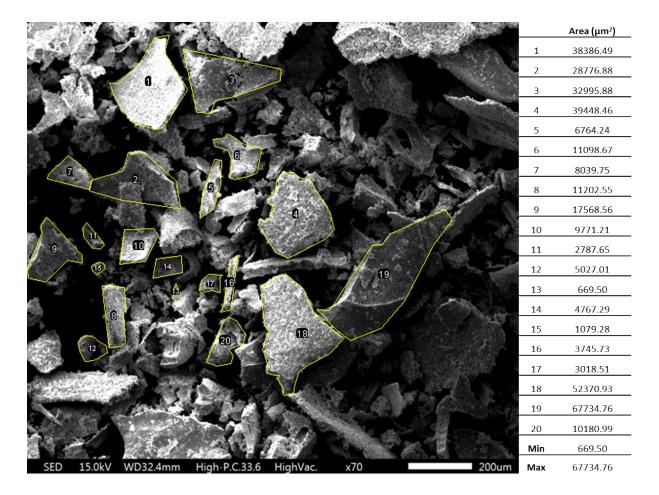


Figure S1. Scanning Electron Microscopy image of the superconductive YBCO sample. Highlighted the crystals chosen to be measured (Left). Table of their relative surfaces areas (Right)

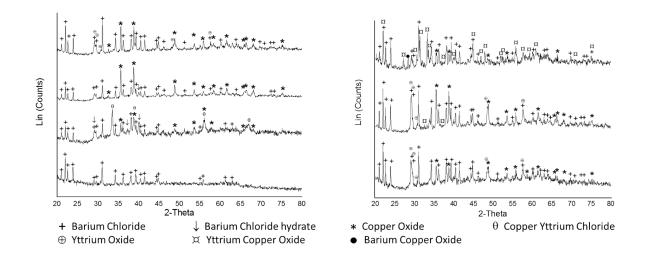


Figure S2. Temperature analysis via powder X-ray diffraction patterns of the synthesis of YBCO using ethylene glycol: choline chloride DES/dextran as chelating agent.

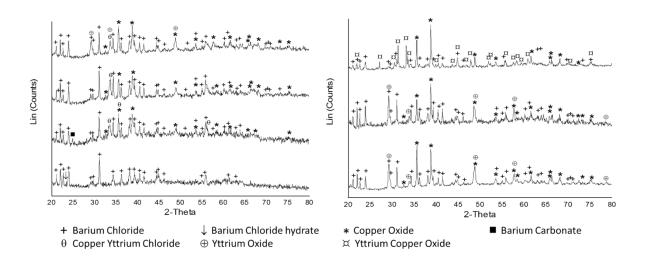


Figure S3. Temperature analysis via powder X-ray diffraction patterns of the synthesis of YBCO using imidazole: choline chloride DES/dextran as chelating agent.

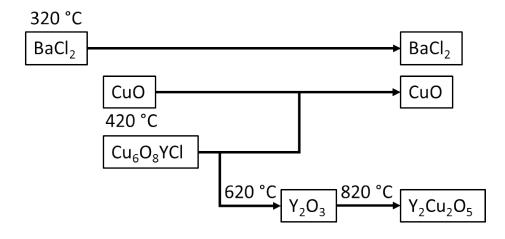


Figure S4. Diagram of crystal growth of the synthesis of YBCO using ethylene glycol: choline chloride DES/dextran and imidazole: choline chloride DES/dextran as chelating agents.

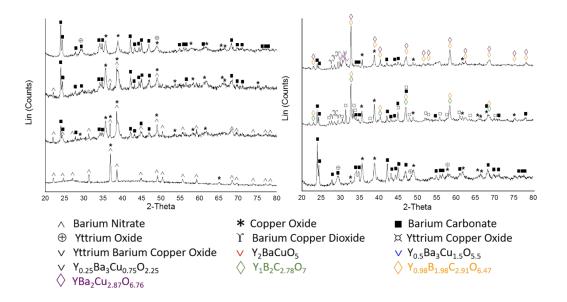


Figure S5. Temperature analysis via powder X-ray diffraction patterns of the synthesis of YBCO using imidazole/dextran as chelating agent.

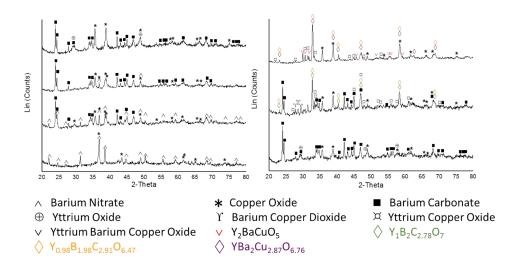


Figure S6. Temperature analysis via powder X-ray diffraction patterns of the synthesis of YBCO using ethylene glycol/dextran as chelating agent.

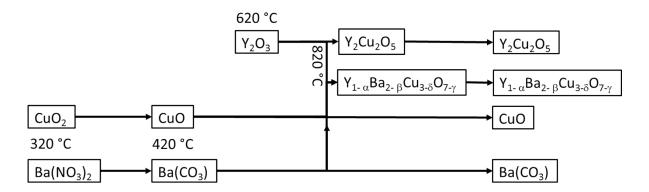


Figure S7. Diagram of crystal growth of the synthesis of YBCO using ethylene glycol/dextran and imidazole/dextran as chelating agents.