Supplementary Information

Roles of hydrogen bond donor and hydrogen bond acceptor in the extraction of toluene from *n*-heptane using deep eutectic solvents

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Table S1. Statistical analysis results of the experiments in this work

T (°C)	DES	S	D_{tol}	D_{hep}
30 °C	ChCl-LA	37.2±1.5	0.128±0.003	0.00344±0.00005
	ChBr-LA	41.6±1.7	0.133±0.003	0.00320±0.00005
	TEAC-LA	38.1±1.5	0.191±0.005	0.00502±0.00008
	TEAB-LA	41.5±1.7	0.205±0.005	0.00493±0.00007
	TPAC-LA	27.2±1.1	0.264±0.007	0.00972±0.00015
	TPAB-LA	27.9±1.1	0.287±0.007	0.01028±0.00015
	TBAC-LA	17.4±0.7	0.356±0.009	0.02052±0.00031
	TBAB-LA	18.1±0.7	0.389±0.010	0.02153±0.00032
	TBPB-LA	16.3±0.7	0.407±0.010	0.02505±0.00038
	MTPPB-LA	36.1±1.4	0.235±0.006	0.00650±0.00010
	BTMAC-LA	35.5±1.4	0.195±0.005	0.00550±0.00008
	Sulfolane	33.6±1.3	0.390±0.010	0.01161±0.00017
	ChCl-EG	40.0±1.6	0.017±0.001	0.00043±0.00001
	TEAB-EG	64.8±2.6	0.056±0.001	0.00087±0.00001
	TPAB-EG	32.7±1.3	0.090±0.002	0.00274±0.00004
	TBAB-EG	19.7±0.8	0.179±0.004	0.00910±0.00014
	ChCl-TEG	42.0±1.7	0.131±0.003	0.00312±0.00005
	TEAB-TEG	42.5±1.7	0.216±0.005	0.00508±0.00008
	TPAB-TEG	26.6±1.1	0.285±0.007	0.01073±0.00016
	TBAB-TEG	16.6±0.7	0.372±0.009	0.02240±0.00034
	ChCl-lactic acid	32.7±1.3	0.023±0.001	0.00069±0.00001
	ChCl-phenol	17.3±0.7	0.227±0.006	0.01312±0.00020
	ChCl-urea	5.2±0.2	0.007±0.001	0.00130±0.00002
	ChCl-malonic acid	6.8±0.3	0.017±0.001	0.00255±0.00004
	ChCl-glutaric acid	5.0±0.2	0.035±0.001	0.00704±0.00011
40 °C	ChCl-LA	43.2±1.7	0.119±0.003	0.00275±0.00004
	ChBr-LA	48.4±1.9	0.125±0.003	0.00257±0.00004
	TEAC-LA	52.9±2.1	0.174±0.004	0.00329±0.00005
	TEAB-LA	54.0±2.2	0.195±0.005	0.00361±0.00005
	TPAC-LA	36.2±1.4	0.257±0.006	0.00711±0.00011
	TPAB-LA	37.8±1.5	0.270±0.007	0.00716±0.00011
	TBAC-LA	21.0±0.8	0.318±0.008	0.01513±0.00023
	TBAB-LA	24.0±1.0	0.362±0.009	0.01508±0.00023
	TBPB-LA	20.1±0.8	0.390±0.010	0.01944±0.00029
	MTPPB-LA	44.4±1.8	0.220±0.005	0.00495±0.00007
	BTMAC-LA	44.3±1.8	0.183±0.005	0.00414±0.00006
	Sulfolane	30.9±1.2	0.354±0.009	0.01144±0.00017