Supporting Information

Efficient Synthesis of Liquid Photonic Crystal by Electrically-Driven Colloid Concentration

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Table S1. Change of particle volume fraction by electrically-driven colloid concentration

LPC	E (V)	d (cm)	$f_{Original}$ (%)	f_{final} (%) *	In Text
SiO_2/EtOH	8	0.5	5.8	35.0	Fig 1g
SiO_2/EtOH	8	0.5	4.4	38.6	Fig 3c
PS/EtOH	8	0.5	5.1	31.6	Fig 3c
CeO_2/EtOH	8	0.5	5.2	15.9	Fig 3c
SiO_2/PCb	8	0.5	5.7	35.4	Fig 3f
SiO_2/IPA	8	0.5	5.8	15.9	Fig 3f
SiO_2/ACN	8	0.5	4.7	39.0	Fig 3f
SiO_2/EG	8	0.5	4.3	6.8	Fig 3f
SiO_2/PCb	5	0.5	5.3	23.9	Fig 3g
SiO_2/PCb	8	0.5	5.3	32.9	Fig 3g
SiO_2/PCb	10	0.5	5.1	38.6	Fig 3g
SiO_2/PCb	8	1.0	5.3	19.0-	Fig 3h
SiO_2/PCb	8	0.5	5.3	32.9	Fig 3h
SiO_2/EtOH	8	0.5	5.8	35.0	Fig 4a
SiO_2/NPA	8	0.5	5.9	23.8	Fig 4a
SiO_2/ACN	8	0.5	4.7	39.0	Fig 4a
SiO_2/PCb	8	0.5	5.7	35.4	Fig 4a
SiO_2/EtOH	8	0.5	4.4	38.6	Fig 4c
PS/EtOH	8	0.5	5.1	31.6	Fig 4c
CeO_2/EtOH	8	0.5	5.2	15.9	Fig 4c

* f_{final} corresponds to the particle volume fraction after 3 time of concentration.

Table S2. Physical properties of the solvents used in the work.

Solvents	**bp (°C)**	**ε**	**η ($kg \cdot m^{-1} \cdot s^{-1}$)**
EtOH	78.3	25.8	1.07
PCb	241.7	69	2.5
IPA	82.5	19.9	2.43
ACN	81.6	37.5	0.35
EG	197.3	37	25.7
NPA	97.4	20.3	2.26