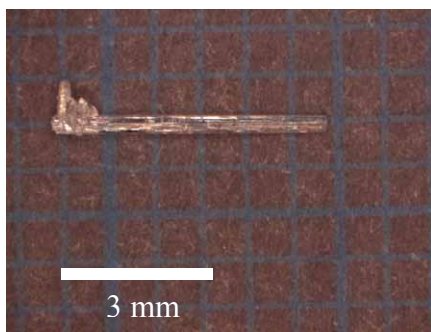


Electronic Supplementary Information (ESI)

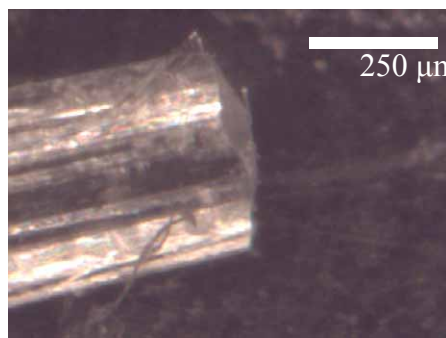
Effect of solvents on the growth morphology of DL Alanine crystals

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(A)

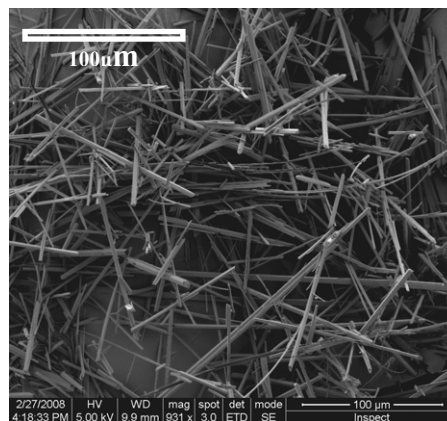


(B)

Figure S-1: (A) light microscope image of DL-alanine crystals crystallized from water
(B) DL-alanine crystal edge crystallized from water.



(A)



(B)

Figure S-2: Scanning electron micrograph of DL-alanine crystals crystallized from aqueous solutions with a 20% volume ratio of ethanol and IPA. (A) Water/IPA 20 Wt.%
(B) Water/EtOH 20%.

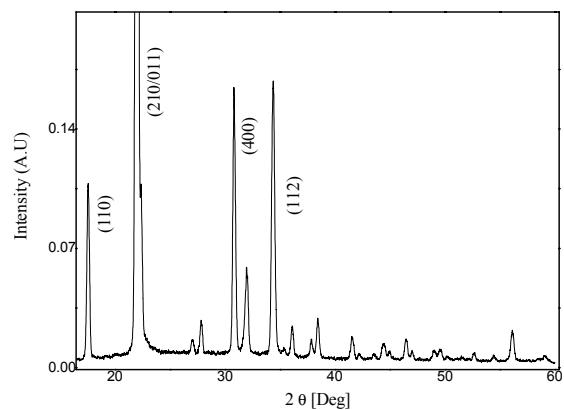
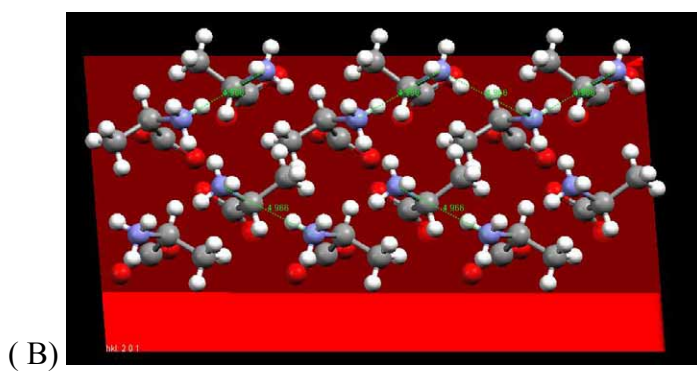
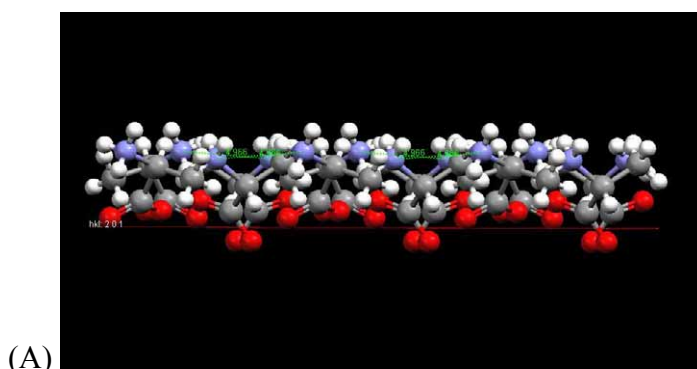


Figure S-3: Powder X-ray diffraction of DL-alanine crystallized from water.



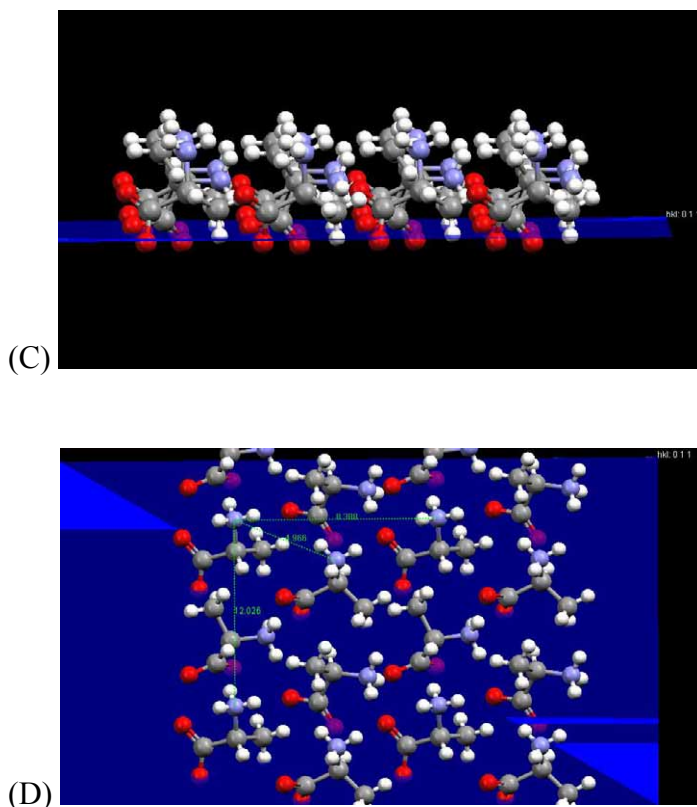


Figure S-4: Representation of the surface of (201) and (011) plans: (A) A slice of (201) plan, a side view (B) A slice of (201) plan, a top view (C) A slice of (011) plan, a side view (D) A slice of (011) plan, a top view.

Solubility Measurements: A series of mix solvents of water/IPA or water/Ethanol with 5% up to 40% alcohols volume ratio were prepared in a total volume 5 mL solution at room temperature. To those solutions portion of 50 mg of DL alanine powder were added and the solutions were shaken for 15 minutes using vortex. This procedure was performed until DL alanine could not be dissolved in the solutions by the vortex motion. Based on those preliminary solubility measurements we performed more accurate solubility test using the same procedure but with addition of 10 mg portion DL alanine.

Table S 1 Solubility of DL alanine in water-alcohols mixtures

	Ethanol			Isopropyl alcohol		
Alcohol %	Solubility (g/mL)	σ saturation index	Aspect ratio	Solubility (g/mL)	σ saturation index	Aspect ratio
5%	0.136	1.25	--	0.120	1.41	--
10%	0.118	1.44	--	0.114	1.49	3:1
15%	0.096	1.77	--	0.094	1.80	5:1
20%	0.076	2.23	100:1	0.078	2.17	15:1
25%	0.062	2.74	-	0.062	2.74	--
30%	0.048	3.54	-	0.044	3.77	40:1
40%	0.034	5.00	-	0.032	5.30	--

$$\sigma = \text{saturation index} = \frac{\text{DL alanine gr/mL}}{\text{solubility in gr/mL}}$$

Table S 2: Solubility of DL alanine in pure water

Pure water		
solubility (g/mL)	σ saturation index	Aspect ratio
0.196	1.41	-
0.208	1.49	-
0.240	1.80	-
0.302	2.17	30:1
0.380	2.74 *	45:1
0.536	3.77 *	-
0.742	5.30*	-

* Under those conditions the solutions are supersaturated and complete dissolution of DL is not achieved therefore the solutions were filtered with a Teflon filter (0.2 μm mesh) and left at room temperature for crystallization.