Electronic Supplementary Information

For

Electrochemical approach towards the controllable synthesis of highly ordered and hierarchical zinc oxide dendritic crystal composed of hexagonal nanosheets: some insights into the stacking-assembly of hierarchical architecture

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Table S1 Exact values of time, temperature and current of ZnO-s1

Time (s)	Temperature(°C)	Current (A)
60	50.2	0.1
120	50.7	0.11
180	51.3	0.12
240	51.8	0.13
300	52.3	0.14
360	52.9	0.15
420	53.4	0.155
480	53.8	0.16
540	54.2	0.17
600	54.8	0.175
660	55.4	0.18
720	55.7	0.185
780	55.9	0.19
840	56.2	0.2
900	56.4	0.205
960	56.9	0.21
1020	57.2	0.215
1080	57.4	0.22
1140	57.8	0.224
1200	58.3	0.228
1260	58.7	0.23
1320	58.8	0.234
1380	58.9	0.24
1440	59.1	0.245
1500	59.3	0.25
1560	59.4	0.255
1620	59.6	0.26
1680	59.7	0.265
1740	59.9	0.268
1800	59.8	0.269
1860	60.6	0.378
1920	60.7	0.38
1980	60.7	0.384
2040	60.8	0.39
2100	60.6	0.395
2160	60.5	0.398
2220	60.7	0.399
2280	60.7	0.4
2340	60.8	0.401
2400	60.8	0.4

Table S2 Exact values of time, temperature and current of ZnO-s2

Time (s)	Temperature(°C)	Current (A)
60	50.2	0.21
120	51.5	0.23
180	53.2	0.25
240	54.3	0.27
300	55.4	0.33
360	57.4	0.34
420	58.3	0.36
480	59.7	0.38
540	60.2	0.4
600	60.8	0.41
660	61.4	0.44
720	62.6	0.46
780	63.7	0.47
840	64.5	0.49
900	65.3	0.51
960	66.4	0.53
1020	67.5	0.55
1080	68.6	0.56
1140	68.9	0.58
1200	69.2	0.64
1260	69.8	0.66
1320	70.3	0.67
1380	70.8	0.69
1440	71.5	0.7
1500	72.6	0.72
1560	71.8	0.73
1620	72.3	0.74
1680	73.2	0.75
1740	73.4	0.76
1800	73.5	0.76
1860	73.8	0.78
1920	74.1	0.78
1980	74.3	0.79
2040	74.5	0.8
2100	74.8	0.8
2160	75.2	0.81
2220	75.3	0.82
2280	75.3	0.82
2340	75.8	0.83
2400	75.9	0.84
2460	76.2	0.85

2520	76.4	0.84
2580	76.5	0.85
2640	76.7	0.84
2700	76.8	0.85
2760	76.8	0.85
2820	76.9	0.86
2880	77.5	0.86
2940	77.5	0.87
3000	77.6	0.88
3060	77.6	0.88
3120	77.8	0.88
3180	77.8	0.88

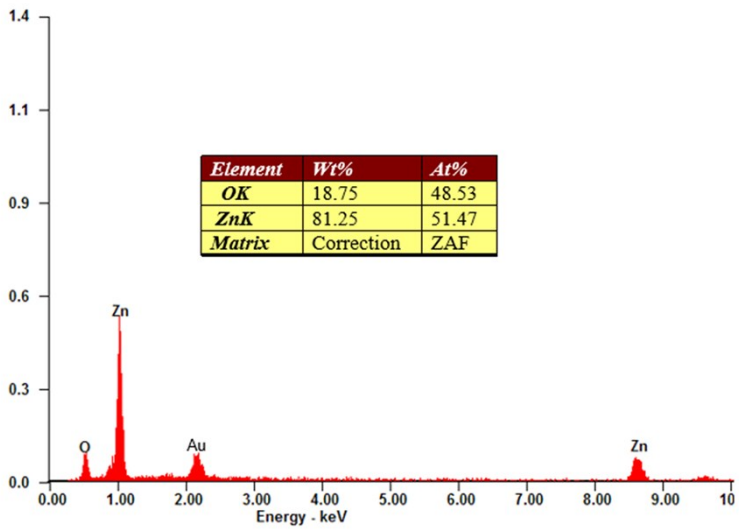

Fig. S1 EDX spectra confirming the Zn and O peaks and, the actual composition of ZnO dendritic crystals.

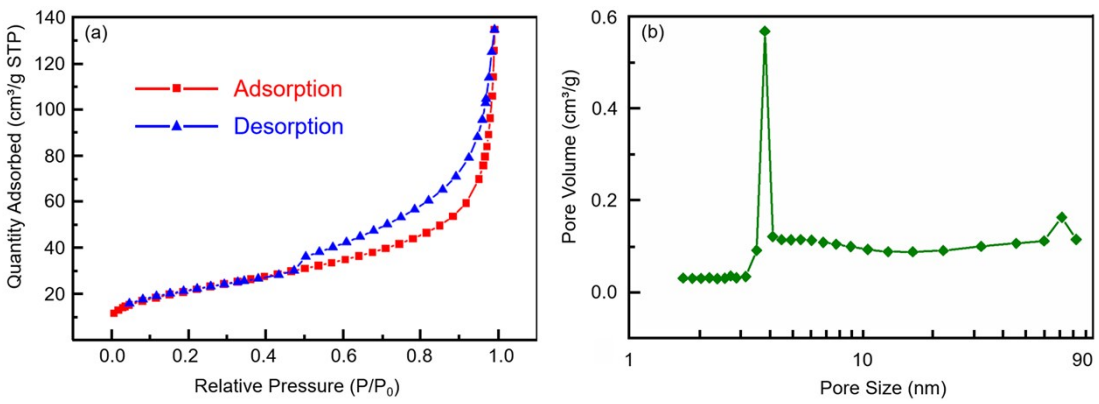

Fig. S2 (a) Nitrogen adsorption-desorption isotherm loop and (b) BJH pore-size distribution of the ZnO dendritic crystals.

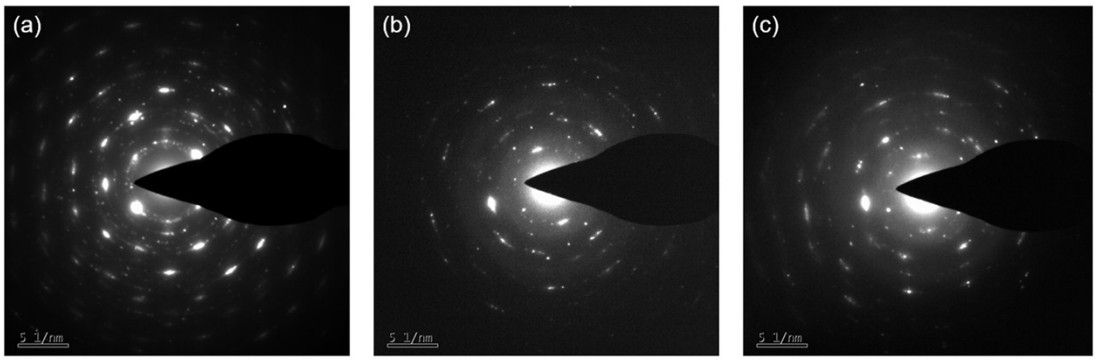

Fig. S3 SAED patterns of the (a) trunk zone, (b) branching zone and (c) growing tip of the hierarchical ZnO dendritic crystal.

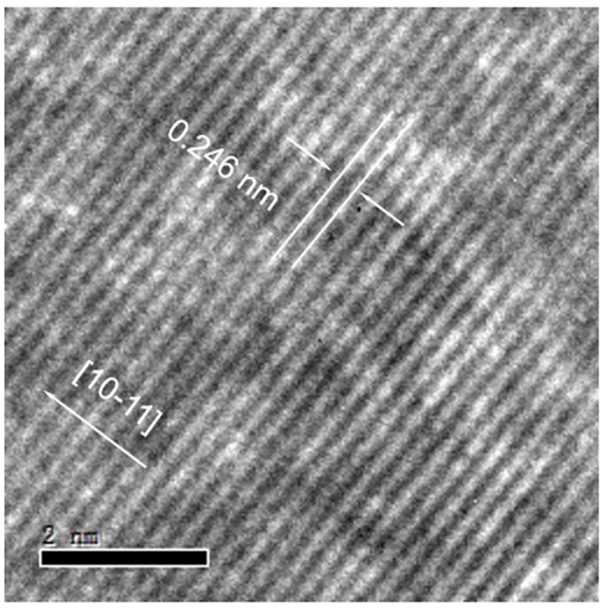

Fig. S4 HRTEM images of (101) plane the hexagonal nanosheet.