Electronic Supplementary Material (ESI) for Journal of Materials Chemistry C.

Supporting Information

Field Emission Behaviors of $CsPbI_3$ Nanobelts

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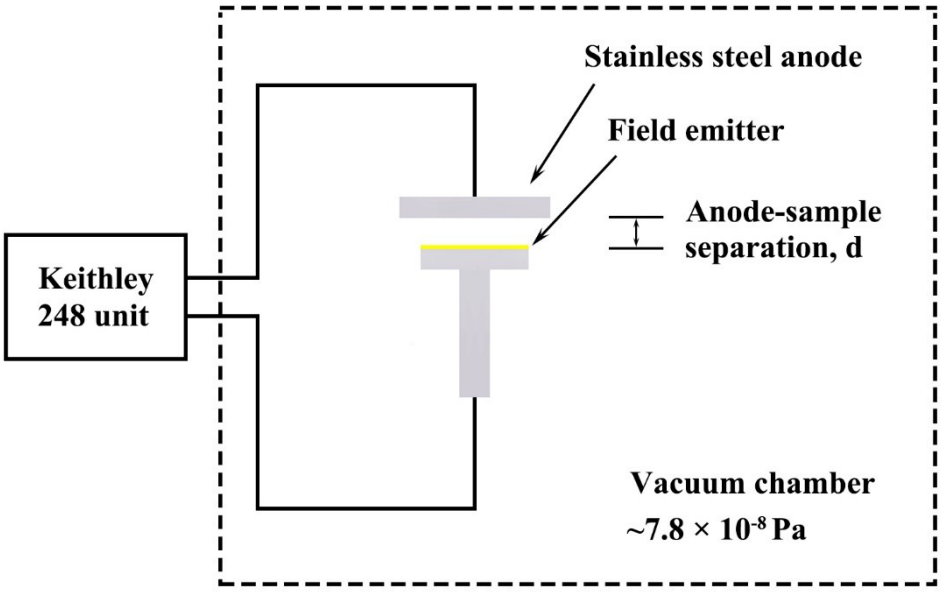

Fig. S1 Schematic diagram of the experimental setup used for measuring FE properties of $CsPbI_3$ nanobelts.

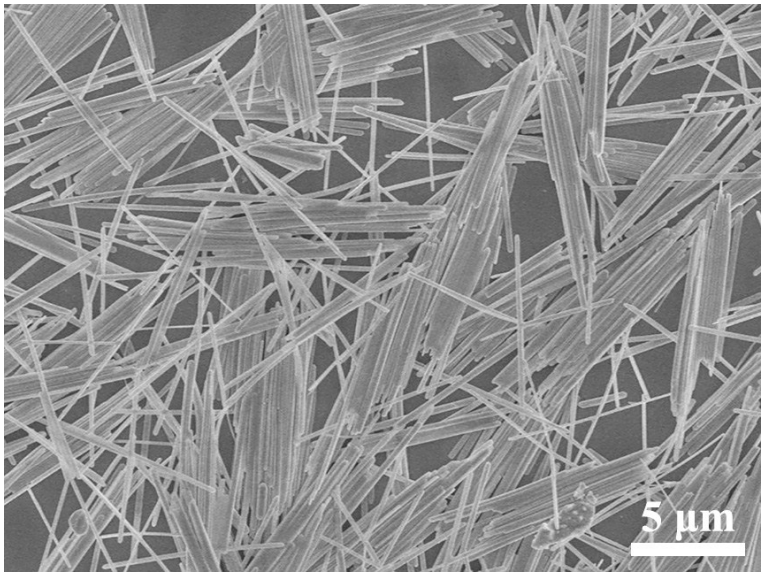

Fig. S2 Typical SEM image of the $CsPbI_3$ nanobelt emitter under a low magnification.

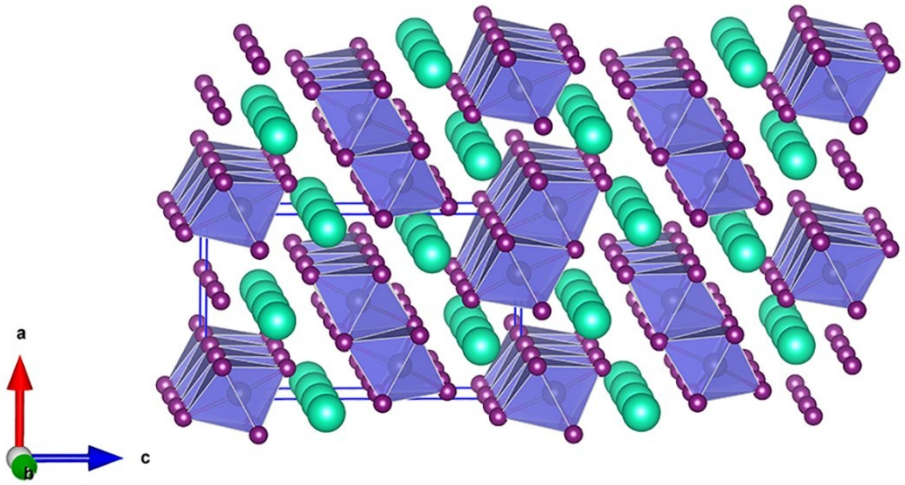

Fig. S3 The crystal structure of $CsPbI_3$ nanobelts.

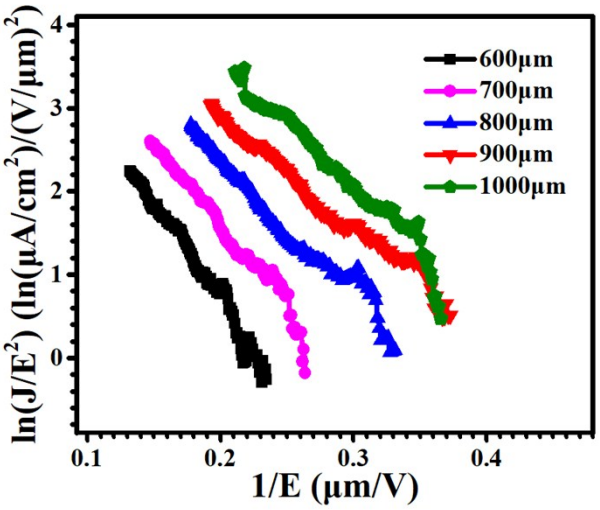

Fig. S4 *F-N* plots of $CsPbI_3$ nanobelt emitters with *d* fixed at 600-1000 μm with an interval of 100 μm.

Table S1 Turn-on fields (E_{to}) and β of typical semiconductor emitters ever reported.

Field emitters	E_{to} **(V/μm)**	β	***Ref.***
ZnS nanobelts	3.47	2010	1
AlN nanorod arrays	4.7	1888.7	2
Aligned AlN nanorods	3.8	950	3
CdS nanobelts	3.7	1298	4
CdS nanowire arrays	11.5	602	5
GaN nanocolumns	2.6	9725	6
Aligned ZnO nanobelts	1.3	14000	7
WO_3 nanowires	4.8	-	8
MoS_2 nanoflowers	4.5	-	9
SnO_2 nanowires	3.5	1225	10
β-Ga_2O_3 nanopillars	30	200	11
β-Ga_2O_3 nanobelts	5.37	2242	12
SiC nanowires/nanorods	3.33	-	13
B-doped SiC nanowires	0.68	5464	14
Si nanowires	7.3	424	15
$CsPbI_3$ nanorods	4	-	16
$CsPbI_3$ rGO composite	2.5	11000	
$CH_3NH_3PbI_{3-x}Cl_x$ film	5.56	3183	17
$CH_3NH_3PbI_3$ nanorods	4.2	-	18
$CsPbI_3$ nanobelts	**2.62**	**3553**	**Our work**

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