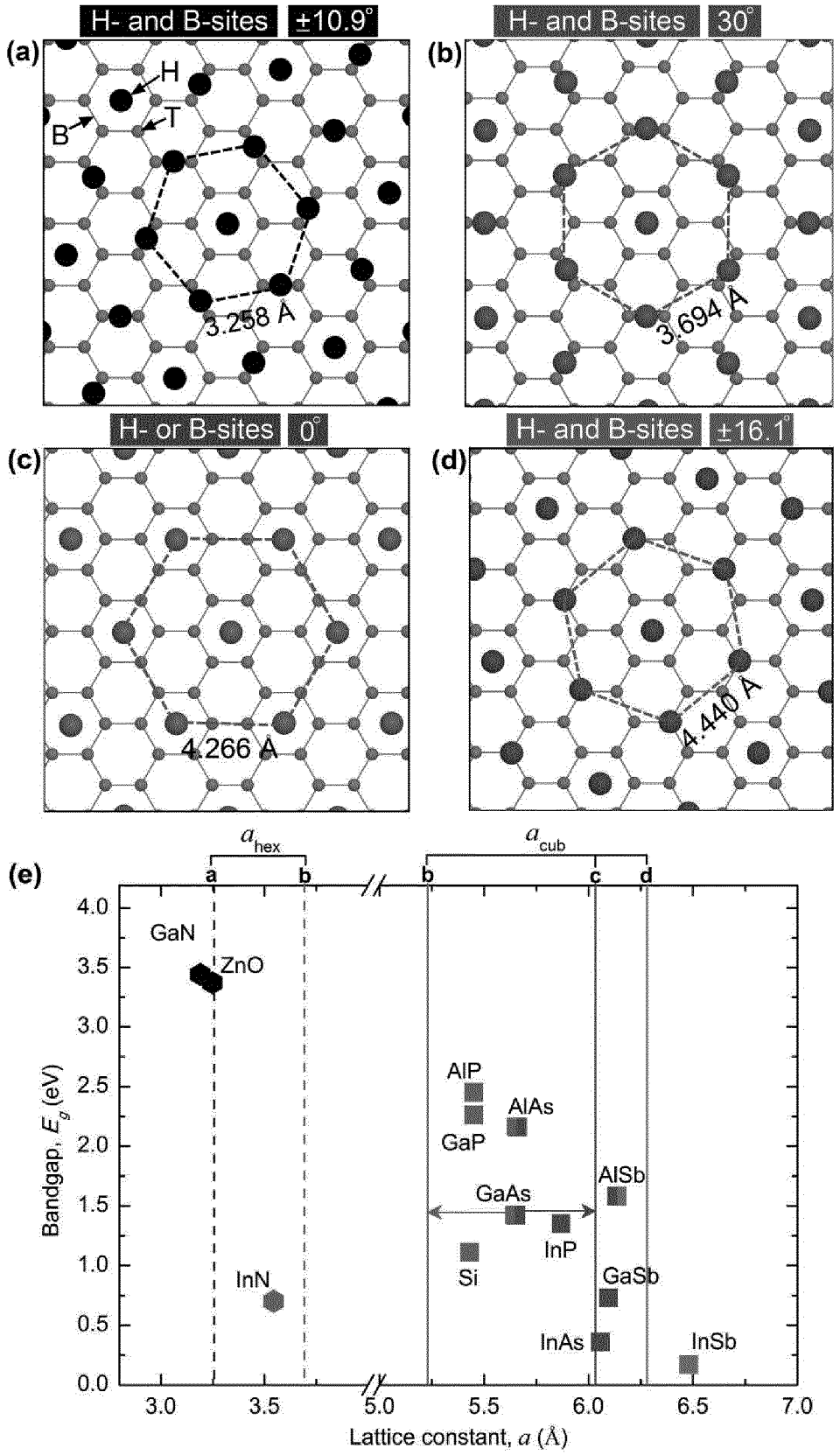
Figure 1


H- and B-sites ±10.9°
(a)
H
T
B
3.258 Å
H- and B-sites 30°
(b)
3.694 Å
H- or B-sites 0°
(c)
4.266 Å
H- and B-sites ±16.1°
(d)
4.440 Å
(e)
a_{hex}
a_{cub}
a
b
b
c
d
GaN
ZnO
InN
AlP
AlAs
GaP
GaAs
AlSb
InP
Si
GaSb
InAs
InSb
Bandgap, E_g (eV)
Lattice constant, a (Å)
4.0
3.5
3.0
2.5
2.0
1.5
1.0
0.5
0.0
3.0
3.5
5.0
5.5
6.0
6.5
7.0

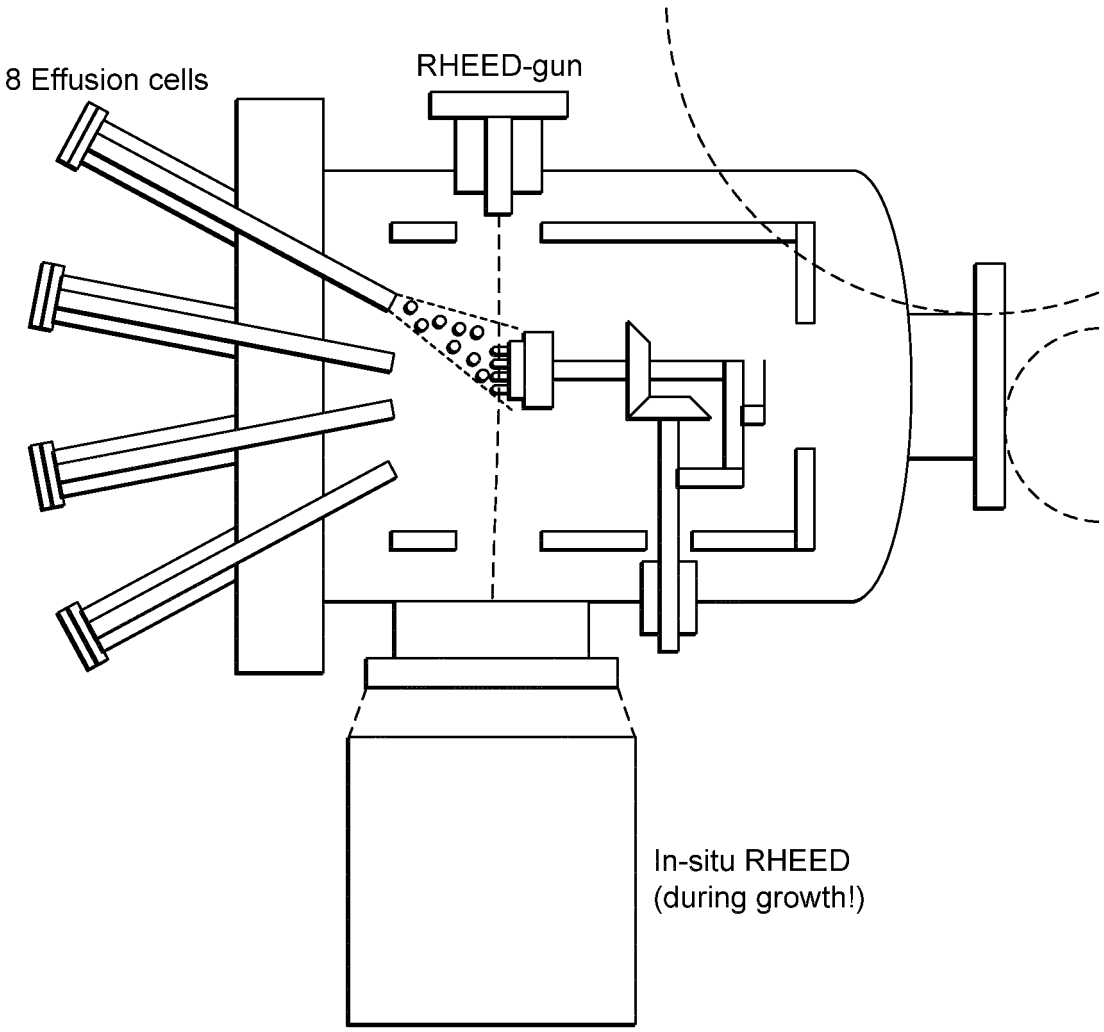


Fig. 2

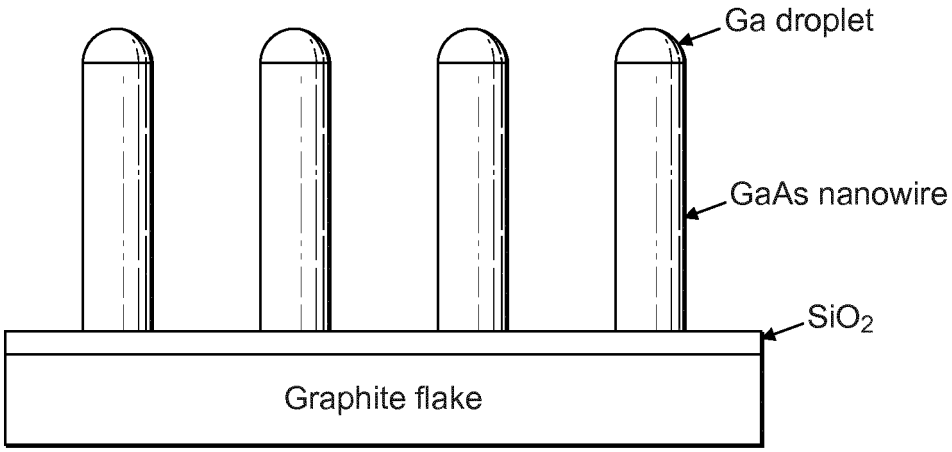


Fig. 3A

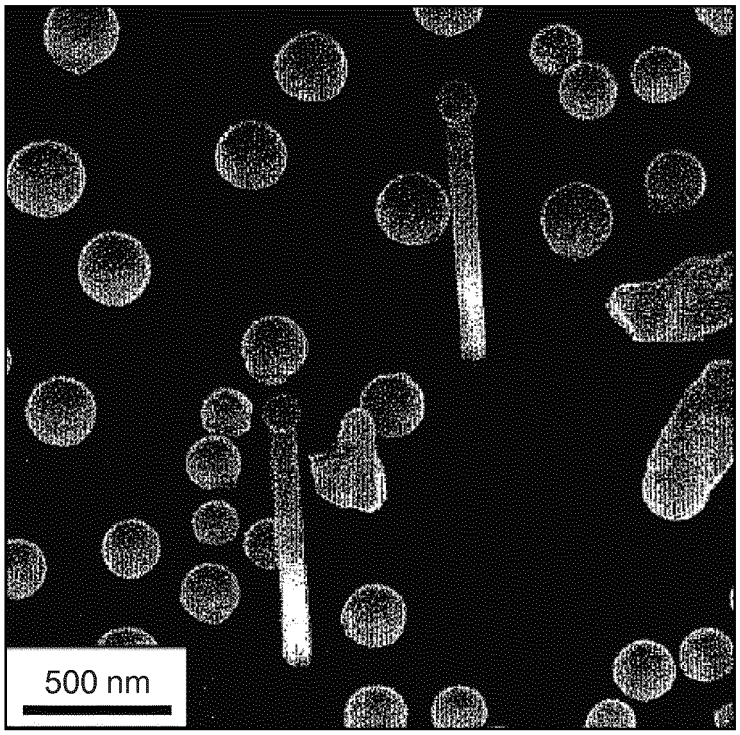


Fig. 3B

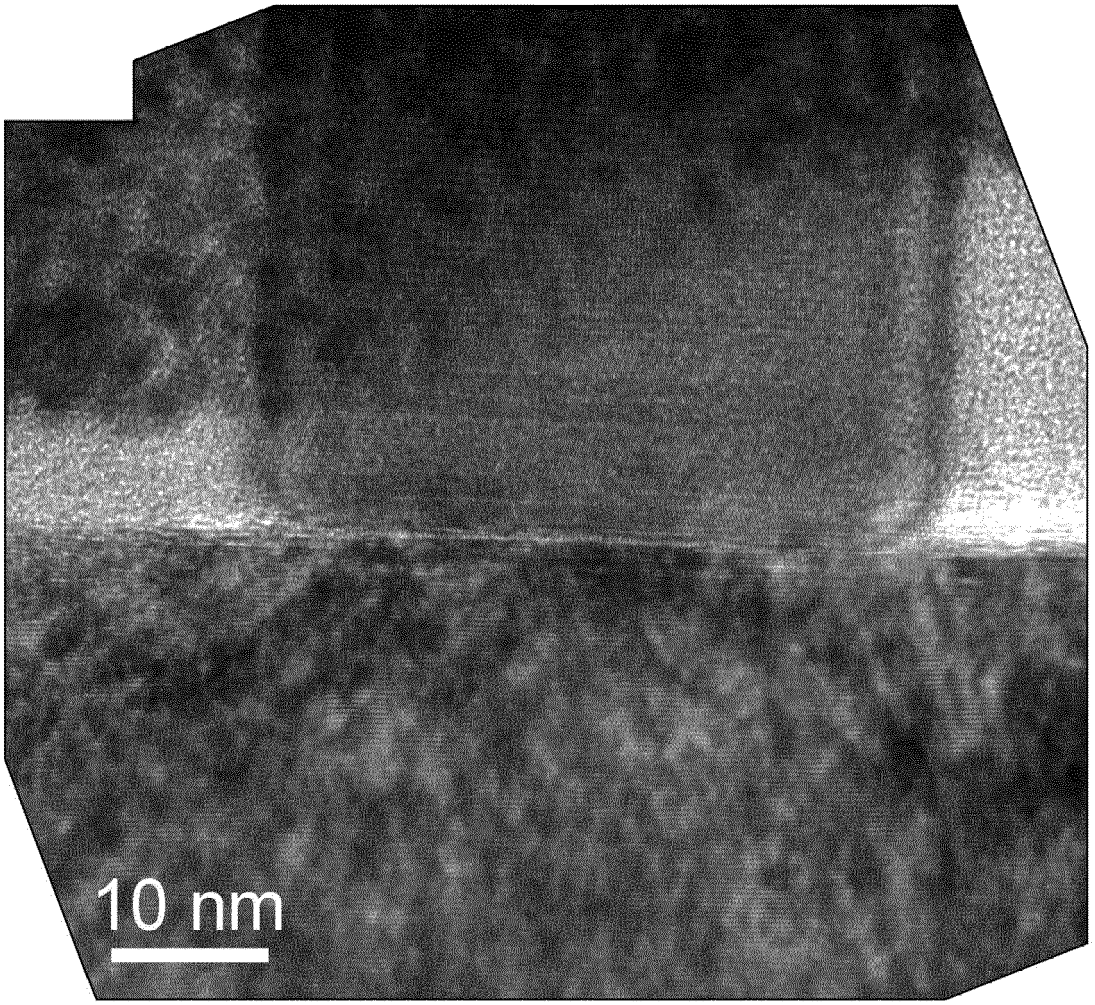


Fig. 3C

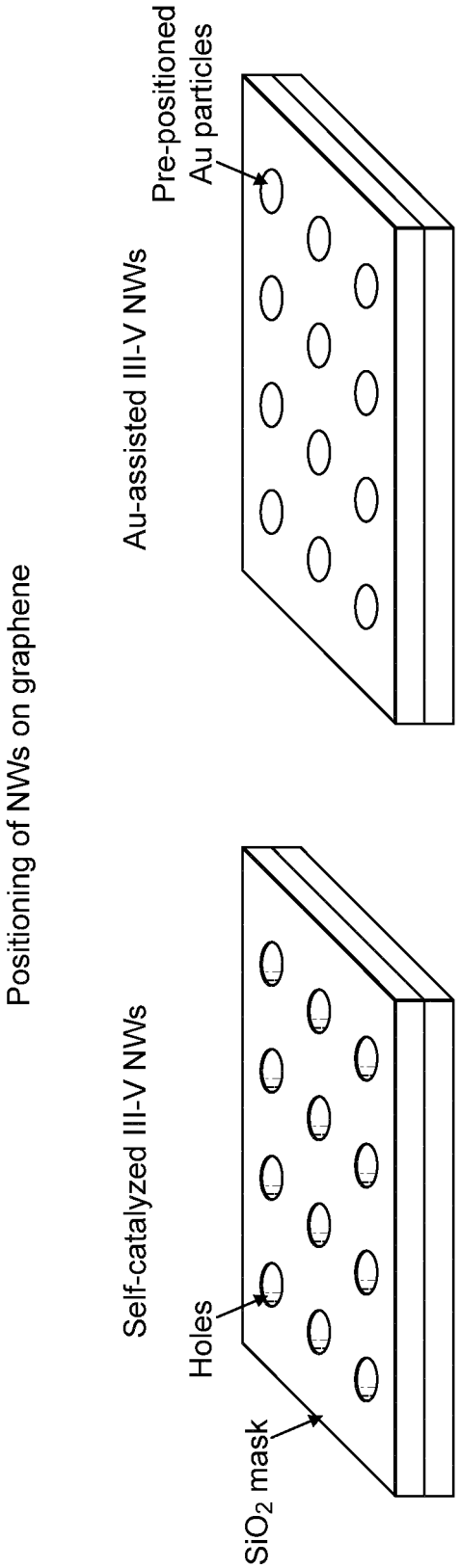

Positioning of NWs on graphene
Au-assisted III-V NWs
Pre-positioned Au particles
Self-catalyzed III-V NWs
Holes
SiO_2 mask

Fig. 4

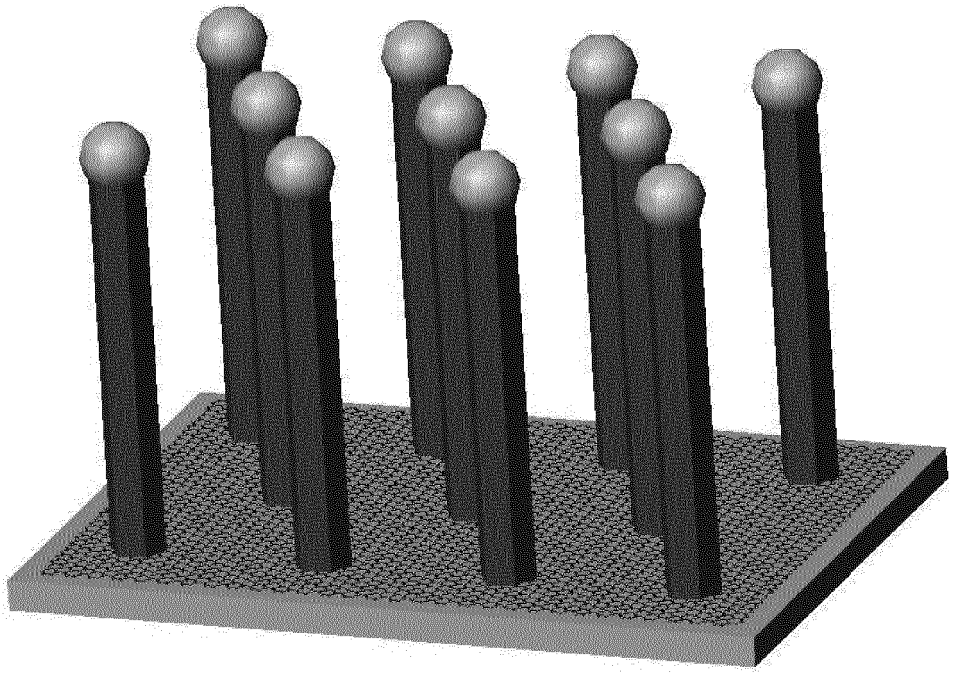


Fig 5a

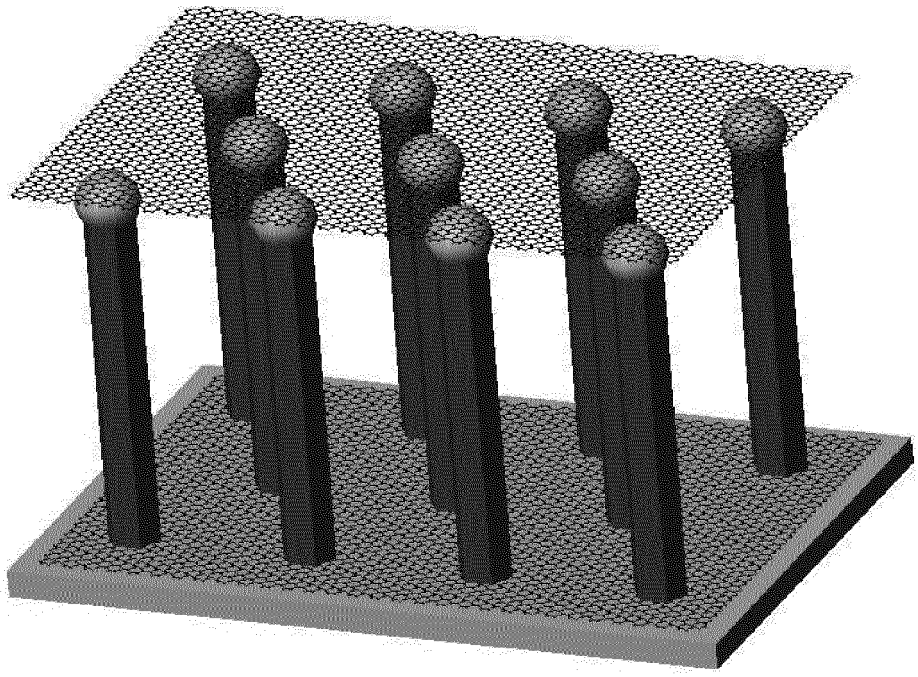


Fig 5b

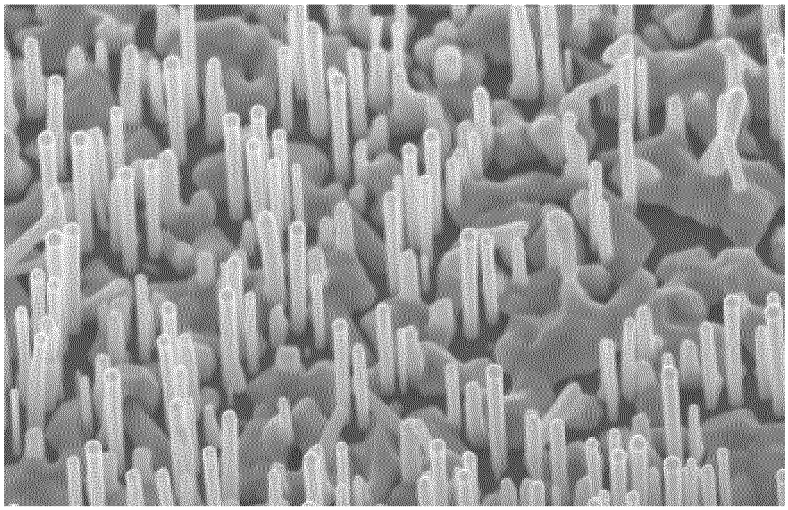


Figure 6a

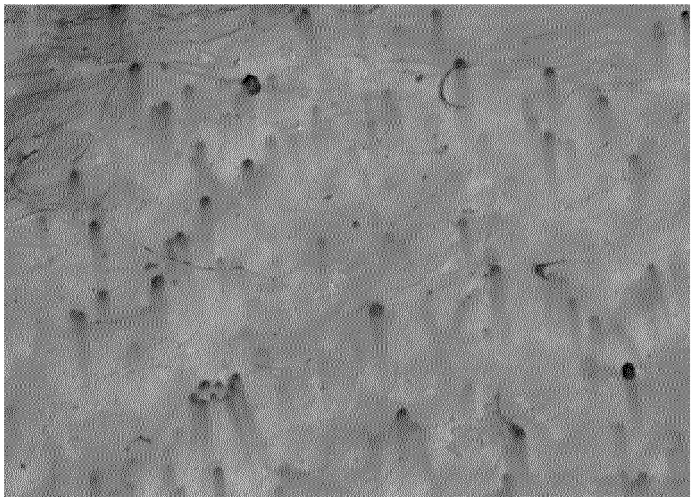


Figure 6b

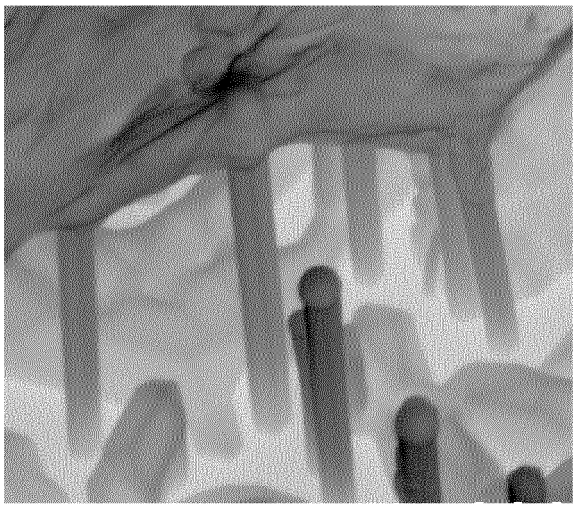


Figure 6c