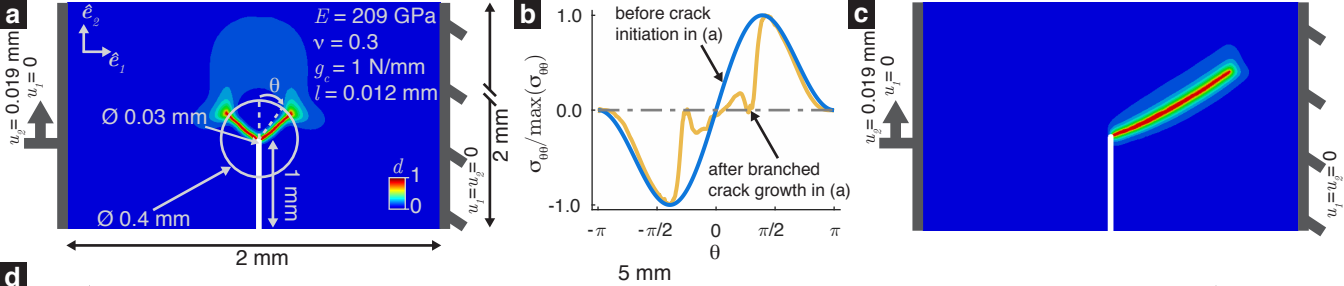
a
$\hat{e}_2$
$\hat{e}_1$
E = 209 GPa
ν = 0.3
g_c = 1 N/mm
l = 0.012 mm
θ
Ø 0.03 mm
Ø 0.4 mm
1 mm
d
1
0
2 mm
2 mm
u_2 = 0.019 mm
u_1 = 0
u_1 = u_2 = 0
b
before crack initiation in (a)
after branched crack growth in (a)
$\sigma_{\theta\theta}/\max(\sigma_{\theta\theta})$
1.0
0.0
-1.0
-π
-π/2
0
π/2
π
θ
c
u_2 = 0.019 mm
u_1 = 0
u_1 = u_2 = 0
d
5 mm
0.5 mm
$\hat{e}_2$
$\hat{e}_1$
E=20.8 GPa
ν=0.25
g_c=1 N/mm
l= 0.03 mm
u_1 = 0
u_2 = 0
u_1 = 0.18 mm