Energy release rate $G_{(..)}$ as a function of debond angular semi-aperture $\Delta\theta$

G_I
G_{II}
G_{TOT}

$G_{(\cdot\cdot)}\ \left[\frac{J}{m^2}\right]$

0.7
0.65
0.6
0.55
0.5
0.45
0.4
0.35
0.3
0.25
0.2
0.15
0.1
$5 \cdot 10^{-2}$
0

−180 −170 −160 −150 −140 −130 −120 −110 −100 −90 −80 −70 −60 −50 −40 −30 −20 −10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160 170 180

$\Delta\theta\ [^\circ]$