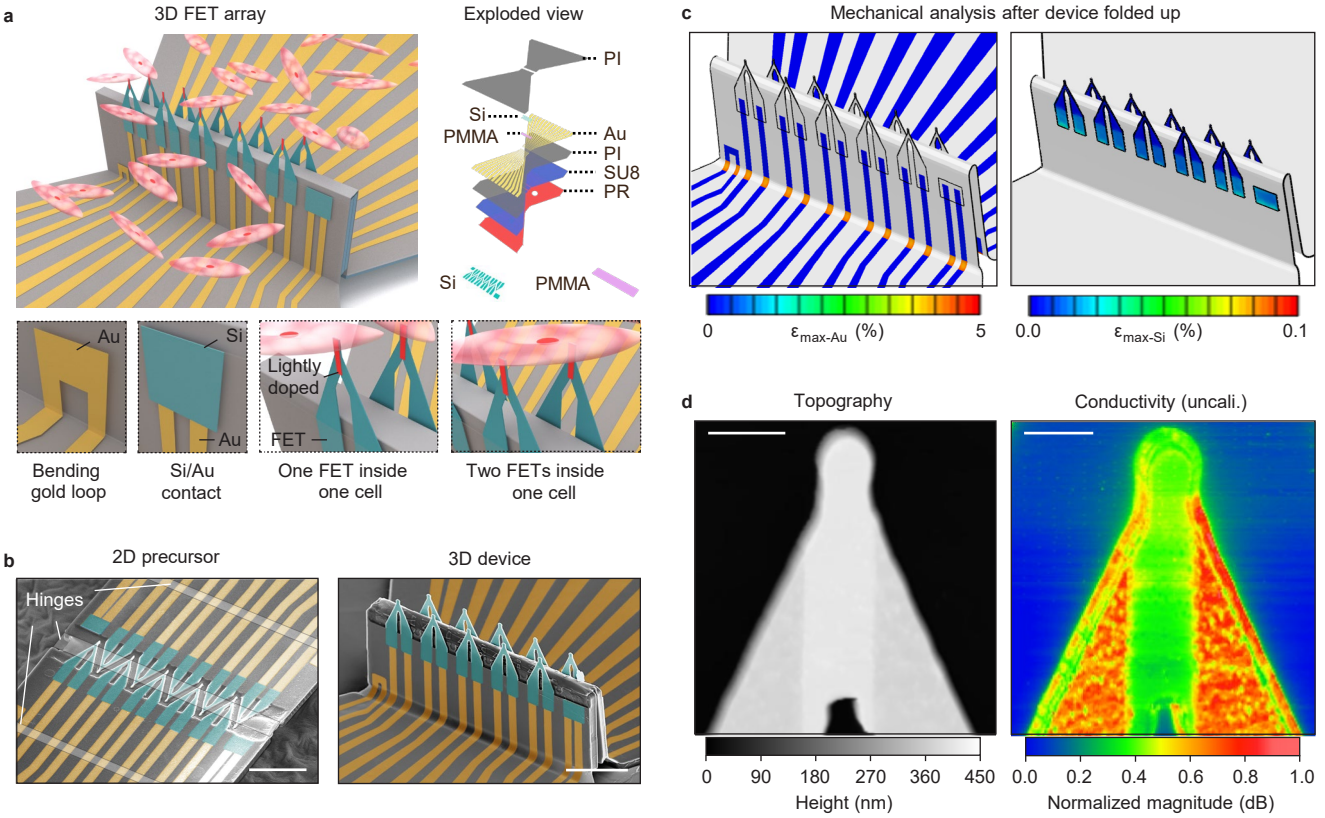
a
3D FET array
Exploded view
PI
Si
PMMA
Au
PI
SU8
PR
Si
PMMA
Au
Si
Au
Lightly doped
FET
Bending gold loop
Si/Au contact
One FET inside one cell
Two FETs inside one cell
b
2D precursor
3D device
Hinges
c
Mechanical analysis after device folded up
0
$\varepsilon_{max\text{-}Au}$ (%)
5
0.0
$\varepsilon_{max\text{-}Si}$ (%)
0.1
d
Topography
Conductivity (uncali.)
0
90
180
270
360
450
Height (nm)
0.0
0.2
0.4
0.6
0.8
1.0
Normalized magnitude (dB)