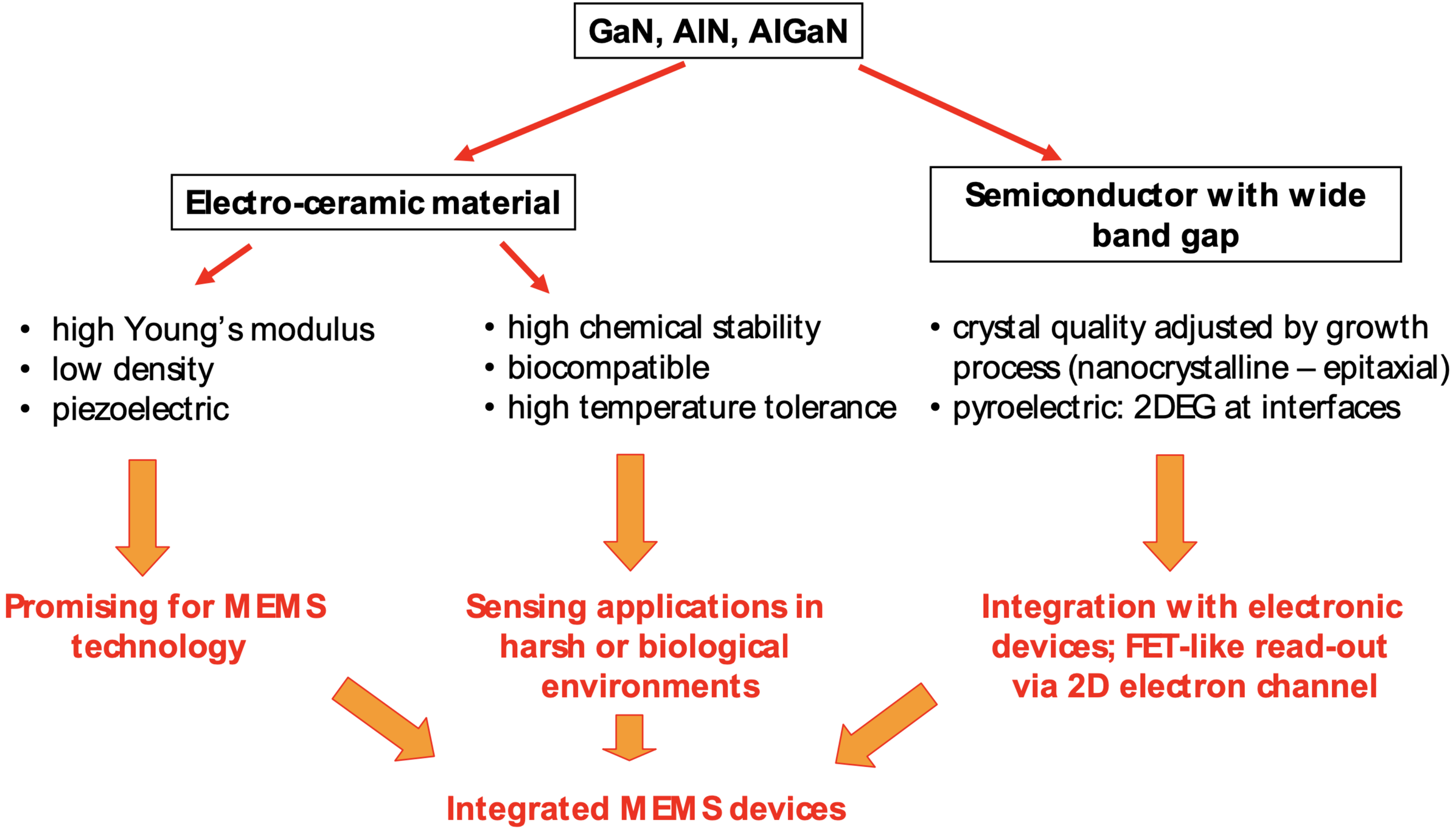
GaN, AlN, AlGaN
Electro-ceramic material
Semiconductor with wide band gap
• high Young's modulus
• low density
• piezoelectric
• high chemical stability
• biocompatible
• high temperature tolerance
• crystal quality adjusted by growth process (nanocrystalline – epitaxial)
• pyroelectric: 2DEG at interfaces
Promising for MEMS technology
Sensing applications in harsh or biological environments
Integration with electronic devices; FET-like read-out via 2D electron channel
Integrated MEMS devices