2.2.4 Summary to: Conductors - General Applications

No electrical engineering without conductors! Hundreds of specialized metal alloys exist just for "wires" because besides σ , other demands must be met, too:

Example for unexpected conductors being "best" compromise: Money, Chemistry (try Na!), Mechanical and Thermal properties, Compatibility with other materials, Compatibility with production technologies, ...

Poly Si, Silicides, TiN, W in integrated circuits.

Don't forget Special Applications:

Contacts (switches, plugs, ...); Resistors; Heating elements; ...