

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; ...