

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; ...