

2.3.4 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:

➤ Don't forget Special Applications:

Money, Chemistry (try Na!),
mechanical and thermal properties,
compatibility with other materials,
compatibility with production
technologies, ...

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

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