

PROJECT LIST ASSIGNMENT

Assigned group	Title/Objective	Professor
1	Design an optical mixer on the basis of LT GaAs involving Graphene for THz enhancement via Plasmonics, in the centre of broad-band log-periodic antenna.	Hartnagel
2	Doppler radar: The goal of the radar is the detection of excess speed for vehicles on the road.	Leuzzi
3	Design an optical system of steering automobiles between white lines on Motorway Lanes in view of driver-free traffic of the future	Hartnagel
4	Wireless monitoring of the health state of elderly	Johansen
5	Design a base station for broad.band communication on the basis of GaN HEMT. Describe in detail each of the components and their particular properties	Hartnagel
6	Wireless body area network operating in ISM band at 5.8 GHz	Raida
7	Dental imaging system using THz technology	Johansen
8	Design a power amplifier with a GaAs HEMT for a mobile telephone receiving also video signals	Hartnagel
9	Evaluation of a skin-cancer early stage diagnostic system based on MIR wavelengths	Acedo
10	For a systematic search of hidden weapons under garments, Terahertz waves can be employed. Design a system, where persons can walk through a gate	Hartnagel
11	Design a solar cell with 0.5 micrometer diameter Ag wires for plasmonic enhancement of photon transfer	Hartnagel
12	Design a measurement system for contact less monitoring of a patient vital functions, heartbeats and breathing	Hoffmann