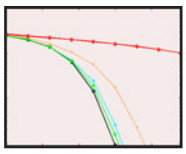
in brief

INCOMING TRANSMISSION

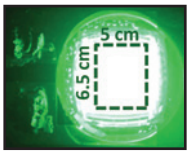
PAGE 469 Researchers in Saudi Arabia and the USA have proposed an adaptive frequency-domain equaliser for a single carrier FDMA system using a particle swam optimisation (PSO) technique with application in current and future generation mobile systems. Results show that PSO has greater computational efficiency than its time domain counterpart.



A PSO technique to improve efficiency in mobile systems

BRIGHT GREEN

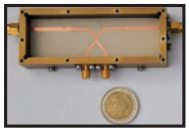
PAGE 457 Work in China has demonstrated that a high-power single-chip green LED can be applied to RGB general lighting, projection and scene view lighting, and that this high voltage design is a feasible approach to fabricate high power LED chips. With this high power LED, costs can be reduced owing to the reduction in expenditure for package and assembly.



Single chip green LED may be used in multiple lighting applications for reduced cost

TO COLDLY GO

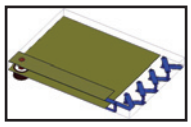
PAGE 449 To improve the performance of the new radiotelescope in Sardinia, researchers in Italy have proposed a new directional coupler to be used in the front end of the L-band receiver. The new coupler has had the operating temperature lowered to 20K, with measurements at this temperature showing a good agreement with design requirements.



New directional coupler operating at cryogenic temperatures improves Sardinian radiotelescope performance

TELEDOC

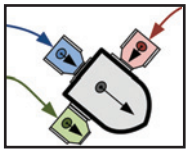
PAGE 429 Researchers from France have presented two different types of inverted-F antennas which can be integrated into a microSD card. Operating at frequencies dedicated to medical applications, the antennas improve the collection of information from different low-power active medical implants with data routed to appropriate practitioners via public cellular networks.



Antenna integrated into microSD card allows improved data transmission from low power active medical implants

DOCKING STATIONS

PAGE 436 A novel docking control algorithm, which covers both stationary and moving stations, has been proposed by researchers from Korea. The algorithm may have applications in numerous industrial and scientific fields including ship-to-ship mooring systems, aerial refuelling systems and multiple robot systems.



Novel docking control algorithm may have multiple applications in industrial and scientific settings

doi: 10.1049/el.2014.0720