



EVERYTHING YOU NEED TO KNOW

## 62 2010 ANNUAL INSTANT EXPERT SPECIAL

Science made easy on rebuilt minds, desalination and more!



FIELD WORK

## 72 THE TREASURE OF THE SAFIT CHIR

Understanding the true scope of Afghanistan's mineral wealth.



UNCOMMON KNOWLEDGE

## 80 SCIENCE CONFIRMS THE OBVIOUS

The real story behind scientific truisms.

# REGULARS

## MEGAPIXELS

### 10 EVERY BREATH YOU FAKE

Scientists simulate a lung on a chip

### 12 A POWERFUL LESSON

Fireworks are dangerous, m'kay?

## WHAT'S NEW

### 14 POWER PLANT

Photovoltaic 'leaves' for solar power

### 15 HANDS FREE

Video games without controllers

### 16 THE GOODS – SUPERSIZED

High-tech cameras, shoes, sunnies and more

### 20 UNWIRED FOR SOUND

Multi-room sound, without the cables

### 22 3D HEAD-TO-HEAD

Real-world test of the 3D effect at home

### 28 IPAD VS GALAXY TAB

Samsung's answer to the Apple iPad

### 34 TRAFFIC LIGHT GRAND PRIX

Formula One tech in consumer cars

## HEADLINES

### 36 A DRUG FOR EVERY DISEASE

Protein killer that could treat cancer

### 38 DRIVE-THRU DETECTION

Scanning for terrorist threats on the roads

### 40 952 SOLAR PANELS ON ONE ROOF

The biggest commercial installation in Oz

### 42 SECRETS IN THE SOIL

The big numbers on biochar and emissions

## HOW 2.0

### 88 FLAME ON

Shooting flames six metres into the air

### 90 TO CATCH A THIEF

Installing your own security cameras

### 92 COOL HAND THEO

A layer of bubbles to protect the flesh

### 93 ASK A GEEK

The best way to clean out your hard drive

## FYI

94 Fantasy evolution, why it's hard to wake up, how close you can get to the Sun

## OTHER STUFF

6 FROM THE EDITOR

8 THE INBOX

70 SUBSCRIPTIONS

86 NEXT ISSUE

96 SHOWCASE

98 THE WORST JOBS IN SCIENCE