



# SUNNY PUZZLES

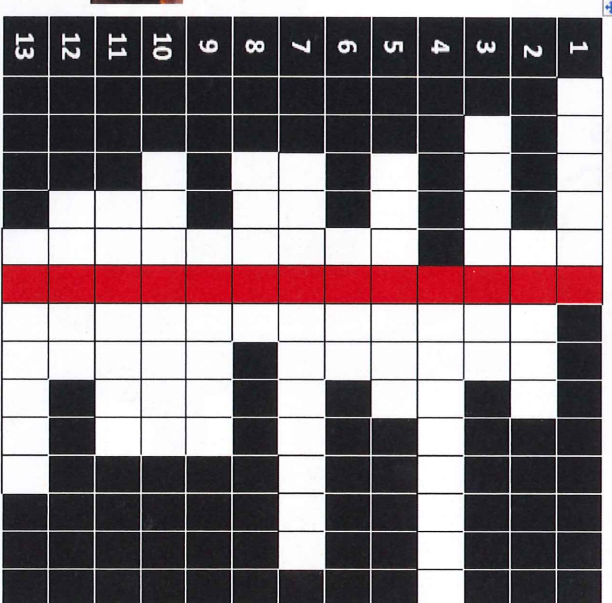
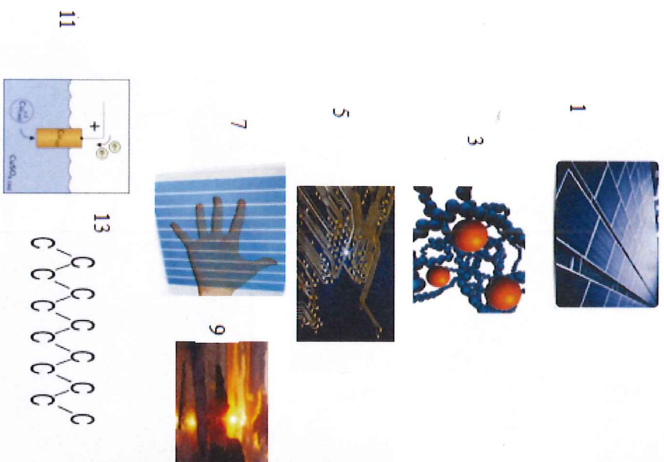
## THE PHOTOVOLTAIC RELAX

THIS IS A PUZZLE INSERTION FROM A NEWSPAPER BASED ON ORGANIC PHOTOVOLTAIC PANELS.

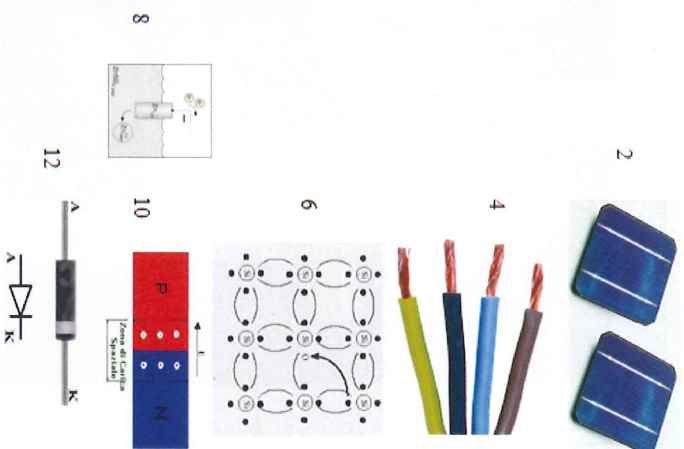
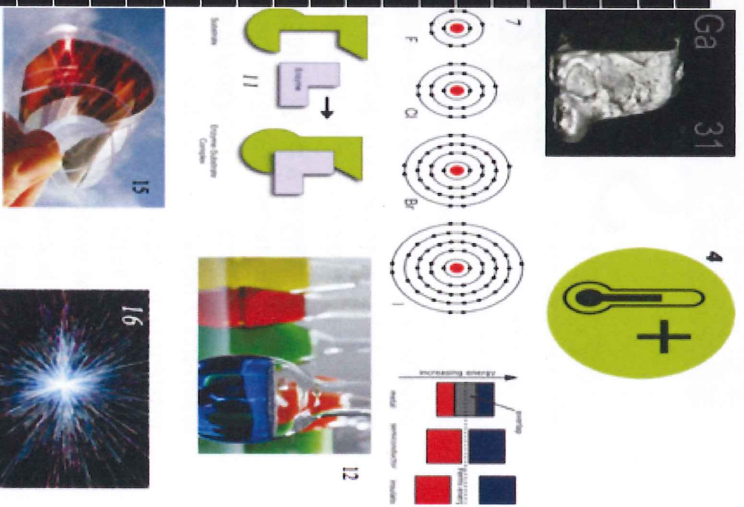
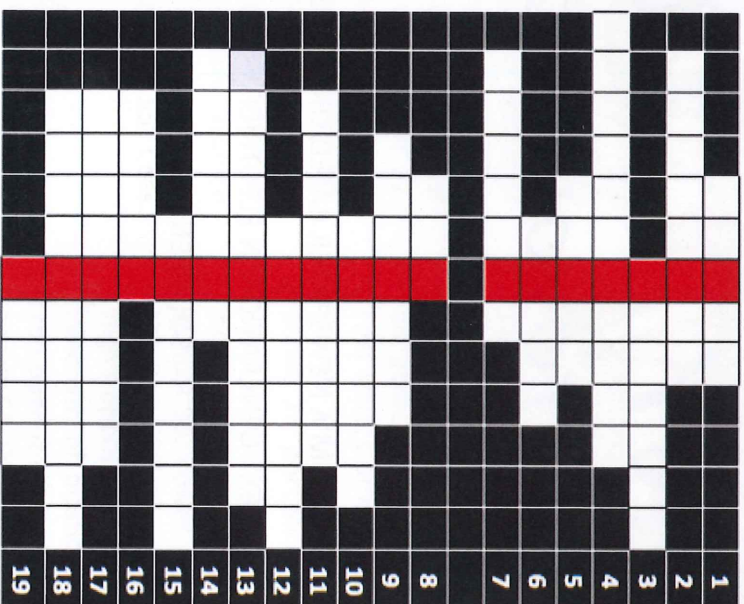
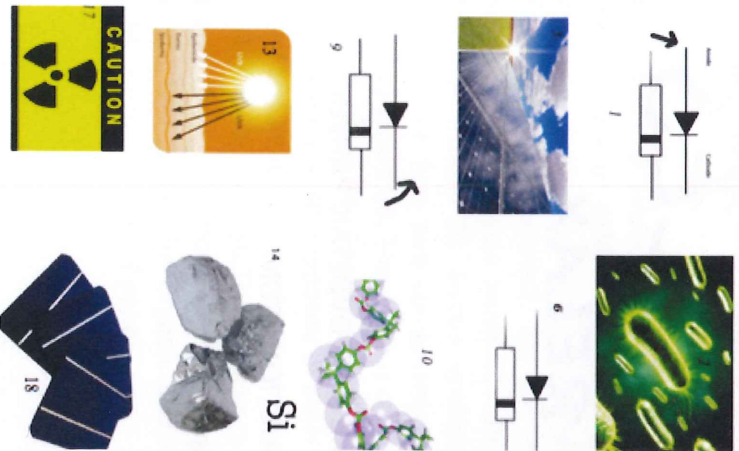
OPV ARE THE NEXT GENERATION IN ELECTRICITY PRODUCTION FROM  
SOLAR ENERGY

E	N	E	S	I		C	L		S	P	A	N	E	S	H	I
E	N	R	I	C	O		L	G		M				M	U	S
M	I	C	H	E	L	A		A	H	M	O	N	T	I	C	E
M	A	R	T	A				S	I		C	I	P	O	L	L
R	I	C	C	A	R	D	O		S					S	P	A
S	I	M	O	N	E			E	I					M	O	T
S	T	E	F	A	N	I	A	3°	A		P	A	L	L	A	D

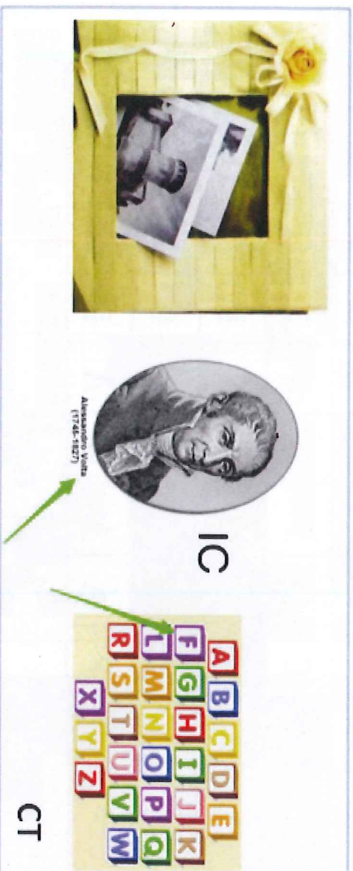
INSERT THE DEFINITIONS THROUGH THE IMAGES TO FIND THE HIDDEN WORD:  
**THE SILICON IS A ...**



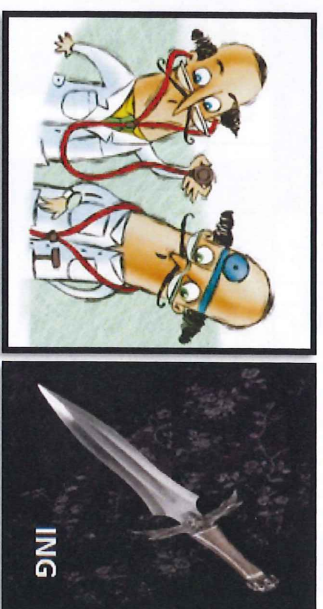
THE NEW TYPE OF PANELS...



REBUS (12-6) Conversion phenomenon of the light into electric Energy:

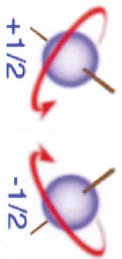


REBUS (6-7) The process to produce medium size panels:



REBUS  
(4-7)

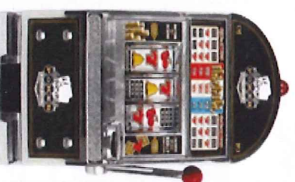
The process to produce a small panel:



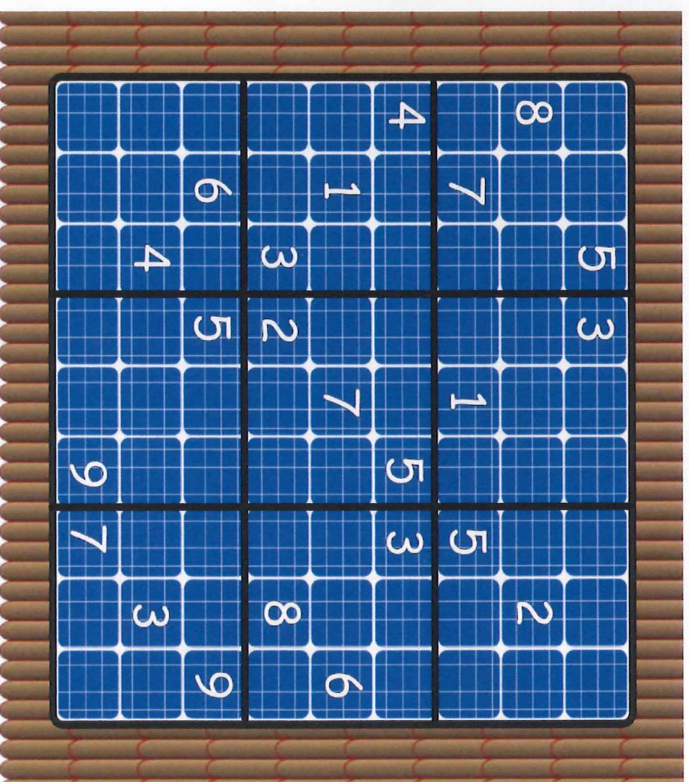
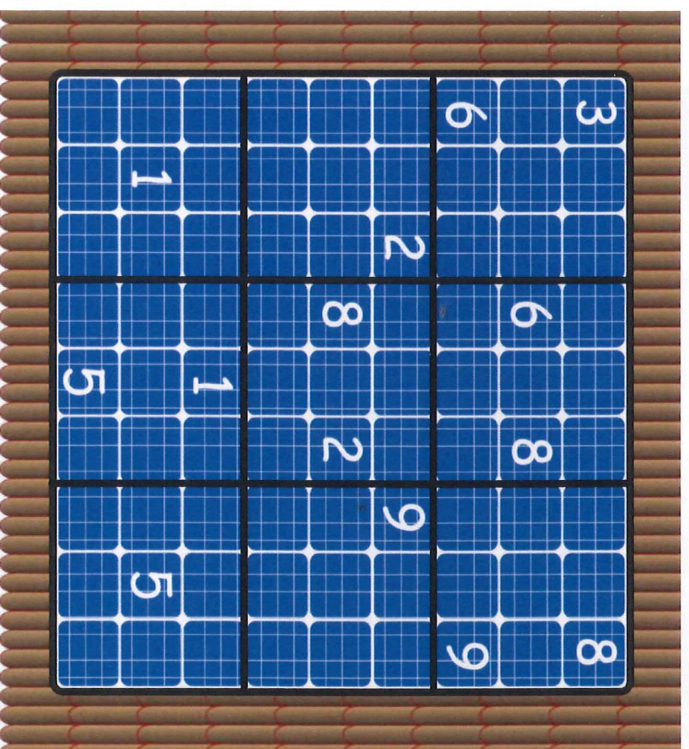
ING

REBUS  
(4-3)

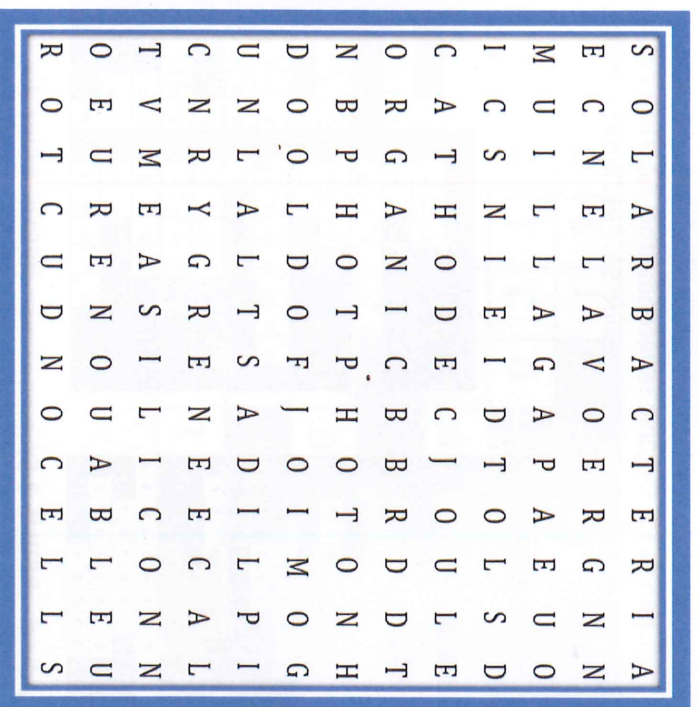
The process to produce big panels:



## SUDOKU

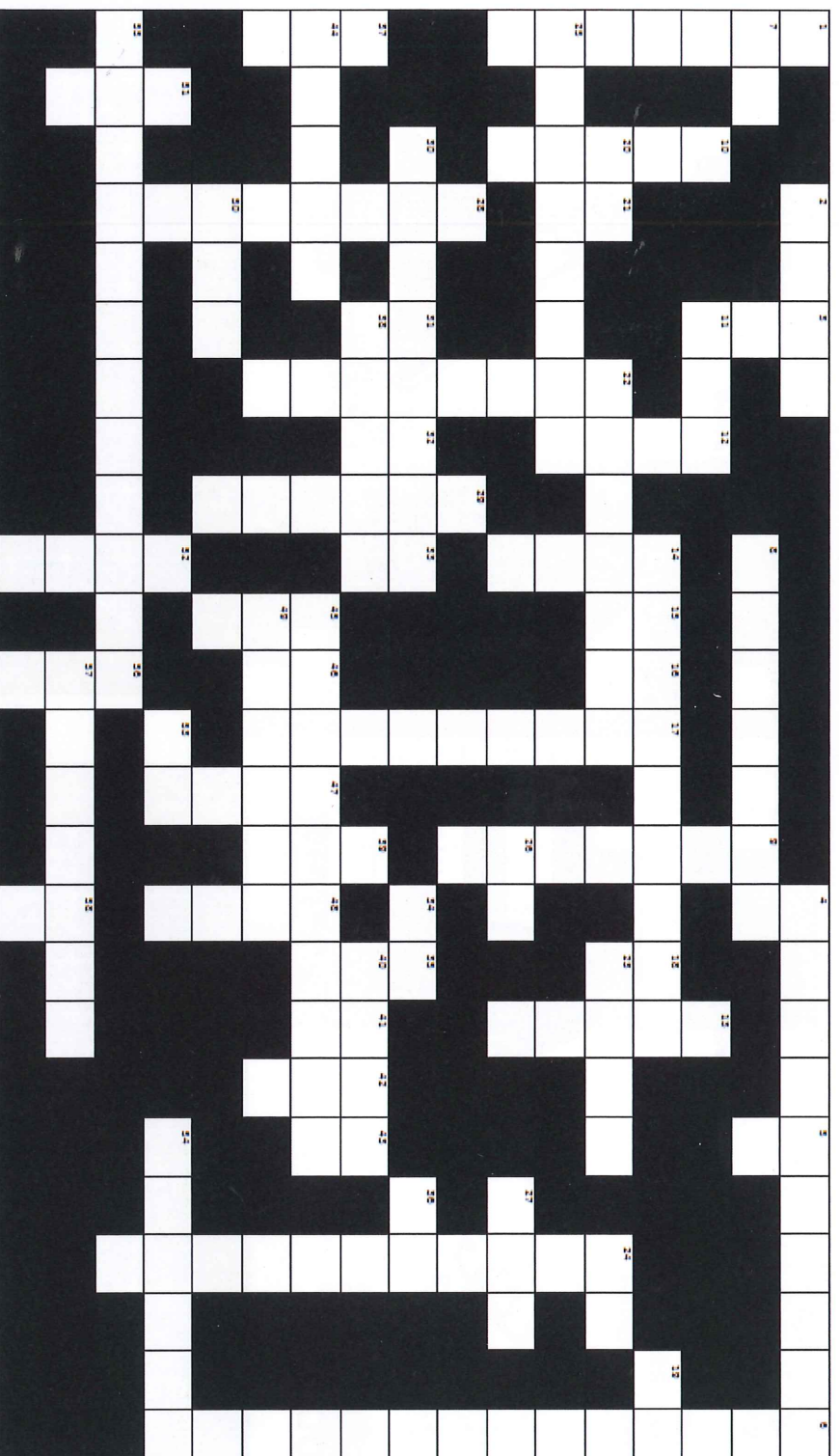


## CROSS WORD: It's the new type of panel (7 ; 12)



WORDS:		
Al	EU	Renovable
Anode	Gallium	Ru
Bacteria	Gap	Semiconductor
BHJ	Hole	SFP
BJT	loule	Si
Br	Layer	Silicon
Carbon	Module	Slotdie
Cathode	Na	Solar
Cells	Organic	Sun
CNR	Panel	Sunlight
Conductor	Pet	UV
Diode	Photo	Valence
Energy	Polymer	

# CROSS WORD



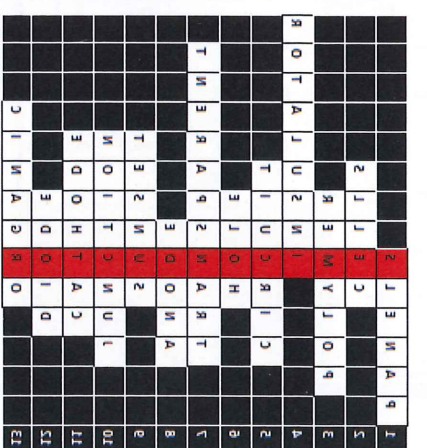
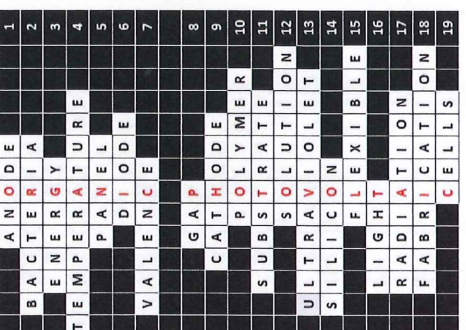
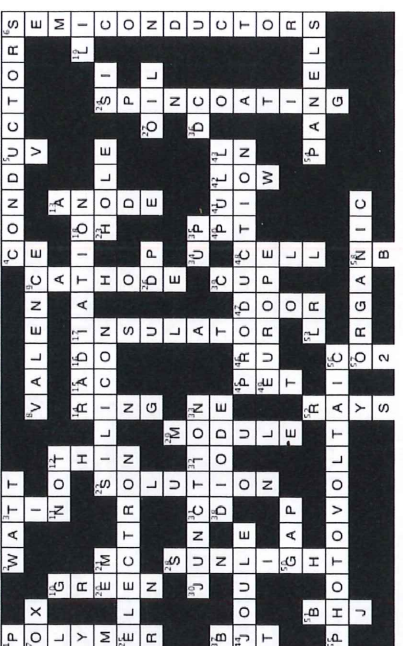
## ACROSS

- 2.** Unit measure of power **4.** Material with a small gap **7.** The first two letters of oxide **8.** They're electron that form chemical bond. **11.** Negation. **14.** Emission of energy, can be lethal. **19.** Lithium symbol. **20.** The first two letters of emission. **22.** Si chemical name of element. **23.** Orbital without an electron. **24.** Silicon symbol. **25.** Opposite of proton. **26.** The first two consonants of department **27.** Black gold synonym **30.** The diode is composed of ... p-n **34.** Opposite of down. **36.** Opposite of alternative current. **38.** Direct Junction *p-n*. **40.** Opposite of push. **44.** Unit measure of energy and heat. **45.** Slot die, spin coating are method of ... **49.** Our continent. **50.** The difference between valence bond and conduction bond. **53.** Language of research **54.** There are two types, the organic and inorganic. **55.** Cells effect **56.** Particular type of panel.

## DOWN

- 1.** Macromolecule **3.** Al **4.** First two letters of "cells"**5.** Acronymus of Ultraviolet ray **6.** Adjective to describe the silicon **9.** Opposite of anode **10.** The energy produced by photovoltaic is....**12.** Opposite of large **13.** Opposite of cathode **14.** The lord of the... (famous film) **15.** Opposite of direct current **16.** First letters of "donor" **17.** It's the plastic, air, glass....**18.** Oxygen and hydrogen's chemical symbols **21.** First letters of *milli Coulomb* **22.** It's formed by water and sodium chloride **24.** the method of production for small panels **28.** portion of electromagnetic radiation by the sun **29.** It's composed of cells **31.** *Cadmium's* chemical symbol **32.** First letters of input and output **33.** Neon's chemical symbol **35.** Power point's extension **37.** Type of transistor **39.** You win that if you win a final **41.** Unit's vowel **42.** High's opposite **43.** First letters of "*Logarithmo Naturale*" **45.** Synonym of plastic **46.** *Rutherford's* chemical symbol **47.** You open it when you enter the house **48.** Smallest part of panels **51.** Organic semiconductors **52.** They can be ionizing or not **56.** Carbon monoxide **58.** First letters of Niels Bohr

## Solutions



REBUS 1 Photovoltaic Effect — REBUS 2 Doctor Blading - REBUS 3 Spin coating — REBUS 4 Slot die