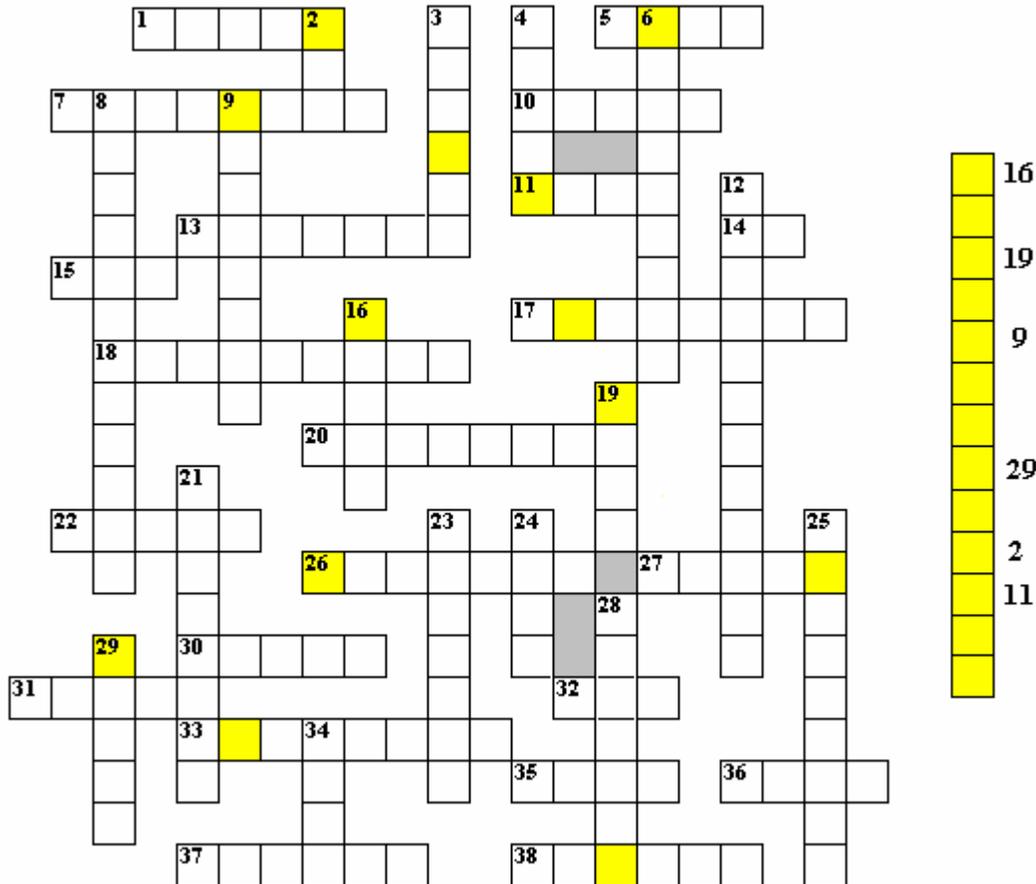


SEMICONDUCTOR CROSSWORD PUZZLE

See it on: www.semi1source.com

Copyright© Jerzy Ruzyllo 2007, all rights reserved

Print it out and check your semiconductor savvy. Use letters from the yellow fields to make sure you are correct. You should be done in 10 minutes or less if you know semiconductors inside out.



Across

1. crystallographic unit cell common in semiconductors
5. author of two laws describing diffusion in solids
7. alloy of metal and silicon used to make contacts
10. co-author of silicon thermal oxidation model
11. unit of pressure often used in semiconductor terminology
13. energy band completely occupied by electrons
14. chemical symbol of acid used to etch silicon dioxide
15. III-V semiconductor used to fabricated blue LEDs
17. devised a theory of metal-semiconductor contact
18. independent of temperature electron transport mechanism across potential barrier
20. memory which loses stored information when power is off
22. p-type dopant of silicon
26. process by which a film of single crystal semiconductor is formed
27. in FETs current flows into it
30. isolation technique used in MOS-based integrated circuits
31. Italian physics; energy level
32. alcoholic solvent used to dry wafers
33. metal used for vias in multilevel metallization scheme
35. inventor of the effect of magnetic field on semiconductors
36. defines concentration of ions crossing 1 cm^2 of the implanted surface
37. a quantum of energy of lattice vibrational wave
38. first name of the man who predicted the rate of growth of semiconductor industry

Down

2. imaging device based on the array of MOS capacitors
3. opaque material in photomasks
4. elongated piece of Czochralski-grown single crystal silicon
6. the state on the semiconductor surface in MOSFET needed to form a channel
8. process injecting dopant ions into semiconductor
9. interatomic bond in elemental semiconductors
12. effect through which difference of potential is created at device terminals upon illumination
16. process of SOI wafer fabrication by implantation of oxygen
- 19 semiconductor devices combining electronic and mechanical functions
21. property of charge carrier determining conductivity of semiconductor
23. an apparatus implementing a step-and-repeat exposure in photolithography
24. determines concentration of metallic contaminants on the surface
25. undoped semiconductor
28. class of devices in which both electrons and holes participate in device operation
29. motion of charge carriers in homogeneous semiconductor caused by the electric field
34. microwave diode named after its inventor