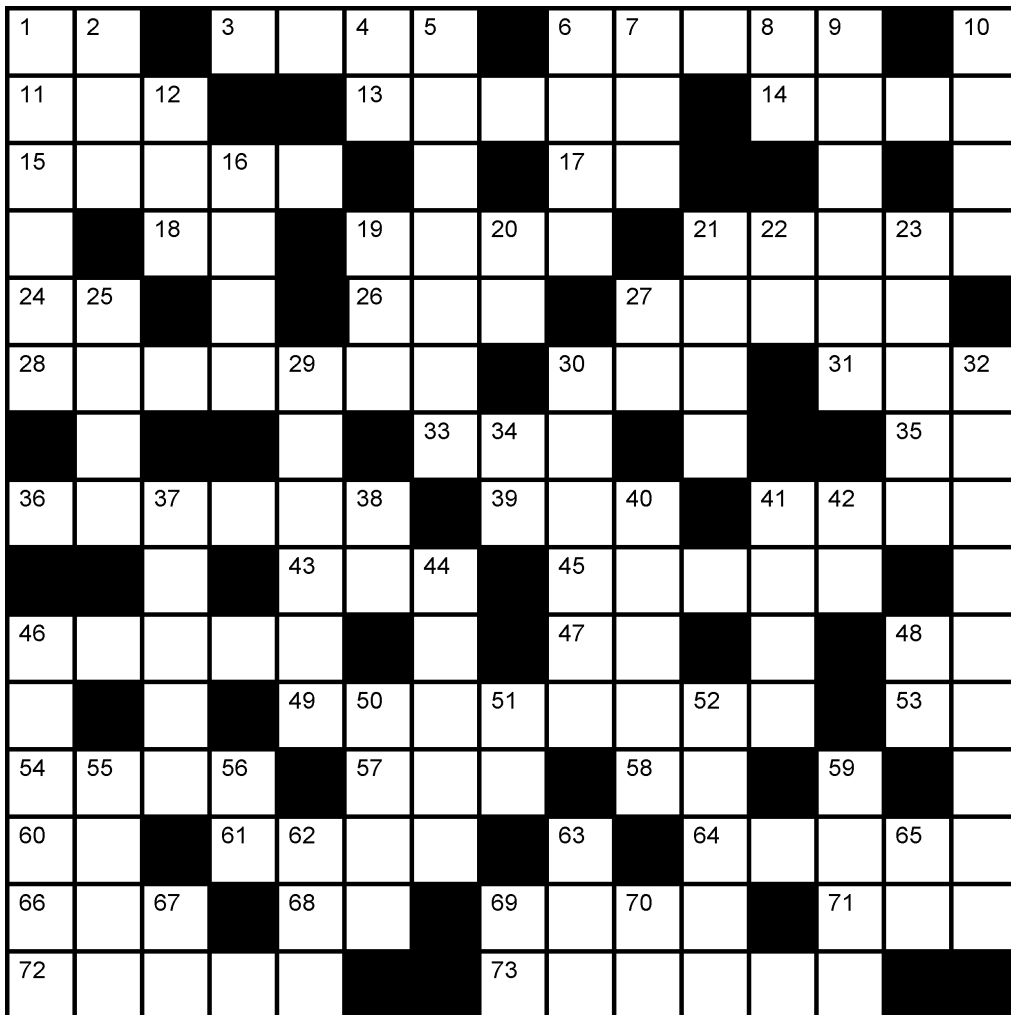


Amateur Radio Crossword Puzzler

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Title

All of our fancy radio and electronic equipment depends on detailed knowledge of the behavior of matter at the smallest of scales. Here is where ICs acquire their characteristics and where memories are stored. At this scale, quantum mechanics takes over! This week's puzzle shrinks its focus down to the level where the world is mostly empty space--the atomic--so your pencil will have to be mighty sharp.



Across

1. One micro-nano amp (abbr)
3. Smallest unit of matter with unique chemical properties
6. What the L in LED stands for
11. World time (abbr)
13. Microwave amplifier
14. Vacuum-based electronic device
15. Type of conduction without resistance
17. Stand by (CW abbr)
18. ARRL official in charge of a section (abbr)
19. Exchange or trade
21. Connections that hold matter together
24. External size of a round object (abbr)
26. Prefix used for 1,000,000 ohms
27. Generates CW with a paddle
28. Without charge
30. Animal in Schroedinger's famous experiment
31. Once around
33. Lowest satellite path (abbr)
35. One trillion of 1 Across (abbr)
36. Adding impurities to a semiconductor
39. A spark (abbr)
41. Goes with tear
43. Pre-Windows operating system
45. Best type of conductor
46. Solar panels generate this kind of voltaic energy
47. Abbreviation for base current
48. Number of radians in a half-circle

49. Two or more of 3 Across that form a chemical unit

53. Passive resonant circuit
54. A sailor's CQ
57. Combine
58. Specifies wire size (abbr)
60. Ninety degrees from NE
61. Common term for refraction
64. Beyond the atmosphere
66. The peak or highest value (abbr)
68. VII + IV
69. Opposite of narrow
71. CW distress signal
72. Particle that consists of a helium nucleus
73. Potential or kinetic

Down

1. Combine two things into one
2. Impedance matching device (abbr)
4. Husband (CW abbr)
5. He came up with the equations for electromagnetism
6. Quantum change
7. The tax man
8. Handheld radio (abbr)
9. To jump directly from one place to another
10. Normal state of a shack
12. Obsolete equivalent of Hz
16. Give off or radiate
19. Miniature coax connector
20. Precious metal (chemical symbol)
21. Radioactive decay by giving off an electron

- 22. Faeroe Island prefix
- 23. Performance
- 25. Operation in order to educate
- 27. A giga-micro amp
- 29. The absence of a pattern
- 30. High energy rays from space
- 32. General name for sub-atomic units of matter
- 34. Electronic designer (abbr)
- 37. Another name for RCA connector
- 38. Opposite of stop
- 40. Troubleshoot
- 41. Travelling energy
- 42. Type of backlight for LCD displays (abbr)
- 44. Densest form or phase of matter
- 46. Hottest form or phase of matter
- 48. Subaudible tone trade name
- 50. Prefix meaning "all"
- 51. Prefix meaning "no longer"
- 52. Emitter of coherent light
- 55. Repair or renew
- 56. Prefix for Indonesian stations
- 59. Not difficult
- 62. One giga-giga amp
- 63. Diode used to switch RF
- 65. Prefix meaning "equal" or "peer"
- 67. Current version of Windows operating system
- 69. You and I together
- 70. From (CW abbr)

