April 2022 crossword


April 2022 wordoku

|  |  | $A$ | $R$ |  |  |  |  |  |
| :--- | :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | $O$ |  |  |  |  |
| $R$ |  |  |  |  | $A$ | $C$ | $N$ | $O$ |
| $A$ |  | $M$ |  |  | $L$ |  |  |  |
| O |  | S |  | $R$ |  | $N$ |  | $L$ |
|  |  |  | $O$ |  |  | $M$ |  | $A$ |
| M | A | N | L |  |  |  |  | $R$ |
|  |  |  |  | $N$ |  |  |  |  |
|  |  |  |  |  | $E$ | $L$ |  |  |


| $A$ |
| :---: |
| $C$ |
| $E$ |
| $L$ |
| $M$ |
| $N$ |
| $O$ |
| $R$ |
| $S$ |

Solve this wordoku in the same way as a sudoku with letters instead of numbers (each of the nine letters in each row, column and nine-square cell). Once solved, one of the overall diagonals can be rearranged to give the name of a pharmaceutical company that was the subject of a 2021 takeover.

## Cryptic

## Across

1 Mark strikes a style (8)
5, 10 Across Carole's ranch needing redesign for a conservationist $(6,6)$

9 Corrupters mixing beers? Sad! (8)
10 See 5 Across
12 Awful pal going crazy for the Austrian physicist $(8,5)$

14 Uncommon and uncooked (4)
15 Extremely offish telegram about a form of energy (10)
17 Restored hero valued abroad (10)
19, 24 Across On arrangement, soft lot left out rich physicist $(4,6)$

22 Lookouts altered orbit overseas (13)

24 See 19 Across
25 Expert treated virus too (8)
26 Ring about real outskirts of Aleppo (6)

27 In a state about the element (8)

## Down

1 Artist mixed lard anyhow $(4,6)$
2 Bells? Could be first unscheduled tuba playing left and right (7)

3 Provide another autograph and leave? (6)

4 Tiny particle of weird cheese? $(7,5)$
6 You can count on seas around Cuba (8)

7 Ma preparing sushi in her element? (7)

8 Glass seen in Smolensk (4)
11 Pharmacists posit earache treatment (12)

13 Noble stood differently for this mineral (10)

16 Perhaps play Chris right away? Could be a test! (8)

18 Compound I'd expose lacking sulfur surprisingly (7)
20 Some strip oligarch's capital (7)
21 Against a little silicon trading (6)
23 King of fashion? Not all of it! (4)

## Quick

## Across

1, 14 Across Pioneer of asymmetric organocatalysis $(8,4)$

5 See 22 Across
9 A group of atoms bonded together (8)

10 H in LHC (6)
12 English economist known for work on population growth $(6,7)$

## 14 See 1 Across

15 Not true (10)
17 Substances like phenolphthalein and methylene blue (10)

19 Study hard (4)
22, 5 Across Phenomenon discovered by Albert Einstein $(13,6)$

24 Biochemist who discovered the PCR cycle of photosynthesis (6)
25 Heavenly body such as Ceres (8)
26 Researcher who worked on an experiment to detect the luminiferous aether (6)

27 Fibrous silicate mineral once used as fireproofing but now banned in many countries (8)

## Down

1 ______-_-_strip, device used to convert temperature change into displacement (10)

2 Wrestling holds (7)
3 Trigonometric function (6)
4 Light (12)
6 Photographic equipment that provides 4 Down (8)

7 Largest continental area on Earth (7)

8 Hue (4)
11 Decomposition of ionic substances using an electric current (12)

13 Subject of Rachel Carson's seminal work Silent Spring (10)

16 Basaltic rock combining garnet and clinopyroxene (8)

18 Physicist who discovered that the observed frequency of a wave depends on the relative speed of the source and observer (7)

20 Exercise (7)
$21 \mathrm{C}_{8} \mathrm{H}_{16}$ (6)
23 Dross (4)

## April 2022 science scramble

Similar to a word ladder, each answer provides letters that must appear including duplicates - in the answer immediately following it. The puzzle's final answer is a scientist or someone who contributed to science. For example:

1 sail, 2 snail, 3 saline, 4 minerals, 5 Neil Armstrong

| 1 | Pretend (3) |
| :--- | :--- |
| 2 | Diplomacy (4) |
| 3 | Area of land (5) |
| 4 | Archaeologist and egyptologist (6) |
| 5 | Backtrack (7) |
| 6 | Joiner (9) |
| 7 | Genome editing pioneer (10, 11) |

## Quick quiz:

1. Which physicist had both an element and a sub-atomic particle named after them and what are they?
2. Which English composer was a keen amateur chemist, had a laboratory in their Hereford garden that they called 'The Ark', and invented a device for synthesising hydrogen sulfide?
3. Which chemistry Nobel prizewinner is on the board of Google's parent company Alphabet?
4. Which two scientists had elements named after them during their lifetimes?
5. Which pioneering crystallographer was awarded BSc and DSc degrees by the University of Oxford, but never attended school or completed any university courses?

 suopanjos

## Entry form

There are four prize puzzles on this page: cryptic crossword; quick crossword; wordoku; and science scramble. For each puzzle, a winner will be selected from all the correct entries received and awarded a £25 UK book voucher.

You can enter any or all of the prize draws, but each entrant is only eligible to win one of the individual puzzle prizes each month.

Please enter your details below and email a scan or photograph of this page with your completed entries to us by 20 April 2022. The winners of this month's puzzles will be published in the May 2022 issue, along with the solutions.
Email: chemistryworld@rsc.org

Name $\qquad$

Address $\qquad$

Participants are advised that any personal information supplied will be processed in connection with this competition and only in accordance with our privacy statement (www.chemistryworld.com/privacy).

## April 2022 Word grid

Use the element symbols from the panel on the right to complete the word grid below.

|  |  | $N$ | $I$ |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  | 1 |  | $H$ |
| $N$ |  | $P$ | Ti |  |
|  |  | $P$ |  |  |
| $S$ | $H$ |  |  | $S$ |


| AI | Ar |
| :---: | :---: |
| C | Er |
| Ge | K |
| Pa | Ra |
| Se | $U$ |

March 2022 solutions and winners


Quick


Wordoku
The isoquinoline alkaloid was BERBERINE

## Science scramble

1 In; 2 Ink; 3 King; 4 Caking;
5 Racking; 6 Fracking;
7 Frederick Sanger.
Word grid


## March winners

Cryptic crossword
P Watt
Leigh, UK
Quick crossword
Peter Brawn
Bedford, UK
Wordoku
David Matthews Lytham St Annes, UK
Science scramble
Simon Corne
Luddenden, UK

