



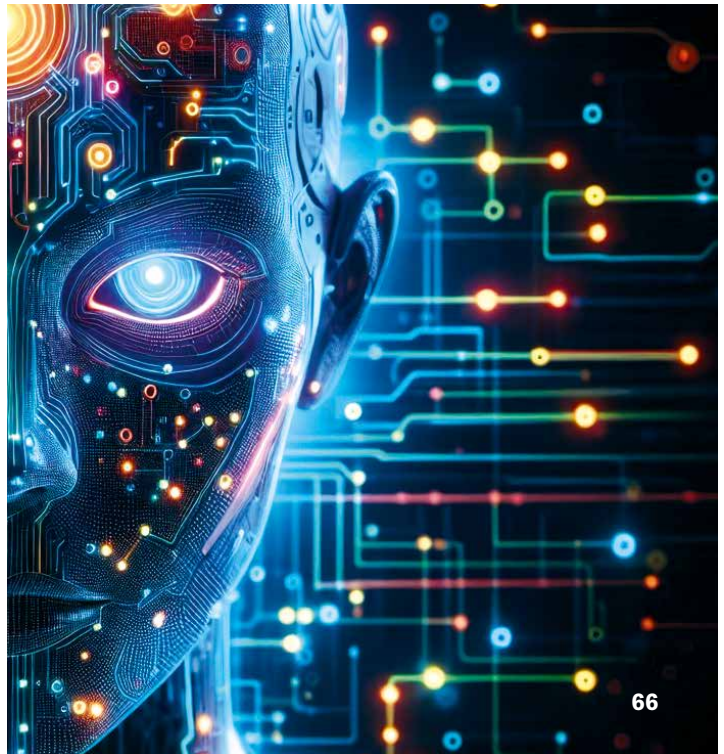
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IMAGES: YAZHONG WANG / MPI FOR PLANT BREEDING RESEARCH (TOP LEFT), CHRISTOPH SEELBACH FOR MPG (TOP RIGHT), FANNI ASPETSBERGER / MPI FOR METEOROKOLOGY (BOTTOM LEFT), ADOBESTOCK (BOTTOM RIGHT)

**22 | SOWN**

Hybrid varieties such as tomatoes should retain their characteristics for generations.

**42 | SUPER-POWERED**

Katharina Höfer's team has given her a superwoman double.

**50 | SAMPLED**

Researchers are taking samples from the MS Farm off the coast of Spitsbergen.

**66 | SOPHISTICATED**

Algorithms from artificial intelligence are helping with physical research.

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Big and Small Alike

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A new breeding method should make the cultivation of high-yielding and resistant hybrid plants easier.

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As a consequence of global warming, forest fires are increasing worldwide. Researchers from the Global Fire Monitoring Center are seeking new approaches for handling this.

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Refined climate models help to predict the regional availability of water. This enables societies to better prepare themselves for droughts, heavy rainfall, and floods.

## 42 | VISIT TO

Katharina Höfer

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### 50 | Diversity in the Sand

Marine microorganisms are important for the material cycle on Earth. A team from Bremen investigates bacterial communities on the Arctic Ocean floor.

### 56 | From Pollutant to Raw Material

It isn't just plastic and paper that are recyclable; CO<sub>2</sub> can also be reused. Methanation of CO<sub>2</sub> could help reduce the use of natural gas.

### 60 | Bad for the Environment, Good for the Climate

Nitrogen pollutes soil, water, and air, but it also affects the climate. A team from the Max Planck Institute for Biogeochemistry takes stock of the climate effects.

### 62 | Studying Crime in Real Time

In virtual environments, researchers investigate how burglars act at crime scenes. Their findings should make neighborhoods safer.

### 66 | Artificial Inspiration

Artificial intelligence algorithms are important tools in various scientific fields. Now researchers also want to use them to better understand physical systems.

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