

Trends in Japan

Sci-tech

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Cuddly Robot Comforts the Elderly

Baby Seal Soothes Stress and Increases Motivation



Paro. (C)AIST

A robotic baby seal born in Japan is bathing in the international spotlight, particularly in Denmark, where it is set to come into widespread use as a companion for residents of nursing homes. Paro is a therapeutic robot developed by Shibata Takanori, senior research scientist at the National Institute of Advanced Industrial Science and Technology (AIST). It can recognize people's names and responds with seal-like sounds when stroked or spoken to.

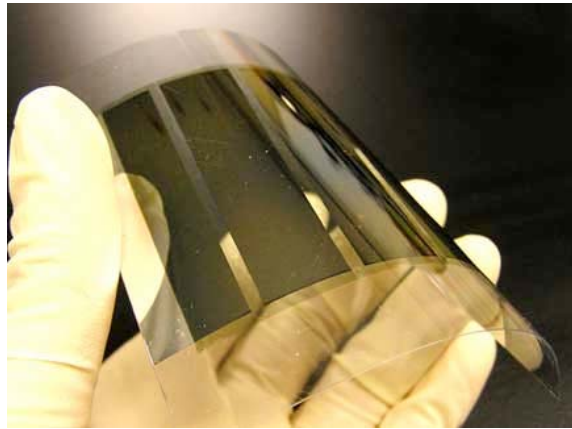


Japanese women interact with Paro. (C)AIST



Danish women enjoy time with Paro. (C)AIST

New Cells Could Herald Era of Solar Clothing and Paint

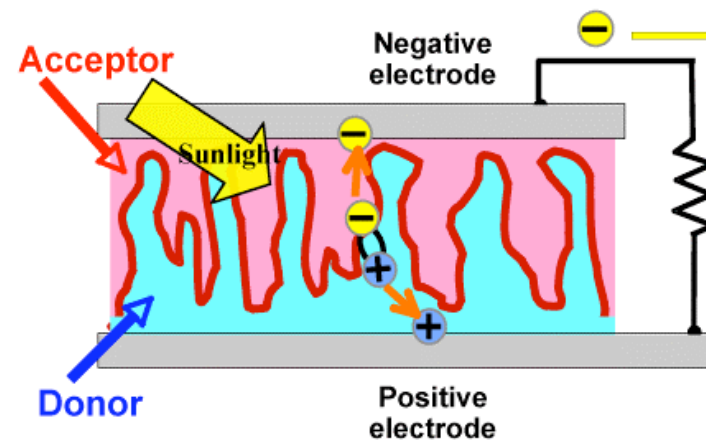


An organic thin-film solar cell.
(C)Toray Industries Inc.

Solar cells are among the most promising power generation devices of the future. There are several kinds of solar cells, including silicon cells that use silicon as a substrate and dye-sensitized cells that use organic dyes. Now a Japanese research team has achieved success in the field of organic thin-film solar cells. Toray, a major chemical company, has achieved the world's highest conversion efficiency with an organic thin-film solar cell.



Donor material (left) and acceptor material (right).
(C)Toray Industries Inc.



The structure of the generating layer. (C)Toray Industries Inc.

Robots Can Now Bat, Smile, and Chat

Japanese Technology Continues to Amaze

Japan possesses some of the world's most advanced robotics technology, and Japanese researchers have developed a succession of groundbreaking models in the field of humanoid robots. Recently, attention has focused on robots with a high level of learning ability and robots whose human appearance and facial expressions make them more approachable.



Saya. (C)Tokyo University of Science



Cbi. (C)JST, ATR



HRP-4C. (C)AIST