

Longer lifetimes for perovskit absorber

An international team of scientists has improved greatly the stability of organic-inorganic lead halide perovskites.

These materials have enormous potential for photovoltaic applications but still suffer from comparably moderate device lifetime. The scientists, led by researchers from the EPFL, Lausanne, Switzerland, incorporated a large organic cation – guanidinium - into the perovskite crystal structure, in part replacing the traditionally used methylammonium and formamidinium cations.

Overall, the new material delivered average power conversion efficiencies over 19%, and stabilized performance for 1,000 h under continuous light illumination.

This is a fundamental step within the perovskite field. These groundbreaking research results were recently published in Nature Energy. Among the authors is the member of **IRIS Adlershof**, Prof. Norbert Koch.

Large guanidinium cation mixed with methylammonium in lead iodide perovskites for 19% efficient solar cells

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