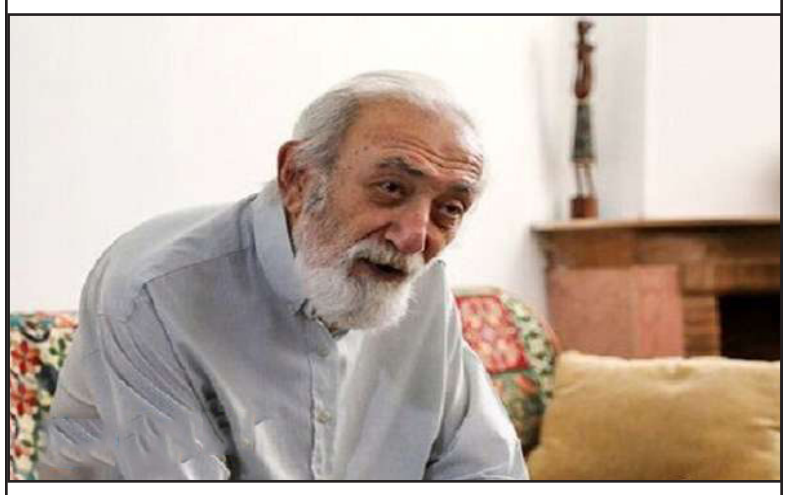
Veteran Actor Passes Away at 78



TEHRAN -- **Veteran Iranian actor Jamal Ejlali passed away at the age of 78.**

The actor of TV series 'In My Heart' and 'Madness of Love' passed away at his home in Tehran on Sunday, after a period of illness.

Born in 1947, Ejlali became familiar with the arts from a young age. He was admitted to the Faculty of Fine Arts in Theater Acting and began his official career.

He appeared in a large number of movies, including 'Taboo' and 'Wind Blows in the Meadow', both directed by Khosro Masoumi, 'Guinness' by Mohsen Tanabandeh, 'Thick Makeup' by Hamid Nematollah, 'The Blue' by Hamid Labkhandeh, 'All the Temptations of the Earth' by Hamid Samandarian and 'A Persian Melody' by Hamidreza Qotbi.

After a two-year hiatus due to illness, Ejlali returned to acting in 2018 with roles in the series 'The Secret of Lovers' by Mohammad-Hossein Latifi and 'The Soldier' by Hadi Moqaddam-Doust, as well as the feature film 'The Redstarts' by Arash Moayyerian.

A New Dawn for Persian Onagers

TEHRAN -- **Iran stands as a biodiversity hotspot, boasting an impressive array of 37,500 animal species and more than 8,000 plant species. The country is home to 579 bird species, 214 mammals, 309 marine fish species, and a wealth of invertebrates, many of which are found nowhere else on Earth.**

In fact, invertebrates make up more than 94% of Iran's animal species, yet they often fly under the radar in conservation discussions. While Iran's fauna is diverse and abundant, the country also faces significant challenges in preserving these species, including critically endangered ones like the Persian zebra.

Hope is on the horizon for the Persian onager, thanks to recent strides made in the Kavir National Park. The birth of four foals has brought the total zebra population in the park to eight this year, a sign that ongoing conservation efforts are beginning to show results.

The Persian onager has faced drastic population declines over the years, but with continued efforts, there's a possibility for recovery. Once common across large swaths of West Asia, Central Asia, and China, the Persian onager's population has dropped to an estimated 50 individuals. This underscores the urgency of conservation measures aimed at safeguarding this iconic species.

In recent years, targeted conservation actions have led to significant progress. In 2018, a bold move saw nine zebras relocated from the Turan National Park in Shahrud, marking the beginning of a long-term plan to rebuild the population in Kavir. Then, in 2022, another 10 onagers were brought in, further strengthening the efforts to re-establish a stable zebra population in the park.

However, challenges remain. Reproduction for Persian onagers is slow, with survival rates for foals remaining low — only about one in three foals make it past infancy. The survival of male foals is particularly precarious, as adult males often reject them. Additionally, the species' long gestation period further complicates breeding efforts, making each birth a significant event.

Recognizing the need for a more structured and comprehensive approach, President Masoud Pezeshkian has instructed the Department of Environment (DOE) to create a detailed preservation plan for endangered species in Iran. This strategy will address a variety of environmental factors, from habitat restoration to sustainable management, with a particular focus on the Persian zebra.

This directive comes at a time when the International Union for Conservation of Nature (IUCN) has reported that 154 vertebrate species in Iran are critically endangered. With the support of both local and international partners, Iran is taking a step toward securing the future of its vulnerable species.

While the news from the Kavir National Park is encouraging, the path forward for the Persian onager remains fraught with challenges. Despite the successes, the species still faces the grim reality of low reproductive rates and high infant mortality. The survival of the foals born this year will be a crucial factor in determining whether the recent population growth can be sustained.

Yet, these challenges are not insurmountable. With continued conservation work, a combination of habitat enhancement, relocation efforts, and strategic planning could ensure that future generations of Persian zebras thrive.

Tehran Symphony Orchestra Performs at IRIB Glass Building

TEHRAN – **The Tehran Symphony Orchestra has performed former national anthem of Iran at residues of the Glass Building of Islamic Republic of Iran Broadcasting (IRIB).**

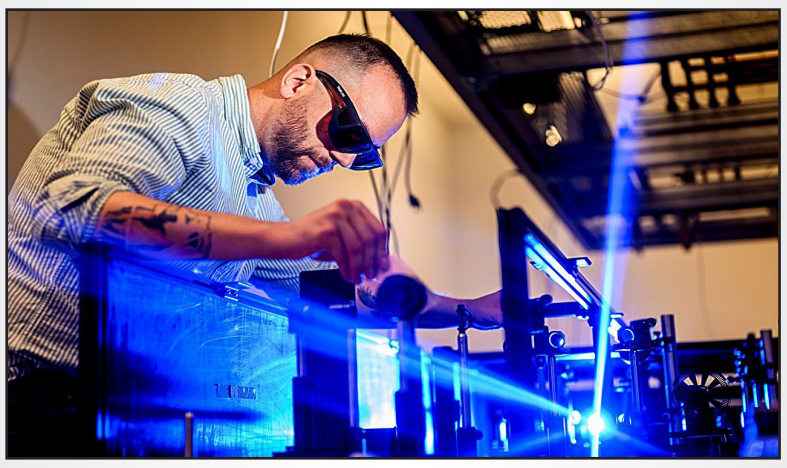
The IRIB's Glass Building was cowardly struck by an Israel regime airstrike during a live news broadcast on June 16, 2025.

The IRIB news anchor Sahar Emami was on-air when the explosion occurred, causing debris and smoke to fill the studio.

Despite the chaos, Emami returned to the broadcast, condemning the attack as an act of aggression and created an epic for Iranian nation.

New Discoveries Can Make Electronics 1,000 Times Faster

BOSTON (Northeastern University) -- **Researchers at Northeastern University have discovered how to change the electronic state of matter on demand, a breakthrough that could make electronics 1,000 times faster and more efficient.**



Alberto De la Torre used controlled heating and cooling to make a quantum material switch between a conductive state and an insulating state.

By switching from insulating to conducting and vice versa, the discovery creates the potential to replace silicon components in electronics with exponentially smaller and faster quantum materials.

"Processors work in gigahertz right now," said Alberto de la Torre, assistant professor of physics and lead author of the research. "The speed of change that this would enable would allow you to go to terahertz."

Via controlled heating and cooling, a technique they call "thermal quenching," researchers are able to make a quantum material switch between a metal conductive state and an insulating state. These states can be reversed instantly using the same technique.

Published in the journal Nature Physics, the research findings represent a breakthrough for materials scientists and the future of electronics: instant control over whether a material conducts or insulates electricity.

The effect is like a transistor switching electronic signals. And just as transistors allowed computers to become smaller—from the huge machines the size of rooms to the phone in your pocket—control over quantum materials has the potential to transform electronics, says Gregory Fiete, a professor of physics at Northeastern who worked with de la Torre to interpret the findings.

"Everyone who has ever used a computer encounters a point where they wish something would load faster," says Fiete. "There's nothing faster than light, and we're using light to control material properties at essentially the fastest possible speed that's allowed by physics."

By shining light on a quantum material called 1T-TaS_2 at close to room temperature, researchers achieved a "hidden metallic state" that had so far only been stable at cryogenically cold temperatures. Now researchers have created that conductive metallic state at more practical temperatures, says de la Torre. The material maintains its programmed state for months—something that has never been accomplished before.

"One of the grand challenges is, how do you control material properties at will?" says Fiete. "What we're shooting for is the highest level of control over material properties. We want it to do something very fast, with a very certain outcome, because that's the sort of thing that can be then exploited in a device."

So far, electronic devices have needed both conductive and insulating materials, plus a well-engineered interface between the two. This discovery makes it possible to use just one material that can be controlled with light to conduct and then insulate.

"We eliminate one of the engineering challenges by putting it all into one material," Fiete says. "And we replace the interface with light within a wider range of temperatures."

The research expands upon previous work that used ultra-fast laser pulses to temporarily change the way materials conduct electricity. But those changes only lasted tiny fractions of a second and usually at extremely cold temperatures.

Stable conductivity switching at higher temperatures is a significant advance for quantum mechanics, Fiete says, and for the long game of supplementing or replacing silicon-based technology. Semiconductors, he says, are so dense with logic components that engineers are now stacking them in three dimensions. But this approach has limitations, he said, which make tiny quantum materials more important for electronics design.

"We're at a point where in order to get amazing enhancements in information storage or the speed of operation, we need a new paradigm," Fiete says. "Quantum computing is one route for handling this and another is to innovate in materials. That's what this work is really about."

Picture of the Day

Evin Prison after the Israeli bombing in northwest Tehran.

Photo by ISNA