



Enhanced ecotoxicity of the technological critical Rare Earth Elements in a warmer and acidified changing ocean using a multibiomarker approach: the case of the European eel *Anguilla anguilla*, the surf clam *Spisula solida* and the alga *Ulva rigida*

Cátia Figueiredo
catia.figueiredo@ipma.pt
cafigueiredo@fc.ul.pt

Global Rare Earth Elements Market is Predicted to Reach US\$7.3 Billion by 2026, at 10.2% CAGR: Fairfield Market Research

April 13, 2022 13:07 ET | Source: Fairfield Consultancy Services OPC Pvt Ltd



English EN

- HOME
- RESULTS PACKS
- RESEARCH*EU MAGAZINES
- PODCASTS & NEWS
- PROJECTS & RESULTS
- ABOUT US
- SEARCH

Results Pack

- DE
- EN
- ES
- FR
- IT
- PL

Safety, sustainability and security for Europe's mineral processing industry

Dependence on mineral resources is rooted in their use in a plethora of devices and everyday applications: mobile phones, flat screen televisions, automobiles, solar panels, space guidance systems, jet engines and pacemakers. Even a smartphone contains more than 50 metals, including rare earth elements, that are in huge demand with limited supply. This Results Pack showcases seven EU-funded projects spearheading research to improve processing of these raw materials with emphasis on sustainability.

- NEWS & POLITICS
- CULTURE
- FOOD



SCIENC

Facing shortages, chemists propose "minir waste for rare earth metals

We're leaving the fossil fuel era and entering an "age of metals" — and that may mean sifting through our trash

By ERIC SCHANK PUBLISHED MAY 11, 2022 9:02PM (EDT)

The US has a critical need for rare earth minerals that enable clean energy, and this exploration company may have found the largest deposits in North America

Dominick Reuter Apr 30, 2022, 2:15 PM

- A mineral exploration company may have found the largest reserves of rare earth elements in the US.
- Demand for clean energy minerals is projected to increase by up to 600% in the coming decades.
- The discovery comes at a time when

seodymium
prosimium
ium



- NiMH battery
- Lanthanum
- Neodymium
- Cerium

IM Investment Monitor

How long will China's dominance of rare earths last?

Angola, Australia and the US are all poised to ramp up the production of rare earth elements during the next few years, but China is set to...

há 2 semanas

MetalMiner®

Sourcing & Trading Intelligence for Global Metals Ma

HOME

CONTENT

METAL PRICES

Home | Global Trade | Rare Earth Elements About to Get Even Rarer

INDUSTRY NEWS

Rare Earth Elements About to Get Even Rarer

by Sohrab Darabshaw on MAY 5, 2022

Style: Industry News Category: Global Trade, Minor Metals, Public Policy, Uncategorized



Forbes

HIP STRATEGY

China Plays Hard Ball With Rare Earth Elements

Milton Ezrati Senior Contributor © I write on finance and economics.

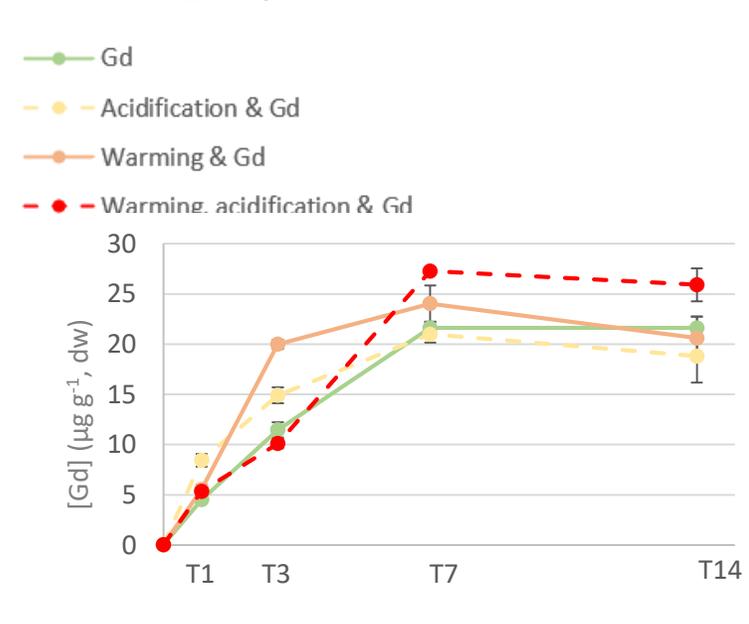
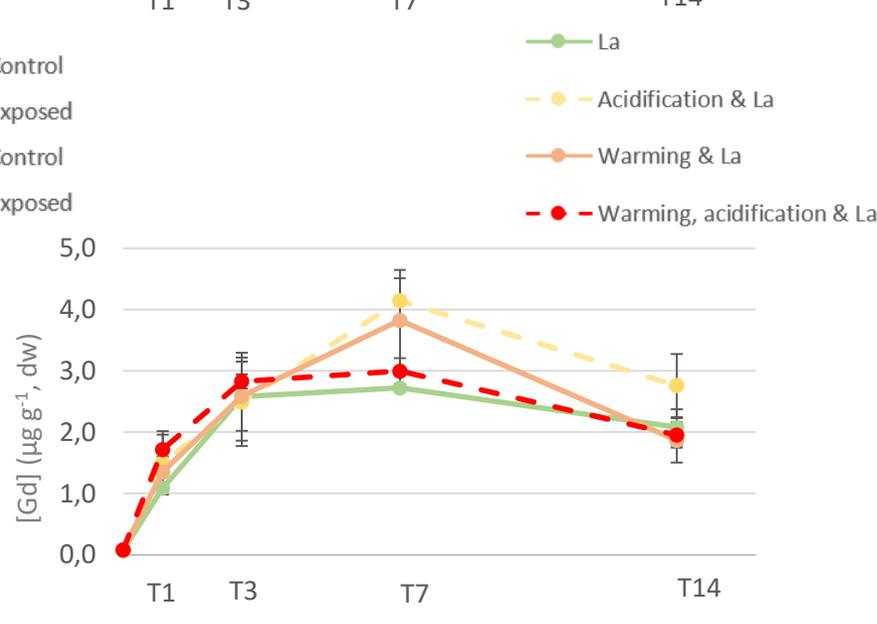
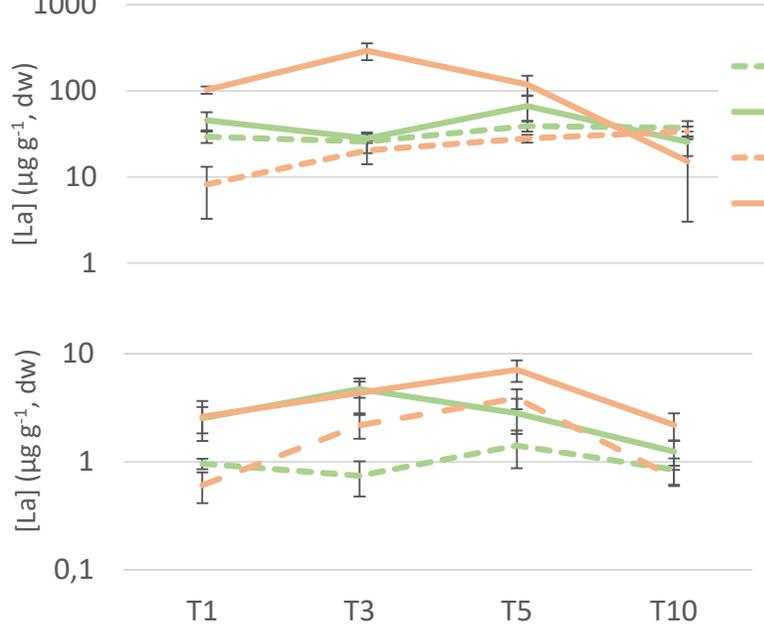
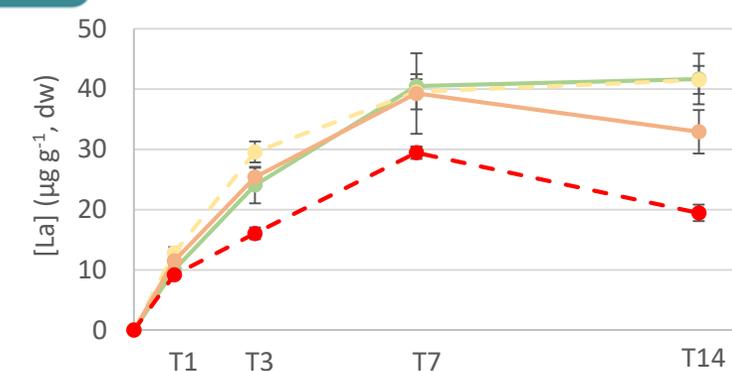
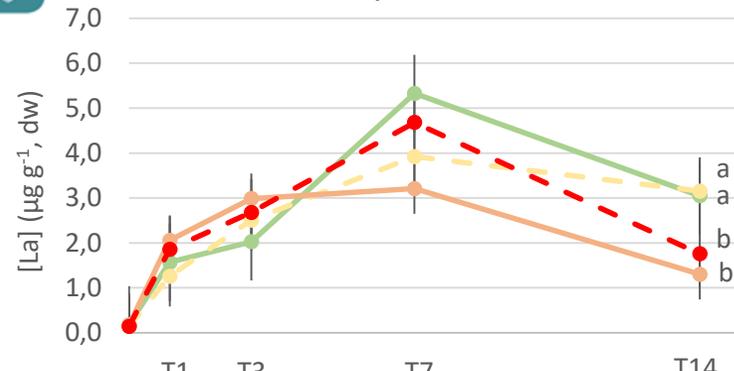
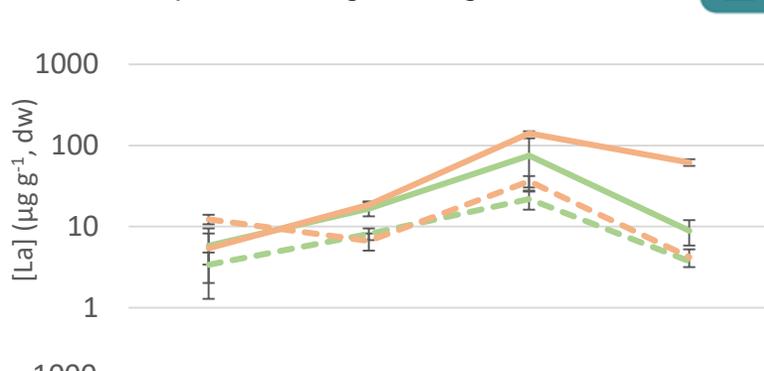
Follow



European eel *Anguilla anguilla*

Bivalve *Spisula solida*

Green macroalgae *Ulva rigida*





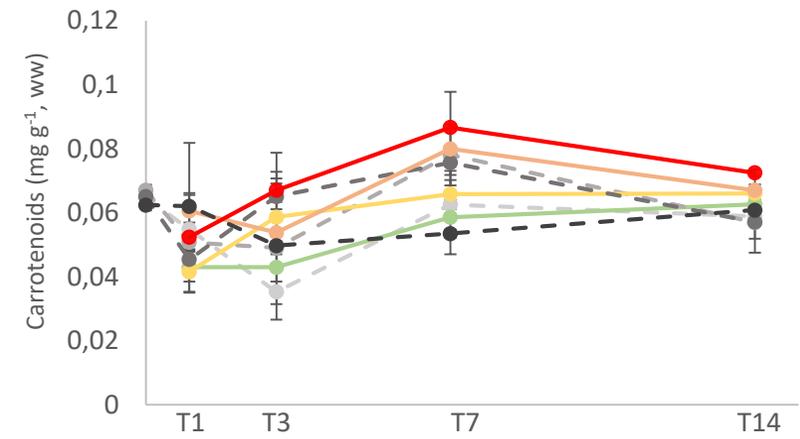
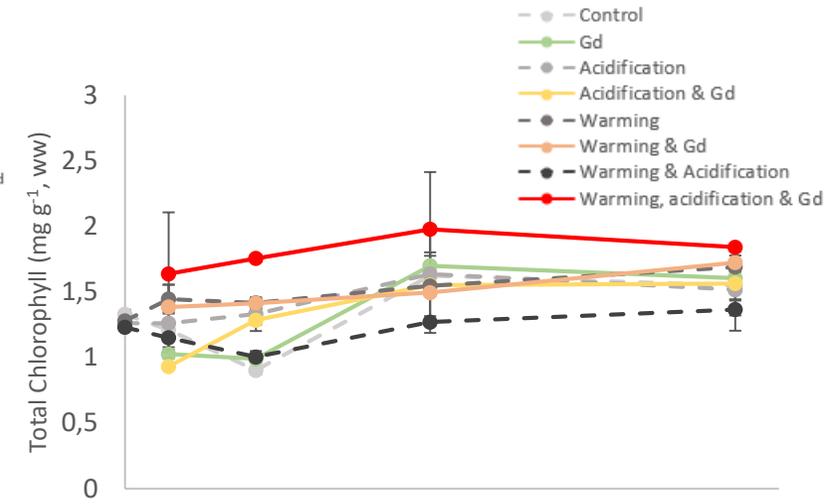
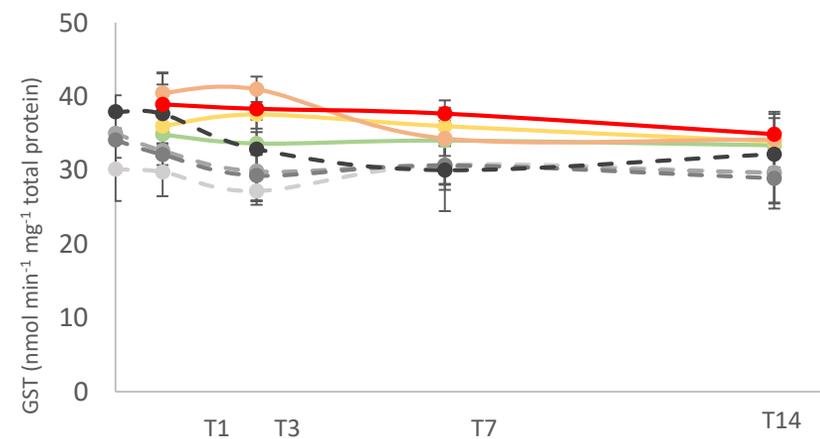
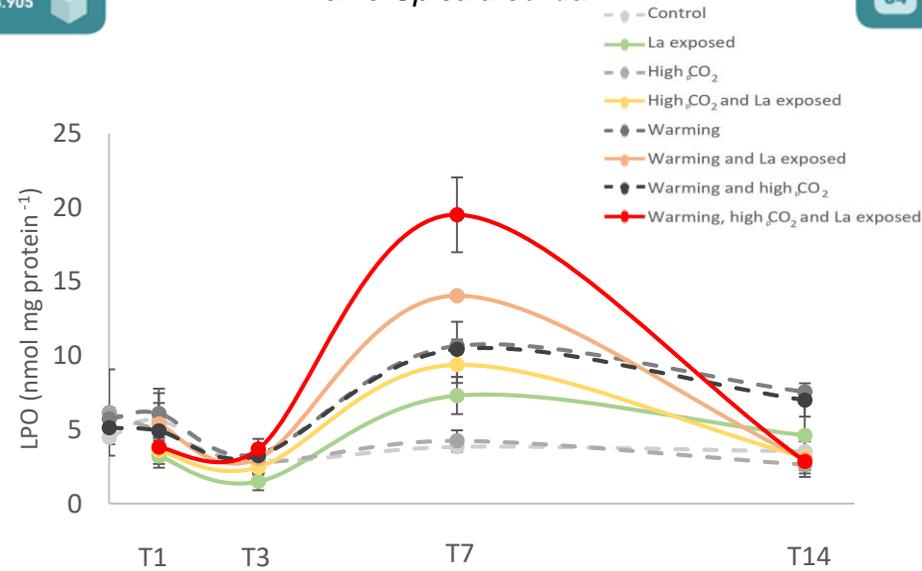
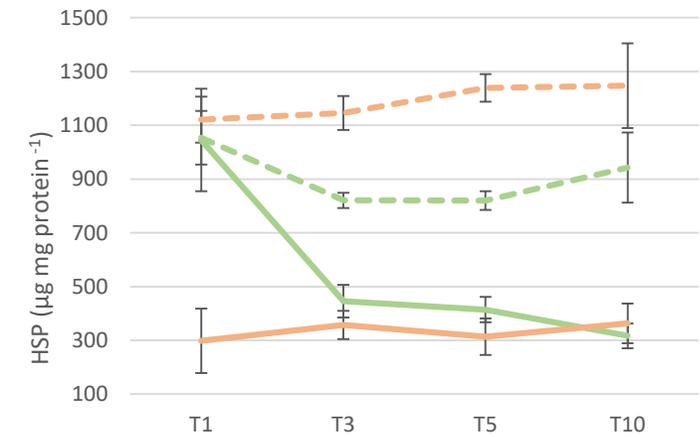
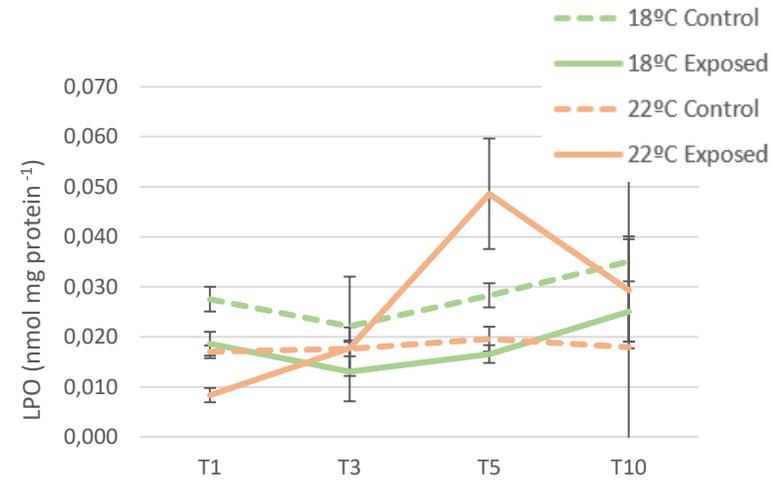
European eel *Anguilla anguilla*



Bivalve *Spisula solida*



Green macroalgae *Ulva rigida*



Accumulation and toxicity



REE exposure triggered an antioxidant response that requires antioxidant repletion. Additionally, chlorophyll a indicates an increase in phytoplankton biomass as a response to environmental changes.

cells
event
a
in a

