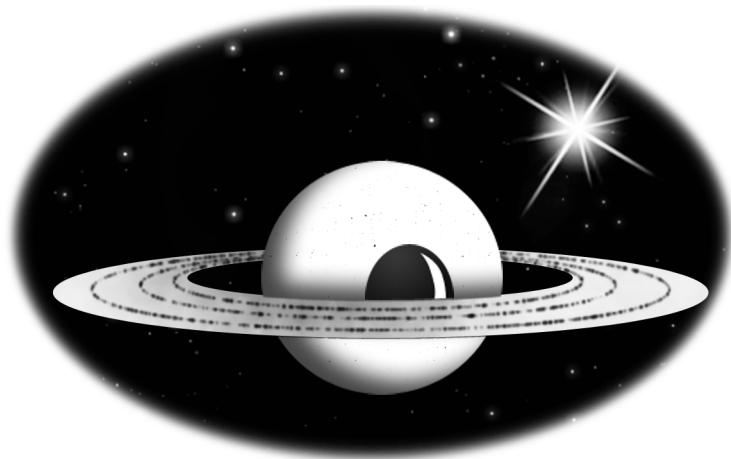


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Bora F. D., Safirescu O. C., Brasovean I., 2024 Challenges in extracting and preserving nuclear DNA from fossils for reviving extinct species. ELBA Bioflux 16(1):18-21.

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Burlacu L., Gavriiloaie C., Mantoiu D. S., Puscasu I. G., Guta R. I., 2024 Demystifying the living fossil: reassessing *Romanichthys valsanicola*'s evolutionary context. ELBA Bioflux 16(1):26-34.

Petrescu-Mag I. V., Balint C., Papuc T., 2024 Recent discoveries in astrobiology: The case of Enceladus. ELBA Bioflux 16(1):35-39.

Bordea D., Papuc T., Coroian C., Balint C., Oroian C., Bora F. D., Popescu M., Petrescu-Mag I. V., 2024 What does it mean to be alive? A review on the concept of the living in the context of existence. ELBA Bioflux 16(1):40-43.