Achievements & Contributions

This record is presented in recognition of contributions to Eterna, the internet-scale molecular design platform.

Verify authenticity of this record at: https://eternagame.org/certificate/151903

ISSUED	March 15, 2026

PLAYER DETAILS

PERSONAL NAME	Luigi Usai
PLAYER NAME	luigiusai
REGISTRATION DATE	April 2014
GLOBAL RANK	1,118 of 435,109
PUZZLES CLEARED	287
PUZZLES CREATED	100
ADVANCED TUTORIALS CLEARED	1/10

Eterna puzzles are created by the Eterna team or players. They invite players to devise effective procedures for pairing nucleotides in hypothetical or biologically-inspired RNA strands.

Learn more on luigiusai's player profile: https://eternagame.org/players/151903

PUBLICATION CONTRIBUTIONS

Contributions towards pre-print or peer-reviewed scientific publications.

1. PRINCIPLES FOR PREDICTING RNA SECONDARY STRUCTURE DESIGN DIFFICULTY

February 2016 Journal of Molecular Biology *Gameplay Contributor*

2. RNA SECONDARY STRUCTURE PACKAGES EVALUATED AND IMPROVED BY HIGH-THROUGHPUT EXPERIMENTS

October 2022 Nature Methods *Gameplay Contributor*

3. SENTRNA: IMPROVING COMPUTATIONAL RNA DESIGN BY INCORPORATING A PRIOR OF HUMAN DESIGN STRATEGIES

March 2018 Preprint *Gameplay Contributor*

DESIGN SUBMISSIONS

Contributions towards Eterna biomedical challenges experimentally tested through in-vitro synthesis and structure mapping measurements.

	TOTAL (#)	TESTED	BEST (%)
T.thermophilise16S Hammerhead	1	0	-
Unconventional RNA Structure and Sequence Design	15	15	91
Thermodynamic Mimics: A Method for Simulating Functional Riboswitches	11	11	98
MS2 Riboswitches On Chip	6	0	-
Eterna History Tour - Introduction to Lab	12	12	89

TOTAL (#): The total number of design submissions made to an Eterna challenge.

TESTED: The total number of design submissions made to an Eterna challenge that were experimentally tested.

BEST (%): Player's best score (as a percentage) for experimentally tested design submissions made to an Eterna challenge