

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****December 14, 2025****PLAYER DETAILS**

PERSONAL NAME	Luigi Usai
PLAYER NAME	luigiusai
REGISTRATION DATE	April 2014
GLOBAL RANK	1,116 of 421,190
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.thermophilis16S 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

