



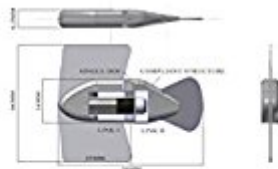
The book was found

# Robotic Fish ISplash-MICRO: A 50mm Robotic Fish Generating The Maximum Velocity Of Real Fish (High Speed Robotics. Mechanical Engineering And Kinematics For Maximum Velocity Robot Fish. Book 4)

## *Robotic Fish iSplash-MICRO*

A 50mm Robotic Fish Generating the Maximum Velocity of  
Real Fish

By Richard James Clapham



[www.isplash-robotics.com](http://www.isplash-robotics.com)



## Synopsis

iSplash-MICRO: A 50mm Robotic Fish Generating the Maximum Velocity of Real Fish Richard James Clapham  
Abstract—This paper presents a millimeter scale robotic fish, namely iSplash-MICRO, able to accurately generate the posterior undulatory pattern of the carangiform swimming mode, at intensively high frequencies. Furthermore an investigation into anterior stabilization was made in an attempt to reduce the large kinematic errors and optimize forces around the center of mass. Applying large scale dorsal and pelvic fins relative to body size enabled predictable optimization of the anterior and posterior displacements. During the field trials, the small fish with a length of 50mm has generated an equivalent average maximum velocity to real fish, measured in body lengths/ second (BL/s), greatly improving previous man-made systems, achieving a consistent free swimming speed of 10.4BL/s (0.52m/s) at 19Hz with a low energy consumption of 0.8 Watts.

## Book Information

File Size: 787 KB

Print Length: 27 pages

Publication Date: February 3, 2016

Sold by: Amazon Digital Services LLC

Language: English

ASIN: B01BGPHD7U

Text-to-Speech: Enabled

X-Ray: Not Enabled

Word Wise: Not Enabled

Lending: Enabled

Enhanced Typesetting: Enabled

Best Sellers Rank: #1,781,838 Paid in Kindle Store (See Top 100 Paid in Kindle Store) #78

in Books > Engineering & Transportation > Engineering > Reference > Research #358

in Kindle Store > Kindle eBooks > Engineering & Transportation > Engineering > Mechanical > Robotics #583 in Kindle Store > Kindle eBooks > Engineering & Transportation > Engineering > Computer Technology > Robotics & Automation

[Download to continue reading...](#)

Robotic Fish iSplash-MICRO: A 50mm Robotic Fish Generating the Maximum Velocity of Real Fish (High Speed Robotics. Mechanical engineering and kinematics for maximum velocity robot fish.

Book 4) Robotic Fish iSplash-OPTIMIZE: Optimized Linear Carangiform Swimming Motion (High Speed Robotics. Mechanical engineering and kinematics for maximum velocity robot fish. Book 3) Speed Training for Combat, Boxing, Martial Arts, and MMA: How to Maximize Your Hand Speed, Foot Speed, Punching Speed, Kicking Speed, Wrestling Speed, and Fighting Speed Robotics: Everything You Need to Know About Robotics From Beginner to Expert (Robotics 101, Robotics Mastery) Robotic Fish iSplash-II: Realizing Fast Carangiform Swimming to Outperform a Real Fish Robotics: Discover The Robotic Innovations Of The Future - An Introductory Guide to Robotics The Smart Real Estate Investor: Real Estate Book Bundle 3 Manuscripts Expert Strategies on Real Estate Investing, Finding and Generating Leads, Funding, Proven Methods for Investing in Real Estate Robots and Robotics High Risk Robots Macmillan Library (Robots and Robotics - Macmillan Library) High Fiber Recipes: 101 Quick and Easy High Fiber Recipes for Breakfast, Snacks, Side Dishes, Dinner and Dessert (high fiber cookbook, high fiber diet, high fiber recipes, high fiber cooking) Mechatronic Hands: Prosthetic and Robotic Design (Iet Control, Robotics and Sensors) Speed Reading: Triple Your Reading Speed in Less than 24 Hours: The Comprehensive Guide to Speed Reading and Skyrocketing Your Productivity Speed of Thought = Speed of Play: 25 Training Sessions That Increase Speed of Play In Soccer Speed Reading: The Comprehensive Guide To Speed Reading Æœ Increase Your Reading Speed By 300% In Less Than 24 Hours Code Check Plumbing & Mechanical 4th Edition: An Illustrated Guide to the Plumbing and Mechanical Codes (Code Check Plumbing & Mechanical: An Illustrated Guide) Smoking Meat: Fish Edition: Top 25 Amazing Smoked Fish Recipes (Smoked Fish Recipes, Smoked Fish Cookbook, Smoked Fish Guide, Unique Smoking Fish Recipe Book, Smoking Meat, BBQ Cookbook) Evolutionary Robotics: The Biology, Intelligence, and Technology of Self-Organizing Machines (Intelligent Robotics and Autonomous Agents) Robotics, Vision and Control: Fundamental Algorithms in MATLAB (Springer Tracts in Advanced Robotics) Robotics, Vision and Control: Fundamental Algorithms In MATLAB, Second Edition (Springer Tracts in Advanced Robotics) The Robotics Primer (Intelligent Robotics and Autonomous Agents series) Robotics: Everything You Need to Know About Robotics from Beginner to Expert

[Contact Us](#)

[DMCA](#)

[Privacy](#)

[FAQ & Help](#)