Development of AUV and xxx 机器+功能

功能：机器+测试

Design of

Investigation on the mechanical design and manipulation hydrodynamics for a small sized single body and a streamline autonomous underwater vehicle

Field test on hydrodynamic modeling and robust control application for a noval designed triangular AUV

Hydrodynamic modeling and robust control application on a noval triangular AUV for hovering operations

题目：

A Novel Hovering Capable AUV and its Yaw Control Application using Numerical Hydrodynamic Models

Triangular Hovering Capable AUV and its Yaw Control Application using Numerical Hydrodynamic Models

Triangular AUV for hovering： An xxx for xxx tasks

Tri-HCAUV

HCAUV: A Noval Triangular Shaped AUV for Hovering Operations

Robust Yaw Control Application on HCAUV: A Noval Hovering Capable AUV with Numerical Models been investigated

1. 设计（核心）
2. 建模（辅助1）
3. 控制（辅助2）

HCAUV：A Tri-Cabin AUV with Numerical Model and Robust Yaw Control scheme for Hovering Operations

HCAUV：A Tri-Cabin Hovering Capable AUV with Robust Control Scheme using Numerical Hydrodynamic Models

HCAUV：A Tri-Cabin AUV with Robust Control Scheme and Numerical Hydrodynamic Models to Improve Manipulation Capability

HCAUV：A Tri-Cabin AUV with Robust Control Scheme and Numerical Hydrodynamic Models to Improve Hovering Capabilities

with Methods been Tested

Investigation on Numerical Modeling and Robust Control methods for A Noval Triangular Shaped AUV for Hovering Operations

Investigation on Numerical Modeling and Robust Control for a Noval Designed Tri-Cabin AUV

查一下日本人的三体叫什么。

摘要：

1. 背景：Hovering Operation
2. 问题：运动控制能力不足。Design problem，modeling problem and control problem
3. 解决方案：三体，分析，鲁棒
4. 总结：开展了YAW测试

正文

1. Introduction：悬浮作业：1）机器人设计2）建模不行3）控制不行，所以要开展本文工作。
2. 机器人布置及设计
3. 机器人建模
4. 机器人控制
5. YAW控制实验
6. 分析

摘要：

由于作业级水下机器人通常存在多源干扰、外形复杂等特点，导致了其不确定性因素较多、水动力特性较差，难以建立准确的模型并实现精准的运动控制。为从物理层面解决上述问题，本文设计了一种具有水动力外壳包裹的三体水下机器人HCAUV。在此基础上，本文开展了水动力建模与鲁棒控制器设计，从控制层面提高此机器人的运动控制能力。最后开展了艏摇运动控制实验，证明此设计的有效性。

关键词：

正文：