



基本条件概要

政治面貌： 中共党员
就读院校： 南京大学/硕士一年级
专业方向： 管理科学与工程/物流与运营管理

学科竞赛获奖情况（省级及以上奖项）

- 第三届中国“互联网+”大学生创新创业大赛国赛银奖（主要完成人）
- 第三届中国“互联网+”大学生创新创业大赛江苏省赛金奖（第二负责人）
- 第二届“兰景杯”全国高校气象科技创新创业大赛全国总冠军（前三负责人）
- 第九届高等学校信息技术创新与实践活动国赛一等奖（第一负责人）
- 2018“创青春”江苏省大学生创业大赛省赛银奖（第一负责人）
- 第四届中国“互联网+”大学生创新创业大赛江苏省赛银奖（前三负责人）
- “创慧湖杯”第三届苏州独墅湖全国大学生创业大赛优秀奖（第一负责人）

学术论文

发表 SSCI/SCI 论文 5 篇（均为第二作者/第二作者且通讯作者；JCR 二区 3 篇）

- Zhu, X.; Yu, L*. The Impact of Warranty Efficiency of Remanufactured Products on Production Decisions and Green Growth Performance in Closed-Loop Supply Chain: Perspective of Consumer Behavior. *Sustainability* 2019, 11, 1420. **SCI/SSCI(JCR Q2)**

Abstract: Consumers cannot fully assess the quality of remanufactured products prior to purchase. To reduce consumer risk, closed-loop supply chains adopt a warranty strategy to enhance perceived value among customers and stimulate green growth. Based on Stackelberg game theory and considering consumers' low-carbon and remanufactured product preferences, this paper aims to explore the decision-making efficiency of closed-loop supply chains with warranty services. The results of the study show that consumers' confidence in purchasing remanufactured products has increased the demand for new products and remanufactured products, in turn also increasing the interest of the member companies of the supply chain, and stimulating the realization of the potential value of remanufacturing, which is conducive to green growth. When a remanufactured product warranty period meets certain conditions, the member companies of the supply chain can obtain optimal profit. The optimal warranty entity selection of a closed-loop supply chain with a warranty service depends on the warranty efficiency of each entity, thus making it necessary to examine the products of each warranty party. [\[Cross Ref\]](#)

- Zhu, X.; Yu, L*. Screening Contract Excitation Models Involving Closed-Loop Supply Chains Under Asymmetric Information Games: A Case Study with New Energy Vehicle Power Battery. *Appl. Sci.* 2019, 9, 146. **SCI/SSCI**

Abstract: In closed-loop supply chain systems for power battery remanufacturing, recycling and dismantling tasks will be relegated to third-party recyclers. This has significant disadvantages, inasmuch as the asymmetric exchange of information regarding the level of recycling capacity and effort after signing a contract fiscal risks to the manufacturers. The purpose of this paper is to study the “adverse selection” of recyclers and “moral hazards” hidden in their purported effort levels, based on Information Screening Models in the principal-agent theory. Our information screening model for revenue sharing will be presented, and subsequently verified using numerical simulation to demonstrate the impact of the screening contract on the expected returns of both parties. Our results show that the sharing coefficient of the remanufacturing revenue for low-capability recyclers is distorted downwards, and only truthful reporting can retain profits. High-capacity recyclers will obtain additional information while retaining profit. At the same time, as the proportion of high-capacity recyclers in the market increases, the expected return of the entrusting party increases. One critical area where this will impact the Chinese economy is in the area of new energy vehicles. We investigate a case study of our approach in new energy vehicles, which are being used to reduced CO_2 emissions, but have environmentally hazardous batteries that must be recycled safely and

economically. [\[Cross Ref\]](#)

3. Zhu, X.; Yu, L.*; Zhang, J.; Li, C.; Zhao, Y. Warranty Decision Model and Remanufacturing Coordination Mechanism in Closed-Loop Supply Chain: View from a Consumer Behavior Perspective. *Sustainability* 2018, 10, 4738. [SCI/SSCI\(JCR Q2\)](#)

Abstract: The remanufacturing warranty strategy has become an effective mechanism for reducing consumer risk and stimulating market demand in closed-loop supply chain management. Based on the characteristics of consumers' behavior of purchase decisions, this paper studies the warranty decision model of remanufacturing closed-loop supply chain under the Stackelberg game model. The present study discussed and compared the decision variables, including remanufacturing product pricing, extended warranty service pricing, warranty period and supply chain system profit. The research shows that consumers' decision-making significantly affirms the dual marginalization effect of the supply chain system while significantly affecting the supply chain warranty decision; the improved revenue sharing contract and the two charge contracts respectively coordinates the manufacturer-led and retail-oriented closed-loop supply chain system, which effectively implements the Pareto improvement of the closed-loop supply chain system with warranty services. In the present study, the model is verified and analyzed by numerical simulation. [\[Cross Ref\]](#)

4. Zhu, X.; Yu, L. Differential Pricing Decision and Coordination of Green Electronic Products from the Perspective of Service Heterogeneity. *Appl. Sci.* 2018, 8, 1207. [SCI/SSCI](#)

Abstract: Consumers focus on level of service while purchasing electronic products. This study focuses on consumer buying behavior. We determine the Stackelberg outcome for a market when a durable electronic product has three different forms: new product, remanufactured product and refurbished product. Under the dynamic game model, the optimal differential pricing strategy is implemented, and the double marginal effect is coordinated through a revenue-sharing contract and two toll contracts to increase the system's revenue capacity. Our research shows that as the degree of consumer preference increases, the service differentiation of the three products is reduced. A lower level of consumer preference affects the pricing decision of new products and significantly affects the pricing of remanufactured products and refurbished products. [\[Cross Ref\]](#)

5. Zhu, X.; Yu, L.*. Warranty Period Decision and Coordination in Closed-Loop Supply Chains Considering Remanufacturing and Consumer Behavior. *Sustainability*. 2019, 11, 4237. [SCI/SSCI](#)

Abstract: The closed-loop supply chain management model is an effective way to promote sustainable economic development and environmental protection. Increasing the sales volume of remanufactured products to stimulate green growth is a key issue in the development of closed-loop supply chains. By designing an effective warranty strategy, customer's perceived value can be enhanced and market demand can be stimulated. This study cuts through the warranty period of closed-loop supply chain products. Based on the perspective of consumer behavior, game theory is used to construct the optimal decision-making model for closed-loop supply chains. The optimal warranty decision making for new products and remanufactured products under centralized and decentralized decision-making models is discussed. Further, the impact of the closed-loop supply chain system with warranty services and the design of contract coordination is also shown. We show that consumer preference has a positive impact on the sales of remanufactured products and the profits of enterprises; with the extension of the new product and remanufacturing warranty period, the profit of the supply chain system first increases and then decreases, and the value is maximized at the extreme point in the manufacturer-led decision-making model. Furthermore, the leader gains higher profits with bargaining power, but the profit of the supply chain system under decentralized decision model is less than that of the centralized decision model, reflecting the double marginalization effect. The revenue sharing contract and the two-charge contract designed in this study coordinate the closed-loop supply chain system with warranty services, so that the member companies in the supply chain can achieve Pareto improvement.. [\[Cross Ref\]](#)

(注：第一作者为本人本科导师)

科研及课题

- 国家级大学生创新训练计划项目**主持人**（编号：201810300025Z；项目名称：产品升级换代情境下“以旧换再”闭环供应链定价决策及协调；已结题）
- 2019 年度教育部人文社会科学研究青年基金项目**主要参与人**（编号：19YJC630240；项目名称：再制造产品差异担保设计与实证研究）
- 2019 第二届中国可持续运营与管理学术会议（中国系统工程学会可持续运营与管理系统分会）**分会场汇报**，并录用会议论文一篇
- 2017 年度“江苏省社科应用研究精品工程”财经发展专项课题成员（编号：17SCB-23；项目名称：内控导向下高

校管理信息系统建设问题研究；已结题)

- **实用新型专利 3 篇**，专利号：ZL 2017 2 1366543.0；ZL 2017 2 1430314.0；ZL 2017 2 1430314.0（均为第一发明人，已授权）
- 软件著作权 3 篇（第一作者一篇）

☞ 个人能力

学术能力：精通 Worlframe 语言、Matlab、LaTeX、Flexsim，并能熟练使用 python。（均已贯穿于科研成果产出过程）

计算机水平：Auto CAD 二级工程师；CSWP 国际认证（SolidWorks）；微软办公软件国际认证（Microsoft Office Specialist）；阿里云 Apsara Clouder 云计算专项认证。

◀ 社会/企业经历

- 南京开天眼无人机科技有限公司联合创始人（江苏省优秀大学生创业项目，江苏省 2018 科技型中小企业，2018 江苏省海洋专项基金依托单位），历任**运营总监/无人机结构工程师**。主导完成企业天使轮投资协议。
- 2019 国家奖学金
- 2019 江苏省“三好学生”