

向JGCD投稿的成功之路

Journal of Guidance, Control, and Dynamics

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Editor-in-Chief

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Outline

- Overview of JGCD
- How Does the Process Work
- How to Write a (Good) Paper for JGCD
- How to Respond to Reviews/Decisions
- Cautionary Tales

Overview of the JGCD

- Founded in 1978, now the second largest journal published by the American Institute of Aeronautics and Astronautics (AIAA)
- “Devoted to the advancement of the science and technology of guidance, control, and dynamics”
- Papers must have original and significant contribution in
 - theory, methodology, or algorithms
 - novel application of existing techniques or ideas
 - aspects of the dynamics and control of significant recent developments, such as a new or different aircraft or spacecraft
- The JGCD is NOT just another control theoretic journal

Editorial Team of the JGCD

- Editor-in-Chief
- Associate Editors
- International Advisors
 - Solicit and recommend good papers to the JGCD
 - Help promote JGCD to the relevant technical community locally
 - Help answer general questions about the JGCD
 - JGCD 在国内的International Advisor:
 - 北京航空航天大学航空科学与工程学院、飞行力学与飞行安全系沈作军教授 (09433@buaa.edu.cn)
- Everyone on the Editorial Team is a volunteer, working for the journal in their own time, outside their regular jobs

Two Sobering Facts on Journal Papers

- Based on the statistics by *Science* two decades ago, only 45% papers published in the 4500 **top** scientific journals were cited within 5 years of their publication
- About 90% papers published in all journals are *never* cited

2012 JCR Ranking on Aerospace Research Journals

Rank	Abbreviated Journal Title	ISSN	JCR Data		
			Total Cites	Impact Factor	5-Year Impact Factor
3463	IEEE T AERO ELEC SYS	0018-9251	5915	1.299	1.767
4790	J GUID CONTROL DYNAM	0731-5090	4539	1.27	1.474
351	AIAA J	0001-1452	10686	1.08	1.301
5505	J THERMOPHYS HEAT TR	0887-8722	1613	0.881	0.876
302	AEROSP SCI TECHNOL	1270-9638	918	0.873	1.022
4179	J AEROSPACE ENG	0893-1321	434	0.778	0.854
5333	J PROPUL POWER	0748-4658	2340	0.717	0.936
66	ACTA ASTRONAUT	0094-5765	2040	0.701	0.664
4317	J ASTRONAUT SCI	0021-9142	561	0.697	0.677
4195	J AIRCRAFT	0021-8669	2646	0.632	0.701
3732	INT J AEROACOUST	1475-472X	190	0.627	
4221	J AM HELICOPTER SOC	0002-8711	377	0.514	0.571
5435	J SPACECRAFT ROCKETS	0022-4650	1593	0.489	0.707
359	AIRCR ENG AEROSP TEC	1748-8842	180	0.441	0.348
1720	CHINESE J AERONAUT	1000-9361	334	0.438	0.584
6676	P I MECH ENG G-J AER	0954-4100	514	0.4	0.663
300	AERONAUT J	0001-9240	502	0.311	0.469
7960	T JPN SOC AERONAUT S	0549-3811	126	0.259	0.292
2081	COSMIC RES+	0010-9525	332	0.244	0.275
4176	J AEROS COMP INF COM	1940-3151	93	0.214	

2012 SCImago Journal Rank on 63 Aerospace Engineering Journals

	Title	(Scopus based)	SJR	H index	Country
1	Progress in Aerospace Sciences	Q1	1.411	56	United Kingdom
2	Journal of Guidance, Control, and Dynamics	Q1	1.389	73	United States
3	IEEE Transactions on Aerospace and Electronic Systems	Q1	1.377	78	United States
4	AIAA Journal	Q1	0.915	82	United States
5	Navigation, Journal of the Institute of Navigation	Q1	0.738	20	United States
6	Journal of Aircraft	Q1	0.697	48	United States
7	Aerospace Science and Technology	Q1	0.629	33	Italy
8	Acta Astronautica	Q1	0.612	30	United Kingdom
9	Journal of the American Helicopter Society	Q1	0.592	31	United States
10	Journal of Propulsion and Power	Q1	0.581	54	United States
11	Journal of Spacecraft and Rockets	Q1	0.546	41	United States
12	IEEE Aerospace and Electronic Systems Magazine	Q1	0.434	32	United States
13	Journal of Traffic and Transportation Engineering	Q1	0.419	14	China
14	Proceedings of the Institution of Mechanical Engineers, Part G: Journal of Aerospace Engineering	Q1	0.414	19	United Kingdom
15	Annals of Public and Cooperative Economics	Q1	0.393	14	United States
16	Journal of Aerospace Engineering	Q1	0.354	25	United States
17	Journal of the Astronautical Sciences	Q2	0.334	29	United States
18	Zhongguo Guanxing Jishu Xuebao/Journal of Chinese Inertial Technology	Q2	0.328	5	China
19	Aeronautical Journal	Q2	0.321	24	United Kingdom

Current JGCD Statistics

- Submissions from 38 countries
 - Submissions from China: ~33%
 - Submissions from US: ~ 32%
 - Submissions from the rest of the world: 35%
- Acceptance rate projected for 2014: 28-30%
- I would like to see significant increase in the success rate of the papers from China
 - But you (the author) will have to have research results that are solid and publishable in the JGCD
 - This presentation can help you on how to write it as a good paper

How Does It Work (1)

- The paper is submitted online
<http://mc.manuscriptcentral.com/aiaa>
- See <http://arc.aiaa.org/loi/jgcd> for author resources
- All authors will need to sign the co-authors agreement
- The Editor-in-Chief (EIC) performs initial screening
 - Appropriateness of scope
 - Publication history
 - Apparent technical contribution; proper/complete references
 - English
 - Compliance with AIAA format and style; quality of figures
- The EIC can and will request revisions, withdraw, or decline papers without seeking reviews

How Does It Work (2)

- After the paper passes EIC initial screening, the paper is assigned to an Associate Editor (AE)
- The AE selects reviewers
- When the reviews come back, the AE makes the editorial decision and notifies the author
 - The Editor does not have to follow the recommendation of any particular reviewer or all reviewers
- If the author disagrees with AE's decision, the author can submit a rebuttal to the AE; the AE will respond
- If the AE declines the rebuttal and the author still disagrees, the author can appeal to the EIC
- The decision by the EIC is final

How to Write a Good JGCD Paper

- Prerequisite: there are already solid research results
- Decide the appropriate category for your paper
 - Technical Note: significant results of limited scope, 20 pages
 - Full-Length Paper: significant and complete results or development
 - When in doubt, consult an issue of the JGCD to see what a Note looks like, and how it compares to a full paper.
- Please follow the required AIAA style and format
- Choose a descriptive and succinct title (no more than 12 words)
 - Example: Optimal Aerocapture Guidance
 - Avoid titles like “Research on...”, “QSRT for BTT Vehicles”,...

What Should be in Abstract

- Key ingredients in an Abstract (in less 200 words)
 1. What is the problem
 2. Why is the problem worthy of research
 3. What is the technical approach/methodology
 4. What is the development in this paper
 5. What is the major result/accomplishment
- Common mistakes:
 - Filled with useless passages (长篇废话、空话, 言不及义)
 - Missing one or more of the above key elements

What the Introduction Should Explain

1. What is the problem?
 2. What is the significance of the problem (refernces)?
 3. What is the current state of research on the topic (references)?
 4. What is the remaining challenge or issue this paper intends to address? (why does the world need another paper?)
 5. What are the method/theory/techniques this paper uses, and why?
 6. What are the major results or contribution of this paper, especially compared to existing work?
- Common mistakes:
 - Poor or no motivation to the work in the paper
 - No mention of any original and significant advance beyond literature
 - Useless paragraphs such as “This paper is organized as follows.....”

The Body of the Paper

- Remember: you are writing this paper for the reader, not yourself –do not assume that the reader knows your mind
- Be logical, clear; do not use hyperboles or exaggerate
- Most JGCD papers need not use theorem/proof style
- Move lengthy derivations/proofs to appendices
- Do not use pseudo codes or busy flowcharts
- Pay attention to the quality of figures
- Refrain from excessive use of acronyms (especially the ones invented by you)

Conclusions Section

- The Conclusions section is only for the conclusions that can be drawn from and supported by the content of the paper
- If you are hard pressed to put down meaningful and substantive conclusions on the paper, think twice before submitting the paper to the JGCD.
- Common mistakes:
 - This section written as a laundry list (e.g., a summary of everything done in the paper)
 - Include statements on future work – any plan for future work is the author's business, and it is not publishable.

References

- The selection of the references reflects the author's understanding of the state-of-the-art in the topic area
- It is disastrous not to cite the most relevant references
- But it is not “the more, the merrier”
- Comply with the AIAA format for references (DOI numbers required whenever available)
- Common mistakes:
 - Neglect to include relevant papers published in the JGCD
 - References are arbitrary
 - References are unfocused – some are at best tangentially relevant, some are completely irrelevant

Revision

- When revisions are requested, make every effort to do an *honest, good-faith, and thorough* revision on every point requested; explain to the Editor in sufficient detail your major revisions
- Common mistakes:
 - Make a minimalistic effort to do only superficial revision
 - Leave some of the revision requests unaddressed, and never explain why
 - Claim to have made all required revisions while it is actually not true



Acceptance

- If the paper is accepted, **congratulations!!!**
- The JGCD and AIAA would appreciate the author to pay the voluntary publication charges – it is a token of support from you to the premier journal of your professional field



Rebuttal

- If the paper is declined by the AE, and you have good reasons to disagree with the reviews
 - You can submit a written rebuttal to the AE to clearly state your reasons of disagreement; focus on the most important points
 - But always be courteous, professional, and respectful
- Common mistakes:
 - Make claims like “the reviewer did not understand the paper...”
 - Use emotional and irrational languages or be argumentative
 - Use the reason “reviewer #2 was positive on the paper...”
 - Baselessly question the expertise of the reviewer



Cautionary Tales

- 灌水论文对作者有长期的不良影响
- “系列”似曾相识的论文不可取
- 切勿抱侥幸心理投半成品论文; 等到工作成熟后再投稿
- 至少逐字逐句检查、修改论文数遍
- 一定不要犯初级英语语法错误
- 指导老师: 请您务必仔细阅读您的学生准备投的论文
- Be honest and ethical in everything you do!

谢谢！