

The International Academy of Astronautics

21-23 May 2018



Prof. Filippo Graziani
IAA Trustee

Dr. Jean Michel Contant
Secretary General IAA

**“4th IAA Conference on
Dynamics and Control of
Space Systems” (DyCoSS)**
Changsha, China

First Space Pioneer

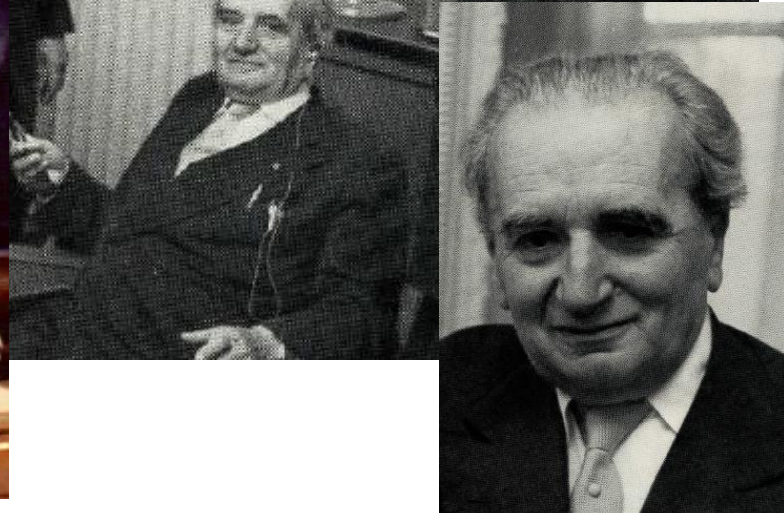
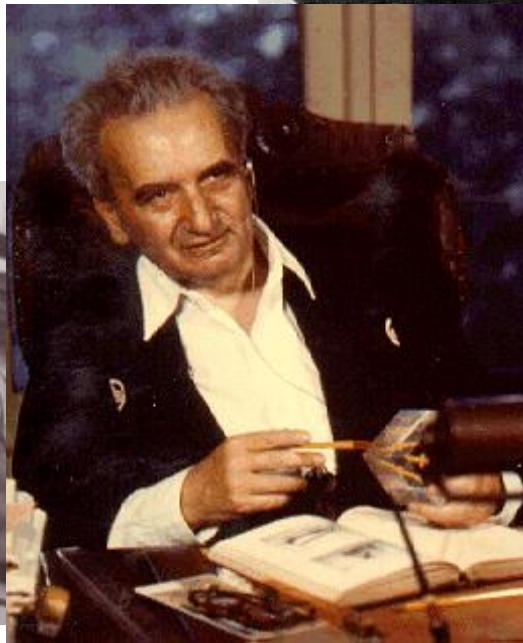


15th century Legend: Wàn Hǔ (虎萬 or 戶萬) of Ming dynasty attempted to become the world's first recorded "astronaut".

The International Academy of Astronautics (IAA)

Founded in Stockholm August 16, 1960

**Theodore von Karman
First IAA President and
Frank J. Malina Second
IAA President, GALCIT
project before historic
JATO flights in 1941
(JPL).**



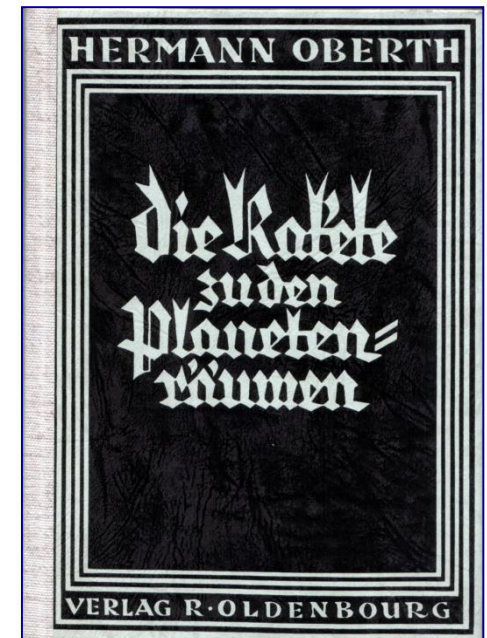
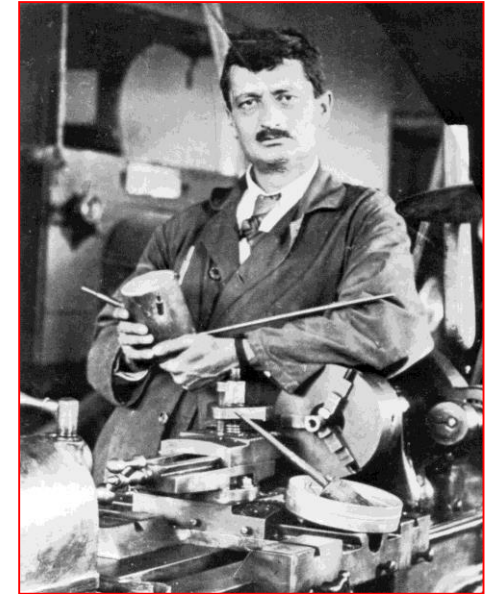
Space Pioneers

IAA Academician Herman Oberth (1894-1989)

Born in Sibiu

Lived and worked in Mediash

With IAA Academician
Dorin Prunariu



Space Pioneers were IAA Academicians



**IAA
Academician
Mikhail
Tikhonravov
in Russia
with Sergey
Korolev**

**IAA Academician
Valentin Petrovich
Glushko in Russia**



First US satellite, Explorer 1: radiation belt theorized by James Van Allen, one of the outstanding discoveries of the International Geophysical Year.



Starting from left side: IAA Academicians William Pickering, James Van Allen, Wernher von Braun

April 12, 1961

Yuri Gagarin IAA Honorary Member

First Man in Space



**Yelena Gagarina
Kremlin 2011**



16 June 1963
Valentina Tereshkova
IAA Honorary Member
On board Vostok 6
First Women Cosmonaut



2009 in Moscow



Valentina Tereshkova
Moscow April 2011

March 1965
Alexei Leonov
IAA member
First Space Walk



Kremlin April 2011

Tsien Hsueh Shen: Space Pioneer

- #100 scientists of Chinese origin were invited to leave JPL during the McCarthy era (1950) and sent to China.
- Tsien Hsueh, (Qian Xuesen) Prof. at Caltech, expert in propulsion head of the new Chinese missile program in 1956

After the rupture of URSS and China relations in 1959 design of an improved version of the V-2, known as the R-2 Dong Feng (East Wind).





**Apollo 11, July 16-24, 1969,
Neil Armstrong, IAA Member
(left) commander,**

**Buzz Aldrin, IAA Member,
(right) lunar module pilot.**

**Buzz Aldrin on July 20, 1969,
completed a 2-hour and 15
minute lunar EVA**



Buzz Aldrin Washington DC, May 2011



IAA

an independent international community
of 1200 active leading experts
(1700 from 89 nations)
recognized by the UN in 1996.

membership access based on highly
competitive election

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Membership: Access by Election

**About 50 new members elected each year
from all over the world**

Corresponding Member (<5 years)

Member (Lifetime)

www.iaaweb.org

**IAA is arranged in four
sections to reflect the
major disciplines:**

**Basic Sciences,
Engineering Sciences,
Life Sciences and
Social Sciences.**

THE THEODORE VON KARMAN AWARD

The premier and the most prestigious award of the Academy. Given annually to recognize outstanding lifetime achievements in any branch of science. Honors the memory of the Academy's founder and 1st President

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Ryojiro Akiba, Japan
Roger Bonnet, France

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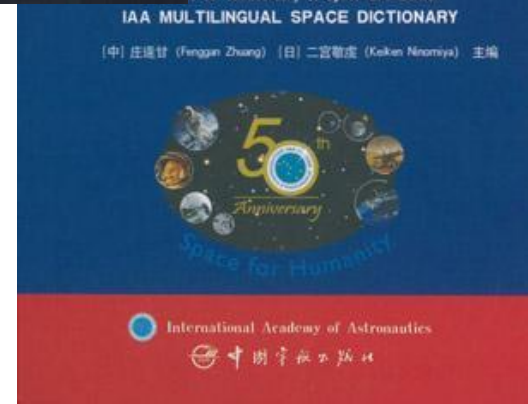
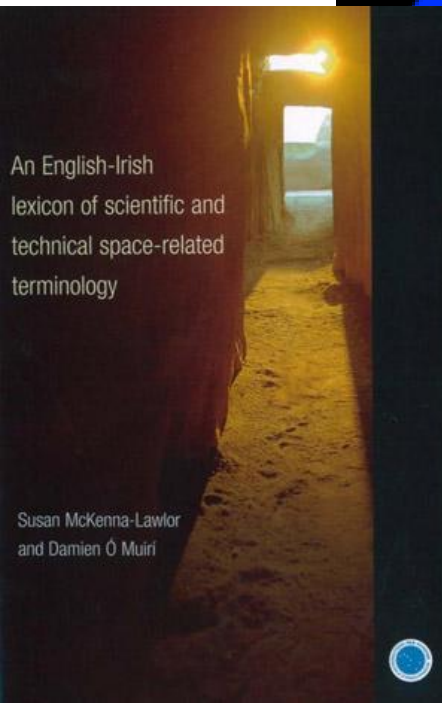
70 studies published 45 studies in preparation



<https://shop.iaaweb.org>

IAA Dictionaries

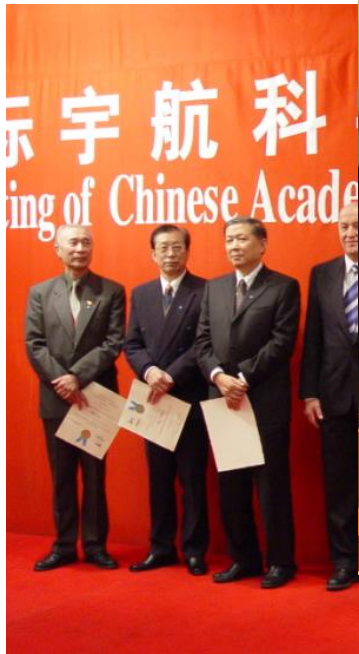
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25 to 30 IAA Conferences Yearly

Tokyo

Beijing



Bangalore



Tunis



Moscou



IAA Conferences on Impact of Space Technology Innovation on Economic Development, Shanghai, China

2001, 2008, 2011, 2013, 2015, 2017



Shanghai, China, Nov 2017



21 IAA Human in Space Symposia since 1962

Life science in all continents


21st HIS in Shenzhen, China 27 Nov 2017

1962 Paris
1971 Yerevan
1987 Houston
1993 Tokyo
2000 Santorini
2007 Beijing
2013 Cologne
2017 Shenzhen

1965 Paris
1973 Washington
1989 Tashkent
1995 Toulouse
2003 Banff
2009 Moscow
2015 Prague

1968 Geneva
1980 Bonn
1991 Cologne
1997 Washington
2005 Graz
2011 Houston



The background of the slide is a photograph of Earth taken from space, showing the blue horizon of the planet against the blackness of space. The text is overlaid on the left side of the image.

IAA pioneered new concepts such as
Return to the Moon
Mars Exploration
Space Debris
Small Satellites
Low Cost Planetary Missions
Planetary Defense
Space Situational Awareness ..

IAA is at the forefront of space research imagination and dreams and welcomed Summit follow-on.

How to enter the IAA world?

The youngest Academician is 33 years old

BUT

IAA welcome young scientists, engineers and students as members of any Study Groups and participants of any IAA stand alone conference.

All studies available online (free access)

www.iaaweb.org

List and preparatory work of Study Groups:

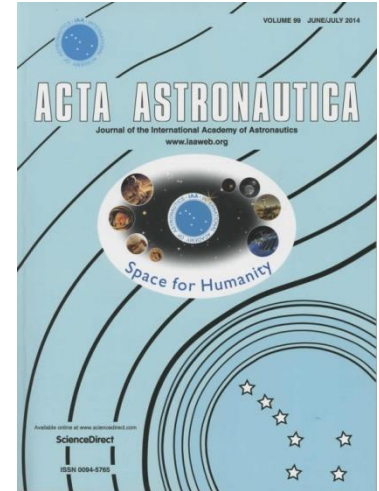
<http://iaaweb.org/content/view/273/412/>

How to enter the IAA world?

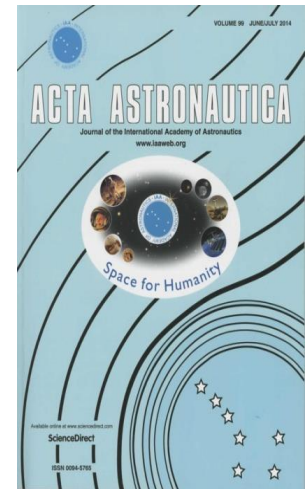
Publications are welcomed in:
Acta Astronautica Journal
<http://iaaweb.org>

**Papers are welcomed in any of the
IAA Conference.**

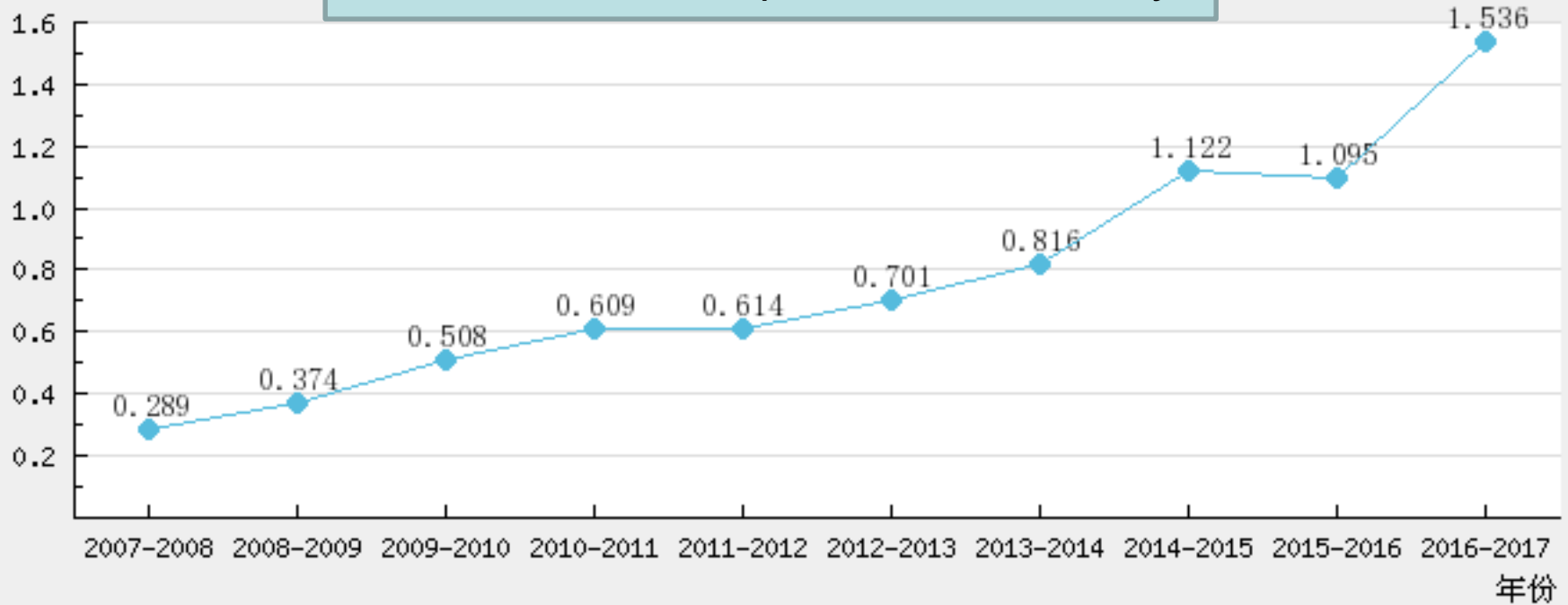
**Best Paper Awards for Student in
most of the IAA Conferences.**



Acta Astronautica

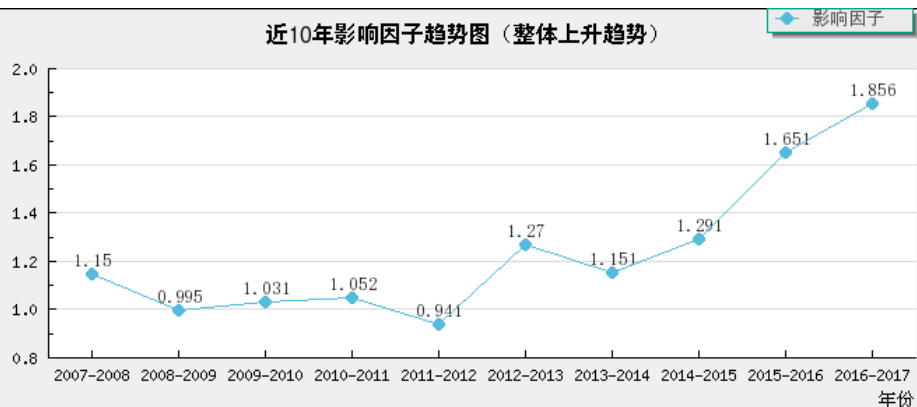


Acta Astronautica Impact Factor Tendency



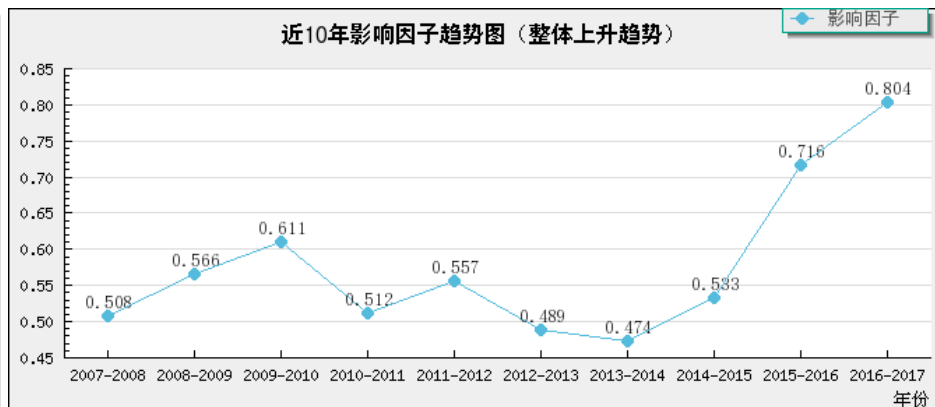
Other Journals IF Tendency

近10年影响因子趋势图（整体上升趋势）



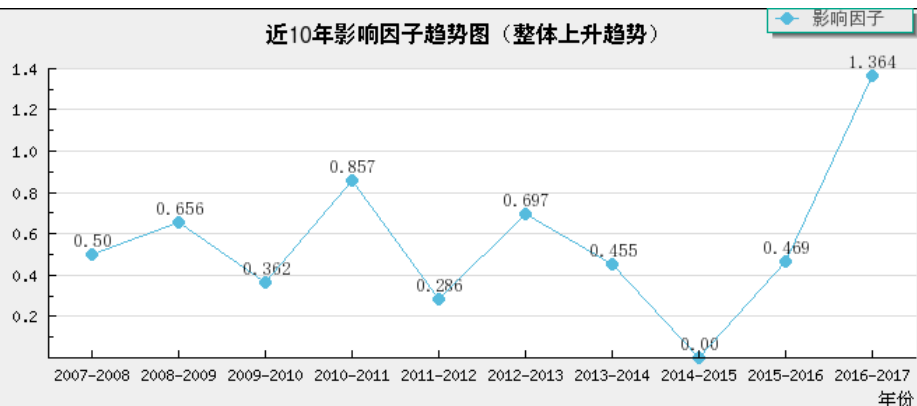
JOURNAL OF GUIDANCE, CONTROL, AND DYNAMICS

近10年影响因子趋势图（整体上升趋势）



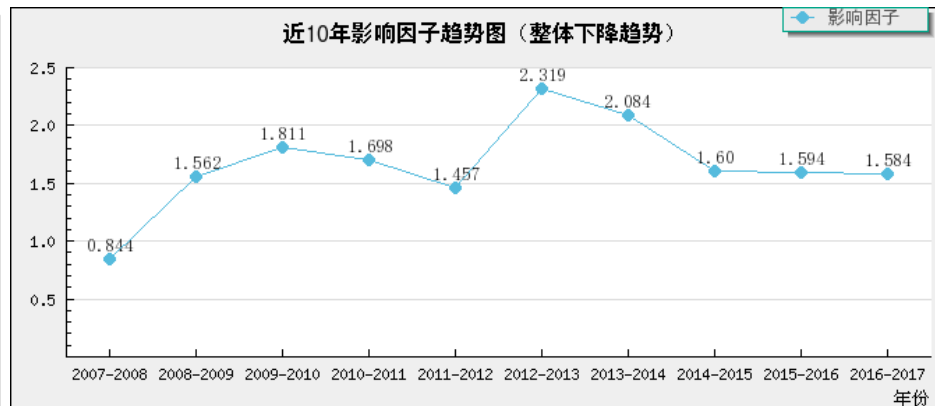
JOURNAL OF SPACECRAFT AND ROCKETS

近10年影响因子趋势图（整体上升趋势）



JOURNAL OF THE ASTRONAUTICAL SCIENCES

近10年影响因子趋势图（整体下降趋势）




CELESTIAL MECHANICS AND DYNAMICAL ASTRONOMY

Acta Astronautica

2-year IF, Δ (+ or -) and Ranking

Year	IF	Δ	Ranking
2009/2010	0.508		14/27
2010/2011	0.609	(+0.101, +19.9%)	9/27
2011/2012	0.614	(+0.005, +0.8%)	9/28
2012/2013	0.701	(+0.087, +14.2%)	9/28
2013/2014	0.816	(+0.115, +16.4%)	8/28
2014/2015	1.122	(+0.306, +37.5%)	5/30
2015/2016	1.095	(- 0.027, -2.4%)	7/30
2016/2017	1.536	(+0.441, +40.3%)	7/31



Have a great Conference
Thank you

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Photo Credit

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