

中国科学院

统计年鉴

2012

STATISTICAL YEARBOOK  
OF CHINESE ACADEMY OF SCIENCES

科学出版社

# 中国科学院统计年鉴

STATISTICAL YEARBOOK OF  
CHINESE ACADEMY OF SCIENCES

2012

中国科学院计划财务局 编

Bureau of Planning and Finance  
Chinese Academy of Sciences



科学出版社

北京

Science Press, Beijing

中国科学院统计年鉴

STATISTICAL YEARBOOK OF  
CHINESE ACADEMY OF SCIENCES

2012

中国科学院计划财务局

Bureau of Planning and Finance  
Chinese Academy of Sciences

中国科学院统计年鉴  
STATISTICAL YEARBOOK OF  
CHINESE ACADEMY OF SCIENCES  
2012

中国科学院计划财务局 编

科学出版社 出版

北京东黄城根北街16号

邮政编码: 100717

<http://www.sciencep.com>

中国科学院印刷厂 印刷

科学出版社出版发行

\*

2012年11月第一版 开本: 787×1092 1/16

2012年11月第一次印刷 印张: 21

字数: 470 000

ISBN 978-7-03-035813-4

定价: 180.00 元

(如有印装质量问题, 我社负责调换)

# 《中国科学院统计年鉴》(2012) 编委会和编辑人员

## 一、编委会

主 编：邓麦村

副主编：孔 力

编辑委员 (以姓氏笔画为序):

王志伟 孔繁文 吕永龙 李和风

陈晓峰 张 凤 张晓林 苗 鸿

周德进 索继栓 曹 凝 戚 强

崔胜先 潘 锋

## 二、编辑部工作人员

总 编辑：孔 力

副总编辑：崔胜先

责任编辑：刘晓东 王丽萍

编辑人员 (以姓氏笔画为序):

王 迪 王伶俐 甘 泉 毕金初

刘 红 刘 清 刘继昱 刘筱敏

李 毅 李 衡 杨兴宪 张 乐

张 洁 张世伟 陈文开 金 昆

金建辉 赵 军 郝 帅 徐建辉

高 军 唐 炜 彭 颖 彭晴晴

英文翻译和审校：刘晓东 崔胜先

# Members of the Editorial Committee and Editorial Office of the *Statistical Yearbook of Chinese Academy of Sciences*

## Editorial Committee

**Editor-in-Chief:** Deng Maicun

**Deputy Editor-in-Chief:** Kong Li

**Members** (according to the order of Chinese alphabet):

Wang zhiwei	Kong Fanwen	Lü Yonglong	Li Hefeng
Chen Xiaofeng	Zhang Feng	Zhang Xiaolin	Miao Hong
Zhou Dejin	Suo Jishuan	Cao Ning	Qi Qiang
Cui Shengxian	Pan Feng		

## Editorial Office

**Managing Editor:** Kong Li

**Deputy Managing Editor:** Cui Shengxian

**Coordinators:** Liu Xiaodong Wang Liping

**Members** (according to the order of Chinese alphabet):

Wang Di	Wang Lingli	Gan Quan	Bi Jinchu
Liu Hong	Liu Qing	Liu Jiyu	Liu Xiaomin
Li Yi	Li Heng	Yang Xingxian	Zhang Le
Zhang Jie	Zhang Shiwei	Chen Wenkai	Jin Kun
Jin Jianhui	Zhao Jun	Hao Shuai	Xu Jianhui
Gao Jun	Tang Wei	Peng Ying	Peng Qingqing

**English Translation & Revision:** Liu Xiaodong Cui Shengxian

# 编者说明

一、《中国科学院统计年鉴》(2012)是一部全面反映中国科学院科技工作和各项事业发展的资料性年刊。本年鉴收录了全院及院属各单位2011年的统计数据以及历年全院主要统计数据。

二、本年鉴内容分为12个部分,即:学部,机构,人员,经费,基本建设,科技活动,人才培养与引进,专利、科技论文、获奖成果,院、所投资企业开发经营活动,院地合作,国际合作及与港、澳、台交流,文献情报、图书出版。主要统计指标解释附于各部分之后。

三、本年鉴资料来源于综合、业务及其他管理部门年度统计报表。

四、本年鉴部分数据合计数由于单位取舍不同产生的计算误差均未做机械调整。

五、本年鉴各部分中的“按学科分”汇总数据,均指按机构所属学科分,个别情况已另加“注”说明。

六、本年鉴由中国科学院计划财务局会同院机关有关部门及相关单位共同完成。在编辑出版过程中,编辑部得到了各方面的支持和帮助,在此一并致谢。

## EDITOR'S NOTES

1. The *Statistical Yearbook of Chinese Academy of Sciences, 2012*, is an informational almanac which gives an overall description of every major aspect related to CAS's scientific and technological (S&T) activities and its development. It contains statistical data of institutions and organizations of CAS in 2011 as well as its important statistical information in the past year.

2. The Yearbook consists of the following 12 parts: academic divisions; organizations; personnel; funds; capital construction; S&T activities; talent training and recruitment; patents, S&T papers and award-winning achievements; business activities of CAS and its institution invested enterprises; CAS and locality cooperation; international cooperation, and exchanges with Hong Kong, Macao and Taiwan regions; documentation and information; and publication. Explanatory notes on key indicators are attached at the end of each part.

3. Data contained in the Yearbook are selected from the annual statistical reports of various professional and management departments of the Headquarters of CAS.

4. Details may not add to the total in some statistical tables due to rounding. No manual adjustment is made.

5. The definition "By field" in some statistical tables refers to the classification of research fields which the institutes mainly deal with, some special cases have attached notes.

6. The Yearbook is completed by the Bureau of Planning and Finance of CAS in cooperation with the relevant departments of CAS Headquarters and concerned institutions. The Editorial Committee extends its gratitude to all those who have rendered their valuable support and assistance during the preparation of this Yearbook.

# 目 录

## CONTENTS

一、学部 .....	1
<b>ACADEMIC DIVISIONS</b>	
1-1 历届当选的中国科学院院士(学部委员)人数按学部分布 .....	3
CAS Members, by Academic Division and Election Year	
1-2 现有院士人数按学部分布(2011 年) .....	4
Present CAS Members, by Academic Division: 2011	
1-3 中国科学院院士年龄情况(2011 年) .....	4
Age Distribution of CAS Members: 2011	
1-4 中国科学院学部咨询报告 .....	5
Consultation Reports Submitted by CAS Academic Divisions	
二、机构 .....	7
<b>ORGANIZATIONS</b>	
2-1 院直属单位发展情况 .....	9
Development of Units Directly under CAS	
2-2 院直属事业单位(2011 年) .....	10
Institutions Directly under CAS: 2011	
2-3 院直接投资的控股企业(2011 年) .....	15
CAS Invested Holding Enterprises: 2011	
主要统计指标解释 .....	17
Explanatory Notes on Key Indicators	
三、人员 .....	19
<b>PERSONNEL</b>	
3-1 事业单位在职职工分类情况 .....	20
Classification of CAS Regular Staff	
3-2 事业单位在职职工及离退休人员情况(2011 年) .....	22
CAS Regular Staff and Retired Personnel: 2011	
3-3 事业单位在职职工年龄情况(2011 年) .....	40
Age Distribution of CAS Regular Staff: 2011	
3-4 事业单位在职职工学位和学历情况(2011 年) .....	42
CAS Regular Staff, by Academic Degree and Qualification: 2011	
主要统计指标解释 .....	43
Explanatory Notes on Key Indicators	

四、经费 .....	45
<b>FUNDS</b>	
4-1 事业单位总收入、支出情况 .....	47
Total Income and Expenditure of CAS Institutions	
4-2 事业单位总收入情况(2011年) .....	48
Total Income of CAS Institutions: 2011	
4-3 事业单位总支出情况(2011年) .....	62
Total Expenditure of CAS Institutions: 2011	
主要统计指标解释 .....	76
Explanatory Notes on Key Indicators	
五、基本建设 .....	79
<b>CAPITAL CONSTRUCTION</b>	
5-1 基本建设总体情况 .....	81
General Information of Capital Construction	
5-2 基本建设投资完成情况(2011年) .....	82
Capital Construction Expenditure: 2011	
5-3 基本建设建筑面积完成情况(2011年) .....	82
Floor Space Completed: 2011	
六、科技活动 .....	83
<b>SCIENTIFIC AND TECHNOLOGICAL ACTIVITIES</b>	
6-1 科研机构人员概况 .....	85
Staff of CAS Research Institutions	
6-2 科研机构职工按工作性质分类(2011年) .....	86
Statistics of CAS Staff, by Nature of Work: 2011	
6-3 科研机构科技活动收入(2011年) .....	88
Total Income of S&T Activities in CAS Research Institutions: 2011	
6-4 科研机构科技活动经费内部支出情况(2011年) .....	110
Total Internal Expenditure of S&T Activities in CAS Research Institutions: 2011	
6-5 科研机构基本建设投资完成情况(2011年) .....	116
Capital Construction Expenditure in CAS Research Institutions: 2011	
6-6 科研机构科研仪器设备原值情况(2011年) .....	118
Original Value of Scientific Equipment and Instrumentation in CAS Research Institutions: 2011	
6-7 科研机构研究与试验发展人员全时当量 .....	134
Full-time Equivalent of R&D Personnel in Research Institutions	
6-8 科研机构研究与试验发展经费支出 .....	135
Research Institution R&D Expenditure	
6-9 科研机构科技活动课题基本情况 .....	136
Basic Statistics of S&T Projects in CAS Research Institutions	
6-10 科研机构科技活动课题综合情况(2011年) .....	138
Statistics of S&T Projects in CAS Research Institutions: 2011	

6-11	科研机构科技活动课题按活动类型分类(2011年).....	140
	Total S&T Projects in CAS Research Institutions, by Type of Research: 2011	
6-12	科研机构科技活动课题按主要任务来源分类(2011年).....	146
	Total S&T Projects in CAS Research Institutions, by Source of Project: 2011	
6-13	科研机构科技活动课题按技术领域分类(2011年).....	152
	Total S&T Projects in CAS Research Institutions, by Field of Technology: 2011	
6-14	科研机构科技著作.....	153
	S&T Works Published by CAS Research Institutions	
6-15	科研机构科技著作(2011年).....	154
	S&T Works Published by CAS Research Institutions: 2011	
6-16	学校及公共支撑机构科技活动课题综合情况(2011年).....	156
	Statistics of S&T Projects in Universities and CAS Supporting Institutions: 2011	
6-17	国家重点实验室人员情况(2011年).....	158
	Basic Statistics of Staff in the State Key Laboratories: 2011	
6-18	国家重点实验室课题情况(2011年).....	172
	Basic Statistics of Research Projects Conducted by the State Key Laboratories: 2011	
6-19	国家重点实验室科研课题经费投入情况(2011年).....	172
	Statistics of Research Project Funds for the State Key Laboratories: 2011	
6-20	国家重点实验室科技成果情况(2011年).....	174
	Statistics of Research Results from the State Key Laboratories: 2011	
6-21	工程中心总体情况.....	176
	General Statistics of Engineering Research Centers	
6-22	工程中心各类人员情况(2011年).....	178
	Statistics of Various Kinds of Staff at Engineering Research Centers: 2011	
	主要统计指标解释.....	184
	Explanatory Notes on Key Indicators	
七、	人才培养与引进.....	195
	<b>TALENT TRAINING AND RECRUITMENT</b>	
7-1	中国科学技术大学录取和毕业大学生情况.....	196
	Enrollment and Graduation of Undergraduate Students in the University of Science and Technology of China	
7-2	录取研究生和授予学位情况.....	197
	Total Enrollment of Graduate Students and Degrees Granted	
7-3	研究生招收培养及授予学位情况(2011年).....	198
	Total Enrollment of Graduate Students and Degrees Granted: 2011	
7-4	中国科学院院长奖学金获奖情况.....	214
	Statistics of CAS President's Scholarship	
7-5	博士后情况(2011年).....	215
	Statistics of Postdoctors: 2011	
7-6	派往国外及香港地区留学人员情况.....	222
	Statistics of Students and Visiting Scholars Sent Abroad and to Hong Kong Special Administrative Region	

7-7	派往国外及香港地区留学人员情况(2011年).....	223
	Statistics of Students and Visiting Scholars Sent Abroad and to Hong Kong Special Administrative Region: 2011	
7-8	职工继续教育和社会培训情况(2011年).....	224
	Statistics of Staff Continued Education and Personnel Trained for the Society:2011	
7-9	中国科学院“百人计划”招聘情况.....	228
	Status on the Recruitment of CAS Hundred Talents Program	
7-10	中国科学院“百人计划”各单位招聘情况.....	229
	Status on the Recruitment of CAS Hundred Talents Program, by Institution	
7-11	中国科学院“千人计划”招聘情况.....	235
	Status on the Recruitment of CAS Thousand Talents Program	
7-12	中国科学院“千人计划”各单位招聘情况.....	236
	Status on the Recruitment of CAS Thousand Talents Program, by Institution	
<b>八、专利、科技论文、获奖成果.....</b>		<b>243</b>
<b>PATENTS, S&amp;T PAPERS AND AWARD-WINNING ACHIEVEMENTS</b>		
8-1	专利申请受理量及授权量.....	245
	Number of Patents Applied and Granted	
8-2	专利申请受理量及授权量(2011年,按申请量排序).....	246
	Number of Patents Applied and Granted: 2011 (By the order of number of patents applied)	
8-3	科技论文的发表及被引用情况.....	253
	S&T Publications and Citations	
8-4	科技论文的发表及被引用情况(2010年).....	254
	S&T Publications and Citations: 2010	
8-5	科技论文在国内重要期刊上发表及被引用情况.....	258
	S&T Papers Published and Cited by Major Domestic Journals	
8-6	科技论文在国内重要期刊上被引次数最多的前30名机构(2010年).....	259
	Top 30 Institutions in Citation of S&T Papers by Major Domestic Journals: 2010	
8-7	获国家自然科学奖情况.....	261
	S&T Achievements Granted with National Natural Science Awards	
8-8	获国家技术发明奖情况.....	263
	S&T Achievements Granted with National Technology Invention Awards	
8-9	获国家科技进步奖情况.....	266
	S&T Achievements Granted with National S&T Progress Awards	
8-10	获国家科学技术奖情况(2011年).....	269
	S&T Achievements Granted with National S&T Awards: 2011	
<b>九、院、所投资企业开发经营活动.....</b>		<b>271</b>
<b>BUSINESS ACTIVITIES OF CAS AND ITS INSTITUTION INVESTED ENTERPRISES</b>		
9-1	院、所投资企业总体情况.....	273
	Statistical Indices of CAS and Its Institution Invested Enterprises	
9-2	院、所投资企业按在职职工总数分组(2011年).....	274
	CAS and Its Institution Invested Enterprises, by Number of Staff: 2011	

9-3	院、所投资企业按营业收入分组(2011年).....	275
	CAS and Its Institution Invested Enterprises, by Operating Income: 2011	
9-4	院、所投资企业按年利润总额分组(2011年).....	275
	CAS and Its Institution Invested Enterprises, by Annual Profit: 2011	
9-5	营业收入排序前30名的院、所投资企业(2011年).....	276
	Top 30 CAS and Its Institution Invested Enterprises in Business Income: 2011	
9-6	利润总额排序前30名的院、所投资企业(2011年).....	278
	Top 30 CAS and Its Institution Invested Enterprises in Total Profit: 2011	
9-7	院、所投资企业经营情况按行业分类(2011年).....	280
	Statistics of Business Operation of CAS and Its Institution Invested Enterprises, by Sector: 2011	
9-8	院、所投资企业高新技术产品分类(2011年).....	281
	High-technology Products of CAS and Its Institution Invested Enterprises: 2011	
	主要统计指标解释.....	282
	Explanatory Notes on Key Indicators	
十、	院地合作.....	285
	<b>CAS AND LOCALITY COOPERATION</b>	
10-1	院地合作项目社会经济效益情况.....	287
	General Statistics of CAS and Locality Cooperation Projects	
10-2	院地合作项目按销售收入分组(2011年).....	287
	CAS and Locality Cooperation Projects, by Sales Income: 2011	
10-3	院地合作项目按分院分类(2011年).....	288
	CAS and Locality Cooperation Projects, by Branches: 2011	
10-4	院地合作项目社会经济效益超过10亿元的单位(2011年).....	289
	Institutions with Sales Income Surpassing One Billion RMB Generated from CAS and Locality Cooperation: 2011	
十一、	国际合作及与港、澳、台地区交流.....	293
	<b>INTERNATIONAL COOPERATION PLUS EXCHANGES WITH HONG KONG, MACAO AND TAIWAN REGIONS</b>	
11-1	国际合作及与港、澳、台地区交流情况.....	295
	International Cooperation plus Exchanges with Hong Kong, Macao and Taiwan Regions	
11-2	国际合作及与港、澳、台地区交流邀请项目按类型分类(2011年).....	296
	Statistics of Visitors Hosted by CAS, by Type of Exchange: 2011	
11-3	国际合作及与港、澳、台地区交流派出项目按类型分类(2011年).....	303
	Statistics of CAS Staff Sent Overseas, by Type of Exchange: 2011	
11-4	在国际组织任职人员情况(2011.12).....	310
	Statistics of CAS Professionals Holding Posts in Various International Organizations:(December, 2011)	
十二、	文献情报、图书出版.....	311
	<b>DOCUMENTATION, INFORMATION AND PUBLICATION</b>	
12-1	文献情报系统馆藏文献情况.....	313
	Statistics of Documentation Collected by CAS Documentation and Information System	

12-2	数字文献资源建设(2011年).....	314
	Digital Documentation Resources: 2011	
12-3	文献情报系统馆藏图书、期刊情况(2011年).....	314
	Statistics of Books and Periodicals Collected by CAS Documentation and Information System: 2011	
12-4	文献情报系统馆藏其他文献情况(2011年).....	315
	Statistics of Other Documents Collected by CAS Documentation and Information System: 2011	
12-5	文献情报系统情报服务情况(2011年).....	315
	Documentation Services Provided by CAS Documentation and Information System: 2011	
12-6	文献情报系统情报加工与服务情况(2011年).....	315
	Information Processing and Services Provided by CAS Documentation and Information System: 2011	
12-7	图书出版情况.....	316
	Classification of Books Published	
12-8	图书出版情况(2011年).....	318
	Classification of Books Published: 2011	
12-9	自然科学期刊分类情况(2011年).....	319
	Classification of Periodicals in Natural Sciences: 2011	

# 一、学 部

## ACADEMIC DIVISIONS

1.1	1	1	1
1.2	2	2	2
1.3	3	3	3
1.4	4	4	4
1.5	5	5	5
1.6	6	6	6
1.7	7	7	7
1.8	8	8	8
1.9	9	9	9
1.10	10	10	10
1.11	11	11	11
1.12	12	12	12
1.13	13	13	13
1.14	14	14	14
1.15	15	15	15
1.16	16	16	16
1.17	17	17	17
1.18	18	18	18
1.19	19	19	19
1.20	20	20	20
1.21	21	21	21
1.22	22	22	22
1.23	23	23	23
1.24	24	24	24
1.25	25	25	25
1.26	26	26	26
1.27	27	27	27
1.28	28	28	28
1.29	29	29	29
1.30	30	30	30
1.31	31	31	31
1.32	32	32	32
1.33	33	33	33
1.34	34	34	34
1.35	35	35	35
1.36	36	36	36
1.37	37	37	37
1.38	38	38	38
1.39	39	39	39
1.40	40	40	40
1.41	41	41	41
1.42	42	42	42
1.43	43	43	43
1.44	44	44	44
1.45	45	45	45
1.46	46	46	46
1.47	47	47	47
1.48	48	48	48
1.49	49	49	49
1.50	50	50	50
1.51	51	51	51
1.52	52	52	52
1.53	53	53	53
1.54	54	54	54
1.55	55	55	55
1.56	56	56	56
1.57	57	57	57
1.58	58	58	58
1.59	59	59	59
1.60	60	60	60
1.61	61	61	61
1.62	62	62	62
1.63	63	63	63
1.64	64	64	64
1.65	65	65	65
1.66	66	66	66
1.67	67	67	67
1.68	68	68	68
1.69	69	69	69
1.70	70	70	70
1.71	71	71	71
1.72	72	72	72
1.73	73	73	73
1.74	74	74	74
1.75	75	75	75
1.76	76	76	76
1.77	77	77	77
1.78	78	78	78
1.79	79	79	79
1.80	80	80	80
1.81	81	81	81
1.82	82	82	82
1.83	83	83	83
1.84	84	84	84
1.85	85	85	85
1.86	86	86	86
1.87	87	87	87
1.88	88	88	88
1.89	89	89	89
1.90	90	90	90
1.91	91	91	91
1.92	92	92	92
1.93	93	93	93
1.94	94	94	94
1.95	95	95	95
1.96	96	96	96
1.97	97	97	97
1.98	98	98	98
1.99	99	99	99
1.100	100	100	100



# 1-1 历届当选的中国科学院院士(学部委员)人数按学部分布

## CAS Members, by Academic Division and Election Year

单位: 人

(person)

年份 Year	合计 Total	数学物理学部 Division of Mathematics and Physics	化学部 Division of Chemistry	生命科学和 医学学部 Division of Life Sciences and Medicine	地学部 Division of Earth Sciences	信息技术 科学部 Division of Information Technical Sciences	技术科学部 Division of Technological Sciences
总计 Total	1194	213	197	254	211	18	301
1955	172	30	22	60	24		36
1957	18	6	2	5	3		2
1980	283	51	51	53	64		64
1991	210	38	35	34	35		68
1993	59	10	10	11	10		18
1995	59	10	9	12	10		18
1997	58	9	10	12	10		17
1999	55	10	8	11	10		16
2001	56	10	10	12	9		15
2003	58	10	10	11	10		17
2005	51	8	9	12	7	6	9
2007	29	6	6	7	4	1	5
2009	35	6	8	5	5	4	7
2011	51	9	7	9	10	7	9

## 1-2 现有院士人数按学部分布(2011年)

### Present CAS Members, by Academic Division: 2011

单位: 人

(person)

	合计 Total	数学物理学部 Division of Mathematics and Physics	化学部 Division of Chemistry	生命科学和医学学部 Division of Life Sciences and Medicine	地学部 Division of Earth Sciences	信息技术科学部 Division of Information Technical Sciences	技术科学部 Division of Technological Sciences
<b>总计</b> <b>Total</b>	<b>727</b>	<b>139</b>	<b>126</b>	<b>128</b>	<b>119</b>	<b>83</b>	<b>132</b>
其中: 女性 Of which: Female	44	8	9	14	6	3	4
中国科学院 CAS	276	64	46	59	53	31	23
高等院校 Institutions of higher education	324	55	73	49	35	39	73
其他单位 Other institutions	127	20	7	20	31	13	36

注: 1. 另有 64 位中国科学院外籍院士。

Note: In addition, CAS has 64 foreign members.

2. 2004 年 6 月, 生物学部更名为生命科学和医学学部, 技术科学部划分为信息技术科学部、技术科学部。

In June 2004, Division of Biological Sciences changed its name into Division of Life Sciences and Medicine, while, Division of Technological Sciences was divided into Division of Information Technical Sciences and Division of Technological Sciences.

## 1-3 中国科学院院士年龄情况(2011年)

### Age Distribution of CAS Members: 2011

单位: 人

(person)

	合计 Total	40-49 岁 Aged 40-49	50-59 岁 Aged 50-59	60-69 岁 Aged 60-69	70-79 岁 Aged 70-79	80-89 岁 Aged 80-89	90 岁以上 Aged 90
<b>总计</b> <b>Total</b>	<b>727</b>	<b>46</b>	<b>80</b>	<b>84</b>	<b>283</b>	<b>174</b>	<b>60</b>
数学物理学部 Division of Mathematics and Physics	139	8	10	19	64	30	8
化学部 Division of Chemistry	126	10	23	11	32	37	13
生命科学和医学学部 Division of Life Sciences and Medicine	128	10	20	18	36	36	8
地学部 Division of Earth Sciences	119	3	13	15	57	23	8
信息技术科学部 Division of Information Technical Sciences	83	6	7	7	43	15	5
技术科学部 Division of Technological Sciences	132	9	7	14	51	33	18