

电工研究所 2013 年 SCI/EI 奖励论文分析

科技论文是科技工作产出的一个侧面，从一个重要的角度反映了一个机构在基础研究、应用研究等方面开展的工作及其与国内外科技界的交流情况。SCI (Science Citation Index)和 EI (The Engineering Index) 是现在国际最常用的评价资源，其中 SCI 主要反映的是基础科学研究情况，EI 主要反映的是工程技术方面的状况。研究所的科研成果是否被 SCI 和 EI 收录，在评价其科研实力和科研人员的学术水平上发挥着重要的作用。

本报告利用 ISI Web of science 数据库、Ei Engineering Village 2 数据库、Endnote 软件及情报分析工具 TDA，对 2013 年电工所奖励的论文进行系统的检索分析，揭示电工所目前的科技论文产出概貌。

同时，由于不同学科之间的 SCI 期刊很难进行比较和评价，报告中对仅以期刊影响因子作为科技论文影响力评价标准的弊端做了简单分析。

一、 2013 年度论文奖励总体情况

电工所 2013 年奖励的论文共有 252 篇，有 109 篇论文被 SCI 收录，240 篇论文被 EI 收录，其中 97 篇论文为 SCI、EI 双收录论文。因此，在 SCI/EI 双收录论文按照 SCI 论文标准给予奖励的原则下，本年度获 SCI 奖励论文 109 篇（包括期刊论文 90 篇，会议论文 19 篇），获 EI 奖励论文 143 篇（期刊论文 59 篇，会议论文 84 篇）。具体情况如表 1 所示。

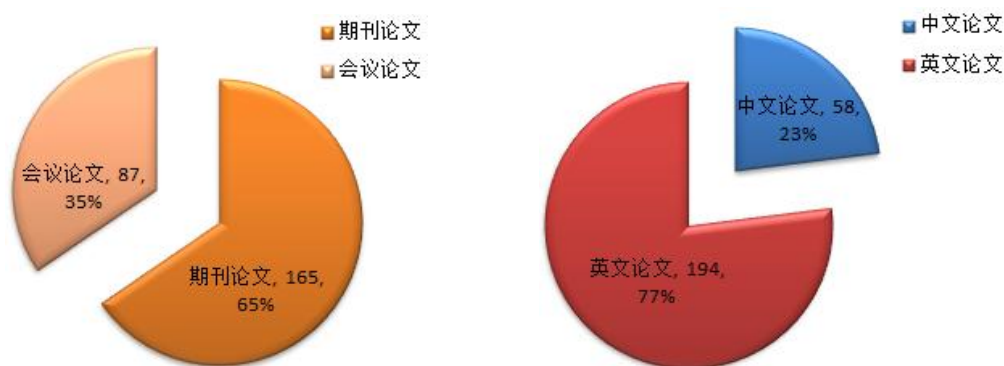


图 1 电工所 2013 年奖励论文概况 (1)

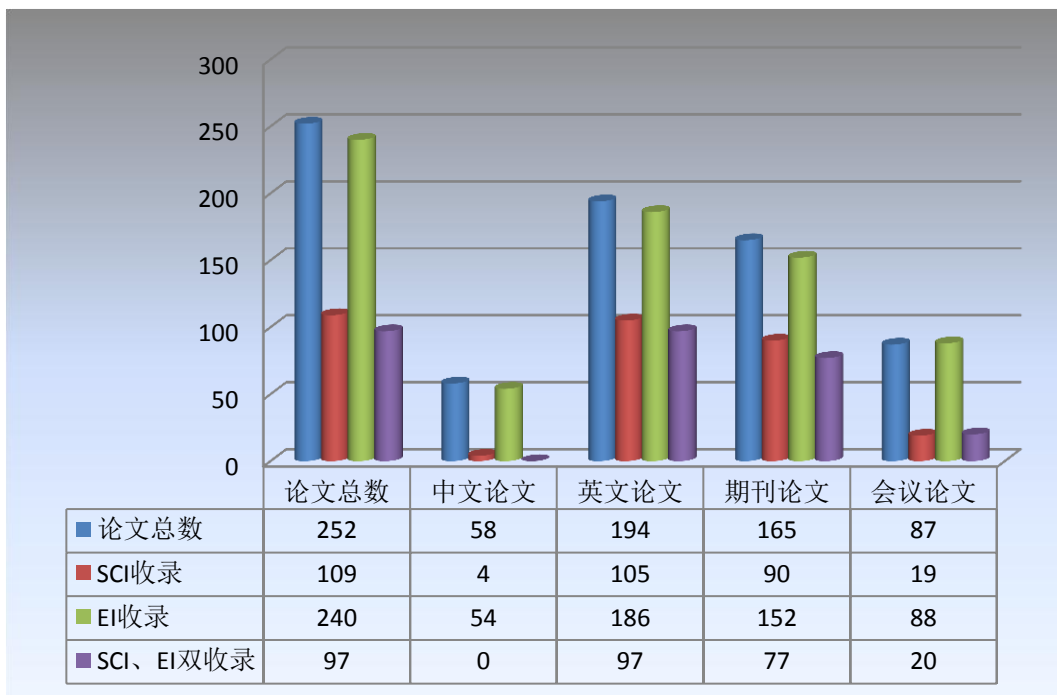


图 1 电工所 2013 年奖励论文概况 (2)

二、 发文期刊分析

2013 年获奖励的期刊论文共发表在 65 个期刊中，其中发文量在 10 篇及以上的期刊有 4 个，分别是：IEEE Transactions on Applied Superconductivity (21 篇)、强激光与离子束(12 篇)、高电压技术(11 篇)以及 Superconductor Science & Technology (10 篇)。发文量在 2 篇以上的期刊共 28 个，如表 1 所示。

表 1 发文期刊统计

序号	期刊名称	发文数量
1	IEEE TRANSACTIONS ON APPLIED SUPERCONDUCTIVITY	21
2	强激光与离子束	12
3	高电压技术	11
4	SUPERCONDUCTOR SCIENCE & TECHNOLOGY	10
5	SOLAR ENERGY	8
6	中国电机工程学报	8
7	电工技术学报	7
8	JOURNAL OF ALLOYS AND COMPOUNDS	4
9	MATERIALS LETTERS	4
10	RENEWABLE ENERGY	4
11	CRYOGENICS	3
12	电机与控制学报	3

13	电力系统保护与控制	3
14	电力系统自动化	3
15	JOURNAL OF APPLIED PHYSICS	3
16	RARE METALS	3
17	物理学报	2
18	物理化学学报	2
19	APPLIED ENERGY	2
20	电力自动化设备	2
21	ELECTROCHIMICA ACTA	2
22	EPL (EUROPHYSICS LETTERS)	2
23	IEEE TRANSACTIONS ON PLASMA SCIENCE	2
24	IEEE TRANSACTIONS ON POWER ELECTRONICS	2
25	JOURNAL OF BEIJING INSTITUTE OF TECHNOLOGY (ENGLISH EDITION)	2
26	JOURNAL OF MAGNETISM AND MAGNETIC MATERIALS	2
27	SCIENCE CHINA-TECHNOLOGICAL SCIENCES	2
28	太阳能学报	2

本次奖励涉及的 SCI（或 SCI/EI）期刊共 49 个，其中 PROGRESS IN PHOTOVOLTAICS 的影响因子最高，为 7.712。

JCR 期刊引证报告数据库中对期刊进行了学科领域分类，并将每个学科领域中的期刊按照影响因子大小排名后四等分为 Q1、Q2、Q3 和 Q4 区间，表 2 给出了各发文期刊所属领域及其排名情况。由此可见：1) 各学科领域期刊的种类（数量）存在差异；2) 同一期刊可能归属于不同的学科领域；3) 不同学科领域期刊的影响因子在数值上差异较大。

以本次发文量排名第一的期刊 IEEE TRANSACTIONS ON APPLIED SUPERCONDUCTIVITY 为例，该期刊同时属于 ENGINEERING, ELECTRICAL & ELECTRONIC 领域和 PHYSICS, APPLIED 领域，其在 ENGINEERING, ELECTRICAL & ELECTRONIC 领域中位于 113 位 Q2 区，在 PHYSICS, APPLIED 领域中虽然位于 73 位却属于 Q3 区。而本所的超导磁体与强磁场应用研究部、超导电力应用与新型输电技术研究部、电磁信息检测与成像技术研究部、工程电磁场及其应用研究部 4 个研究组都在该期刊上发表了论文，共计 21 篇。因此，这些论文所在期刊的影响因子虽然一样，但如果它们定位在不同的领域，其将在同行中产生不一样的影响力。表 3 所示为有多个研究组选择发文的期刊。

同时，JCR 这种将期刊按数量等分为 4 个区域的方法是欠合理的，因此，国内越来越多的高校和科研院所开始采纳中科院国家科学图书馆的“JCR 期刊影响

因子及分区情况”数据（以下简称国科图 SCI 分区表），该分区表综合考虑期刊的质量、影响力等因素以年度和学科为单位对 SCI 期刊重新进行 4 个等级的划分，将各学科的 SCI 期刊分为 1 区（最高区）、2 区、3 区和 4 区四个等级，并呈金字塔状分布，顶级最高区期刊最少，底层 4 区期刊最多，各种学科被归为 13 个大类（领域）及 173 种小类（方向）。国科图 SCI 分区表有利于鼓励科研工作者向本学科的高级区域投稿，发表在 1 区和 2 区的 SCI 论文，通常被认为是该学科领域的比较重要的成果。

比如在 2012 年版的国科图 SCI 分区表中，工程技术大类下共有 1709 个期刊，其中 1 区 85 个，2 区 225 个，3 区 377 个，4 区 1022 个，该大类下的“电子与电气”小类有 164 个刊，其中 PROG QUANT ELECTRON 影响因子排名第一处于 1 区，IEEE TRANSACTIONS ON APPLIED SUPERCONDUCTIVITY 排名 83 处于 3 区位置。

表 2 SCI（或 SCI/EI）期刊影响力分析

序号	期刊名称	影响因子	领域排名																
1	PROGRESS IN PHOTOVOLTAICS	7.712	<table border="1"> <thead> <tr> <th>Category Name</th> <th>Total Journals in Category</th> <th>Journal Rank in Category</th> <th>Quartile in Category</th> </tr> </thead> <tbody> <tr> <td>ENERGY & FUELS</td> <td>81</td> <td>4</td> <td>Q1</td> </tr> <tr> <td>MATERIALS SCIENCE, MULTIDISCIPLINARY</td> <td>241</td> <td>15</td> <td>Q1</td> </tr> <tr> <td>PHYSICS, APPLIED</td> <td>128</td> <td>11</td> <td>Q1</td> </tr> </tbody> </table>	Category Name	Total Journals in Category	Journal Rank in Category	Quartile in Category	ENERGY & FUELS	81	4	Q1	MATERIALS SCIENCE, MULTIDISCIPLINARY	241	15	Q1	PHYSICS, APPLIED	128	11	Q1
Category Name	Total Journals in Category	Journal Rank in Category	Quartile in Category																
ENERGY & FUELS	81	4	Q1																
MATERIALS SCIENCE, MULTIDISCIPLINARY	241	15	Q1																
PHYSICS, APPLIED	128	11	Q1																
2	APPLIED ENERGY	4.781	<table border="1"> <thead> <tr> <th>Category Name</th> <th>Total Journals in Category</th> <th>Journal Rank in Category</th> <th>Quartile in Category</th> </tr> </thead> <tbody> <tr> <td>ENERGY & FUELS</td> <td>81</td> <td>6</td> <td>Q1</td> </tr> <tr> <td>ENGINEERING, CHEMICAL</td> <td>133</td> <td>6</td> <td>Q1</td> </tr> </tbody> </table>	Category Name	Total Journals in Category	Journal Rank in Category	Quartile in Category	ENERGY & FUELS	81	6	Q1	ENGINEERING, CHEMICAL	133	6	Q1				
Category Name	Total Journals in Category	Journal Rank in Category	Quartile in Category																
ENERGY & FUELS	81	6	Q1																
ENGINEERING, CHEMICAL	133	6	Q1																
3	SOLAR ENERGY MATERIALS AND SOLAR CELLS	4.630	<table border="1"> <thead> <tr> <th>Category Name</th> <th>Total Journals in Category</th> <th>Journal Rank in Category</th> <th>Quartile in Category</th> </tr> </thead> <tbody> <tr> <td>ENERGY & FUELS</td> <td>81</td> <td>10</td> <td>Q1</td> </tr> <tr> <td>MATERIALS SCIENCE, MULTIDISCIPLINARY</td> <td>241</td> <td>29</td> <td>Q1</td> </tr> <tr> <td>PHYSICS, APPLIED</td> <td>128</td> <td>16</td> <td>Q1</td> </tr> </tbody> </table>	Category Name	Total Journals in Category	Journal Rank in Category	Quartile in Category	ENERGY & FUELS	81	10	Q1	MATERIALS SCIENCE, MULTIDISCIPLINARY	241	29	Q1	PHYSICS, APPLIED	128	16	Q1
Category Name	Total Journals in Category	Journal Rank in Category	Quartile in Category																
ENERGY & FUELS	81	10	Q1																
MATERIALS SCIENCE, MULTIDISCIPLINARY	241	29	Q1																
PHYSICS, APPLIED	128	16	Q1																
4	IEEE TRANSACTIONS ON POWER ELECTRONICS	4.080	<table border="1"> <thead> <tr> <th>Category Name</th> <th>Total Journals in Category</th> <th>Journal Rank in Category</th> <th>Quartile in Category</th> </tr> </thead> <tbody> <tr> <td>ENGINEERING, ELECTRICAL & ELECTRONIC</td> <td>243</td> <td>6</td> <td>Q1</td> </tr> </tbody> </table>	Category Name	Total Journals in Category	Journal Rank in Category	Quartile in Category	ENGINEERING, ELECTRICAL & ELECTRONIC	243	6	Q1								
Category Name	Total Journals in Category	Journal Rank in Category	Quartile in Category																
ENGINEERING, ELECTRICAL & ELECTRONIC	243	6	Q1																
5	NEW JOURNAL OF PHYSICS	4.063	<table border="1"> <thead> <tr> <th>Category Name</th> <th>Total Journals in Category</th> <th>Journal Rank in Category</th> <th>Quartile in Category</th> </tr> </thead> <tbody> <tr> <td>PHYSICS, MULTIDISCIPLINARY</td> <td>83</td> <td>9</td> <td>Q1</td> </tr> </tbody> </table>	Category Name	Total Journals in Category	Journal Rank in Category	Quartile in Category	PHYSICS, MULTIDISCIPLINARY	83	9	Q1								
Category Name	Total Journals in Category	Journal Rank in Category	Quartile in Category																
PHYSICS, MULTIDISCIPLINARY	83	9	Q1																
6	PHYSICAL CHEMISTRY CHEMICAL PHYSICS	3.829	<table border="1"> <thead> <tr> <th>Category Name</th> <th>Total Journals in Category</th> <th>Journal Rank in Category</th> <th>Quartile in Category</th> </tr> </thead> <tbody> <tr> <td>CHEMISTRY, PHYSICAL</td> <td>135</td> <td>32</td> <td>Q1</td> </tr> <tr> <td>PHYSICS, ATOMIC, MOLECULAR & CHEMICAL</td> <td>34</td> <td>6</td> <td>Q1</td> </tr> </tbody> </table>	Category Name	Total Journals in Category	Journal Rank in Category	Quartile in Category	CHEMISTRY, PHYSICAL	135	32	Q1	PHYSICS, ATOMIC, MOLECULAR & CHEMICAL	34	6	Q1				
Category Name	Total Journals in Category	Journal Rank in Category	Quartile in Category																
CHEMISTRY, PHYSICAL	135	32	Q1																
PHYSICS, ATOMIC, MOLECULAR & CHEMICAL	34	6	Q1																
7	ELECTROCHIMICA ACTA	3.777	<table border="1"> <thead> <tr> <th>Category Name</th> <th>Total Journals in Category</th> <th>Journal Rank in Category</th> <th>Quartile in Category</th> </tr> </thead> <tbody> <tr> <td>ELECTROCHEMISTRY</td> <td>26</td> <td>6</td> <td>Q1</td> </tr> </tbody> </table>	Category Name	Total Journals in Category	Journal Rank in Category	Quartile in Category	ELECTROCHEMISTRY	26	6	Q1								
Category Name	Total Journals in Category	Journal Rank in Category	Quartile in Category																
ELECTROCHEMISTRY	26	6	Q1																
8	ENERGY	3.651	<table border="1"> <thead> <tr> <th>Category Name</th> <th>Total Journals in Category</th> <th>Journal Rank in Category</th> <th>Quartile in Category</th> </tr> </thead> <tbody> <tr> <td>ENERGY & FUELS</td> <td>81</td> <td>14</td> <td>Q1</td> </tr> <tr> <td>THERMODYNAMICS</td> <td>55</td> <td>2</td> <td>Q1</td> </tr> </tbody> </table>	Category Name	Total Journals in Category	Journal Rank in Category	Quartile in Category	ENERGY & FUELS	81	14	Q1	THERMODYNAMICS	55	2	Q1				
Category Name	Total Journals in Category	Journal Rank in Category	Quartile in Category																
ENERGY & FUELS	81	14	Q1																
THERMODYNAMICS	55	2	Q1																
9	BIOMICROFLUIDICS	3.385	<table border="1"> <thead> <tr> <th>Category Name</th> <th>Total Journals in Category</th> <th>Journal Rank in Category</th> <th>Quartile in Category</th> </tr> </thead> <tbody> <tr> <td>BIOPHYSICS</td> <td>72</td> <td>22</td> <td>Q2</td> </tr> <tr> <td>NANOSCIENCE & NANOTECHNOLOGY</td> <td>69</td> <td>22</td> <td>Q2</td> </tr> <tr> <td>PHYSICS, FLUIDS & PLASMAS</td> <td>31</td> <td>3</td> <td>Q1</td> </tr> </tbody> </table>	Category Name	Total Journals in Category	Journal Rank in Category	Quartile in Category	BIOPHYSICS	72	22	Q2	NANOSCIENCE & NANOTECHNOLOGY	69	22	Q2	PHYSICS, FLUIDS & PLASMAS	31	3	Q1
Category Name	Total Journals in Category	Journal Rank in Category	Quartile in Category																
BIOPHYSICS	72	22	Q2																
NANOSCIENCE & NANOTECHNOLOGY	69	22	Q2																
PHYSICS, FLUIDS & PLASMAS	31	3	Q1																

10	RENEWABLE ENERGY	2.989	<table border="1"> <thead> <tr> <th>Category Name</th> <th>Total Journals in Category</th> <th>Journal Rank in Category</th> <th>Quartile in Category</th> </tr> </thead> <tbody> <tr> <td>ENERGY & FUELS</td> <td>81</td> <td>18</td> <td>Q1</td> </tr> </tbody> </table>	Category Name	Total Journals in Category	Journal Rank in Category	Quartile in Category	ENERGY & FUELS	81	18	Q1								
Category Name	Total Journals in Category	Journal Rank in Category	Quartile in Category																
ENERGY & FUELS	81	18	Q1																
11	SOLAR ENERGY	2.952	<table border="1"> <thead> <tr> <th>Category Name</th> <th>Total Journals in Category</th> <th>Journal Rank in Category</th> <th>Quartile in Category</th> </tr> </thead> <tbody> <tr> <td>ENERGY & FUELS</td> <td>81</td> <td>21</td> <td>Q2</td> </tr> </tbody> </table>	Category Name	Total Journals in Category	Journal Rank in Category	Quartile in Category	ENERGY & FUELS	81	21	Q2								
Category Name	Total Journals in Category	Journal Rank in Category	Quartile in Category																
ENERGY & FUELS	81	21	Q2																
12	SCIENTIFIC REPORTS	2.927	<table border="1"> <thead> <tr> <th>Category Name</th> <th>Total Journals in Category</th> <th>Journal Rank in Category</th> <th>Quartile in Category</th> </tr> </thead> <tbody> <tr> <td>MULTIDISCIPLINARY SCIENCES</td> <td>56</td> <td>8</td> <td>Q1</td> </tr> </tbody> </table>	Category Name	Total Journals in Category	Journal Rank in Category	Quartile in Category	MULTIDISCIPLINARY SCIENCES	56	8	Q1								
Category Name	Total Journals in Category	Journal Rank in Category	Quartile in Category																
MULTIDISCIPLINARY SCIENCES	56	8	Q1																
13	SUPERCONDUCTOR SCIENCE & TECHNOLOGY	2.758	<table border="1"> <thead> <tr> <th>Category Name</th> <th>Total Journals in Category</th> <th>Journal Rank in Category</th> <th>Quartile in Category</th> </tr> </thead> <tbody> <tr> <td>PHYSICS, APPLIED</td> <td>128</td> <td>22</td> <td>Q1</td> </tr> <tr> <td>PHYSICS, CONDENSED MATTER</td> <td>68</td> <td>18</td> <td>Q2</td> </tr> </tbody> </table>	Category Name	Total Journals in Category	Journal Rank in Category	Quartile in Category	PHYSICS, APPLIED	128	22	Q1	PHYSICS, CONDENSED MATTER	68	18	Q2				
Category Name	Total Journals in Category	Journal Rank in Category	Quartile in Category																
PHYSICS, APPLIED	128	22	Q1																
PHYSICS, CONDENSED MATTER	68	18	Q2																
14	ENERGY POLICY	2.743	<table border="1"> <thead> <tr> <th>Category Name</th> <th>Total Journals in Category</th> <th>Journal Rank in Category</th> <th>Quartile in Category</th> </tr> </thead> <tbody> <tr> <td>ENERGY & FUELS</td> <td>81</td> <td>25</td> <td>Q2</td> </tr> <tr> <td>ENVIRONMENTAL SCIENCES</td> <td>210</td> <td>51</td> <td>Q1</td> </tr> </tbody> </table>	Category Name	Total Journals in Category	Journal Rank in Category	Quartile in Category	ENERGY & FUELS	81	25	Q2	ENVIRONMENTAL SCIENCES	210	51	Q1				
Category Name	Total Journals in Category	Journal Rank in Category	Quartile in Category																
ENERGY & FUELS	81	25	Q2																
ENVIRONMENTAL SCIENCES	210	51	Q1																
15	APPLIED PHYSICS EXPRESS	2.731	<table border="1"> <thead> <tr> <th>Category Name</th> <th>Total Journals in Category</th> <th>Journal Rank in Category</th> <th>Quartile in Category</th> </tr> </thead> <tbody> <tr> <td>PHYSICS, APPLIED</td> <td>128</td> <td>23</td> <td>Q1</td> </tr> </tbody> </table>	Category Name	Total Journals in Category	Journal Rank in Category	Quartile in Category	PHYSICS, APPLIED	128	23	Q1								
Category Name	Total Journals in Category	Journal Rank in Category	Quartile in Category																
PHYSICS, APPLIED	128	23	Q1																
16	RSC ADVANCES	2.562	<table border="1"> <thead> <tr> <th>Category Name</th> <th>Total Journals in Category</th> <th>Journal Rank in Category</th> <th>Quartile in Category</th> </tr> </thead> <tbody> <tr> <td>CHEMISTRY, MULTIDISCIPLINARY</td> <td>152</td> <td>46</td> <td>Q2</td> </tr> </tbody> </table>	Category Name	Total Journals in Category	Journal Rank in Category	Quartile in Category	CHEMISTRY, MULTIDISCIPLINARY	152	46	Q2								
Category Name	Total Journals in Category	Journal Rank in Category	Quartile in Category																
CHEMISTRY, MULTIDISCIPLINARY	152	46	Q2																
17	IEEE TRANSACTIONS ON ENERGY CONVERSION	2.427	<table border="1"> <thead> <tr> <th>Category Name</th> <th>Total Journals in Category</th> <th>Journal Rank in Category</th> <th>Quartile in Category</th> </tr> </thead> <tbody> <tr> <td>ENERGY & FUELS</td> <td>81</td> <td>30</td> <td>Q2</td> </tr> <tr> <td>ENGINEERING, ELECTRICAL & ELECTRONIC</td> <td>243</td> <td>33</td> <td>Q1</td> </tr> </tbody> </table>	Category Name	Total Journals in Category	Journal Rank in Category	Quartile in Category	ENERGY & FUELS	81	30	Q2	ENGINEERING, ELECTRICAL & ELECTRONIC	243	33	Q1				
Category Name	Total Journals in Category	Journal Rank in Category	Quartile in Category																
ENERGY & FUELS	81	30	Q2																
ENGINEERING, ELECTRICAL & ELECTRONIC	243	33	Q1																
18	JOURNAL OF ALLOYS AND COMPOUNDS	2.390	<table border="1"> <thead> <tr> <th>Category Name</th> <th>Total Journals in Category</th> <th>Journal Rank in Category</th> <th>Quartile in Category</th> </tr> </thead> <tbody> <tr> <td>CHEMISTRY, PHYSICAL</td> <td>135</td> <td>57</td> <td>Q2</td> </tr> <tr> <td>MATERIALS SCIENCE, MULTIDISCIPLINARY</td> <td>241</td> <td>49</td> <td>Q1</td> </tr> <tr> <td>METALLURGY & METALLURGICAL ENGINEERING</td> <td>76</td> <td>4</td> <td>Q1</td> </tr> </tbody> </table>	Category Name	Total Journals in Category	Journal Rank in Category	Quartile in Category	CHEMISTRY, PHYSICAL	135	57	Q2	MATERIALS SCIENCE, MULTIDISCIPLINARY	241	49	Q1	METALLURGY & METALLURGICAL ENGINEERING	76	4	Q1
Category Name	Total Journals in Category	Journal Rank in Category	Quartile in Category																
CHEMISTRY, PHYSICAL	135	57	Q2																
MATERIALS SCIENCE, MULTIDISCIPLINARY	241	49	Q1																
METALLURGY & METALLURGICAL ENGINEERING	76	4	Q1																
19	PHYSICS OF PLASMAS	2.376	<table border="1"> <thead> <tr> <th>Category Name</th> <th>Total Journals in Category</th> <th>Journal Rank in Category</th> <th>Quartile in Category</th> </tr> </thead> <tbody> <tr> <td>PHYSICS, FLUIDS & PLASMAS</td> <td>31</td> <td>8</td> <td>Q2</td> </tr> </tbody> </table>	Category Name	Total Journals in Category	Journal Rank in Category	Quartile in Category	PHYSICS, FLUIDS & PLASMAS	31	8	Q2								
Category Name	Total Journals in Category	Journal Rank in Category	Quartile in Category																
PHYSICS, FLUIDS & PLASMAS	31	8	Q2																
20	JOURNAL OF SOLID STATE ELECTROCHEMISTRY	2.279	<table border="1"> <thead> <tr> <th>Category Name</th> <th>Total Journals in Category</th> <th>Journal Rank in Category</th> <th>Quartile in Category</th> </tr> </thead> <tbody> <tr> <td>ELECTROCHEMISTRY</td> <td>26</td> <td>13</td> <td>Q3</td> </tr> </tbody> </table>	Category Name	Total Journals in Category	Journal Rank in Category	Quartile in Category	ELECTROCHEMISTRY	26	13	Q3								
Category Name	Total Journals in Category	Journal Rank in Category	Quartile in Category																
ELECTROCHEMISTRY	26	13	Q3																
21	EPL	2.260	<table border="1"> <thead> <tr> <th>Category Name</th> <th>Total Journals in Category</th> <th>Journal Rank in Category</th> <th>Quartile in Category</th> </tr> </thead> <tbody> <tr> <td>PHYSICS, MULTIDISCIPLINARY</td> <td>83</td> <td>18</td> <td>Q1</td> </tr> </tbody> </table>	Category Name	Total Journals in Category	Journal Rank in Category	Quartile in Category	PHYSICS, MULTIDISCIPLINARY	83	18	Q1								
Category Name	Total Journals in Category	Journal Rank in Category	Quartile in Category																
PHYSICS, MULTIDISCIPLINARY	83	18	Q1																
22	MATERIALS LETTERS	2.224	<table border="1"> <thead> <tr> <th>Category Name</th> <th>Total Journals in Category</th> <th>Journal Rank in Category</th> <th>Quartile in Category</th> </tr> </thead> <tbody> <tr> <td>MATERIALS SCIENCE, MULTIDISCIPLINARY</td> <td>241</td> <td>56</td> <td>Q1</td> </tr> <tr> <td>PHYSICS, APPLIED</td> <td>128</td> <td>31</td> <td>Q1</td> </tr> </tbody> </table>	Category Name	Total Journals in Category	Journal Rank in Category	Quartile in Category	MATERIALS SCIENCE, MULTIDISCIPLINARY	241	56	Q1	PHYSICS, APPLIED	128	31	Q1				
Category Name	Total Journals in Category	Journal Rank in Category	Quartile in Category																
MATERIALS SCIENCE, MULTIDISCIPLINARY	241	56	Q1																
PHYSICS, APPLIED	128	31	Q1																
23	JOURNAL OF APPLIED PHYSICS	2.210	<table border="1"> <thead> <tr> <th>Category Name</th> <th>Total Journals in Category</th> <th>Journal Rank in Category</th> <th>Quartile in Category</th> </tr> </thead> <tbody> <tr> <td>PHYSICS, APPLIED</td> <td>128</td> <td>32</td> <td>Q2</td> </tr> </tbody> </table>	Category Name	Total Journals in Category	Journal Rank in Category	Quartile in Category	PHYSICS, APPLIED	128	32	Q2								
Category Name	Total Journals in Category	Journal Rank in Category	Quartile in Category																
PHYSICS, APPLIED	128	32	Q2																
24	MATERIALS CHEMISTRY AND PHYSICS	2.072	<table border="1"> <thead> <tr> <th>Category Name</th> <th>Total Journals in Category</th> <th>Journal Rank in Category</th> <th>Quartile in Category</th> </tr> </thead> <tbody> <tr> <td>MATERIALS SCIENCE, MULTIDISCIPLINARY</td> <td>241</td> <td>61</td> <td>Q2</td> </tr> </tbody> </table>	Category Name	Total Journals in Category	Journal Rank in Category	Quartile in Category	MATERIALS SCIENCE, MULTIDISCIPLINARY	241	61	Q2								
Category Name	Total Journals in Category	Journal Rank in Category	Quartile in Category																
MATERIALS SCIENCE, MULTIDISCIPLINARY	241	61	Q2																
25	LASER AND PARTICLE BEAMS	2.016	<table border="1"> <thead> <tr> <th>Category Name</th> <th>Total Journals in Category</th> <th>Journal Rank in Category</th> <th>Quartile in Category</th> </tr> </thead> <tbody> <tr> <td>PHYSICS, APPLIED</td> <td>128</td> <td>38</td> <td>Q2</td> </tr> </tbody> </table>	Category Name	Total Journals in Category	Journal Rank in Category	Quartile in Category	PHYSICS, APPLIED	128	38	Q2								
Category Name	Total Journals in Category	Journal Rank in Category	Quartile in Category																
PHYSICS, APPLIED	128	38	Q2																
26	JOURNAL OF MAGNETISM AND MAGNETIC MATERIALS	1.826	<table border="1"> <thead> <tr> <th>Category Name</th> <th>Total Journals in Category</th> <th>Journal Rank in Category</th> <th>Quartile in Category</th> </tr> </thead> <tbody> <tr> <td>MATERIALS SCIENCE, MULTIDISCIPLINARY</td> <td>241</td> <td>77</td> <td>Q2</td> </tr> <tr> <td>PHYSICS, CONDENSED MATTER</td> <td>68</td> <td>28</td> <td>Q2</td> </tr> </tbody> </table>	Category Name	Total Journals in Category	Journal Rank in Category	Quartile in Category	MATERIALS SCIENCE, MULTIDISCIPLINARY	241	77	Q2	PHYSICS, CONDENSED MATTER	68	28	Q2				
Category Name	Total Journals in Category	Journal Rank in Category	Quartile in Category																
MATERIALS SCIENCE, MULTIDISCIPLINARY	241	77	Q2																
PHYSICS, CONDENSED MATTER	68	28	Q2																
27	JOURNAL OF NON-CRYSTALLINE SOLIDS	1.597	<table border="1"> <thead> <tr> <th>Category Name</th> <th>Total Journals in Category</th> <th>Journal Rank in Category</th> <th>Quartile in Category</th> </tr> </thead> <tbody> <tr> <td>MATERIALS SCIENCE, CERAMICS</td> <td>27</td> <td>5</td> <td>Q1</td> </tr> <tr> <td>MATERIALS SCIENCE, MULTIDISCIPLINARY</td> <td>241</td> <td>91</td> <td>Q2</td> </tr> </tbody> </table>	Category Name	Total Journals in Category	Journal Rank in Category	Quartile in Category	MATERIALS SCIENCE, CERAMICS	27	5	Q1	MATERIALS SCIENCE, MULTIDISCIPLINARY	241	91	Q2				
Category Name	Total Journals in Category	Journal Rank in Category	Quartile in Category																
MATERIALS SCIENCE, CERAMICS	27	5	Q1																
MATERIALS SCIENCE, MULTIDISCIPLINARY	241	91	Q2																
28	EXPERIMENTAL THERMAL AND FLUID SCIENCE	1.595	<table border="1"> <thead> <tr> <th>Category Name</th> <th>Total Journals in Category</th> <th>Journal Rank in Category</th> <th>Quartile in Category</th> </tr> </thead> <tbody> <tr> <td>ENGINEERING, MECHANICAL</td> <td>125</td> <td>24</td> <td>Q1</td> </tr> <tr> <td>PHYSICS, FLUIDS & PLASMAS</td> <td>31</td> <td>16</td> <td>Q3</td> </tr> <tr> <td>THERMODYNAMICS</td> <td>55</td> <td>17</td> <td>Q2</td> </tr> </tbody> </table>	Category Name	Total Journals in Category	Journal Rank in Category	Quartile in Category	ENGINEERING, MECHANICAL	125	24	Q1	PHYSICS, FLUIDS & PLASMAS	31	16	Q3	THERMODYNAMICS	55	17	Q2
Category Name	Total Journals in Category	Journal Rank in Category	Quartile in Category																
ENGINEERING, MECHANICAL	125	24	Q1																
PHYSICS, FLUIDS & PLASMAS	31	16	Q3																
THERMODYNAMICS	55	17	Q2																
29	VACUUM	1.530	<table border="1"> <thead> <tr> <th>Category Name</th> <th>Total Journals in Category</th> <th>Journal Rank in Category</th> <th>Quartile in Category</th> </tr> </thead> <tbody> <tr> <td>MATERIALS SCIENCE, MULTIDISCIPLINARY</td> <td>241</td> <td>97</td> <td>Q2</td> </tr> <tr> <td>PHYSICS, APPLIED</td> <td>128</td> <td>56</td> <td>Q2</td> </tr> </tbody> </table>	Category Name	Total Journals in Category	Journal Rank in Category	Quartile in Category	MATERIALS SCIENCE, MULTIDISCIPLINARY	241	97	Q2	PHYSICS, APPLIED	128	56	Q2				
Category Name	Total Journals in Category	Journal Rank in Category	Quartile in Category																
MATERIALS SCIENCE, MULTIDISCIPLINARY	241	97	Q2																
PHYSICS, APPLIED	128	56	Q2																

30	CURRENT MICROBIOLOGY	1. 520	<table border="1"> <thead> <tr> <th>Category Name</th> <th>Total Journals in Category</th> <th>Journal Rank in Category</th> <th>Quartile in Category</th> </tr> </thead> <tbody> <tr> <td>MICROBIOLOGY</td> <td>116</td> <td>87</td> <td>Q4</td> </tr> </tbody> </table>	Category Name	Total Journals in Category	Journal Rank in Category	Quartile in Category	MICROBIOLOGY	116	87	Q4								
Category Name	Total Journals in Category	Journal Rank in Category	Quartile in Category																
MICROBIOLOGY	116	87	Q4																
31	JOURNAL OF RENEWABLE AND SUSTAINABLE ENERGY	1. 514	<table border="1"> <thead> <tr> <th>Category Name</th> <th>Total Journals in Category</th> <th>Journal Rank in Category</th> <th>Quartile in Category</th> </tr> </thead> <tbody> <tr> <td>ENERGY & FUELS</td> <td>81</td> <td>42</td> <td>Q3</td> </tr> </tbody> </table>	Category Name	Total Journals in Category	Journal Rank in Category	Quartile in Category	ENERGY & FUELS	81	42	Q3								
Category Name	Total Journals in Category	Journal Rank in Category	Quartile in Category																
ENERGY & FUELS	81	42	Q3																
32	PHYSICA STATUS SOLIDI A-APPLICATIONS AND MATERIALS SCIENCE	1. 469	<table border="1"> <thead> <tr> <th>Category Name</th> <th>Total Journals in Category</th> <th>Journal Rank in Category</th> <th>Quartile in Category</th> </tr> </thead> <tbody> <tr> <td>MATERIALS SCIENCE, MULTIDISCIPLINARY</td> <td>241</td> <td>101</td> <td>Q2</td> </tr> <tr> <td>PHYSICS, APPLIED</td> <td>128</td> <td>62</td> <td>Q2</td> </tr> <tr> <td>PHYSICS, CONDENSED MATTER</td> <td>68</td> <td>40</td> <td>Q3</td> </tr> </tbody> </table>	Category Name	Total Journals in Category	Journal Rank in Category	Quartile in Category	MATERIALS SCIENCE, MULTIDISCIPLINARY	241	101	Q2	PHYSICS, APPLIED	128	62	Q2	PHYSICS, CONDENSED MATTER	68	40	Q3
Category Name	Total Journals in Category	Journal Rank in Category	Quartile in Category																
MATERIALS SCIENCE, MULTIDISCIPLINARY	241	101	Q2																
PHYSICS, APPLIED	128	62	Q2																
PHYSICS, CONDENSED MATTER	68	40	Q3																
33	JOURNAL OF RARE EARTHS	1. 363	<table border="1"> <thead> <tr> <th>Category Name</th> <th>Total Journals in Category</th> <th>Journal Rank in Category</th> <th>Quartile in Category</th> </tr> </thead> <tbody> <tr> <td>CHEMISTRY, APPLIED</td> <td>71</td> <td>33</td> <td>Q2</td> </tr> </tbody> </table>	Category Name	Total Journals in Category	Journal Rank in Category	Quartile in Category	CHEMISTRY, APPLIED	71	33	Q2								
Category Name	Total Journals in Category	Journal Rank in Category	Quartile in Category																
CHEMISTRY, APPLIED	71	33	Q2																
34	IEEE TRANSACTIONS ON INSTRUMENTATION AND MEASUREMENT	1. 357	<table border="1"> <thead> <tr> <th>Category Name</th> <th>Total Journals in Category</th> <th>Journal Rank in Category</th> <th>Quartile in Category</th> </tr> </thead> <tbody> <tr> <td>ENGINEERING, ELECTRICAL & ELECTRONIC</td> <td>243</td> <td>94</td> <td>Q2</td> </tr> <tr> <td>INSTRUMENTS & INSTRUMENTATION</td> <td>57</td> <td>25</td> <td>Q2</td> </tr> </tbody> </table>	Category Name	Total Journals in Category	Journal Rank in Category	Quartile in Category	ENGINEERING, ELECTRICAL & ELECTRONIC	243	94	Q2	INSTRUMENTS & INSTRUMENTATION	57	25	Q2				
Category Name	Total Journals in Category	Journal Rank in Category	Quartile in Category																
ENGINEERING, ELECTRICAL & ELECTRONIC	243	94	Q2																
INSTRUMENTS & INSTRUMENTATION	57	25	Q2																
35	CURRENT NANOSCIENCE	1. 356	<table border="1"> <thead> <tr> <th>Category Name</th> <th>Total Journals in Category</th> <th>Journal Rank in Category</th> <th>Quartile in Category</th> </tr> </thead> <tbody> <tr> <td>BIOTECHNOLOGY & APPLIED MICROBIOLOGY</td> <td>160</td> <td>111</td> <td>Q3</td> </tr> <tr> <td>MATERIALS SCIENCE, MULTIDISCIPLINARY</td> <td>241</td> <td>106</td> <td>Q2</td> </tr> <tr> <td>NANOSCIENCE & NANOTECHNOLOGY</td> <td>69</td> <td>41</td> <td>Q3</td> </tr> </tbody> </table>	Category Name	Total Journals in Category	Journal Rank in Category	Quartile in Category	BIOTECHNOLOGY & APPLIED MICROBIOLOGY	160	111	Q3	MATERIALS SCIENCE, MULTIDISCIPLINARY	241	106	Q2	NANOSCIENCE & NANOTECHNOLOGY	69	41	Q3
Category Name	Total Journals in Category	Journal Rank in Category	Quartile in Category																
BIOTECHNOLOGY & APPLIED MICROBIOLOGY	160	111	Q3																
MATERIALS SCIENCE, MULTIDISCIPLINARY	241	106	Q2																
NANOSCIENCE & NANOTECHNOLOGY	69	41	Q3																
36	CHINESE SCIENCE BULLETIN	1. 319	<table border="1"> <thead> <tr> <th>Category Name</th> <th>Total Journals in Category</th> <th>Journal Rank in Category</th> <th>Quartile in Category</th> </tr> </thead> <tbody> <tr> <td>MULTIDISCIPLINARY SCIENCES</td> <td>56</td> <td>18</td> <td>Q2</td> </tr> </tbody> </table>	Category Name	Total Journals in Category	Journal Rank in Category	Quartile in Category	MULTIDISCIPLINARY SCIENCES	56	18	Q2								
Category Name	Total Journals in Category	Journal Rank in Category	Quartile in Category																
MULTIDISCIPLINARY SCIENCES	56	18	Q2																
37	IEEE TRANSACTIONS ON APPLIED SUPERCONDUCTIVITY	1. 199	<table border="1"> <thead> <tr> <th>Category Name</th> <th>Total Journals in Category</th> <th>Journal Rank in Category</th> <th>Quartile in Category</th> </tr> </thead> <tbody> <tr> <td>ENGINEERING, ELECTRICAL & ELECTRONIC</td> <td>243</td> <td>113</td> <td>Q2</td> </tr> <tr> <td>PHYSICS, APPLIED</td> <td>128</td> <td>73</td> <td>Q3</td> </tr> </tbody> </table>	Category Name	Total Journals in Category	Journal Rank in Category	Quartile in Category	ENGINEERING, ELECTRICAL & ELECTRONIC	243	113	Q2	PHYSICS, APPLIED	128	73	Q3				
Category Name	Total Journals in Category	Journal Rank in Category	Quartile in Category																
ENGINEERING, ELECTRICAL & ELECTRONIC	243	113	Q2																
PHYSICS, APPLIED	128	73	Q3																
38	SCIENCE CHINA-TECHNOLOGICAL SCIENCES	1. 187	<table border="1"> <thead> <tr> <th>Category Name</th> <th>Total Journals in Category</th> <th>Journal Rank in Category</th> <th>Quartile in Category</th> </tr> </thead> <tbody> <tr> <td>ENGINEERING, MULTIDISCIPLINARY</td> <td>90</td> <td>25</td> <td>Q2</td> </tr> <tr> <td>MATERIALS SCIENCE, MULTIDISCIPLINARY</td> <td>241</td> <td>129</td> <td>Q3</td> </tr> </tbody> </table>	Category Name	Total Journals in Category	Journal Rank in Category	Quartile in Category	ENGINEERING, MULTIDISCIPLINARY	90	25	Q2	MATERIALS SCIENCE, MULTIDISCIPLINARY	241	129	Q3				
Category Name	Total Journals in Category	Journal Rank in Category	Quartile in Category																
ENGINEERING, MULTIDISCIPLINARY	90	25	Q2																
MATERIALS SCIENCE, MULTIDISCIPLINARY	241	129	Q3																
39	ADVANCES IN SPACE RESEARCH	1. 183	<table border="1"> <thead> <tr> <th>Category Name</th> <th>Total Journals in Category</th> <th>Journal Rank in Category</th> <th>Quartile in Category</th> </tr> </thead> <tbody> <tr> <td>ASTRONOMY & ASTROPHYSICS</td> <td>56</td> <td>38</td> <td>Q3</td> </tr> <tr> <td>GEOSCIENCES, MULTIDISCIPLINARY</td> <td>172</td> <td>103</td> <td>Q3</td> </tr> <tr> <td>METEOROLOGY & ATMOSPHERIC SCIENCES</td> <td>74</td> <td>55</td> <td>Q3</td> </tr> </tbody> </table>	Category Name	Total Journals in Category	Journal Rank in Category	Quartile in Category	ASTRONOMY & ASTROPHYSICS	56	38	Q3	GEOSCIENCES, MULTIDISCIPLINARY	172	103	Q3	METEOROLOGY & ATMOSPHERIC SCIENCES	74	55	Q3
Category Name	Total Journals in Category	Journal Rank in Category	Quartile in Category																
ASTRONOMY & ASTROPHYSICS	56	38	Q3																
GEOSCIENCES, MULTIDISCIPLINARY	172	103	Q3																
METEOROLOGY & ATMOSPHERIC SCIENCES	74	55	Q3																
40	CRYOGENICS	1. 170	<table border="1"> <thead> <tr> <th>Category Name</th> <th>Total Journals in Category</th> <th>Journal Rank in Category</th> <th>Quartile in Category</th> </tr> </thead> <tbody> <tr> <td>PHYSICS, APPLIED</td> <td>128</td> <td>75</td> <td>Q3</td> </tr> <tr> <td>THERMODYNAMICS</td> <td>55</td> <td>23</td> <td>Q2</td> </tr> </tbody> </table>	Category Name	Total Journals in Category	Journal Rank in Category	Quartile in Category	PHYSICS, APPLIED	128	75	Q3	THERMODYNAMICS	55	23	Q2				
Category Name	Total Journals in Category	Journal Rank in Category	Quartile in Category																
PHYSICS, APPLIED	128	75	Q3																
THERMODYNAMICS	55	23	Q2																
41	SIMULATION MODELLING PRACTICE AND THEORY	1. 159	<table border="1"> <thead> <tr> <th>Category Name</th> <th>Total Journals in Category</th> <th>Journal Rank in Category</th> <th>Quartile in Category</th> </tr> </thead> <tbody> <tr> <td>COMPUTER SCIENCE, INTERDISCIPLINARY APPLICATIONS</td> <td>100</td> <td>61</td> <td>Q3</td> </tr> <tr> <td>COMPUTER SCIENCE, SOFTWARE ENGINEERING</td> <td>105</td> <td>40</td> <td>Q2</td> </tr> </tbody> </table>	Category Name	Total Journals in Category	Journal Rank in Category	Quartile in Category	COMPUTER SCIENCE, INTERDISCIPLINARY APPLICATIONS	100	61	Q3	COMPUTER SCIENCE, SOFTWARE ENGINEERING	105	40	Q2				
Category Name	Total Journals in Category	Journal Rank in Category	Quartile in Category																
COMPUTER SCIENCE, INTERDISCIPLINARY APPLICATIONS	100	61	Q3																
COMPUTER SCIENCE, SOFTWARE ENGINEERING	105	40	Q2																
42	JOURNAL OF BIONIC ENGINEERING	1. 144	<table border="1"> <thead> <tr> <th>Category Name</th> <th>Total Journals in Category</th> <th>Journal Rank in Category</th> <th>Quartile in Category</th> </tr> </thead> <tbody> <tr> <td>ENGINEERING, MULTIDISCIPLINARY</td> <td>90</td> <td>26</td> <td>Q2</td> </tr> <tr> <td>MATERIALS SCIENCE, BIOMATERIALS</td> <td>27</td> <td>20</td> <td>Q3</td> </tr> <tr> <td>ROBOTICS</td> <td>21</td> <td>10</td> <td>Q2</td> </tr> </tbody> </table>	Category Name	Total Journals in Category	Journal Rank in Category	Quartile in Category	ENGINEERING, MULTIDISCIPLINARY	90	26	Q2	MATERIALS SCIENCE, BIOMATERIALS	27	20	Q3	ROBOTICS	21	10	Q2
Category Name	Total Journals in Category	Journal Rank in Category	Quartile in Category																
ENGINEERING, MULTIDISCIPLINARY	90	26	Q2																
MATERIALS SCIENCE, BIOMATERIALS	27	20	Q3																
ROBOTICS	21	10	Q2																
43	JAPANESE JOURNAL OF APPLIED PHYSICS	1. 067	<table border="1"> <thead> <tr> <th>Category Name</th> <th>Total Journals in Category</th> <th>Journal Rank in Category</th> <th>Quartile in Category</th> </tr> </thead> <tbody> <tr> <td>PHYSICS, APPLIED</td> <td>128</td> <td>82</td> <td>Q3</td> </tr> </tbody> </table>	Category Name	Total Journals in Category	Journal Rank in Category	Quartile in Category	PHYSICS, APPLIED	128	82	Q3								
Category Name	Total Journals in Category	Journal Rank in Category	Quartile in Category																
PHYSICS, APPLIED	128	82	Q3																
44	ACTA PHYSICA SINICA	1. 016	<table border="1"> <thead> <tr> <th>Category Name</th> <th>Total Journals in Category</th> <th>Journal Rank in Category</th> <th>Quartile in Category</th> </tr> </thead> <tbody> <tr> <td>PHYSICS, MULTIDISCIPLINARY</td> <td>83</td> <td>49</td> <td>Q3</td> </tr> </tbody> </table>	Category Name	Total Journals in Category	Journal Rank in Category	Quartile in Category	PHYSICS, MULTIDISCIPLINARY	83	49	Q3								
Category Name	Total Journals in Category	Journal Rank in Category	Quartile in Category																
PHYSICS, MULTIDISCIPLINARY	83	49	Q3																
45	ACTA PHYSICO-CHIMICA SINICA	0. 869	<table border="1"> <thead> <tr> <th>Category Name</th> <th>Total Journals in Category</th> <th>Journal Rank in Category</th> <th>Quartile in Category</th> </tr> </thead> <tbody> <tr> <td>CHEMISTRY, PHYSICAL</td> <td>135</td> <td>114</td> <td>Q4</td> </tr> </tbody> </table>	Category Name	Total Journals in Category	Journal Rank in Category	Quartile in Category	CHEMISTRY, PHYSICAL	135	114	Q4								
Category Name	Total Journals in Category	Journal Rank in Category	Quartile in Category																
CHEMISTRY, PHYSICAL	135	114	Q4																
46	IEEE TRANSACTIONS ON PLASMA SCIENCE	0. 868	<table border="1"> <thead> <tr> <th>Category Name</th> <th>Total Journals in Category</th> <th>Journal Rank in Category</th> <th>Quartile in Category</th> </tr> </thead> <tbody> <tr> <td>PHYSICS, FLUIDS & PLASMAS</td> <td>31</td> <td>23</td> <td>Q3</td> </tr> </tbody> </table>	Category Name	Total Journals in Category	Journal Rank in Category	Quartile in Category	PHYSICS, FLUIDS & PLASMAS	31	23	Q3								
Category Name	Total Journals in Category	Journal Rank in Category	Quartile in Category																
PHYSICS, FLUIDS & PLASMAS	31	23	Q3																
47	CHINESE JOURNAL OF CHEMICAL PHYSICS	0. 632	<table border="1"> <thead> <tr> <th>Category Name</th> <th>Total Journals in Category</th> <th>Journal Rank in Category</th> <th>Quartile in Category</th> </tr> </thead> <tbody> <tr> <td>PHYSICS, ATOMIC, MOLECULAR & CHEMICAL</td> <td>34</td> <td>33</td> <td>Q4</td> </tr> </tbody> </table>	Category Name	Total Journals in Category	Journal Rank in Category	Quartile in Category	PHYSICS, ATOMIC, MOLECULAR & CHEMICAL	34	33	Q4								
Category Name	Total Journals in Category	Journal Rank in Category	Quartile in Category																
PHYSICS, ATOMIC, MOLECULAR & CHEMICAL	34	33	Q4																

48	ELECTRIC POWER COMPONENTS AND SYSTEMS	0.620	Category Name	Total Journals in Category	Journal Rank in Category	Quartile in Category
			ENGINEERING, ELECTRICAL & ELECTRONIC	243	177	Q3
49	RARE METALS	0.493	Category Name	Total Journals in Category	Journal Rank in Category	Quartile in Category
			MATERIALS SCIENCE, MULTIDISCIPLINARY	241	203	Q4
			METALLURGY & METALLURGICAL ENGINEERING	76	40	Q3

表 3 多个研究组发文期刊

期刊名称	2012 影响因子	所在数据库	发文研究部名称
EPL	2.260	IOP	超导与能源新材料研究部
			极端电磁环境科学与技术研究部
MATERIALS LETTERS	2.224	Elsevier-SD	超导与能源新材料研究部
			微纳加工技术与智能电气设备研究部
JOURNAL OF APPLIED PHYSICS	2.210	AIP (未订购)	超导与能源新材料研究部
			极端电磁环境科学与技术研究部
			太阳能电池技术研究部
IEEE TRANSACTIONS ON APPLIED SUPERCONDUCTIVITY	1.199	IEL	超导磁体与强磁场应用研究部
			超导电力应用与新型输电技术研究部
			电磁信息检测与成像技术研究部
			工程电磁场及其应用研究部
ACTA PHYSICA SINICA	1.016	CNKI	极端电磁环境科学与技术研究部
			太阳能电池技术研究部
ACTA PHYSICO-CHIMICA SINICA	0.869	CNKI	超导与能源新材料研究部
			太阳能电池技术研究部
IEEE TRANSACTIONS ON PLASMA SCIENCE	0.868	IEL	超导磁体与强磁场应用研究部
			极端电磁环境科学与技术研究部
RARE METALS	0.493	CNKI	超导磁体与强磁场应用研究部
			超导与能源新材料研究部

三、会议论文分析

电工所 2013 年被奖励的会议论文在 42 个国际会议中进行了交流。其中在 2012 IEEE Innovative Smart Grid Technologies、2012 Asia-Pacific Power and Energy Engineering Conference 和 2012 IEEE 7th International Power Electronics and Motion Control Conference 三个会议中交流的论文最多，发文 2 篇及以上的会议信息如表 4 所示。

表 4 会议论文统计

序号	会议信息	发文数量
1	2012 IEEE Innovative Smart Grid Technologies - Asia, ISGT Asia, May 21, 2012 - May 24, 2012	8
2	2012 Asia-Pacific Power and Energy Engineering Conference, APPEEC 2012, March 27, 2012 - March 29, 2012	7
3	2012 IEEE 7th International Power Electronics and Motion Control Conference - ECCE Asia, IPEMC 2012, June 2, 2012 - June 5, 2012	6
4	1st International Conference on Energy and Environmental Protection, ICEEP 2012, June 23, 2012 - June 24, 2012	3
5	2012 2nd International Conference on Advanced Material Research, ICAMR 2012, January 7, 2012 - January 8, 2012	3
6	2012 6th International Conference on Electromagnetic Field Problems and Applications, ICEF' 2012, June 19, 2012 - June 21, 2012	3
7	Selected publications from the 22nd Space Photovoltaic Research and Technology (SPRAT) Conference	3
8	37th IEEE Photovoltaic Specialists Conference, PVSC 2011, June 19, 2011 - June 24, 2011	3
9	1st 2011 International Conference on Environment Science and Biotechnology, ICESB 2011, November 25, 2011 - November 26, 2011	2
10	2011 4th International Conference on Biomedical Engineering and Informatics, BMEI 2011, October 15, 2011 - October 17, 2011	2
11	2011 IEEE International Conference on Robotics and Biomimetics, ROBIO 2011, December 7, 2011 - December 11, 2011	2
12	2011 International Conference on Material Science and Information Technology, MSIT2011, September 16, 2011 - September 18, 2011	2
13	2012 16th International Symposium on Electromagnetic Launch Technology, EML 2012, May 15, 2012 - May 19, 2012	2
14	2012 2nd International Conference on Key Engineering Materials, ICKEM 2012, February 26, 2012 - February 28, 2012	2
15	2012 International Conference on Advances in Mechanics Engineering, ICAME 2012, August 3, 2012 - August 5, 2012	2
16	2012 International Conference on Systems and Informatics, ICSAI 2012, May 19, 2012 - May 20, 2012	2
17	2nd International Symposium on Bioelectronics and Bioinformatics, ISBB 2011, November 3, 2011 - November 5, 2011	2
18	38th IEEE Photovoltaic Specialists Conference, PVSC 2012, June 3, 2012 - June 8, 2012	2

19	3rd International Conference on Manufacturing Science and Engineering, ICMSE 2012, March 27, 2012 - March 29, 2012	2
20	4th Annual IEEE Energy Conversion Congress and Exposition, ECCE 2012, September 15, 2012 - September 20, 2012	2
21	4th International Conference on Mechanical and Electrical Technology, ICMET 2012, July 24, 2012 - July 26, 2012	2
22	4th International Congress on Image and Signal Processing, CISP 2011, October 15, 2011 - October 17, 2011	2

四、 课题组发文分析

统计结果表明，2013 年奖励的电工所论文分别来自于 6 个实验室的 18 个研究组，其中发文量在 50 篇以上的有三个实验室，分别是超导与新材料应用研究实验室 77 篇、可再生能源发电技术实验室 69 篇和电力电子与电能变换技术实验室 57 篇。此外生物电磁学与电磁探测技术实验室发文 26 篇，直流电网科学技术实验室发文 16 篇，电力设备新技术实验室 7 篇。具体统计结果见表 5。

表 5 实验室发文概况

序号	实验室	研究组名称	文章总数量	SCI 期刊	SCI 会议	EI 期刊	EI 会议
1	超导与新材料应用研究实验室	超导电力应用与新型输电技术研究部	14	4	7	2	1
		超导磁体及强磁场应用研究部	17	8	8	1	0
		超导与能源新材料研究部	34	34	0	0	0
		微纳加工技术与智能电气设备研究部	12	3	0	5	4
2	可再生能源发电技术实验室	可再生能源发电系统研究部	6	0	0	2	4
		太阳能热利用技术研究部	23	19	0	4	0
		中科院太阳光伏发电系统和风力发电系统质量检测中心	6	0	0	0	6
		太阳能电池技术研究部	29	10	0	3	16
		海洋能发电与应用研究部	5	0	0	0	5
3	电力电子与电能变换技术实验室	高功率密度电气驱动及电动汽车技术研究部	10	0	0	4	6
		大功率电力电子与直线驱动技术研究	12	2	0	4	6
		车用能源系统及控制技术研究部	4	0	0	3	1
		极端电磁环境科学与技术研究部	31	6	1	21	3

4	生物电磁学与电磁探测技术实验室	生物电磁技术研究部	11	4	0	0	7
		电磁信息监测与成像技术研究部	6	0	2	0	4
		工程电磁场及其应用研究部	9	0	1	1	7
5	直流电网科学技术实验室	直流电网科学技术研究部	16	0	0	9	7
6	电力设备新技术实验室	电力设备新技术研究部	7	0	0	0	7
合计			252	90	19	59	84

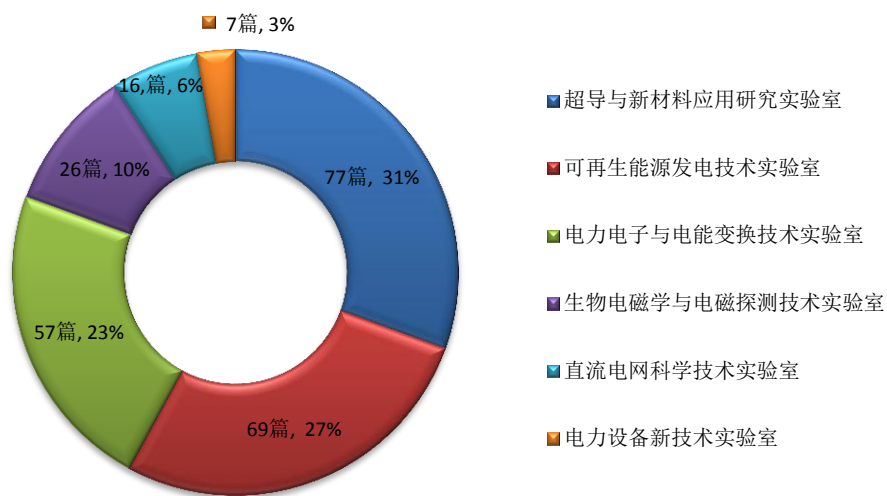


图 2 统计结果表明，2013 年奖励论文中，超导与能源新材料研究部发文量排名第一，共 34 篇，均为 SCI 期刊论文；极端电磁环境科学与技术研究部发文量排名第二，共 31 篇，其中发表的 EI 期刊论文最多，有 21 篇；太阳能电池技术研究部发文量排名第三，共 29 篇，其中发表的 EI 会议论文最多，有 16 篇。

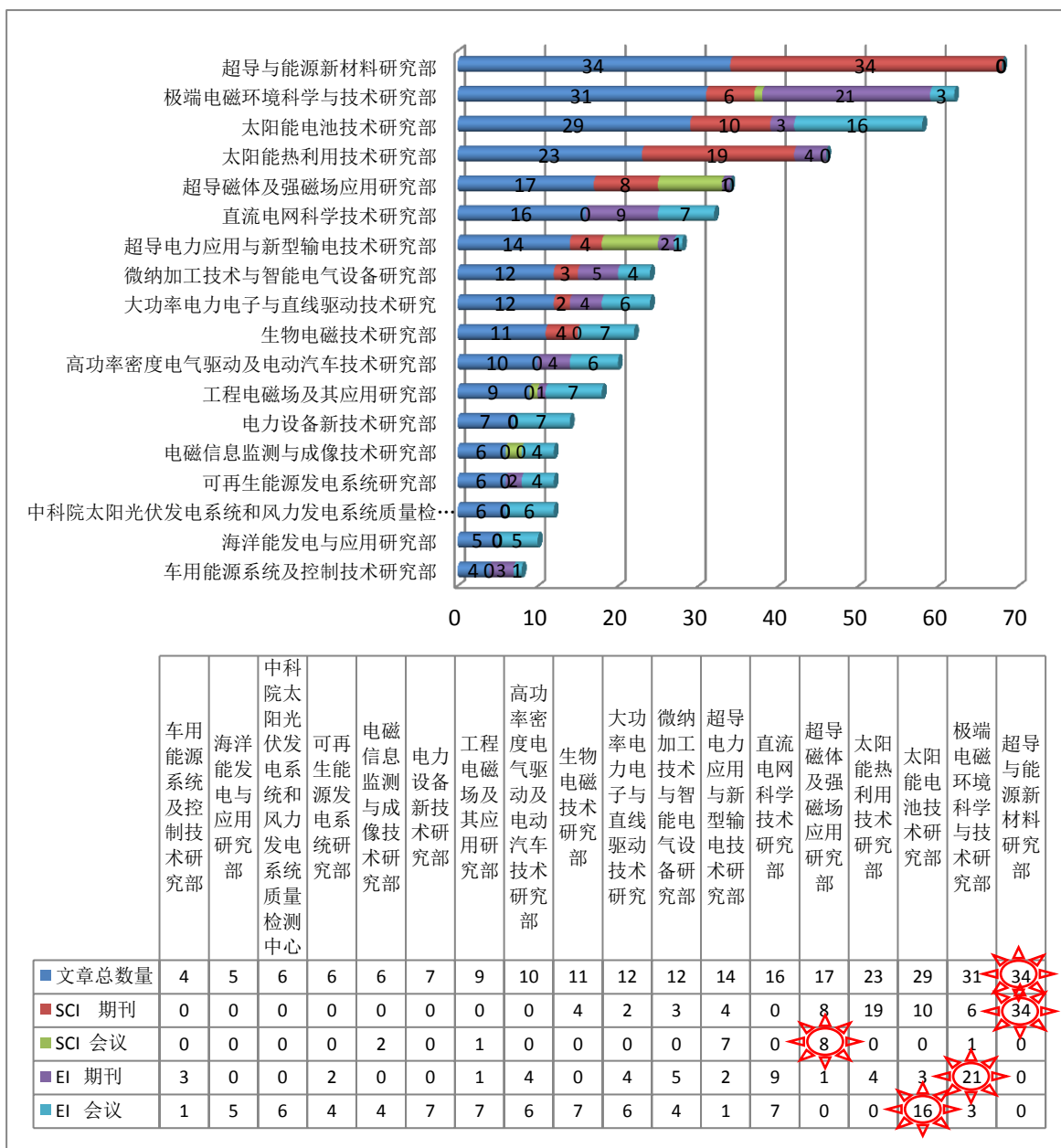


图 2 研究组发文情况分析

五、 作者分析

统计结果表明，2013 年奖励论文中涉及 153 位第一作者，其中极端电磁环境科学与技术研究部的邵涛和章程发文最多，分别有 6 篇。发表 SCI 论文最多的第一作者是邵涛和超导与能源新材料研究部的陈尧，均为 4 篇；发表 EI 论文最多的第一作者是电力设备新技术研究部的董海虹，有 4 篇。表 6 所示为发文量在 3 篇及以上的第一作者，约占全所奖励论文总数的 34%。

表 6 第一作者分析

序号	姓名	所在课题组	发文数量 (篇)	备注																					
1.	邵涛	极端电磁环境科学与技术研究部	6	4 篇 SCI, 2 篇 EI																					
2.	章程	极端电磁环境科学与技术研究部	6	3 篇 SCI, 3 篇 EI																					
3.	李涛	太阳能电池技术研究部	5	2 篇 SCI, 3 篇 EI																					
4.	陈尧	超导与能源新材料研究部	4	4 篇 SCI																					
5.	余强	太阳能热利用技术研究部	4	3 篇 SCI, 1 篇 EI																					
6.	闫保军	太阳能电池技术研究部	4	2 篇 SCI, 2 篇 EI																					
7.	韩冬	微纳加工技术与智能电气设备研究部	4	1 篇 SCI, 3 篇 EI																					
8.	董海虹	电力设备新技术研究部	4	4 篇 EI																					
9.	齐彦鹏	超导与能源新材料研究部	3	3 篇 SCI																					
10.	王成铎	超导与能源新材料研究部	3	3 篇 SCI																					
11.	闻振利	太阳能电池技术研究部	3	3 篇 SCI																					
12.	张书霞	超导与能源新材料研究部	3	3 篇 SCI																					
13.	张腾	超导与能源新材料研究部	3	3 篇 SCI																					
14.	张现平	超导与能源新材料研究部	3	3 篇 SCI																					
15.	张熊	超导与能源新材料研究部	3	3 篇 SCI																					
16.	郭文勇	超导电力应用与新型输电技术研究部	3	2 篇 SCI, 1 篇 EI																					
17.	李子欣	大功率电力电子与直线驱动技术研究部	3	2 篇 SCI, 1 篇 EI																					
18.	赵雷	太阳能电池技术研究部	3	1 篇 SCI, 2 篇 EI																					
19.	冯兴田	直流电网科学技术研究部	3	3 篇 EI																					
20.	兰志明	大功率电力电子与直线驱动技术研究部	3	3 篇 EI																					
21.	刘海涛	中科院太阳光伏发电系统和风力发电系统质量检测中心	3	3 篇 EI																					
22.	唐西胜	直流电网科学技术研究部	3	3 篇 EI																					
23.	徐伟东	极端电磁环境科学与技术研究部	3	3 篇 EI																					
24.	周华伟	高功率密度电气驱动及电动汽车技术研究部	3	3 篇 EI																					
全所总计		<table border="1"> <caption>全所总计发文分布</caption> <thead> <tr> <th>发文数量</th> <th>人数</th> <th>占比</th> </tr> </thead> <tbody> <tr><td>1</td><td>91</td><td>59.5%</td></tr> <tr><td>2</td><td>38</td><td>24.8%</td></tr> <tr><td>3</td><td>16</td><td>10.5%</td></tr> <tr><td>4</td><td>5</td><td>3.2%</td></tr> <tr><td>6</td><td>2</td><td>1.3%</td></tr> <tr><td>5</td><td>1</td><td>0.7%</td></tr> </tbody> </table>			发文数量	人数	占比	1	91	59.5%	2	38	24.8%	3	16	10.5%	4	5	3.2%	6	2	1.3%	5	1	0.7%
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该报告由电工所图书馆和国科图学科馆员共同完成，如有不妥请随时联系所图书馆或学科馆员。

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