华北电力大学 (留学生) 英语授课

North China Electric Power University (International Student) Taught in English

能源材料与装备二级学科博士研究生培养方案

Training Program for Doctoral Students in Second-level Discipline of Energy Material and

Equipment

(专业代码: 0807Z3 授予工学博士学位)

(Major Code: 0807Z3, Degree: Doctoral Degree of Engineering)

一、学科简介

I. Brief Introduction to the Discipline

能源材料与装备二级学科是在动力工程及工程热物理一级学科下,通过与材料科学与工程学科相交叉,自设的二级学科博士点。本学科立足国家能源战略需求和学科发展前沿 布局,以储能、节能和能源创新技术为发展定位,通过材料科学与工程、能源装备和动力 工程及工程热物理等学科交叉,开展能源材料与装备科学技术领域研究,培养该领域高层 次博硕士人才。

The second-level discipline of Energy Material and Equipment is a self-established second-level-discipline doctoral program under the first-level discipline of Power Engineering and Engineering Thermophysics and formed through intersection of the disciplines of Material Science and Engineering. This discipline is based on the national energy strategic needs and the frontier layout of discipline development, and takes energy storage, energy saving and energy innovation technology as the development orientation. Through the intersection of the disciplines of Material Science and Engineering, Energy Equipment and Power Engineering, and Engineering Thermophysics, our school carries out research in the field of energy material and equipment science and technology, and cultivates high-level doctoral and master talents in this field.

二、培养目标

II. Training Objectives

- 1. 培养对中国有良好认知,理解中国社会主流价值观,具有相应的中文语言能力,具备一定跨文化和全球胜任力,在所在学科具有相当专业知识和学术能力的国际化人才。
- 1. Cultivate international talents who have a good understanding of China, understand the mainstream values of Chinese society, have corresponding Chinese language skills, have certain

cross-cultural and global competencies, and have considerable professional knowledge and academic abilities in their disciplines.

- 2. 应具有能源材料与装备学科宽广而扎实的基础理论和系统深入的专门知识,深入了解本学科的发展方向及学术研究前沿。具有独立地和创造性地从事科学研究工作的能力,初步具有主持较大型科研、技术开发项目,或探索解决我国经济、社会发展问题的能力。熟练掌握一门外国语。
- 2. Cultivate students to master solid and broad basic theories along with in-depth and systematic knowledge of Energy Material and Equipment, to understand the development direction of the discipline and the forefront of academic research. Equip students with the ability to engage in scientific research independently and creatively, and have the primary ability to preside over large-scale scientific research and technological development projects, or to explore and solve the problems of China's economic and social development. Proficient in a foreign language.

三、研究方向

III. Research Direction

能源材料与装备二级学科主要研究方向:

The main research directions of the second-level discipline of Energy Material and Equipment are as follows:

- 1. 熵调控节能材料
- 1. Energy-saving Material Regulated by Entropy
- 2. 氢能源材料与技术
- 2. Hydrogen Energy Material and Technology
- 3. 高温金属材料与服役性能
- 3. High Temperature Metallic Material and Service Property
- 4. 先进表面技术
- 4. Advanced Surface Technology
- 5. 新型储热材料与制备技术
- 5. New Heat Storage Material and Preparation Technology
- 6. 液态金属电池
- 6. Liquid Metal Battery
- 7. 太阳能电池材料与器件
- 7. Solar Cell Material and Device
- 8. 新能源材料与器件
- 8. New Energy Materials and Devices

四、培养方式

IV. Training Method

- 1. 博士生培养实行导师负责制,必要时可设副导师或组成指导小组。导师是研究生培养第一责任人,要将专业教育与日常教育有机融合,既作学业导师,又作人生导师,严格要求学生遵守科学道德和学术规范。
- 1. The training of doctoral students implements supervisor responsibility system, if necessary, a secondary-supervisor or a steering group may be introduced. The supervisor is the person of primary responsibility for postgraduate training, who should organically integrate professional education with daily education both as academic mentor and life mentor, and strictly require students to abide by scientific ethics and academic norms.
- 2. 博士生的培养以科学研究工作为主,重点是培养独立从事科学研究工作和进行创造性研究工作的能力;并根据研究需要继续深入学习一些课程,在拓宽基础、加深专业、掌握学科发展前沿的基础上,学会进行创造性研究工作的方法和培养严谨的科学作风。
- 2. The training of doctoral students is mainly on scientific research work, with emphasis on cultivating the ability to independently engage in scientific research work and creative research work. Doctoral students should continue to study some courses in depth according to the needs of the research; moreover, they should learn the methods of creative research work and cultivate a rigorous scientific style on the basis of broadening the foundation, deepening the specialty and grasping the forefront of discipline development.
 - 3. 博士生的培养可在校内进行,也可由国内、国际的高校以及科研院所联合培养。
- 3. The training of doctoral students can be carried out in the campus of the university as well as in the joint academic institutes at home or abroad.

五、学制与学习年限

V. Educational System and Duration of the Program

学制 4 年, 学习年限 3-8 年。

The educational system is 4 years, and the duration of the program is 3-8 years.

六、课程设置与学分要求

VI. Curriculum and Credit Requirements

博士生的课程设置分学位课、必修环节和任选课三大类。学位课分公共课、基础理论课、专业核心课。博士研究生在校期间,应修最低学分为 20 学分,其中学位课 14 学分,必修环节 6 学分。具体要求如下:

The curriculum for doctoral students consists of three categories: degree courses, required links and optional courses. Degree courses are divided into public courses, basic theoretical courses and professional core courses. During the period of doctoral students in school, the minimum credit requirement is 20 credits, including 14 credits for degree courses and 6 credits for required links. The specific requirements are as follows:

1. 学位课(14 学分), 其中:

1. Degree courses (14 credits), of which:

公共课: 汉语综合 (1): 4 学分 (64 学时);

Public courses: Chinese Comprehension (1): 4 credits (64 class hours);

汉语综合 (2): 4 学分 (64 学时);

Chinese Comprehension (2): 4 credits (64 class hours);

中国概况 (英文): 2 学分(32 学时);

Introduction to China (English): 2 credits (32 class hours);

基础理论课: 2 学分;

Basic theoretical courses: 2 credits;

专业核心课: 2 学分。

Specialized core courses: 2 credits.

要求博士生在基础理论方面,应进一步掌握现代数学等高层次的宽厚的基础理论,为研究方法的创新提供坚实的理论基础;在专业核心课程的设置中以研究型的专业基础课程为基础,以加强博士研究生的学术理论训练为主,使学生把握本学科发展的前沿动态,培养学生发现问题、提出问题、分析问题的批判性思维能力和创新思维能力以及解决实际问题的能力。

Doctoral students are required to further master the high-level and broad basic theories such as Modern Mathematics, so as to provide a solid theoretical basis for the innovation of research methods. The setting of the specialized core courses is based on the research-oriented professional basic courses, focusing on strengthening the academic theory training of doctoral students, so as to enable students to grasp the frontier trends of the development of this discipline, cultivate students' critical thinking ability and innovative thinking ability of discovering, raising and analyzing problems as well as the ability to solve practical questions.

(专业核心课每门课程原则上不超过 2 学分,每学分对应 16 学时。课程教学一般安排 在第一学期。)

(In principle, each specialized core course does not exceed 2 credits, and each credit corresponds to 16 class hours. The course teaching is usually arranged in the first semester.)

2. 必修环节 (6 学分), 包括:

2. Required links (6 credits), including:

研究生科学道德与学术规范 1 学分;

Scientific Ethics and Academic Norms for Postgraduates: 1 credit;

文献综述与选题报告 2 学分:

Literature Review and Thesis Proposal: 2 credits;

前沿讲座与专题研讨 1 学分:参加前沿讲座与专题研讨是培养博士生综合能力和进入 学科前沿的重要环节。博士生在学习期间,应在导师确定的专题领域,至少参加 8 次前沿 讲 座与专题研讨,完成后记 1 学分;

Cutting-edge Lectures and Seminars (1 credit): Participating in cutting-edge lectures and seminars is an important link to cultivate the comprehensive ability of doctoral students and help them to enter the forefront of the discipline. During the period of study, doctoral students should participate in at least 8 cutting-edge lectures and seminars in the special areas determined by their supervisors, and they shall get 1 credit upon completion;

博士论坛 1 学分: 要求博士生至少做 2 次学术报告, 完成后记 1 学分;

Doctoral Forum (1 credit): Doctoral students are required to make at least 2 academic reports, and they shall get 1 credit upon completion;

研读专业经典名著 1 学分:博士生在学习期间,须在导师的要求与指导下,研读本学科至少 1 本经典名著,完成后记 1 学分;

Professional Classics Studying (1 credit): During the study of doctoral students, they must, under the requirements and guidance of their supervisors, study at least one classic masterpiece of this discipline, and they shall get 1 credit upon completion;

3. 任选课与补修课程

3. Optional courses and supplementary courses

硕士阶段非本学科的博士生应补修若干本学科硕士阶段主干课程。补修课程不计入总学分。

Doctoral students who are not in their own disciplines at the postgraduate stage should take several major courses of postgraduate stage of this discipline. Supplementary courses are not included in the total credit.

具体课程设置见附表。

For the specific curriculum, please refer to the Schedule.

七、科学研究及学位论文要求

VII. Requirements for Scientific Research and Degree Thesis

进行科学研究与撰写学位论文,是对博士研究生进行科学研究训练、培养创新能力的主

要途径,也是衡量研究生能否获得博士学位的重要依据之一。博士生在学期间一般要用2年的时间完成学位论文。博士学位论文是综合衡量博士生培养质量和学术水平的重要标志,学位论文开选、论文中期检查、学位论文预答辩、论文答辩资格审查等,是博士生培养工作的重要环节,本学科的相关具体安排与要求如下:

Conducting scientific research and writing degree thesis is the main way to train doctoral students in scientific research and innovative ability, and it is also one of the important bases to measure whether a student can obtain a doctoral degree or not. Doctoral students usually take 2 years to complete their dissertations during the period of study. Doctoral dissertation is an important symbol to comprehensively measure the training quality and academic level of doctoral students. The thesis proposal, the mid-term review of dissertation, the pre-defense of dissertation, and the examination of qualification for defense are important links in the training of doctoral students. The specific arrangements and requirements of this discipline are as follows:

1. 文献综述与开题报告

1. Literature review and thesis proposal

博士生应在了解本研究领域国内外的现状、发展动态的基础上确定博士学位论文题目, 选题要体现学科领域的前沿性和先进性, 撰写选题报告并由导师组织开题答辩, 开题时间 一般最迟不超过博士入学后第 3 学期, 开题时间距离申请答辩日期不少于 18 个月。

Doctoral students should determine the title of doctoral dissertation on the basis of understanding the current situation and development trends in this research field at home and abroad, and the topic selection should reflect the frontier and advanced nature of the discipline field. The thesis proposal should be written by doctoral students, and the defense shall be organized by supervisors. Generally speaking, the time for thesis proposal shall not exceed the third semester after the enrollment, and the time for thesis proposal shall be no less than 18 months before the date of application for defense.

博士论文开题报告内容应包含文献综述、论文选题及其意义、主要研究内容、技术路线、预期成果及可能的创新点等。博士生在论文开题时须针对论文选题单独提交一份全面详细的文献综述报告(不少于 1 万字)。开题报告在二级学科范围内相对集中、公开地进行,并由以博士生导师为主体的 3~5 名专家组成的考核小组进行开题答辩。开题报告会应吸收有关导师和研究生参加,跨学科的论文选题应聘请相关学科的导师参加。若学位论文课题有重大变动,应重开题,以保证课题的前沿性和创新性。

The thesis proposal of doctoral dissertation should include literature review, topic selection and its significance, main research content, technical route, expected results and possible innovation points, etc. At the beginning of the thesis proposal, doctoral students are required to submit a comprehensive and detailed literature review report (no less than 10,000 words) for the selected topic of the dissertation. The thesis proposal is carried out in a relatively intensive and

open manner within the scope of the second-level discipline, and the defense for thesis proposal is organized by the assessment team composed of 3-5 experts and with doctoral students' supervisors as the main body. The thesis proposal meeting should be attended by relevant supervisors and postgraduates, and supervisors of relevant disciplines should be invited to participate in the meeting for topic selection of interdisciplinary theses. If there is a major change in the topic of the degree thesis, the thesis proposal should be carried out once again to ensure the frontier and innovation of the topic.

博士生进行论文开题报告之前,应在指导教师的指导下,在教育部认定的科技查新工作,站进行论文开题查新工作,以保证博士学位论文选题的创新性。

Before carrying out the thesis proposal, doctoral students should, under the guidance of their supervisors, conduct the thesis novelty search work at the scientific and technological novelty search station recognized by the Ministry of Education, so as to ensure the innovation of doctoral dissertation topic.

2. 论文中期检查

2. Mid-term review of the thesis

学位论文实行中期检查制度。中期考核是检查研究生学位论文进展状况、帮助学生把握学位论文方向、提高学位论文质量的必要环节。各学科应根据学院制定的考核办法和中期检查时间组织论文中期考核,中期检查最迟不超过博士入学后第 6 学期,距离申请答辩日期不少于 6 个月。

A mid-term review system is adopted for degree thesis. The mid-term review is a necessary process to check the progress of master dissertation, keep students in the right direction and improve the quality of their dissertation. Each discipline shall organize the mid-term review of theses in accordance with the assessment methods formulated by the college and the time of the mid-term review, which shall not exceed the 6th semester after the enrollment of doctoral students at the latest, and shall be no less than 6 months before the date of application for defense.

3. 科研成果要求

3. Requirements for scientific research achievements

博士生应参与省部级及以上科技项目或企业委托重大项目的研究,在申请学位论文答辩前完成发表高水平学术论文、科研获奖、专利转化或成果鉴定等科研成果。科研获奖、专利转化或成果鉴定可以等同于高水平学术论文,但要求科研成果中至少有一篇本学科权 威期刊论文(学术期刊目录见附表二)。科研成果的具体要求如下:

A doctoral student shall participate in subject research of technological projects at provincial and ministerial level or above or of major projects entrusted by enterprises, and obtain scientific research achievements such as publishing high-level academic papers, winning awards for scientific research, completing patent conversion or achievement identification before applying for

thesis defense. Scientific research award, patent transformation or achievement appraisal can be equated with high-level academic theses, but at least one thesis of authoritative journal of the discipline is required in the scientific research achievements (refer to Schedule 2 for the catalogue of academic journals). Specific requirements for scientific research achievements are as follows:

- (1) 博士生在申请学位论文答辩前必须以第一作者身份(其导师必须是作者之一)或第二作者身份(其导师必须是第一作者),并以华北电力大学为第一发表单位,公开发表反映学位论文工作成果的学术论文。要求满足以下任意一条:
- (1) Before applying for degree thesis defense, the doctoral student should, as the first author (the supervisor must be one of the authors) or the second author (the supervisor must be the first author), publish the academic thesis reflecting the achievements of the degree thesis work, with North China Electric Power University as the first publishing unit. At least one of the followings is required:
- ① 在本学科中文核心期刊(以北京大学出版的《中文核心期刊要目总览》最新版为 依据)、国际期刊或国际重要会议(被 SCI 或 EI 收录,会议转期刊的除外)上发表 3 篇及 以上学术论文;
- ① Publish 3 or more academic theses in Chinese core journals of the discipline (refer to the latest edition of the Overview of Chinese Core Journals published by Peking University), international journals or important international conferences (included by SCI or EI, except for the conferences transferred to periodicals);
 - ② 在本学科权威期刊上发表学术论文 2 篇及以上 (开源期刊除外);
- ② Publish 2 or more academic theses in the authoritative journals of this discipline (except for open access journals);
- (2) 博士生作为主要完成人之一,其学位论文工作成果获得省部级科研奖励 1 项(以科研院认证目录为准,署名单位为华北电力大学),相当于权威期刊论文 1 篇。
- (2) The doctoral student's achievements of the degree thesis work, for which the doctoral student is one of the main contributors, have won one scientific research award at the provincial and ministerial level (subject to the catalogue certified by the Scientific Research Institute and with North China Electric Power University as the author affiliation), which is equivalent to one authoritative journal thesis.
- (3) 获得与博士论文代表性成果相关的国内外发明专利授权 1 项,发明专利要求第一署名单位为华北电力大学,学生排名第一或者学生排名第二(其导师排名第一),相当于权 威期刊论文 1 篇。
- (3) Obtain a patent for invention at home and abroad related to the representative achievements of the doctoral dissertation. It required that the first author affiliation is North China Electric Power University, and the student is the first author or the second author (the supervisor is

the first author) for the patent for invention. The patent for invention is equivalent to one authoritative journal thesis.

凡不符合上述要求的成果,在学位申请时一律不予考虑。硕博连读学生在硕士期间取得的科研成果,按以上规定同等对待。英文期刊有 Doi 号 Online,中文核心期刊及以上中文刊物有录用证明视同正式发表。

Any other achievements that do not meet the above requirements will not be considered in degree applications. The scientific research achievements obtained by the MD-PhD students of continuous academic program during the master stage shall be treated equally in accordance with the above provisions. If there is a proof of inclusion for English journals with Doi number Online, Chinese core journals or the above Chinese journals, the student is deemed to have officially published its thesis in these journals.

4. 学位论文预答辩

4. Pre-defense of dissertation

博士生完成博士学位论文后,在论文送审之前,要完成学位论文的预答辩,以便对学位论文进行进一步修改和完善。预答辩的目的在于进一步修改、完善博士学位论文。博士 生在完成博士学位论文初稿,经导师审核认为符合要求的,要进行博士学位论文的预答辩。学位论文预答辩通过者,方可申请正式答辩。

After completing the doctoral dissertation, doctoral students should complete the pre-defense of the degree thesis before the thesis is submitted for review, so as to further revise and improve the thesis. The purpose of pre-defense is to further revise and improve the doctoral dissertation. If the doctoral student completes the first draft of the doctoral dissertation and the first draft is deemed to meet the requirements after review of the supervisor, the doctoral student will make a pre-defense for its doctoral dissertation. Only the students who pass the pre-defense can apply for the formal defense of thesis.

5. 博士研究生申请论文送审的资格审查

5. Qualification review of the submitted dissertation applied by doctoral students

博士论文资格审查由指导教师或博士生指导小组负责进行。博士研究生申请论文送审的基本条件:

The doctoral dissertation qualification review is carried out by the supervisor or the steering group. Basic application conditions of doctoral students' dissertation submission are as below:

- (1) 修完所规定的学分要求;
- (1) To meet the credit requirements;
- (2) 完成论文开题查新报告与论文开题;

- (2) To complete the thesis novelty search report and the thesis proposal;
- (3) 完成论文中期检查;
- (3) To complete the mid-term review of dissertation;
- (4) 满足学术论文发表与科研成果要求;
- (4) To meet the requirements of academic thesis publication and scientific research achievements:
 - (5) 通过学位论文的预答辩;
 - (5) To pass the pre-defense of the dissertation;
 - (6) 完成毕业论文的撰写并通过学位论文撰写规范审查。
- (6) To complete the writing of graduation thesis and pass the standard examination of degree thesis writing.
 - 6. 博士学位论文的评审与答辩

6. Review and defense of doctoral dissertation

博士生在通过论文送审的资格审查后即可进行学位论文的送审与答辩,具体要求按照《华北电力大学研究生学位论文评审和答辩的有关规定》、《华北电力大学学位授予工作实施细则》等相关规定执行。毕业生的答辩时间一般安排在 6 月,延期毕业的研究生答辩时间可安排在 6 月或 12 月。

Doctoral students can submit their degree theses for examination and make the theses defense after passing the qualification examination for their degree theses, which are required to be specifically carried out in accordance with the relevant provisions of the *Relevant Provisions on the Review and Defense of Master Dissertation of North China Electric Power University* and the *Detailed Rules for Degree Awarding of North China Electric Power University*. The defense time for graduates is generally arranged in June, and the defense time for postgraduate for postponed graduation can be arranged in June or December.

八、提前毕业条件

VIII. Conditions for Early Graduation

特别优秀并提前完成本培养方案规定内容的博士生最多可提前 1 年毕业。

Doctoral students who are particularly excellent and complete the contents specified in the training program ahead of time can graduate at most one year in advance.

附表: 能源材料与装备二学科博士研究生课程设置表(英文授课)

Schedule: Curriculum of Doctoral Students in Second-level Discipline of Energy Material and Equipment(Taught in English)

课程性质 Category	课程属性 Attribute	课程名称 Course name	学时 Class hour	学分 Credit	考核方式 Assessment mode	开课 学期 Semester of the course	备注 Remarks
(≥6 学分) (≥6 credits) 学位课 Degree courses	10 学分公共课 Public courses: 10 credits (≥2 学分) (≥ 2 credits) 基础理论课 Basic theoretical courses	汉语综合(1) Chinese Comprehension (1)	64	4	考试 Exam	1	
		中国概况(英文) Introduction to China (English)	32	2	考试 Exam	1	
		汉语综合(2) Chinese Comprehension (2)	64	4	考试 Exam	2	
		现代数学基础与方法 Fundamentals and Methods of Modern Mathematics	32	2.0	考试 Exam	1	
		高等数值分析 Advanced Numerical Analysis	48	3	考试 Exam	1	
		高等热学理论 Advanced Thermal Theory	32	2	考试 Exam	1	
	(≥2 学分) (≥ 2 credits) 专业核心课 Specialized core courses	(热流体科学,全英文课程) Thermal Fluid Science (Taught in English)	32	2	考试 Exam	1	
		新能源材料与器件技术 New Energy Material and Device Technology	32	2	考试 Exam	1	
		材料性能学 Material Property	32	2	考试 Exam	1	
		现代机械工程理论 Modern Mechanical Engineering Theory	32	2	考试 Exam	1	
		可选其它专业核心课程 Other Specialized Core Courses Can Be Chosen	32	2	考试 Exam	1	
((6 学分) (6 credits) 必修环节 Required links	无 None	研究生科学道德与学术规范 Scientific Ethics and Academic Norms for Postgraduates		1	考查 Review of performan ce		
		研读专业经典名著 Professional Classics Studying		1	考查 Review of performan ce		
		文献综述与开题报告 Literature Review and Thesis Proposal		2	考查 Review of performan ce		
		前沿讲座与专题研讨 Cutting-edge Lectures and Seminars	8次 8 times	1	考查 Review of performan ce		
		博士论坛 Doctoral Forum	2次 2 times	1	考查 Review of performan ce		

tant m			
任选课			
Optional courses			
补修课			附注一
Supplementary courses			Note 1

附注一:对非本专业入学的博士生,应补学由导师指定的本专业主干硕士课程。

Note 1: For the doctoral student who was not in this major when enrolled, they should take several major postgraduate courses of this discipline designated by their supervisors.

附表二: 动力工程及工程热物理一级学科学术期刊目录

Schedule 2: Catalogue of Academic Journals of First-level Discipline of Power Engineering and Engineering Thermophysics

序号	刊物名称	期刊主管/主办单位
S/N	1972/ココヤル Journal Name	Departments in charge of journals/organizers
5/11	被 SCI 检索的期刊	Departments in charge of journals/organizers
1	Journals indexed by SCI	
	中国科学	
2	Science China	Chinese Academy of Sciences
	科学通报	中国科学院
3	연하ese Science Bulletin	て四件子所 Chinese Academy of Sciences
	数学学报	中国数学学会
4	双子子IX Acta Mathematica Sinica	Chinese Mathematical Society
	Acta Mathematica Sinica 物理学报	中国物理学会
5	***	
	Acta Physica Sinica	China Physical Society
7	光学学报	中国光学学会
	Acta Optica Sinica	Chinese Optical Society
	声学学报	中国声学学会
	Acta Acustica	Acoustical Society of China
8	化学学报	中国化学会
	Acta Chimica Sinica	Chinese Chemical Society
9	化工学报	中国化工学会
	CIESC Journal	Chemical Industry and Engineering Society of China
	工程热物理学报	中国工程热物理学会
	Journal of Engineering Thermophysics	Chinese Society of Engineering Thermophysics
11	动力工程学报	中国动力工程学会
	Chinese Journal of Power Engineering	China Society of Power Engineering
	中国电机工程学报	中国电机工程学会
12	Proceedings of the Chinese Society for Electrical	Chinese Society for Electrical Engineering
	Engineering	Chimose Society for Electrical Engineering
13	制冷学报	中国制冷学会
15	Journal of Refrigeration	Chinese Association of Refrigeration
14	空气动力学报	中国空气动力学会
11	Acta Aerodynamica Sinica	Chinese Areodynamics Research Society
15	太阳能学报	中国太阳能学会
13	Acta Energiae Solaris Sinica	China Solar Energy Society
16	机械工程学报	中国机械工程学会
10	Journal of Mechanical Engineering	Chinese Mechanical Engineering Society
17	振动工程学报	中国振动工程学会
1 /	Journal of Vibration Engineering	Chinese Society for Vibration Engineering
18	力学学报	中国力学学会
	Chinese Journal of Theoretical and Applied	で国力チチ云 Chinese Society of Theoretical and Applied Mechanics
	Mechanics	Chinicse Society of Theoretical and Applied Mechanics
19	内燃机学报	中国内燃机学会
	Transactions of Csice	Chinese Society for Internal Combustion Engines
20	土木工程学报	中国土木工程学会
	China Civil Engineering Journal	China Civil Engineering Society
21	金属学报	中国金属学会
	Acta Metallurgica Sinica	Chinese Society for Metals
		-

	,	
22	电子学报	中国电子学会
	Acta Electronica Sinica	Chinese Institute of Electronics
23	自动化学报	中国自动化学会
	Acta Automatica Sinica	Chinese Association of Automation
24	计算机学报	中国计算机学会
	Chinese Journal of Computers	China Computer Federation
25	仪器仪表学报	中国仪器仪表学会
	Chinese Journal of Scientific Instrument	China Instrument and Control Society
26	水利学报	中国水利学会
	Journal of Hydraulic Engineering	Chinese Hydraulic Engineering Society
25	水力发电学报	中国水力发电工程学会
27	Journal of Hydroelectric Engineering	China Society for Hydropower Engineering
• •	核科学与工程	中国核学会
28	Chinese Journal of Nuclear Science and Engineering	Chinese Nuclear Society
20	环境科学学报	中国环境科学学会
29	Acta Scientiae Circumstantiae	Chinese Society for Environmental Sciences
20	煤炭学报	中国煤炭学会
30	Journal of China Coal Society	China Coal Society
2.1	中国工程机械学报	中国工程机械学会
31	Chinese Journal of Construction Machinery	China Construction Machinery Society
32	图学学报	中国图学学会
32	Journal of Graphics	China Graphics Society
22	人工晶体学报	中国晶体学会
33	Journal of Synthetic Crystals	Chinese Crystallographic Society
	中国腐蚀与防护学报	中国腐蚀与防护学会
34	Journal of Chinese Society for Corrosion and	, , , , , , , , , , , , , , , , , , , ,
	Protection	Chinese Society for Corrosion and Protection
35	硅酸盐学报	中国硅酸盐学会
	Journal of the Chinese Ceramic Society	Chinese Ceramic Society
36	中国有色金属学报	中国有色金属学会
	Chinese Journal of Nonferrous Metals	Nonferrous Metals Society of China
37	系统仿真学报	中国系统仿真学会
	Journal of System Simulation	Chinese Association for System Simulation
	-	