

JoVE (Journal of Visualized Experiments) 中文使用手册

<https://www.jove.com/>

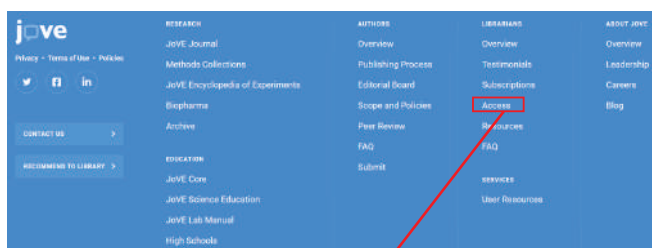
- 第1页 大学图书馆订阅，个人使用，试用及推荐
- 第2页 JoVE视频期刊 (JoVE Video Journal) 简介
- 第3页 JoVE教育 (JoVE Education) 简介
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- 第5- 78页 JoVE教育 (JoVE Education) 目录列表及直达链接



JoVE视频期刊 (JoVE Video Journal) JoVE教育视频 (JoVE Education) 的大学图书馆订阅、试用与推荐

JoVE视频由大学的图书馆以版块为单位进行订阅。大学订阅后，教师和学生可使用视频或将视频嵌入PPT。在大学校园里使用时，您的IP地址直接赋予了您使用权；在校园以外使用时，需要以您的大学邮箱注册登录。

查询您的大学已经订阅的JoVE视频资源，请将主页拉倒最下边（图1），点击“Access”链接（红框标记），即可进入已经订阅的版块列表（图2）。



Access

图1

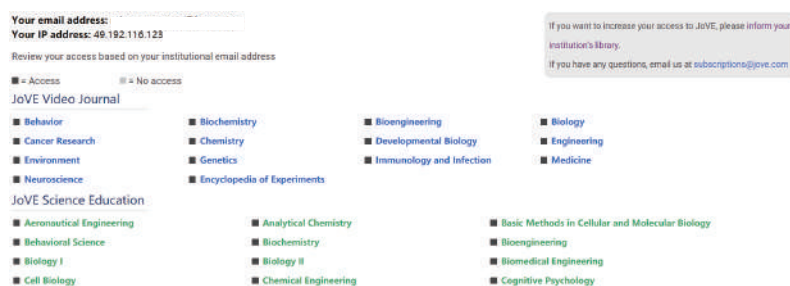


图2

如果您的大学尚未订阅您想使用的视频版块，JoVE给您提供了为期2周的试用。请点击试用链接：<http://info2.jove.com/apac-free-trial>，点击后用进行注册（推荐使用大学邮箱）。注册后即可使用。也可在试用期内将视频嵌入PPT应用于演示和教学。如果需要获得更长时间的试用，请与JoVE联系。

您的推荐是大学图书馆订阅的主要依据，请在主页最左下角“RECOMMEND TO LIBRARY”链接（图3），点击后可在图4的页面填写您想向图书馆推荐的版块，中文即可。



RECOMMEND TO LIBRARY >

图3

Recommend JoVE To Your Librarian

Xing Ming

XXX@cmu.edu.cn

JoVE

Australia

Please enter a subject for your recommendation *

Your Recommendation: 2-3 sentences explaining to your librarian why JoVE is a great resource for your institution. Feel free to write in your own language. *

图4

JoVE视频期刊 (JoVE VIDEO JOURNAL) 内容简介20200707版

JoVE Video Journal是全球最大的同行评审视频期刊，内容包括十几个领域的前沿研究。来自世界上领先实验室的37,000位科学家在此发表约10000篇视频文章，每月新增150余篇。视频文章内容为高质量的，具体到细节的实验视频结合详细的描述文本。这种眼见为实的办刊理念，大大提高了试验的可重复性、知识转移的有效性，并且最大限度地避免了科研经费的浪费。本刊在PubMed, Medline, Web of Science, Google Scholar等中被索引。主要包括13个学科版块。

- 1. 行为学 (Behavior) :** 认知神经科学、认知 (注意力, 推理, 决策)、虚拟现实与感知、性行为动机、社会意识与互动、学习与记忆、睡眠和昼夜节律、语言学、成瘾、情感、运动控制、意识
- 2. 生物化学 (Biochemistry) :** 生物分子的结构和功能、细胞代谢、脂质和膜生物化学、蛋白质-蛋白质互做、蛋白质-核酸互做、蛋白质折叠与修饰、酶学、生物分离和纯化
- 3. 生物工程 (Bioengineering) :** 组织工程、生物传感器、生物成像技术、细胞形态学、治疗材料、高通量分析、微流体、合成基材和材料的生物应用、机器人治疗学
- 4. 生物学 (Biology) :** 细胞信号通路、细胞通讯、生物信息学、基因测序、细胞和分子成像、细胞和遗传疗法、体内和体外疾病模型、蛋白质相互作用和动力学、代谢、衰老研究的模型
- 5. 癌症研究 (Cancer Research) :** 肿瘤发生与肿瘤抑制、肿瘤血管生成、宿主与肿瘤相互作用、癌症的诱变和转移、癌症干细胞、癌症生物标志物、癌症表观遗传学, 遗传学和基因组学、体内和体外肿瘤模型、肿瘤成像、癌症治疗和外科
- 6. 化学 (Chemistry) :** 结构表征、电子光谱、核电表征 (核磁共振, 电子顺磁共振)、电化学、分子动力学、质谱、合成与纯化、柱色谱、合成生物学、结构生物学
- 7. 发育生物学 (Developmental Biology) :** 配子发生与受精、胚胎发生、形态发生和器官发生、干细胞生物学与核重新编程、再生与修复、分化机制、遗传和表观遗传控制发展历程、进化发育生物学、衰老
- 8. 工程学 (Engineering) :** 设备制造、电子系统、光学和光子学、应用力学、材料科学、高端制造
- 9. 环境科学 (Environment) :** 替代能源、生物燃料、绿色化学、环境工程、生态学、海洋生物学、海洋学、土壤与农业科学、生态毒理学与生态健康、林业与植物学、大气科学与地球科学
- 10. 遗传学 (Genetics) :** 基因发现和基因筛选、基因调控, 功能和表达、DNA复制, 修复和重组、染色体生物学和基因组结构、表观遗传学、进化遗传学、测序技术、比较和功能基因组学、医学遗传学、基因治疗
- 11. 传染与免疫 (Immunology & Infection) :** 微生物学、免疫学、过敏、免疫细胞发育、自身免疫性疾病、病原细菌, 真菌, 寄生虫, 病毒和感染性Pr病毒、疾病的体外和体内建模、全球卫生研究、流行病学
- 12. 医学 (Medicine) :** 内科、临床试验、疾病的动物模型、外科专科 (心胸, 神经, 骨科, 口腔颌面科, 移植等)、临床教学资源、人体生理学、肿瘤科、体内成像技术 (超声, CT, PET, MRI)
- 13. 神经科学 (Neuroscience) :** 细胞和分子神经生物学、系统神经科学、发育与神经可塑性、疾病的神经生物学、电生理、神经发生和神经干细胞、神经外科和神经影像学、脊髓损伤模型、神经递质和神经元细胞信号传导

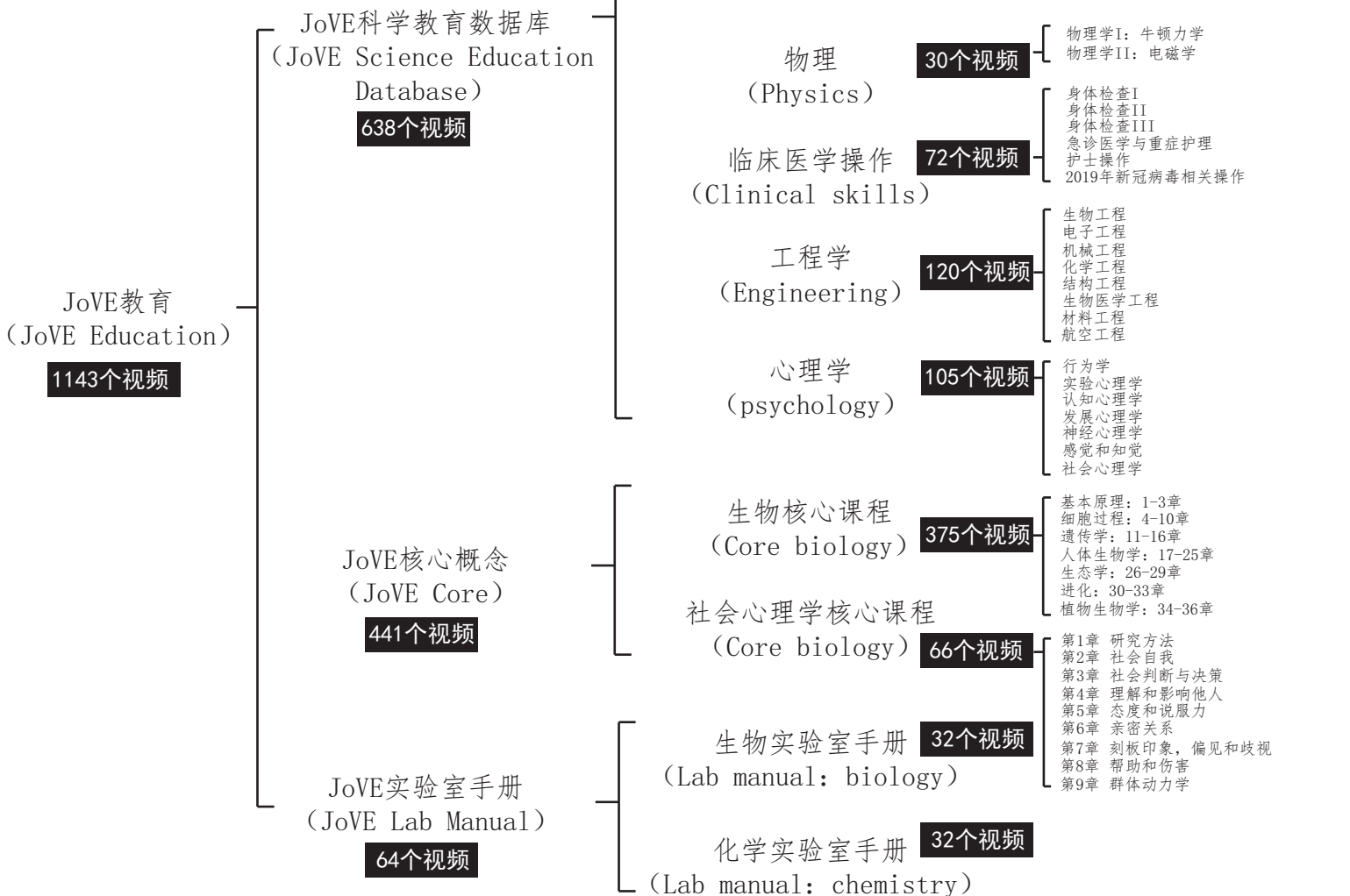
JoVE教育视频 (JoVE Education) 内容简介20200702版

JoVE Education由准确精良的动画和实验操作视频组成，帮助使用者理解科学概念和掌握实验流程。主要分为JoVE科学教育数据库 (JoVE Science Education Database)、JoVE核心科学概念 (JoVE Core) 和JoVE实验室手册 (JoVE Lab Manual) 三大板块。所有视频都有中文字幕和文稿。

1. **JoVE 科学教育数据库 (JoVE Science Education Database)** 包括八个学科子版块的基础理论和实验操作：基础生物学 (Basic biology)、高级生物学 (advanced biology)、化学 (Chemistry)、环境科学 (environmental sciences)、物理 (physics)、临床医学操作 (clinical skills)、工程学 (engineering)、心理学 (psychology)。

2. **JoVE核心概念 (JoVE Core)** 是聚焦于关键概念，交叉学科概念以及当下研究热点的视频教科书。目前涵盖二个学科子版块：生物核心课程 (core biology)、社会心理学核心课程 (core social psychology)

3. **JoVE实验室手册 (JoVE Lab Manual)** 从基础理论，教师教学和学生三个角度提供生动详实的视频。目前涵盖二个学科子版块：生物实验室手册 (Lab manual: biology)，化学实验室手册 (Lab manual: chemistry)。



JoVE教育 (JoVE Education) 视频观看和嵌入指南20200702版

一. 校园或研究所的IP地址直接赋予您视频使用权，无需注册登录；在校园或研究所以外使用，请使用您大学或研究所邮箱注册并登录个人账户。

二. JoVE教育 (JoVE education) 和登录链接在主页的最上端 (图1)。点击后下拉菜单显示JoVE科学教育数据库 (JoVE science education database)、JoVE核心科学概念 (JoVE core)，JoVE实验室手册 (JoVE lab manual) 三个板块 (图1)。点击后进入子版块链接列表页面 (图2)。以基础生物学 (Basic biology) 为例，点击后即进入基础生物学专题下的六个子版块列表 (图3)，再次点击后进入子专题的视频列表 (图4)。



图1

JoVE Science education database 子版块列表和链接

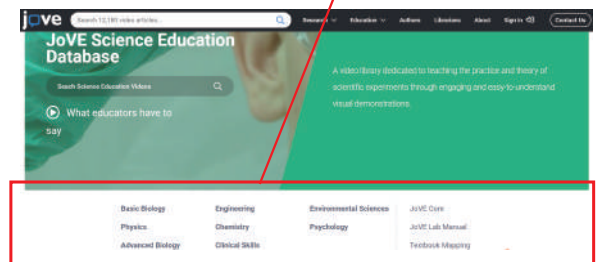


图2

子版块列表和链接

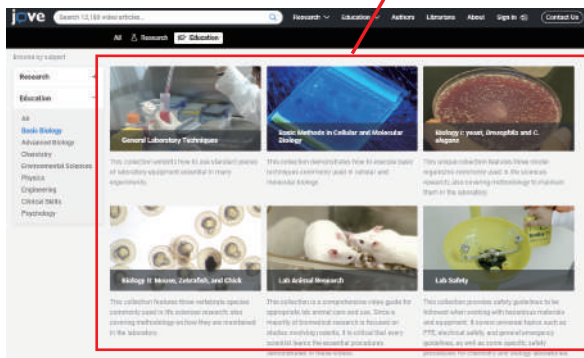
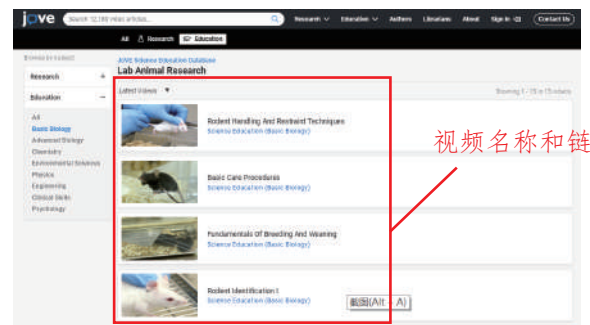


图3

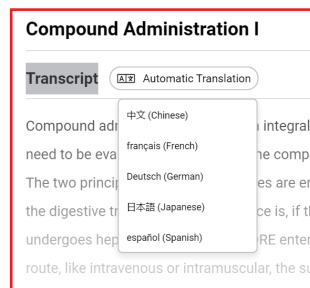


视频名称和链接

图4

三. 进入视频页面，可通过图5所示的语言选择界面选择中文；通过右侧的提纲导航，精准选择播放内容。

文稿语言选择



提纲导航



视频嵌入PPT的链接

图5

四. 点击图5的嵌入链接，能够将视频嵌入您的PPT用于教学或演示。点击嵌入按钮后会弹出图6的嵌入页面，复制划红线的部分，直接粘贴至PPT或远程教学软件中。当进行教学或演示时，直接点击该PPT上的链接即可播放视频。

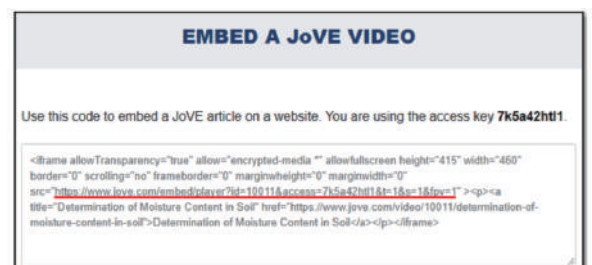


图6

JoVE 教育视频 (JoVE Education) 目录列表 20200702 版

第一部分: JoVE 科学教育数据库 (JoVE Science Education Database)

<https://www.jove.com/science-education/basicbio>

一、基础生物学 (Basic biology), <https://www.jove.com/science-education/basicbio> 共 92 个视频。视频全部有中文字幕, 其中 60 个有全中文版本。

1. 实验室基本操作技术 (General Laboratory Techniques) <https://www.jove.com/science-education-library/1/general-laboratory-techniques>

全中文版本视频

- (1) 离心机概述 (An Introduction to the Centrifuge)
<https://www.jove.com/science-education/5019/?language=Chinese>
- (2) 实验室中的温度控制: 冷却保存样品 (Regulating Temperature in the Lab: Preserving Samples Using Cold)
<https://www.jove.com/science-education/5042/?language=Chinese>
- (3) 光学显微镜概述 (Introduction to Light Microscopy)
<https://www.jove.com/science-education/5041/?language=Chinese>
- (4) 荧光显微镜技术概述 (Introduction to Fluorescence Microscopy)
<https://www.jove.com/science-education/5040/?language=Chinese>
- (5) 制备组织学样品用于光学显微镜技术 (Histological Sample Preparation for Light Microscopy)
<https://www.jove.com/science-education/5039/?language=Chinese>
- (6) 分光光度计的介绍 (Introduction to the Spectrophotometer)
<https://www.jove.com/science-education/5038/?language=Chinese>
- (7) 实验室中的称重操作 (Measuring Mass in the Laboratory)
<https://www.jove.com/science-education/5037/?language=Chinese>
- (8) 工作台的介绍 (生物安全柜, 超净工作台, 通风橱等) (An Introduction to Working in the Hood)
<https://www.jove.com/science-education/5036/?language=Chinese>
- (9) 本生灯概述 (Introduction to the Bunsen Burner)
<https://www.jove.com/science-education/5035/?language=Chinese>
- (10) 移液管和移液器的介绍 (Introduction to Serological Pipettes and Pipettors)
<https://www.jove.com/science-education/5034/?language=Chinese>
- (11) 微量移液器概述 (微量加样枪) (An Introduction to the Micropipettor)
<https://www.jove.com/science-education/5033/?language=Chinese>
- (12) 在实验室配置溶液 (Making Solutions in the Laboratory)
<https://www.jove.com/science-education/5030/?language=Chinese>
- (13) 了解浓度和测量体积 (Understanding Concentration and Measuring Volumes)
<https://www.jove.com/science-education/5026/?language=Chinese>
- (14) 酶标仪的介绍 (Introduction to the Microplate Reader)
<https://www.jove.com/science-education/5024/?language=Chinese>

- (15) 在实验室控制温度：加热 (Regulating Temperature in the Lab: Applying Heat)
<https://www.jove.com/science-education/5043/?language=Chinese>
2. 细胞生物学和分子生物学的基本研究方法 (Basic Methods in cellular and molecular biology) <https://www.jove.com/science-education-library/2/basic-methods-in-cellular-and-molecular-biology>), 全中文版本视频
- (1) 使用细胞计数板计数细胞 (Using a Hemacytometer to Count Cells)
<https://www.jove.com/science-education/5048/?language=Chinese>
- (2) 限制性内切酶消化 (Restriction Enzyme Digests)
<https://www.jove.com/science-education/5070/?language=Chinese>
- (3) DNA 连接反应 (DNA Ligation Reactions)
<https://www.jove.com/science-education/5069/dna?language=Chinese>
- (4) 细胞转染 (An Introduction to Transfection)
<https://www.jove.com/science-education/5068/?language=Chinese>
- (5) 蛋白免疫印迹杂交 (The Western Blot)
<https://www.jove.com/science-education/5065/?language=Chinese>
- (6) DNA 凝胶纯化 (Gel Purification)
<https://www.jove.com/science-education/5063/?language=Chinese>
- (7) 质粒纯化 (Plasmid Purification)
<https://www.jove.com/science-education/5062/?language=Chinese>
- (8) 酶联免疫吸附测定法 (ELISA) (The ELISA Method)
<https://www.jove.com/science-education/5061/?language=Chinese>
- (9) 细菌转化：电穿孔法 (Bacterial Transformation: Electroporation)
<https://www.jove.com/science-education/5060/?language=Chinese>
- (10) 细菌转化：热激法 (Bacterial Transformation: The Heat Shock Method)
<https://www.jove.com/science-education/5059/?language=Chinese>
- (11) 用 SDS-PAGE 技术分离蛋白 (SDS-PAGE) 分离蛋白 (Separating Protein with SDS-PAGE)
<https://www.jove.com/science-education/5058/sds-page?language=Chinese>
- (12) DNA 凝胶电泳 (DNA Gel Electrophoresis)
<https://www.jove.com/science-education/5057/dna?language=Chinese>
- (13) PCR: 聚合酶链式反应 (PCR: The Polymerase Chain Reaction)
<https://www.jove.com/science-education/5056/pcr-?language=Chinese>
- (14) 基本的组织培养：细胞传代 (Passaging Cells)
<https://www.jove.com/science-education/5052/?language=Chinese>
- (15) 分子克隆 (Molecular Cloning)
<https://www.jove.com/science-education/5074/?language=Chinese>
3. 生物学专题一(模式生物 I): 酵母, 果蝇, 秀丽隐杆线虫 (Biology I: Yeast, Drosophila and C. Elegans) <https://www.jove.com/science-education-library/3/biology-i-yeast-drosophila-and-c-elegans>), 全中文版本视频
- (1) 酿酒酵母概述 (An Introduction to Saccharomyces cerevisiae)
<https://www.jove.com/science-education/5081/?language=Chinese>
- (2) 模式生物黑腹果蝇概述 (An Introduction to Drosophila melanogaster)
<https://www.jove.com/science-education/5082/?language=Chinese>

- (3) 模式生物概述: 秀丽隐杆线虫 (An Introduction to *Caenorhabditis elegans*)
<https://www.jove.com/science-education/5103/-?language=Chinese>
 - (4) 酿酒酵母的培养和保存 (Yeast Maintenance)
<https://www.jove.com/science-education/5095/?language=Chinese>
 - (5) 果蝇的饲养与保存 (*Drosophila* Maintenance)
<https://www.jove.com/science-education/5084/?language=Chinese>
 - (6) 秀丽隐杆线虫的实验室基本培养 (*C. elegans* Maintenance)
<https://www.jove.com/science-education/5104/?language=Chinese>
 - (7) 酿酒酵母的繁殖 (Yeast Reproduction)
<https://www.jove.com/science-education/5097/?language=Chinese>
 - (8) 果蝇的发育和生殖 (*Drosophila* Development and Reproduction)
<https://www.jove.com/science-education/5093/?language=Chinese>
 - (9) 秀丽隐杆线虫的发育和生殖 (*C. elegans* Development and Reproduction)
<https://www.jove.com/science-education/5110/?language=Chinese>
 - (10) 从酵母中提取核酸 (Isolating Nucleic Acids from Yeast)
<https://www.jove.com/science-education/5096/?language=Chinese>
 - (11) 果蝇幼虫的免疫组化 (*Drosophila* Larval IHC)
<https://www.jove.com/science-education/5106/?language=Chinese>
 - (12) 线虫 RNA 干扰的简介 (RNAi in *C. elegans*)
<https://www.jove.com/science-education/5105/rna?language=Chinese>
 - (13) 酵母的转化和克隆 (Yeast Transformation and Cloning)
<https://www.jove.com/science-education/5083/?language=Chinese>
 - (14) 黑腹果蝇卵和幼虫收获及准备 (*Drosophila melanogaster* Embryo and Larva Harvesting and Preparation)
<https://www.jove.com/science-education/5094/?language=Chinese>
 - (15) 线虫的化学趋向性介绍 (*C. elegans* Chemotaxis Assay)
<https://www.jove.com/science-education/5113/?language=Chinese>
4. 生物学专题二 (模式生物 II): 小鼠, 斑马鱼, 鸡 (Biology II: Mouse, Zebrafish and Chick) <https://www.jove.com/science-education-library/4/biology-ii-mouse-zebrafish-and-chick>), **全中文版本视频**
- (1) 对实验室小鼠概述 (An Introduction to the Laboratory Mouse: *Mus musculus*)
<https://www.jove.com/science-education/5129/?language=Chinese>
 - (2) 鸡 (家鸡) 的概述 (An Introduction to the Chick: *Gallus gallus domesticus*)
<https://www.jove.com/science-education/5153/?language=Chinese>
 - (3) 印度斑马鱼: 斑马鱼的概述 (An Introduction to the Zebrafish: *Danio rerio*)
<https://www.jove.com/science-education/5128/?language=Chinese>
 - (4) 小鼠的操作和饲养的基本知识 (Basic Mouse Care and Maintenance)
<https://www.jove.com/science-education/5158/?language=Chinese>
 - (5) 鸡的操作和饲养的基本知识 (Basic Chick Care and Maintenance)
<https://www.jove.com/science-education/5154/?language=Chinese>
 - (6) 斑马鱼的保存和饲养 (Zebrafish Maintenance and Husbandry)
<https://www.jove.com/science-education/5152/?language=Chinese>
 - (7) 实验室小鼠的发育与繁殖 (Development and Reproduction of the

Laboratory Mouse)

<https://www.jove.com/science-education/5159/?language=Chinese>

- (8) 鸡的发育 (Development of the Chick)
<https://www.jove.com/science-education/5155/?language=Chinese>
 - (9) 斑马鱼的繁殖和发育 (Zebrafish Reproduction and Development)
<https://www.jove.com/science-education/5151/?language=Chinese>
 - (10) 小鼠的基因分型 (Mouse Genotyping)
<https://www.jove.com/science-education/5160/?language=Chinese>
 - (11) 鸡胚的壳内电转化 (In ovo Electroporation of Chicken Embryos)
<https://www.jove.com/science-education/5156/?language=Chinese>
 - (12) 斑马鱼育种和胚胎的操作 (Zebrafish Breeding and Embryo Handling)
<https://www.jove.com/science-education/5150/?language=Chinese>
 - (13) 对小鼠施用实验药剂 (Introducing Experimental Agents into the Mouse)
<https://www.jove.com/science-education/5161/?language=Chinese>
 - (14) 鸡胚的去壳培养 (Chick ex ovo Culture)
<https://www.jove.com/science-education/5157/?language=Chinese>
 - (15) 斑马鱼显微注射技术 (Zebrafish Microinjection Techniques)
<https://www.jove.com/science-education/5130/?language=Chinese>
5. 实验动物专题 (Lab animal research) <https://www.jove.com/science-education-library/23/lab-animal-research>, **中文字幕与中文文稿**
- (1) 啮齿类实验动物的抓取与保定 (Rodent Handling and Restraint Techniques)
<https://www.jove.com/science-education/10221/rodent-handling-and-restraint-techniques>
 - (2) 小鼠的饲养与管理 (Basic Care Procedures)
<https://www.jove.com/science-education/10290/basic-care-procedures>
 - (3) 小鼠的繁育与幼鼠断奶管理 (Fundamentals of Breeding and Weaning)
<https://www.jove.com/science-education/10293/fundamentals-of-breeding-and-weaning>
 - (4) 啮齿类实验动物的个体识别 I: 小鼠打耳标和打耳孔 (Rodent Identification I)
<https://www.jove.com/science-education/10189/rodent-identification-i>
 - (5) 啮齿类实验动物个体识别 II: 染趾, 染尾及大鼠芯片植入 (Rodent Identification II)
<https://www.jove.com/science-education/10182/rodent-identification-ii>
 - (6) 化合物给药 I: 皮下, 腹膜, 肌肉及静脉注射 (Compound Administration I)
<https://www.jove.com/science-education/10198/compound-administration-i>
 - (7) 化合物给药 II: 口服及局部涂抹 (Compound Administration II)
<https://www.jove.com/science-education/10388/compound-administration-ii>
 - (8) 化合物给药 III: 皮内, 鼻内及颅内给药 (Compound Administration III)
<https://www.jove.com/science-education/10215/compound-administration-iii>
 - (9) 化合物给药 IV: 心内, 眶后及足垫给药 (Compound Administration IV)
<https://www.jove.com/science-education/10214/compound-administration-iv>
 - (10) 小鼠血液采集 I: 眶后, 剪尾及心内采血 (Blood Withdrawal I)
<https://www.jove.com/science-education/10246/blood-withdrawal-i>
 - (11) 小鼠血液采集 II: 面部, 颌下腺, 隐静脉及股静脉采血 (Blood Withdrawal II)

- <https://www.jove.com/science-education/10247/blood-withdrawal-ii>
- (12) 小鼠的麻醉与维持 (Anesthesia Induction and Maintenance)
<https://www.jove.com/science-education/10263/anesthesia-induction-and-maintenance>
- (13) 啮齿类动物的外科手术操作 (Considerations for Rodent Surgery)
<https://www.jove.com/science-education/10285/considerations-for-rodent-surgery>
- (14) 尸体剖检及组织样品采集 (Diagnostic Necropsy and Tissue Harvest)
<https://www.jove.com/science-education/10294/diagnostic-necropsy-and-tissue-harvest>
- (15) 组织样品采集的无菌操作 (Sterile Tissue Harvest)
<https://www.jove.com/science-education/10298/sterile-tissue-harvest>
6. 实验室安全 (Lab safety) <https://www.jove.com/science-education-library/31/lab-safety>, **中文字幕和中文文稿**
- (1) 恰当的个人防护装备 (Proper Personal Protective Equipment)
<https://www.jove.com/science-education/10402/proper-personal-protective-equipment>
- (2) 紧急洗眼和喷淋设备 (Emergency Eyewash and Shower Stations)
<https://www.jove.com/science-education/10373/emergency-eyewash-and-shower-stations>
- (3) 用电安全 (Electrical Safety)
<https://www.jove.com/science-education/10364/electrical-safety>
- (4) 离心机使用 (Working with Centrifuges)
<https://www.jove.com/science-education/10365/working-with-centrifuges>
- (5) 制冷和加热设备的使用 (Working with Hot and Cold Sources)
<https://www.jove.com/science-education/10366/working-with-hot-and-cold-sources>
- (6) 实验室紧急情况指南 (Guidelines in Case of a Laboratory Emergency)
<https://www.jove.com/science-education/10379/guidelines-in-case-of-a-laboratory-emergency>
- (7) 化学品存储：分类，危险认知以及兼容存放原则 (Chemical Storage: Categories, Hazards And Compatibilities)
<https://www.jove.com/science-education/10380/chemical-storage-categories-hazards-and-compatibilities>
- (8) 无机酸的安全处理 (Safe Handling of Mineral Acids)
<https://www.jove.com/science-education/10380/chemical-storage-categories-hazards-and-compatibilities>
- (9) 化学品泄漏的处理 (Handling Chemical Spills)
<https://www.jove.com/science-education/10371/handling-chemical-spills>
- (10) 高压灭菌器的正确使用 (Proper Use of Autoclaves)
<https://www.jove.com/science-education/10381/proper-use-of-autoclaves>
- (11) 通风橱和层流柜的使用 (Fume Hoods and Laminar Flow Cabinets)
<https://www.jove.com/science-education/10372/fume-hoods-and-laminar-flow-cabinets>

- (12) 应用施伦克线处理对空气和水敏感的化学品 (Handling Air- and Water-Sensitive Chemicals Using a Schlenk Line)
<https://www.jove.com/science-education/10376/handling-air-and-water-sensitive-chemicals-using-a-schlenk-line>
- (13) 真空设备的正确操作 (Proper Operation of Vacuum Based Equipment)
<https://www.jove.com/science-education/10377/proper-operation-of-vacuum-based-equipment>
- (14) 手套箱的操作 (Operating the Glovebox)
<https://www.jove.com/science-education/10378/operating-the-glovebox>
- (15) 高压反应容器的操作 (Operation of High-pressure Reactor Vessels)
<https://www.jove.com/science-education/10400/operation-of-high-pressure-reactor-vessels>
- (16) 保证实验室生物安全的消毒措施 (Decontamination for Laboratory Biosafety)
<https://www.jove.com/science-education/10399/decontamination-for-laboratory-biosafety>
- (17) 实验室废物的适当处理 (Proper Waste Disposal)
<https://www.jove.com/science-education/10403/proper-waste-disposal>

二、高级生物学 (Advanced biology), <https://www.jove.com/science-education/advnbio>
共 84 个视频。视频全部有中文字幕, 其中 15 个有全中文版本。

1. 神经科学 (Neuroscience), <https://www.jove.com/science-education-library/5/neuroscience>, 全中文版本视频。
 - (1) 神经生理学导论 (An Introduction to Neurophysiology)
<https://www.jove.com/science-education/5201/?language=Chinese>
 - (2) 膜片钳电生理技术 (Patch Clamp Electrophysiology)
<https://www.jove.com/science-education/5202/?language=Chinese>
 - (3) 神经元钙成像 (Calcium Imaging in Neurons)
<https://www.jove.com/science-education/5203/?language=Chinese>
 - (4) 神经解剖学导论 (An Introduction to Neuroanatomy)
<https://www.jove.com/science-education/5204/?language=Chinese>
 - (5) 啮齿动物的立体定位手术 (Rodent Stereotaxic Surgery)
<https://www.jove.com/science-education/5205/?language=Chinese>
 - (6) 神经组织的组织学染色 (Histological Staining of Neural Tissue)
<https://www.jove.com/science-education/5206/?language=Chinese>
 - (7) 行为神经学导论 (An Introduction to Behavioral Neuroscience)
<https://www.jove.com/science-education/5210/?language=Chinese>
 - (8) Morris 水迷宫 (The Morris Water Maze)
<https://www.jove.com/science-education/5211/morris?language=Chinese>
 - (9) fMRI:功能磁共振成像 (fMRI: Functional Magnetic Resonance Imaging)
<https://www.jove.com/science-education/5212/fmri?language=Chinese>
 - (10) 细胞和分子神经科学导论 (An Introduction to Cellular and Molecular Neuroscience)
<https://www.jove.com/science-education/5213/?language=Chinese>

- (11) 原代神经元培养物 (Primary Neuronal Cultures)
<https://www.jove.com/science-education/5214/?language=Chinese>
 - (12) 神经元转染方法 (Neuronal Transfection Methods)
<https://www.jove.com/science-education/5215/?language=Chinese>
 - (13) 发育神经生物学导论 (An Introduction to Developmental Neurobiology)
<https://www.jove.com/science-education/5207/?language=Chinese>
 - (14) 小鼠子宫内电穿孔 (Murine In Utero Electroporation)
<https://www.jove.com/science-education/5208/?language=Chinese>
 - (15) 神经组织的外植体培养 (Explant Culture of Neural Tissue)
<https://www.jove.com/science-education/5209/?language=Chinese>
2. 发育生物学 (developmental biology), <https://www.jove.com/science-education-library/6/developmental-biology>, **中文字幕和中文文稿。**
- (1) 发育遗传学概述 (An Introduction to Developmental Genetics)
<https://www.jove.com/science-education/5325/an-introduction-to-developmental-genetics>
 - (2) 反义吗啉环寡核苷酸 (Morpholinos) 介导的基因沉默技术 (Gene Silencing with Morpholinos)
<https://www.jove.com/science-education/5326/gene-silencing-with-morpholinos>
 - (3) 模式生物的基因工程技术 (Genetic Engineering of Model Organisms)
<https://www.jove.com/science-education/5327/genetic-engineering-of-model-organisms>
 - (4) 分子发育生物学概论 (An Introduction to Molecular Developmental Biology)
<https://www.jove.com/science-education/5328/an-introduction-to-molecular-developmental-biology>
 - (5) 组织块体外培养在发育研究中的应用 (Explant Culture for Developmental Studies)
<https://www.jove.com/science-education/5329/explant-culture-for-developmental-studies>
 - (6) 整胚原位杂交技术 (Whole-Mount In Situ Hybridization)
<https://www.jove.com/science-education/5330/whole-mount-in-situ-hybridization>
 - (7) 干细胞生物学概论 (An Introduction to Stem Cell Biology)
<https://www.jove.com/science-education/5331/an-introduction-to-stem-cell-biology>
 - (8) 胚胎干细胞的培养与分化 (Embryonic Stem Cell Culture and Differentiation)
<https://www.jove.com/science-education/5332/embryonic-stem-cell-culture-and-differentiation>
 - (9) 诱导多能性干细胞 (Induced Pluripotency)
<https://www.jove.com/science-education/5333/induced-pluripotency>
 - (10) 器官发生学概论 (An Introduction to Organogenesis)
<https://www.jove.com/science-education/5334/an-introduction-to-organogenesis>
 - (11) 命运图: 细胞命运的决定与特化机制 (Fate Mapping)

- <https://www.jove.com/science-education/5335/fate-mapping>
- (12) 利用胚胎组织移植技术研究器官发生 (Transplantation Studies)
<https://www.jove.com/science-education/5336/transplantation-studies>
- (13) 衰老与再生研究概述 (An Introduction to Aging and Regeneration)
<https://www.jove.com/science-education/5337/an-introduction-to-aging-and-regeneration>
- (14) 无脊椎模式动物寿命的定量 (Invertebrate Lifespan Quantification)
<https://www.jove.com/science-education/5338/invertebrate-lifespan-quantification>
- (15) 成体干细胞在组织修复再生中作用的研究 (Tissue Regeneration with Somatic Stem Cells)
<https://www.jove.com/science-education/5339/tissue-regeneration-with-somatic-stem-cells>
3. 遗传学 (Genetics), <https://www.jove.com/science-education-library/8/genetics>,
中文字幕和中文文稿
- (1) 遗传学分析概述 (An Overview of Genetic Analysis)
<https://www.jove.com/science-education/5540/an-overview-of-genetic-analysis>
- (2) 遗传杂交 (Genetic Crosses)
<https://www.jove.com/science-education/5541/genetic-crosses>
- (3) 遗传 (基因) 筛选 (Genetic Screens)
<https://www.jove.com/science-education/5542/genetic-screens>
- (4) 遗传 (基因) 与疾病的概述 (An Overview of Genetics and Disease)
<https://www.jove.com/science-education/5543/an-overview-of-genetics-and-disease>
- (5) SNP (单核苷酸多态性) 基因分型 (SNP Genotyping)
<https://www.jove.com/science-education/5544/snp-genotyping>
- (6) 细胞遗传学 (Cytogenetics)
<https://www.jove.com/science-education/5545/cytogenetics>
- (7) 基因表达概述 (An Overview of Gene Expression)
<https://www.jove.com/science-education/5546/an-overview-of-gene-expression>
- (8) 用微阵列分析表达谱 (Expression Profiling with Microarrays)
<https://www.jove.com/science-education/5547/expression-profiling-with-microarrays>
- (9) RNA 测序 (RNA-Seq)
<https://www.jove.com/science-education/5548/rna-seq>
- (10) 表观遗传学概述 (An Overview of Epigenetics)
<https://www.jove.com/science-education/5549/an-overview-of-epigenetics>
- (11) DNA 甲基化分析 (DNA Methylation Analysis)
<https://www.jove.com/science-education/5550/dna-methylation-analysis>
- (12) 染色质免疫共沉淀 (Chromatin Immunoprecipitation)
<https://www.jove.com/science-education/5551/chromatin-immunoprecipitation>

- (13) 基因工程概述 (An Overview of Genetic Engineering)
<https://www.jove.com/science-education-library/8/genetics>
- (14) 重组工程与基因靶向 (Recombineering and Gene Targeting)
<https://www.jove.com/science-education/5553/recombineering-and-gene-targeting>
- (15) 基因组编辑 (Genome Editing)
<https://www.jove.com/science-education/5554/genome-editing>
- 4. 细胞生物学 (Cell biology) <https://www.jove.com/science-education-library/9/cell-biology>, **中文字幕和中文文稿**
 - (1) 细胞分裂概述 (An Introduction to Cell Division)
<https://www.jove.com/science-education/5640/an-introduction-to-cell-division>
 - (2) 细胞周期分析 (Cell Cycle Analysis)
<https://www.jove.com/science-education/5641/cell-cycle-analysis>
 - (3) 活细胞有丝分裂成像技术 (Live Cell Imaging of Mitosis)
<https://www.jove.com/science-education/5642/live-cell-imaging-of-mitosis>
 - (4) 细胞运动与迁移概述 (An Introduction to Cell Motility and Migration)
<https://www.jove.com/science-education/5643/an-introduction-to-cell-motility-and-migration>
 - (5) Transwell 细胞迁移试验 (The Transwell Migration Assay)
<https://www.jove.com/science-education/5644/the-transwell-migration-assay>
 - (6) 细胞外基质概述及 3D 矩阵侵入试验 (Invasion Assay Using 3D Matrices)
<https://www.jove.com/science-education/5645/invasion-assay-using-3d-matrices>
 - (7) 胞吞与胞吐的概述 (An Introduction to Endocytosis and Exocytosis)
<https://www.jove.com/science-education/5646/an-introduction-to-endocytosis-and-exocytosis>
 - (8) 细胞表面蛋白生物素标记技术 (Cell-surface Biotinylation Assay)
<https://www.jove.com/science-education/5647/cell-surface-biotinylation-assay>
 - (9) FM 染料在囊泡在循环研究中的应用 (FM Dyes in Vesicle Recycling)
<https://www.jove.com/science-education/5151/?language=Chinese>
 - (10) 细胞新陈代谢概述 (An Introduction to Cell Metabolism)
<https://www.jove.com/science-education/5652/an-introduction-to-cell-metabolism>
 - (11) ATP 生物发光检测 (The ATP Bioluminescence Assay)
<https://www.jove.com/science-education/5653/the-atp-bioluminescence-assay>
 - (12) 细胞死亡概述 (An Introduction to Cell Death)
<https://www.jove.com/science-education/5649/an-introduction-to-cell-death>
 - (13) 活性氧自由基的检测 (Detecting Reactive Oxygen Species)
<https://www.jove.com/science-education/5654/detecting-reactive-oxygen-species>

- (14) TUNEL 试验检测细胞凋亡 (The TUNEL Assay)
<https://www.jove.com/science-education/5650/annexin-v-and-propidium-iodide-labeling>
- (15) Annexin V 和碘化丙啶标记区分细胞凋亡和细胞坏死试验 (Annexin V and Propidium Iodide Labeling)
<https://www.jove.com/science-education/5650/annexin-v-and-propidium-iodide-labeling>
5. 免疫学 (Immunology) , <https://www.jove.com/science-education-library/83/immunology>, **中文字幕和中文文稿**
- (1) 流式细胞仪及荧光细胞分选 (FACS): 脾脏 B 细胞的分离 (Flow Cytometry and Fluorescence-Activated Cell Sorting (FACS): Isolation of Splenic B Lymphocytes)
<https://www.jove.com/science-education/10494/flow-cytometry-fluorescence-activated-cell-sorting-facs-isolation>
- (2) 磁珠分选法分离胸腺 T 细胞 (Magnetic Activated Cell Sorting (MACS): Isolation of Thymic T Lymphocytes)
<https://www.jove.com/science-education/10495/magnetic-activated-cell-sorting-macs-isolation-of-thymic-t-lymphocytes>
- (3) 间接, 三明治及竞争 ELISA 试验 (ELISA Assays: Indirect, Sandwich, and Competitive)
<https://www.jove.com/science-education/10496/elisa-assays-indirect-sandwich-and-competitive>
- (4) ELISPOT 试验: 分泌 IFN- γ 的脾细胞的检测 (ELISPOT Assay: Detection of IFN- γ Secreting Splenocytes)
<https://www.jove.com/science-education/10497/elispot-assay-detection-of-ifn-secreting-splenocytes>
- (5) 免疫组织化学和免疫细胞化学: 通过光学显微镜进行组织成像 (Immunohistochemistry and Immunocytochemistry: Tissue Imaging via Light Microscopy)
<https://www.jove.com/science-education/10498/immunohistochemistry-immunocytochemistry-tissue-imaging-via-light>
- (6) 抗体生产: 利用杂交瘤生产单克隆抗体 (Antibody Generation: Producing Monoclonal Antibodies Using Hybridomas)
<https://www.jove.com/science-education/10499/antibody-generation-producing-monoclonal-antibodies-using-hybridomas>
- (7) 免疫荧光显微镜: 石蜡包埋组织切片的免疫荧光染色 (Immunofluorescence Microscopy: Immunofluorescence Staining of Paraffin-Embedded Tissue Sections)
<https://www.jove.com/science-education/10500/immunofluorescence-microscopy-immunofluorescence-staining-paraffin>
- (8) 激光共聚焦显微镜: 小鼠成纤维细胞中蛋白质的定位技术 (Confocal Fluorescence Microscopy: A Technique to Determine the Localization of Proteins in Mouse Fibroblasts)
<https://www.jove.com/science-education/10501/confocal-fluorescence->

- [microscopy-technique-to-determine-localization](#)
- (9) 免疫共沉淀技术：使用琼脂糖珠纯化内源蛋白 (Immunoprecipitation-Based Techniques: Purification of Endogenous Proteins Using Agarose Beads)
<https://www.jove.com/science-education/10502/immunoprecipitation-based-techniques-purification-endogenous-proteins>
 - (10) 细胞周期分析：使用 CFSE 染色和流式细胞仪检测刺激后的 CD4 和 CD8 T 细胞增殖 (Cell Cycle Analysis: Assessing CD4 and CD8 T Cell Proliferation After Stimulation Using CFSE Staining and Flow Cytometry)
<https://www.jove.com/science-education/10503/cell-cycle-analysis-assessing-cd4-cd8-t-cell-proliferation-after>
 - (11) 适应性细胞转移：供体小鼠脾细胞向受体小鼠的移植及通过流式细胞术评价移植效果 (Adoptive Cell Transfer: Introducing Donor Mouse Splenocytes to a Host Mouse and Assessing Success via FACS)
<https://www.jove.com/science-education/10504/adoptive-cell-transfer-introducing-donor-mouse-splenocytes-to-host>
 - (12) 细胞死亡的检测：铬释放试验检测细胞毒作用 (Assay for Cell Death: Chromium Release Assay of Cytotoxic Ability)
<https://www.jove.com/science-education/10505/assay-for-cell-death-chromium-release-assay-of-cytotoxic-ability>
6. 微生物学 (Microbiology) , <https://www.jove.com/science-education-library/84/microbiology>, **中文字幕和中文文稿**
- (1) Winogradsky 柱的应用：样品中不同微生物种群富集培养方法 (Creating a Winogradsky Column: A Method to Enrich the Microbial Species in a Sediment Sample)
<https://www.jove.com/science-education/10506/creating-winogradsky-column-method-to-enrich-microbial-species>
 - (2) 倍比稀释，培养平板制作及划线涂板 (Serial Dilutions and Plating: Microbial Enumeration)
<https://www.jove.com/science-education/10507/serial-dilutions-and-plating-microbial-enumeration>
 - (3) 富集培养：应用选择性和差异培养基培养需氧和厌氧微生物 (Enrichment Cultures: Culturing Aerobic and Anaerobic Microbes on Selective and Differential Medias)
<https://www.jove.com/science-education/10508/enrichment-cultures-culturing-aerobic-anaerobic-microbes-on-selective>
 - (4) 纯培养和划线涂板：从混合样品中分离单克隆菌落 (Pure Cultures and Streak Plating: Isolation of Single Bacterial Colonies from a Mixed Sample)
<https://www.jove.com/science-education/10509/pure-cultures-streak-plating-isolation-single-bacterial-colonies-from>
 - (5) 16S rRNA 测序：基于 PCR 的菌种鉴定技术 (16S rRNA Sequencing: A PCR-based Technique to Identify Bacterial Species)
<https://www.jove.com/science-education/10510/16s-rna-sequencing-pcr-based-technique-to-identify-bacterial>
 - (6) 生长曲线：应用菌落形成单位和光密度测量测定细菌生长曲线 (Growth

Curves: Generating Growth Curves Using Colony Forming Units and Optical Density Measurements)

<https://www.jove.com/science-education/10511/growth-curves-generating-growth-curves-using-colony-forming-units>

- (7) 抗生素药敏试验：用 E-test 药敏条法测定两种抗生素的最小抑菌浓度及协同作用 (Antibiotic Susceptibility Testing: Epsilometer Tests to Determine MIC Values of Two Antibiotics and Evaluate Antibiotic Synergy)

<https://www.jove.com/science-education/10512/antibiotic-susceptibility-testing-epsilometer-tests-to-determine-mic>

- (8) 显微镜和细菌染色：革兰氏染色，荚膜染色和孢子染色 (Microscopy and Staining: Gram, Capsule, and Endospore Staining)

<https://www.jove.com/science-education/10513/microscopy-and-staining-gram-capsule-and-endospore-staining>

- (9) 噬斑试验：通过噬斑形成单位测定病毒滴度 (Plaque Assay: A Method to Determine Viral Titer as Plaque Forming Units (PFU))

<https://www.jove.com/science-education/10514/plaque-assay-method-to-determine-viral-titer-as-plaque-forming-units>

- (10) 转化由氯化钙处理制作的感受态大肠杆菌细胞 (Transformation of E. coli Cells Using an Adapted Calcium Chloride Procedure)

<https://www.jove.com/science-education/10515/transformation-e-coli-cells-using-an-adapted-calcium-chloride>

- (11) 细菌接合：氨苄青霉素抗性从供体细菌向受体细菌转移的一种方式 (Conjugation: A Method to Transfer Ampicillin Resistance from Donor to Recipient E. coli)

<https://www.jove.com/science-education/10516/conjugation-method-to-transfer-ampicillin-resistance-from-donor-to>

- (12) 噬菌体转导：氨苄青霉素抗性从供体细菌向受体细菌转移的一种方式 (Phage Transduction: A Method to Transfer Ampicillin Resistance from Donor to Recipient E. coli)

<https://www.jove.com/science-education/10517/phage-transduction-method-to-transfer-ampicillin-resistance-from>

三、化学 (Chemistry), <https://www.jove.com/science-education/chem> 共 90 个视频。视频全部有中文字幕

1. 通用化学 (General chemistry), <https://www.jove.com/science-education-library/16/general-chemistry>, 中文字幕和中文文稿

- (1) 实验室玻璃器皿介绍及使用 (Common Lab Glassware and Uses)

<https://www.jove.com/science-education/10161/common-lab-glassware-and-uses>

- (2) 溶液及浓度 (Solutions and Concentrations)

<https://www.jove.com/science-education/10078/solutions-and-concentrations>

- (3) 测量固体和液体的密度 (Determining the Density of a Solid and Liquid)

<https://www.jove.com/science-education/10082/determining-the-density-of-a-solid-and-liquid>

- (4) 测定使溶液的质量百分比 (Determining the Mass Percent Composition in an Aqueous Solution)
<https://www.jove.com/science-education/10172/determining-the-mass-percent-composition-in-an-aqueous-solution>
 - (5) 实验式的确定 (Determining the Empirical Formula)
<https://www.jove.com/science-education/10181/determining-the-empirical-formula>
 - (6) 离子化合物的溶解性规律 (Determining the Solubility Rules of Ionic Compounds)
<https://www.jove.com/science-education/10197/determining-the-solubility-rules-of-ionic-compounds>
 - (7) pH 计的使用 (Using a pH Meter)
<https://www.jove.com/science-education/5500/using-a-ph-meter>
 - (8) 滴定分析法概述 (Introduction to Titration)
<https://www.jove.com/science-education/5699/introduction-to-titration>
 - (9) 理想气体定律 (Ideal Gas Law)
<https://www.jove.com/science-education/5537/ideal-gas-law>
 - (10) 分光光度法测定平衡常数 (Spectrophotometric Determination of an Equilibrium Constant)
<https://www.jove.com/science-education/10094/spectrophotometric-determination-of-an-equilibrium-constant>
 - (11) 勒夏特列原理 (Le Châtelier's Principle)
<https://www.jove.com/science-education/10138/le-chatelier-s-principle>
 - (12) 冰点降低法确定未知化合物 (Freezing-Point Depression to Determine an Unknown Compound)
<https://www.jove.com/science-education/10137/freezing-point-depression-to-determine-an-unknown-compound>
 - (13) 确定化学反应速率方程和反应顺序 (Determining Rate Laws and the Order of Reaction)
<https://www.jove.com/science-education/10193/determining-rate-laws-and-the-order-of-reaction>
 - (14) 用差示扫描量热仪测量焓变 (Using Differential Scanning Calorimetry to Measure Changes in Enthalpy)
<https://www.jove.com/science-education/5559/using-differential-scanning-calorimetry-to-measure-changes-in-enthalpy>
 - (15) 配位化合物 (Coordination Chemistry Complexes)
<https://www.jove.com/science-education/10179/coordination-chemistry-complexes>
2. 有机化学 (Organic chemistry), <https://www.jove.com/science-education-library/17/organic-chemistry>, [中文字幕和中文文稿](#)
- (1) 催化作用概述 (Introduction to Catalysis)
<https://www.jove.com/science-education/52946/introduction-to-catalysis>
 - (2) 应用回流冷凝系统进行化学加热反应 (Assembly of a Reflux System for Heated Chemical Reactions)

- <https://www.jove.com/science-education/5516/assembly-of-a-reflux-system-for-heated-chemical-reactions>
- (3) 室温下进行化学反应 (Conducting Reactions Below Room Temperature)
<https://www.jove.com/science-education/10224/conducting-reactions-below-room-temperature>
 - (4) 应用施伦克线进行溶剂转换 (Schlenk Lines Transfer of Solvents)
<https://www.jove.com/science-education/5679/schlenk-lines-transfer-of-solvents>
 - (5) 应用冷冻-泵吸-解冻循环进行液体脱气 (Degassing Liquids with Freeze-Pump-Thaw Cycling)
<https://www.jove.com/science-education/5639/degassing-liquids-with-freeze-pump-thaw-cycling>
 - (6) 试剂和仪器的干燥 (Preparing Anhydrous Reagents and Equipment)
<https://www.jove.com/science-education/10227/preparing-anhydrous-reagents-and-equipment>
 - (7) 通过重结晶进行化合物的纯化 (Purifying Compounds by Recrystallization)
<https://www.jove.com/science-education/10184/purifying-compounds-by-recrystallization>
 - (8) 利用析出条件差异进行混合物的分离 (Separation of Mixtures via Precipitation)
<https://www.jove.com/science-education/5558/separation-of-mixtures-via-precipitation>
 - (9) 固-液萃取 (Solid-Liquid Extraction)
<https://www.jove.com/science-education/5538/solid-liquid-extraction>
 - (10) 应用旋转蒸发仪去除溶剂 (Rotary Evaporation to Remove Solvent)
<https://www.jove.com/science-education/5501/rotary-evaporation-to-remove-solvent>
 - (11) 分馏 (Fractional Distillation)
<https://www.jove.com/science-education/5700/fractional-distillation>
 - (12) 用于X-射线衍射的晶体制备 (Growing Crystals for X-ray Diffraction Analysis)
<https://www.jove.com/science-education/10216/growing-crystals-for-x-ray-diffraction-analysis>
 - (13) 一维薄层色谱的应用 (Performing 1D Thin Layer Chromatography)
<https://www.jove.com/science-education/5499/performing-1d-thin-layer-chromatography>
 - (14) 柱层析 (Column Chromatography)
<https://www.jove.com/science-education/10217/column-chromatography>
 - (15) 核磁共振波谱法 (Nuclear Magnetic Resonance (NMR) Spectroscopy)
<https://www.jove.com/science-education/5339/tissue-regeneration-with-somatic-stem-cells>
3. 有机化学 II (Organic chemistry), <https://www.jove.com/science-education-library/32/organic-chemistry-ii>, 中文字幕和中文文稿
- (1) 玻璃器皿清洗 (Cleaning Glassware)
<https://www.jove.com/science-education/10342/cleaning-glassware>
 - (2) 亲核取代反应 (Nucleophilic Substitution)

- <https://www.jove.com/science-education/10465/nucleophilic-substitution>
- (3) 还原剂 (Reducing Agents) <https://www.jove.com/science-education/10354/reducing-agents>
 - (4) 格氏反应 (Grignard Reaction) <https://www.jove.com/science-education/10337/grignard-reaction>
 - (5) 正丁基锂滴定 (n-Butyllithium Titration) <https://www.jove.com/science-education/10338/n-butyllithium-titration>
 - (6) 迪安-斯脱克分水器 (Dean-Stark Trap) <https://www.jove.com/science-education/10340/dean-stark-trap>
 - (7) 烯烃的臭氧化 (Ozonolysis of Alkenes) <https://www.jove.com/science-education/10339/ozonolysis-of-alkenes>
 - (8) 有机催化 (Organocatalysis) <https://www.jove.com/science-education/10352/organocatalysis>
 - (9) 钯催化的交叉偶联反应 (Palladium-Catalyzed Cross Coupling) <https://www.jove.com/science-education/10353/palladium-catalyzed-cross-coupling>
 - (10) 固相合成 (Solid Phase Synthesis) <https://www.jove.com/science-education/10349/solid-phase-synthesis>
 - (11) 氢化反应 (Hydrogenation) <https://www.jove.com/science-education/10350/hydrogenation>
 - (12) 聚合反应 (Polymerization) <https://www.jove.com/science-education/10357/polymerization>
 - (13) 熔点 (Melting Point) <https://www.jove.com/science-education/10356/melting-point>
 - (14) 红外光谱 (Infrared Spectroscopy) <https://www.jove.com/science-education/10351/infrared-spectroscopy>
 - (15) 旋光仪 (Polarimeter) <https://www.jove.com/science-education/10348/polarimeter>
4. 无机化学 (Inorganic chemistry) <https://www.jove.com/science-education-library/33/inorganic-chemistry>, [中文字幕和中文文稿](#)
- (1) 应用施伦克线技术合成 Ati (III) 茂金属 (Synthesis Of A Ti(III) Metallocene Using Schlenk Line Technique) <https://www.jove.com/science-education/10428/synthesis-of-a-ti-iii-metallocene-using-schlenk-line-technique>
 - (2) 手套箱和杂质感应器 (Glovebox and Impurity Sensors) <https://www.jove.com/science-education/10317/glovebox-and-impurity-sensors>
 - (3) 通过升华纯化二茂铁 (Purification of Ferrocene by Sublimation) <https://www.jove.com/science-education/10429/purification-of-ferrocene-by-sublimation>
 - (4) Evans 方法 (The Evans Method) <https://www.jove.com/science-education/10304/?language=Chinese>
 - (5) 单晶和粉末 X-射线衍射 (Single Crystal and Powder X-ray Diffraction) <https://www.jove.com/science-education/10462/single-crystal-and-powder->

- [x-ray-diffraction](#)
- (6) 电子顺磁共振 (EPR) 光谱 (Electron Paramagnetic Resonance (EPR) Spectroscopy)
<https://www.jove.com/science-education/10463/electron-paramagnetic-resonance-epr-spectroscopy>
 - (7) 莫斯鲍尔光谱 (Mössbauer Spectroscopy)
<https://www.jove.com/science-education/10448/mossbauer-spectroscopy>
 - (8) Ph₃P-BH₃ 中的路易斯酸碱相互作用 (Lewis Acid-Base Interaction in Ph₃P-BH₃)
<https://www.jove.com/science-education/10316/lewis-acid-base-interaction-in-ph3p-bh3>
 - (9) 二茂铁的结构 (Structure Of Ferrocene)
<https://www.jove.com/science-education/10347/structure-of-ferrocene>
 - (10) 群论在红外光谱学中的应用 (Application of Group Theory to IR Spectroscopy)
<https://www.jove.com/science-education/10442/application-of-group-theory-to-ir-spectroscopy>
 - (11) 分子轨道理论 (Molecular Orbital (MO) Theory)
<https://www.jove.com/science-education/10447/molecular-orbital-mo-theory>
 - (12) ??? (Quadruply Metal-Metal Bonded Paddlewheels)
<https://www.jove.com/science-education/10441/quadruply-metal-metal-bonded-paddlewheels>
 - (13) 染料敏化太阳能电池 (Dye-sensitized Solar Cells)
<https://www.jove.com/science-education/10328/dye-sensitized-solar-cells>
 - (14) 载氧钴 (II) 配合物的合成 (Synthesis of an Oxygen-Carrying Cobalt(II) Complex)
<https://www.jove.com/science-education/10430/synthesis-of-an-oxygen-carrying-cobalt-ii-complex>
 - (15) 自由基聚合反应的光化学引发 (Photochemical Initiation Of Radical Polymerization Reactions)
<https://www.jove.com/science-education/10461/photochemical-initiation-of-radical-polymerization-reactions>
5. 分析化学 (analytical chemistry), <https://www.jove.com/science-education-library/18/analytical-chemistry>, **中文字幕和中文文稿**
- (1) 用于分析特性的样品制备 (Sample Preparation for Analytical Characterization)
<https://www.jove.com/science-education/10205/sample-preparation-for-analytical-characterization>
 - (2) 内标法 (Internal Standards)
<https://www.jove.com/science-education/10225/internal-standards>
 - (3) 标准添加法 (MSA) (Method of Standard Addition)
<https://www.jove.com/science-education/10201/method-of-standard-addition>
 - (4) 矫正曲线 (Calibration Curves)

- <https://www.jove.com/science-education/10188/calibration-curves>
- (5) 紫外可见 (UV-Vis) 光谱 (Ultraviolet-Visible (UV-Vis) Spectroscopy)
<https://www.jove.com/science-education/10204/ultraviolet-visible-uv-vis-spectroscopy>
 - (6) 化学分析中拉曼光谱的应用 (Raman Spectroscopy for Chemical Analysis)
<https://www.jove.com/science-education/5701/raman-spectroscopy-for-chemical-analysis>
 - (7) X-射线荧光 (XRF) (X-ray Fluorescence (XRF))
<https://www.jove.com/science-education/5498/x-ray-fluorescence-xrf>
 - (8) 气相色谱 (GC) 火焰电离检测 (Gas Chromatography (GC) with Flame-Ionization Detection)
<https://www.jove.com/science-education/10187/gas-chromatography-gc-with-flame-ionization-detection>
 - (9) 高效液相色谱 (HPLC) (High-Performance Liquid Chromatography (HPLC))
<https://www.jove.com/science-education/10156/high-performance-liquid-chromatography-hplc>
 - (10) 离子交换色谱 (Ion-Exchange Chromatography)
<https://www.jove.com/science-education/10269/ion-exchange-chromatography>
 - (11) 毛细管电泳 (Capillary Electrophoresis (CE))
<https://www.jove.com/science-education/10226/capillary-electrophoresis-ce>
 - (12) 质谱概述 (Introduction to Mass Spectrometry)
<https://www.jove.com/science-education/5634/introduction-to-mass-spectrometry>
 - (13) 扫描电子显微镜 (SEM) (Scanning Electron Microscopy (SEM))
<https://www.jove.com/science-education/5656/scanning-electron-microscopy-sem>
 - (14) 使用恒电位仪/恒电流仪对负载型催化剂进行电化学测量 (Electrochemical Measurements of Supported Catalysts Using a Potentiostat/Galvanostat)
<https://www.jove.com/science-education/5698/electrochemical-measurements-supported-catalysts-using>
 - (15) 循环伏安法 (Cyclic Voltammetry (CV))
<https://www.jove.com/science-education/5502/cyclic-voltammetry-cv>
6. 生物化学 (Biochemistry) , <https://www.jove.com/science-education-library/24/biochemistry>, **中文字幕和中文文稿**
- (1) 透析: 基于扩散原理的分离方法 (Dialysis: Diffusion Based Separation)
<https://www.jove.com/science-education/5684/dialysis-diffusion-based-separation>
 - (2) 酶活实验及酶促动力学 (Enzyme Assays and Kinetics)
<https://www.jove.com/science-education/5692/enzyme-assays-and-kinetics>
 - (3) MALDI-TOF 质谱 (MALDI-TOF Mass Spectrometry)
<https://www.jove.com/science-education/5691/maldi-tof-mass-spectrometry>
 - (4) 串联质谱 (Tandem Mass Spectrometry)
<https://www.jove.com/science-education/5690/tandem-mass-spectrometry>

- (5) 蛋白结晶 (Protein Crystallization)
<https://www.jove.com/science-education/5689/protein-crystallization>
- (6) 双向凝胶电泳 (Two-Dimensional Gel Electrophoresis)
<https://www.jove.com/science-education/5686/two-dimensional-gel-electrophoresis>
- (7) 代谢标记法 (Metabolic Labeling)
<https://www.jove.com/science-education/5687/metabolic-labeling>
- (8) 电泳迁移率分析 (EMSA) (Electrophoretic Mobility Shift Assay (EMSA))
<https://www.jove.com/science-education/5694/electrophoretic-mobility-shift-assay-emsa>
- (9) 紫外分光光度法测量蛋白浓度 (Photometric Protein Determination)
<https://www.jove.com/science-education/5688/photometric-protein-determination>
- (10) 密度梯度离心 (Density Gradient Ultracentrifugation)
<https://www.jove.com/science-education/5685/density-gradient-ultracentrifugation>
- (11) 免疫共沉淀和拉下 (pull-down) 试验 (Co-Immunoprecipitation and Pull-Down Assays)
<https://www.jove.com/science-education/5695/co-immunoprecipitation-and-pull-down-assays>
- (12) 膜蛋白的重构 (纯化的膜蛋白重新进入人造膜) (Reconstitution of Membrane Proteins)
<https://www.jove.com/science-education/5693/reconstitution-of-membrane-proteins>
- (13) 荧光共振能量转移 (Förster Resonance Energy Transfer (FRET))
<https://www.jove.com/science-education/5696/forster-resonance-energy-transfer-fret>
- (14) 表面等离子共振 (SPR) (Surface Plasmon Resonance (SPR))
<https://www.jove.com/science-education/5697/surface-plasmon-resonance-spr>
- (15) 基于色谱的生物分子纯化 (Chromatography-based Biomolecule Purification Methods)
<https://www.jove.com/science-education/5683/chromatography-based-biomolecule-purification-methods>

四、环境科学 (Environmental Sciences) , <https://www.jove.com/science-education/envirosci>。共有 45 个视频，全部有中文字幕。

1. 环境科学 (Environmental Sciences), <https://www.jove.com/science-education-library/12/environmental-science>, 中文字幕和文稿
 - (1) 树木识别：二歧分类检索表的应用 (Tree Identification: How To Use a Dichotomous Key)
<https://www.jove.com/science-education/10070/tree-identification-how-to-use-a-dichotomous-key>
 - (2) 树木调查：以点为中心的四分采样法 (Tree Survey: Point-Centered Quarter Sampling Method)

- <https://www.jove.com/science-education/10060/tree-survey-point-centered-quarter-sampling-method>
- (3) 应用 GIS (地理信息系统) 研究城市森林 (Using GIS to Investigate Urban Forestry)
<https://www.jove.com/science-education/10075/using-gis-to-investigate-urban-forestry>
 - (4) 质子交换膜燃料电池 (Proton Exchange Membrane Fuel Cells)
<https://www.jove.com/science-education/10022/proton-exchange-membrane-fuel-cells>
 - (5) 生物燃料：由纤维素材料生产乙醇 (Biofuels: Producing Ethanol from Cellulosic Material)
<https://www.jove.com/science-education/10014/biofuels-producing-ethanol-from-cellulosic-material>
 - (6) 转基因食品检测 (Testing For Genetically Modified Foods)
<https://www.jove.com/science-education/10044/testing-for-genetically-modified-foods>
 - (7) 地表水中浊度和总固体的测定 (Turbidity and Total Solids in Surface Water)
<https://www.jove.com/science-education/10015/turbidity-and-total-solids-in-surface-water>
 - (8) 地表水中溶解氧的测定 (Dissolved Oxygen in Surface Water)
<https://www.jove.com/science-education/10016/dissolved-oxygen-in-surface-water>
 - (9) 水生生态系统中的营养 (Nutrients in Aquatic Ecosystems)
<https://www.jove.com/science-education/10023/nutrients-in-aquatic-ecosystems>
 - (10) 对流层臭氧的测定 (Measuring Tropospheric Ozone)
<https://www.jove.com/science-education/10024/measuring-tropospheric-ozone>
 - (11) 汽车尾气中 NO_x 的测定：紫外可见光谱的应用 (Determination Of NO_x in Automobile Exhaust Using UV-VIS Spectroscopy)
<https://www.jove.com/science-education/10076/determination-of-nox-in-automobile-exhaust-using-uv-vis-spectroscopy>
 - (12) 土壤中铅的分析：原子吸收光谱的应用 (Lead Analysis of Soil Using Atomic Absorption Spectroscopy)
<https://www.jove.com/science-education/10021/lead-analysis-of-soil-using-atomic-absorption-spectroscopy>
 - (13) 环境样本中碳和氮元素的分析 (Carbon and Nitrogen Analysis of Environmental Samples)
<https://www.jove.com/science-education/10012/carbon-and-nitrogen-analysis-of-environmental-samples>
 - (14) 土壤养分分析：氮磷钾 (Soil Nutrient Analysis: Nitrogen, Phosphorus, and Potassium)
<https://www.jove.com/science-education/10077/soil-nutrient-analysis-nitrogen-phosphorus-and-potassium>

- (15) 土壤中蚯蚓种群分析 (Analysis of Earthworm Populations in Soil)
<https://www.jove.com/science-education/10002/analysis-of-earthworm-populations-in-soil>
2. 环境微生物学 (Environmental Microbiology), <https://www.jove.com/science-education-library/13/environmental-microbiology>, **中文字幕和中文文稿**
- (1) 土壤中水分的测定 (Determination of Moisture Content in Soil)
<https://www.jove.com/science-education/10011/determination-of-moisture-content-in-soil>
- (2) 环境科学中的无菌操作 (Aseptic Technique in Environmental Science)
<https://www.jove.com/science-education/10040/aseptic-technique-in-environmental-science>
- (3) 环境细菌的革兰氏染色 (Gram Staining of Bacteria from Environmental Sources)
<https://www.jove.com/science-education/10092/gram-staining-of-bacteria-from-environmental-sources>
- (4) 应用触片和显微镜观察土壤微生物 (Visualizing Soil Microorganisms via the Contact Slide Assay and Microscopy)
<https://www.jove.com/science-education/10053/visualizing-soil-microorganisms-via-contact-slide-assay>
- (5) 丝状真菌 (Filamentous Fungi)
<https://www.jove.com/science-education/10030/filamentous-fungi>
- (6) 细菌群落总 DNA 的提取 (Community DNA Extraction from Bacterial Colonies)
<https://www.jove.com/science-education/10218/community-dna-extraction-from-bacterial-colonies>
- (7) 通过 PCR 和琼脂糖凝胶电泳检测环境微生物 (Detecting Environmental Microorganisms with the Polymerase Chain Reaction and Gel Electrophoresis)
<https://www.jove.com/science-education/10081/detecting-environmental-microorganisms-with-polymerase-chain-reaction>
- (8) 通过 RT-PCR 对环境样本进行 RNA 分析 (RNA Analysis of Environmental Samples Using RT-PCR)
<https://www.jove.com/science-education/10104/rna-analysis-of-environmental-samples-using-rt-pcr>
- (9) 应用 qPCR 对环境微生物和病毒进行定量 (Quantifying Environmental Microorganisms and Viruses Using qPCR)
<https://www.jove.com/science-education/10186/quantifying-environmental-microorganisms-and-viruses-using-qpcr>
- (10) 通过指示生物分析水质 (Water Quality Analysis via Indicator Organisms)
<https://www.jove.com/science-education/10025/water-quality-analysis-via-indicator-organisms>
- (11) 通过过滤从水样中分离粪便细菌 (Isolation of Fecal Bacteria from Water Samples by Filtration)
<https://www.jove.com/science-education/10213/isolation-of-fecal-bacteria-from-water-samples-by-filtration>
- (12) 环境中噬菌体的检测 (Detection of Bacteriophages in Environmental

Sample)

<https://www.jove.com/science-education/10190/detection-of-bacteriophages-in-environmental-samples>

(13) 土壤样本中细菌的培养和计数 (Culturing and Enumerating Bacteria from Soil Samples)

<https://www.jove.com/science-education/10099/culturing-and-enumerating-bacteria-from-soil-samples>

(14) 细菌生长曲线分析及其在环境中的应用 (Bacterial Growth Curve Analysis and its Environmental Applications)

<https://www.jove.com/science-education/10100/bacterial-growth-curve-analysis-and-its-environmental-applications>

(15) 通过可培养的方法进行藻类计数 (Algae Enumeration via Culturable Methodology)

<https://www.jove.com/science-education/10154/algae-enumeration-via-culturable-methodology>

3. 地球科学 (Earth Science) , <https://www.jove.com/science-education-library/15/earth-science> , 中文字幕和中文文稿

(1) 用 Brunton 指南针确定岩石层的空间方向 (Determining Spatial Orientation of Rock Layers with the Brunton Compass)

<https://www.jove.com/science-education/10086/determining-spatial-orientation-rock-layers-with-brunton>

(2) 用拓扑地图生成地形剖面图 (Using Topographic Maps to Generate Topographic Profiles)

<https://www.jove.com/science-education/10105/using-topographic-maps-to-generate-topographic-profiles>

(3) 测制地质剖面 (Making a Geologic Cross Section)

<https://www.jove.com/science-education/10176/making-a-geologic-cross-section>

(4) 矿物质的物理性质 I: 晶体和解理 (Physical Properties Of Minerals I: Crystals and Cleavage)

<https://www.jove.com/science-education/10007/physical-properties-of-minerals-i-crystals-and-cleavage>

(5) 矿物的物理性质 II: 矿物分析 (Physical Properties Of Minerals II: Polymineralic Analysis)

<https://www.jove.com/science-education/10001/physical-properties-of-minerals-ii-polymineralic-analysis>

(6) 火成火山岩 (Igneous Volcanic Rock)

<https://www.jove.com/science-education/10037/igneous-volcanic-rock>

(7) 岩浆岩 (火成岩) (Igneous Intrusive Rock)

<https://www.jove.com/science-education/10036/igneous-intrusive-rock>

(8) 古气候学 bGDGT 生物标志物分析概述 (An Overview of bGDGT Biomarker Analysis for Paleoclimatology)

<https://www.jove.com/science-education/10256/an-overview-of-bgdgt-biomarker-analysis-for-paleoclimatology>

- (9) **???** (An Overview of Alkenone Biomarker Analysis for Paleothermometry)
<https://www.jove.com/science-education/10219/an-overview-of-alkenone-biomarker-analysis-for-paleothermometry>
- (10) 从沉积物提取脂质生物标志物-超声法 (Sonication Extraction of Lipid Biomarkers from Sediment)
<https://www.jove.com/science-education/10055/sonication-extraction-of-lipid-biomarkers-from-sediment>
- (11) 从沉积物中提取脂质生物标志物-索氏提取法(连续提取法)的应用 (Soxhlet Extraction of Lipid Biomarkers from Sediment)
<https://www.jove.com/science-education/10096/soxhlet-extraction-of-lipid-biomarkers-from-sediment>
- (12) 从沉积物中提取生物标志物-加速溶剂萃取的应用 (Extraction of Biomarkers from Sediments - Accelerated Solvent Extraction)
<https://www.jove.com/science-education/10097/extraction-of-biomarkers-from-sediments-accelerated-solvent-extraction>
- (13) **???** (Conversion of Fatty Acid Methyl Esters by Saponification for U^{k}_{37} Paleothermometry)
<https://www.jove.com/science-education/10158/conversion-fatty-acid-methyl-esters-saponification-for-uk-37>
- (14) 应用柱色谱层析纯化总脂质提取物 (Purification of a Total Lipid Extract with Column Chromatography)
<https://www.jove.com/science-education/10159/purification-of-a-total-lipid-extract-with-column-chromatography>
- (15) **???** (Removal of Branched and Cyclic Compounds by Urea Adduction for U^{k}_{37} Paleothermometry)
<https://www.jove.com/science-education/10160/removal-branched-cyclic-compounds-urea-adduction-for-uk-37>

五、物理学 (Physics), <https://www.jove.com/science-education/physics>。共有 30 个视频，全部有中文字幕。

1. 物理学 I (Physics I), <https://www.jove.com/science-education-library/28/physics-i>, 中文字幕和中文文稿
 - (1) 牛顿力学定律 (Newton's Laws of Motion)
<https://www.jove.com/science-education/10038/newton-s-laws-of-motion>
 - (2) 力与加速度 (Force and Acceleration)
<https://www.jove.com/science-education/10346/force-and-acceleration>
 - (3) 多维向量 (多方向矢量) (Vectors in Multiple Directions)
<https://www.jove.com/science-education/10315/vectors-in-multiple-directions>
 - (4) 运动学和弹丸运动 (Kinematics and Projectile Motion)
<https://www.jove.com/science-education/10314/kinematics-and-projectile-motion>
 - (5) 牛顿万有引力定律 (Newton's Law of Universal Gravitation)
<https://www.jove.com/science-education/10325/newton-s-law-of->

- [universal-gravitation](#)
- (6) 动量守恒 (Conservation of Momentum)
<https://www.jove.com/science-education/10323/conservation-of-momentum>
 - (7) 摩擦 (Friction)
<https://www.jove.com/science-education/10324/friction>
 - (8) 胡克定律和简谐运动 (Hooke's Law and Simple Harmonic Motion)
<https://www.jove.com/science-education/10326/hooke-s-law-and-simple-harmonic-motion>
 - (9) 平衡图和自由体图 (Equilibrium and Free-body Diagrams)
<https://www.jove.com/science-education/10359/equilibrium-and-free-body-diagrams>
 - (10) 扭力 (Torque)
<https://www.jove.com/science-education/10345/torque>
 - (11) 转动惯量 (Rotational Inertia)
<https://www.jove.com/science-education/10327/rotational-inertia>
 - (12) 角动量 (Angular Momentum)
<https://www.jove.com/science-education/10358/angular-momentum>
 - (13) 功和能 (Energy and Work)
<https://www.jove.com/science-education/10313/energy-and-work>
 - (14) 焓 (Enthalpy)
<https://www.jove.com/science-education/10344/enthalpy>
 - (15) 熵 (Entropy)
<https://www.jove.com/science-education/10343/entropy>
2. 物理学 II (Environmental Microbiology) , <https://www.jove.com/science-education-library/29/physics-ii>, 中文字幕和中文文稿
- (1) 电场 (Electric Fields)
<https://www.jove.com/science-education/10322/electric-fields>
 - (2) 电位 (Electric Potential)
<https://www.jove.com/science-education/10329/electric-potential>
 - (3) 磁场 (Magnetic Fields)
<https://www.jove.com/science-education/10384/magnetic-fields>
 - (4) 磁场中的电荷 (Electric Charge in a Magnetic Field)
<https://www.jove.com/science-education/10133/electric-charge-in-a-magnetic-field>
 - (5) 欧姆和非欧姆导体的欧姆定律研究 (Investigation Ohm's Law for Ohmic and Nonohmic Conductors)
<https://www.jove.com/science-education/10116/investigation-ohm-s-law-for-ohmic-and-nonohmic-conductors>
 - (6) 串联和并联电阻 (Series and Parallel Resistors)
<https://www.jove.com/science-education/10289/series-and-parallel-resistors>
 - (7) 电容 (Capacitance)
<https://www.jove.com/science-education/10296/capacitance>
 - (8) 电感 (Inductance)
<https://www.jove.com/science-education/10303/inductance>

(9) RC / RL / LC 电路 (RC/RL/LC Circuits)

<https://www.jove.com/science-education/10318/rcrlc-circuits>

(10) 半导体 (Semiconductors)

<https://www.jove.com/science-education/10410/semiconductors>

(11) 光电效应 (Photoelectric Effect)

<https://www.jove.com/science-education/10413/photoelectric-effect>

(12) 反射和折射 (Reflection and Refraction)

<https://www.jove.com/science-education/10409/reflection-and-refraction>

(13) 干涉和衍射 (Interference and Diffraction)

<https://www.jove.com/science-education/10424/interference-and-diffraction>

(14) 驻波 (Standing Waves)

<https://www.jove.com/science-education/10412/standing-waves>

(15) 声波和多普勒频移 (Sound Waves and Doppler Shift)

<https://www.jove.com/science-education/10411/sound-waves-and-doppler-shift>

六、医学临床操作 (Clinical skills), <https://www.jove.com/science-education/clinicskills> 共 72 个视频。视频全部有中文字幕。

1. 身体检查 I (Physical examinations I), <https://www.jove.com/science-education-library/19/physical-examinations-i>, 中文字幕和中文文稿

(1) 身体检查的基本方法 (General Approach to the Physical Exam)

<https://www.jove.com/science-education/10043/general-approach-to-the-physical-exam>

(2) 视诊 (Observation and Inspection)

<https://www.jove.com/science-education/10119/observation-and-inspection>

(3) 触诊 (Palpation)

<https://www.jove.com/science-education/10143/palpation>

(4) 叩诊 (Percussion)

<https://www.jove.com/science-education/10136/percussion>

(5) 听诊 (Auscultation)

<https://www.jove.com/science-education/10153/auscultation>

(6) 病人身体检查时着装要求 (Proper Adjustment of Patient Attire during the Physical Exam)

<https://www.jove.com/science-education/10147/proper-adjustment-of-patient-attire-during-the-physical-exam>

(7) 血压测量 (Blood Pressure Measurement)

<https://www.jove.com/science-education/10083/blood-pressure-measurement>

(8) 测量生命体征 (Measuring Vital Signs)

<https://www.jove.com/science-education/10107/measuring-vital-signs>

(9) 呼吸检查 I: 视诊和触诊 (Respiratory Exam I: Inspection and Palpation)

<https://www.jove.com/science-education/10028/respiratory-exam-i-inspection-and-palpation>

(10) 呼吸检查 II: 叩诊与听诊 (Respiratory Exam II: Percussion and Auscultation)

- <https://www.jove.com/science-education/10041/respiratory-exam-ii-percussion-and-auscultation>
- (11) 心脏检查 I: 视诊与触诊 (Cardiac Exam I: Inspection and Palpation)
<https://www.jove.com/science-education/10071/cardiac-exam-i-inspection-and-palpation>
 - (12) 心脏检查 II: 听诊 (Cardiac Exam II: Auscultation)
<https://www.jove.com/science-education/10124/cardiac-exam-ii-auscultation>
 - (13) 心脏检查 III: 心音异常 (Cardiac Exam III: Abnormal Heart Sounds)
<https://www.jove.com/science-education/10135/cardiac-exam-iii-abnormal-heart-sounds>
 - (14) 外周血管检查 (Peripheral Vascular Exam)
<https://www.jove.com/science-education/10122/peripheral-vascular-exam>
 - (15) 使用连续波多普勒的外周血管检查 (Peripheral Vascular Exam Using a Continuous Wave Doppler)
<https://www.jove.com/science-education/10123/peripheral-vascular-exam-using-a-continuous-wave-doppler>
2. 身体检查 II (Physical examinations II) <https://www.jove.com/science-education-library/20/physical-examinations-ii>, 中文字幕和中文文稿
- (1) 眼科检查 (Eye Exam)
<https://www.jove.com/science-education/10149/eye-exam>
 - (2) 眼底检查 (Ophthalmoscopic Examination)
<https://www.jove.com/science-education/10146/ophthalmoscopic-examination>
 - (3) 耳科检查 (Ear Exam)
<https://www.jove.com/science-education/10148/ear-exam>
 - (4) 鼻子, 鼻窦, 口腔和咽部检查 (Nose, Sinuses, Oral Cavity and Pharynx Exam)
<https://www.jove.com/science-education/10152/nose-sinuses-oral-cavity-and-pharynx-exam>
 - (5) 甲状腺检查 (Thyroid Exam)
<https://www.jove.com/science-education/10098/thyroid-exam>
 - (6) 淋巴结检查 (Lymph Node Exam)
<https://www.jove.com/science-education/10061/lymph-node-exam>
 - (7) 腹部检查 I: 视诊和听诊 (Abdominal Exam I: Inspection and Auscultation)
<https://www.jove.com/science-education/10088/abdominal-exam-i-inspection-and-auscultation>
 - (8) 腹部检查 II: 叩诊 (Abdominal Exam II: Percussion)
<https://www.jove.com/science-education/10090/abdominal-exam-ii-percussion>
 - (9) 腹部检查 III: 触诊 (Abdominal Exam III: Palpation)
<https://www.jove.com/science-education/10089/abdominal-exam-iii-palpation>
 - (10) 腹部检查 IV: 急性腹痛评估 (Abdominal Exam IV: Acute Abdominal Pain Assessment)
<https://www.jove.com/science-education/10120/abdominal-exam-iv-acute-abdominal-pain-assessment>
 - (11) 男性直肠探查 (Male Rectal Exam)
<https://www.jove.com/science-education/10102/male-rectal-exam>

- (12) 乳房检查 (Comprehensive Breast Exam)
 - <https://www.jove.com/science-education/10118/comprehensive-breast-exam>
 - (13) 盆腔检查 I: 外生殖器检查 (Pelvic Exam I: Assessment of the External Genitalia)
 - <https://www.jove.com/science-education/5056/pcr-?language=Chinese>
 - (14) 盆腔检查 II: 内窥镜检查 (Pelvic Exam II: Speculum Exam)
 - <https://www.jove.com/science-education/10141/pelvic-exam-ii-speculum-exam>
 - (15) 盆腔检查 III: 双合诊和直肠阴道检查 (Pelvic Exam III: Bimanual and Rectovaginal Exam)
 - <https://www.jove.com/science-education/10163/pelvic-exam-iii-bimanual-and-rectovaginal-exam>
3. 身体检查 III (Physical examinations III) <https://www.jove.com/science-education-library/25/physical-examinations-iii>, 中文字幕和中文文稿
- (1) 颅神经检查 I (I-VI) (Cranial Nerves Exam I (I-VI))
 - <https://www.jove.com/science-education/10091/cranial-nerves-exam-i-i-vi>
 - (2) 颅神经检查 II (VII-XII) (Cranial Nerves Exam II (VII-XII))
 - <https://www.jove.com/science-education/10005/cranial-nerves-exam-ii-vii-xii>
 - (3) 运动系统检查 I (Motor Exam I)
 - <https://www.jove.com/science-education/10052/motor-exam-i>
 - (4) 运动系统检查 II (Motor Exam II)
 - <https://www.jove.com/science-education/10095/motor-exam-ii>
 - (5) 感官检查 (Sensory Exam)
 - <https://www.jove.com/science-education/10113/sensory-exam>
 - (6) 颈部检查 (Neck Exam)
 - <https://www.jove.com/science-education/10180/neck-exam>
 - (7) 肩部检查 I (Shoulder Exam I)
 - <https://www.jove.com/science-education/10173/shoulder-exam-i>
 - (8) 肩部检查 II (Shoulder Exam II)
 - <https://www.jove.com/science-education/10185/shoulder-exam-ii>
 - (9) 肘部检查 (Elbow Exam)
 - <https://www.jove.com/science-education/10207/elbow-exam>
 - (10) 手腕和手部检查 (Wrist and Hand Examination)
 - <https://www.jove.com/science-education/10242/wrist-and-hand-examination>
 - (11) 下背部检查 (Lower Back Exam)
 - <https://www.jove.com/science-education/10177/lower-back-exam>
 - (12) 髋关节检查 (Hip Exam)
 - <https://www.jove.com/science-education/10174/hip-exam>
 - (13) 膝盖检查 (Knee Exam)
 - <https://www.jove.com/science-education/10203/knee-exam>
 - (14) 足踝检查 (Ankle Exam)
 - <https://www.jove.com/science-education/10191/ankle-exam>

(15) 足部检查 (Foot Exam)

<https://www.jove.com/science-education/10192/foot-exam>

4. 急诊医学与重症护理 (Emergency medicine and critical care)

<https://www.jove.com/science-education-library/26/emergency-medicine-and-critical-care>, [中文字幕和中文文稿](#)

(1) 基本生命维持：心肺复苏和除颤 (Basic Life Support: Cardiopulmonary Resuscitation and Defibrillation)

<https://www.jove.com/science-education/10199/basic-life-support-cardiopulmonary-resuscitation-and-defibrillation>

(2) 基本生命维持 II：气道/呼吸和持续心肺复苏 (Basic Life Support Part II: Airway/Breathing and Continued Cardiopulmonary Resuscitation)

<https://www.jove.com/science-education/10232/basic-life-support-part-ii-airwaybreathing-continued-cardiopulmonary>

(3) 心包穿刺术 (Pericardiocentesis)

<https://www.jove.com/science-education/10236/pericardiocentesis>

(4) 侧眦切开术和下眦切开术 (Lateral Canthotomy and Inferior Cantholysis)

<https://www.jove.com/science-education/10266/lateral-canthotomy-and-inferior-cantholysis>

(5) 经皮环甲膜切开 (Percutaneous Cricothyrotomy)

<https://www.jove.com/science-education/10239/percutaneous-cricothyrotomy>

(6) 开颅手术 (Open Cricothyrotomy)

<https://www.jove.com/science-education/10284/open-cricothyrotomy>

(7) 胸腔穿刺 (Needle Thoracostomy)

<https://www.jove.com/science-education/10233/needle-thoracostomy>

(8) 急诊开胸管插入 (Tube Thoracostomy)

<https://www.jove.com/science-education/10283/tube-thoracostomy>

(9) 关节内肩部注射减少肩关节脱位 (Intra-articular Shoulder Injection for Reduction Following Shoulder Dislocation)

<https://www.jove.com/science-education/10282/intra-articular-shoulder-injection-for-reduction-following-shoulder>

(10) 动脉管路的置入 (有创血压监测) (Arterial Line Placement)

<https://www.jove.com/science-education/10178/arterial-line-placement>

(11) 骨内针置入 (Intraosseous Needle Placement)

<https://www.jove.com/science-education/10312/intraosseous-needle-placement>

(12) 外周静脉插管 (Peripheral Venous Cannulation)

<https://www.jove.com/science-education/10200/peripheral-venous-cannulation>

(13) 中央静脉导管插入：颈内静脉 (Central Venous Catheter Insertion: Internal Jugular)

<https://www.jove.com/science-education/10237/central-venous-catheter-insertion-internal-jugular>

(14) 中央静脉导管插入：股静脉 (Central Venous Catheter Insertion: Femoral Vein)

<https://www.jove.com/science-education/10240/central-venous-catheter-insertion-femoral-vein>

- (15) 中央静脉导管插入：锁骨下静脉 (Central Venous Catheter Insertion: Subclavian Vein)

<https://www.jove.com/science-education/10241/central-venous-catheter-insertion-subclavian-vein>

5. 护士操作 (Nurse skills) , <https://www.jove.com/science-education-library/27/nursing-skills> , 中文字幕和中文文稿

- (1) 药物管理的五项原则和安全检查 (Safety Checks and Five Rights of Medication Administration)

<https://www.jove.com/science-education/10235/safety-checks-and-five-rights-of-medication-administration>

- (2) 口服片剂和液体药物的准备与管理 (Preparing and Administering Oral Tablet and Liquid Medications)

<https://www.jove.com/science-education/10258/preparing-and-administering-oral-tablet-and-liquid-medications>

- (3) 局部用药的管理与准备 (Preparing and Administering Topical Medications)

<https://www.jove.com/science-education/10259/preparing-and-administering-topical-medications>

- (4) 吸入药物的管理与准备 (Preparing and Administering Inhaled Medications)

<https://www.jove.com/science-education/10390/preparing-and-administering-inhaled-medications>

- (5) 皮下药物的准备和管理 (Preparing and Administering Subcutaneous Medications)

<https://www.jove.com/science-education/10234/preparing-and-administering-subcutaneous-medications>

- (6) 肌肉注射药物的准备和管理 (Preparing and Administering Intramuscular Injections)

<https://www.jove.com/science-education/10261/preparing-and-administering-intramuscular-injections>

- (7) 肠胃药物的准备和管理 (Preparing and Administering Enteric Tube Medications)

<https://www.jove.com/science-education/10287/preparing-and-administering-enteric-tube-medications>

- (8) 外周静脉导管的插入 (Peripheral Intravenous Catheter Insertion)

<https://www.jove.com/science-education/10264/peripheral-intravenous-catheter-insertion>

- (9) 外周静脉管线的评价和冲洗 (Assessing and Flushing a Peripheral Intravenous Line)

<https://www.jove.com/science-education/10265/assessing-and-flushing-a-peripheral-intravenous-line>

- (10) 维持性静脉补液的使用 (Initiating Maintenance IV Fluids)

<https://www.jove.com/science-education/10274/initiating-maintenance-iv-fluids>

- (11) 静脉推注药物的管理和准备 (Preparing and Administering IV Push Medications)
<https://www.jove.com/science-education/10262/preparing-and-administering-iv-push-medications>
 - (12) 间歇性静脉药物注入泵的准备和管理 (Preparing and Administering Intermittent Intravenous Medications with an Infusion Pump)
<https://www.jove.com/science-education/10277/preparing-administering-intermittent-intravenous-medications-with-an>
 - (13) 二级间歇静脉药物的准备和管理 (Preparing and Administering Secondary Intermittent Intravenous Medications)
<https://www.jove.com/science-education/10288/preparing-administering-secondary-intermittent-intravenous>
 - (14) 停止静脉输液和周围静脉输液管 (Discontinuing Intravenous Fluids and a Peripheral Intravenous Line)
<https://www.jove.com/science-education/10278/discontinuing-intravenous-fluids-and-a-peripheral-intravenous-line>
 - (15) 中心静脉导管换药 (Central Venous Access Device Dressing Change)
<https://www.jove.com/science-education/10311/central-venous-access-device-dressing-change>
6. 2019 年新型冠状病毒相关操作 (Cronavirus/covid-19 procedures)
<https://www.jove.com/science-education-library/100/coronavirus-covid-19-procedures>, **中文字幕和中文文稿**
- (1) 在针对流行病进行了优化的快速部署设施内对患者进行鼻拭子测试 (Performing a Nasal Swab Test on Patients inside a Rapidly Deployable Facility Optimized for Epidemics)
<https://www.jove.com/science-education/6426/covid-19-coronavirus-outbreak-performing-nasal-swab-test-on-patients>
 - (2) 医护人员个人防护设备的穿脱 (Donning and Doffing Personal Protective Equipment (PPE) for Healthcare Providers)
<https://www.jove.com/science-education/10373/emergency-eyewash-and-shower-stations>
 - (3) 医护人员手部消毒指南 (Guidance for Hand Hygiene for Healthcare Providers to Ensure a Safe and Healthy Environment)
<https://www.jove.com/science-education/10364/electrical-safety>
 - (4) 针对流行病进行的优化的快速部署医疗设施 (智能 Pod) (A Rapidly Deployable Medical Facility Optimized for Epidemics (Smart Pod))
<https://www.jove.com/science-education/6423/covid-19-coronavirus-outbreak-rapidly-deployable-medical-facility>
 - (5) 气道保护与气管插管 (Protecting The Airway - Endotracheal Intubation)
<https://www.jove.com/science-education/6430/covid-19-coronavirus-outbreak-protecting-airway-endotracheal>
 - (6) 如何进行支气管镜检查 (How To Perform A Bronchoscopy)
<https://www.jove.com/science-education/6431/covid-19-coronavirus-outbreak-how-to-perform-a-bronchoscopy>

- (7) 通过放置中央静脉导管建立中央静脉通路 (How To Establish A Central Venous Access By Placing A Central Venous Catheter)
<https://www.jove.com/science-education/6432/covid-19-coronavirus-outbreak-how-to-establish-central-venous-access>
- (8) PiCCO 血流动力学监测 (Hemodynamic monitoring with PiCCO artery)
<https://www.jove.com/science-education/6433/covid-19-coronavirus-outbreak-hemodynamic-monitoring-with-picco-artery>
- (9) 如何进行血样的细菌培养 (How to take blood cultures)
<https://www.jove.com/science-education/6434/covid-19-coronavirus-outbreak-how-to-take-blood-cultures>
- (10) 如何使新冠患者呈俯卧位 (How to perform complete prone positioning in COVID-Patients)
<https://www.jove.com/science-education/6435/covid-19-coronavirus-outbreak-how-to-perform-complete-prone>
- (11) 进入病房前个人防护设备的穿戴 (Donning Personal Protective Equipment Before Entering A Patient Room)
<https://www.jove.com/science-education/6428/covid-19-coronavirus-outbreak-donning-personal-protective-equipment>
- (12) 离开病房时个人防护装备的脱下 (Doffing Personal Protective Equipment When Exiting A Patient Room)
<https://www.jove.com/science-education/6429/covid-19-coronavirus-outbreak-doffing-personal-protective-equipment>

七、心理学 (Psychology), <https://www.jove.com/science-education/psyc> 共 105 个视频。
视频全部有中文字幕。

1. 行为科学 (Behavioral Science), <https://www.jove.com/science-education-library/7/behavioral-science> 中文字幕和中文文稿
 - (1) 学习与记忆概述 (An Introduction to Learning and Memory)
<https://www.jove.com/science-education/5416/an-introduction-to-learning-and-memory>
 - (2) 恐惧调节 (Fear Conditioning)
<https://www.jove.com/science-education/5417/fear-conditioning>
 - (3) 使用迷宫进行空间记忆测试 (Spatial Memory Testing Using Mazes)
<https://www.jove.com/science-education/5418/spatial-memory-testing-using-mazes>
 - (4) 认知概述 (An Introduction to Cognition)
<https://www.jove.com/science-education/5419/an-introduction-to-cognition>
 - (5) 脑电图 (EEG) (Electro-encephalography (EEG))
<https://www.jove.com/science-education/5420/electro-encephalography-eeg>
 - (6) 认知实验中的眼动追踪 (Eye Tracking in Cognitive Experiments)
<https://www.jove.com/science-education/5421/eye-tracking-in-cognitive-experiments>
 - (7) 运动控制概述 (An Introduction to Motor Control)
<https://www.jove.com/science-education/5422/an-introduction-to-motor->

- [control](https://www.jove.com/science-education/5423/balance-and-coordination-testing)
- (8) 平衡性和协调性测试 (Balance and Coordination Testing)
<https://www.jove.com/science-education/5423/balance-and-coordination-testing>
 - (9) 通过达成任务评估敏捷性 (Assessing Dexterity with Reaching Tasks)
<https://www.jove.com/science-education/5424/assessing-dexterity-with-reaching-tasks>
 - (10) 奖赏效应和成瘾性概述 (An Introduction to Reward and Addiction)
<https://www.jove.com/science-education/5425/an-introduction-to-reward-and-addiction>
 - (11) 积极强化研究 (Positive Reinforcement Studies)
<https://www.jove.com/science-education/5426/positive-reinforcement-studies>
 - (12) 自我管理研究 (Self-administration Studies)
<https://www.jove.com/science-education/5427/self-administration-studies>
 - (13) 行为障碍和压力建模概述 (An Introduction to Modeling Behavioral Disorders and Stress)
<https://www.jove.com/science-education/5428/an-introduction-to-modeling-behavioral-disorders-and-stress>
 - (14) 社交压力模拟 (Modeling Social Stress)
<https://www.jove.com/science-education/5429/modeling-social-stress>
 - (15) 焦虑测试 (Anxiety Testing)
<https://www.jove.com/science-education/5430/anxiety-testing>
2. 试验心理学 (Experimental Psychology) <https://www.jove.com/science-education-library/10/experimental-psychology> 中文字幕和中文文稿
- (1) 从理论到设计：创新在设计实验中的作用 (From Theory to Design: The Role of Creativity in Designing Experiments)
<https://www.jove.com/science-education/10047/from-theory-to-design-the-role-of-creativity-in-designing-experiments>
 - (2) 心理学研究中的伦理 (Ethics in Psychology Research)
<https://www.jove.com/science-education/10045/ethics-in-psychology-research>
 - (3) 试验心理学的观点 (Perspectives on Experimental Psychology)
<https://www.jove.com/science-education/10169/perspectives-on-experimental-psychology>
 - (4) 实验中的真实性 (Realism in Experimentation)
<https://www.jove.com/science-education/10033/realism-in-experimentation>
 - (5) 试点测试 (Pilot Testing)
<https://www.jove.com/science-education/10031/pilot-testing>
 - (6) 观察研究 (Observational Research)
<https://www.jove.com/science-education/10048/observational-research>
 - (7) 简单试验设计：二分组试验 (The Simple Experiment: Two-group Design)
<https://www.jove.com/science-education/10056/the-simple-experiment-two-group-design>
 - (8) 多组试验 (The Multi-group Experiment)

- <https://www.jove.com/science-education/10057/the-multi-group-experiment>
- (9) 受试者内重复测量设计 (Within-subjects Repeated-measures Design)
<https://www.jove.com/science-education/10034/within-subjects-repeated-measures-design>
- (10) Factorial Experiment (The Factorial Experiment)
<https://www.jove.com/science-education/10058/the-factorial-experiment>
- (11) 自我报告与行为措施的回收 (Self-report vs. Behavioral Measures of Recycling)
<https://www.jove.com/science-education/10050/self-report-vs-behavioral-measures-of-recycling>
- (12) 心理学实验的信度 (Reliability in Psychology Experiments)
<https://www.jove.com/science-education/10046/reliability-in-psychology-experiments>
- (13) 研究中的安慰剂 (Placebos in Research)
<https://www.jove.com/science-education/10032/placebos-in-research>
- (14) 具身认知中独立变量的操控 (Manipulating an Independent Variable through Embodiment)
<https://www.jove.com/science-education/10049/manipulating-an-independent-variable-through-embodiment>
- (15) 运用试验同盟者的试验 (Experimentation using a Confederate)
<https://www.jove.com/science-education/10051/experimentation-using-a-confederate>
3. 认知心理学 (Cognitive Psychology) <https://www.jove.com/science-education-library/11/cognitive-psychology> 中文字幕和中文文稿
- (1) 双向听力法 (Dichotic Listening)
<https://www.jove.com/science-education/10101/dichotic-listening>
- (2) 测量反应时间和唐德思减法法 (Measuring Reaction Time and Donders' Method of Subtraction)
<https://www.jove.com/science-education/10087/measuring-reaction-time-and-donders-method-of-subtraction>
- (3) 认知心理学观点 (Perspectives on Cognitive Psychology)
<https://www.jove.com/science-education/10170/perspectives-on-cognitive-psychology>
- (4) 特征和联系的视觉搜索 (Visual Search for Features and Conjunctions)
<https://www.jove.com/science-education/10062/visual-search-for-features-and-conjunctions>
- (5) 双目竞争 (Binocular Rivalry)
<https://www.jove.com/science-education/10065/binocular-rivalry>
- (6) 多目标跟踪 (Multiple Object Tracking)
<https://www.jove.com/science-education/10019/multiple-object-tracking>
- (7) 近似数感测 (Approximate Number Sense Test)
<https://www.jove.com/science-education/10121/approximate-number-sense-test>
- (8) 心理旋转 (Mental Rotation)

- <https://www.jove.com/science-education/10115/mental-rotation>
- (9) 前景理论 (Prospect Theory) <https://www.jove.com/science-education/10059/prospect-theory>
- (10) 测量言语工作记忆广度 (Measuring Verbal Working Memory Span) <https://www.jove.com/science-education/10006/measuring-verbal-working-memory-span>
- (11) 延迟估计的视觉工作记忆的精度 (The Precision of Visual Working Memory with Delayed Estimation) <https://www.jove.com/science-education/10020/the-precision-of-visual-working-memory-with-delayed-estimation>
- (12) 口头的启动 (Verbal Priming) <https://www.jove.com/science-education/10026/verbal-priming>
- (13) 偶发编码方式 (Incidental Encoding) <https://www.jove.com/science-education/10103/incidental-encoding>
- (14) 视觉统计学习 (Visual Statistical Learning) <https://www.jove.com/science-education/10063/visual-statistical-learning>
- (15) 镜像中的运动学习 (Motor Learning in Mirror Drawing) <https://www.jove.com/science-education/10064/motor-learning-in-mirror-drawing>
4. 发展心理学 (Developmental Psychology) <https://www.jove.com/science-education-library/14/developmental-psychology>, **中文字幕和中文文稿**
- (1) 习惯：在婴儿说话之前先对其进行研究 (Habituation: Studying Infants Before They Can Talk) <https://www.jove.com/science-education/5129/?language=Chinese>
- (2) 用脑：衡量婴儿对行为的理性模仿 (Using Your Head: Measuring Infants' Rational Imitation of Actions) <https://www.jove.com/science-education/10069/using-your-head-measuring-infants-rational-imitation-of-actions>
- (3) Rouge 测试：寻找自我意识 (The Rouge Test: Searching for a Sense of Self) <https://www.jove.com/science-education/10111/the-rouge-test-searching-for-a-sense-of-self>
- (4) 数值认知：或多或少 (Numerical Cognition: More or Less) <https://www.jove.com/science-education/10093/numerical-cognition-more-or-less>
- (5) 互斥：儿童如何学习单词的含义 (Mutual Exclusivity: How Children Learn the Meanings of Words) <https://www.jove.com/science-education/10132/mutual-exclusivity-how-children-learn-the-meanings-of-words>
- (6) 儿童如何使用因果推理解决问题 (How Children Solve Problems Using Causal Reasoning) <https://www.jove.com/science-education/10110/how-children-solve-problems-using-causal-reasoning>
- (7) 元认知发展：儿童如何评估自己的记忆 (Metacognitive Development: How Children Estimate Their Memory)

- <https://www.jove.com/science-education/10084/metacognitive-development-how-children-estimate-their-memory>
- (8) 功能执行和尺寸变更卡排序任务 (Executive Function and the Dimensional Change Card Sort Task)
<https://www.jove.com/science-education/10085/executive-function-and-the-dimensional-change-card-sort-task>
- (9) 类别和归纳推理 (Categories and Inductive Inferences)
<https://www.jove.com/science-education/10109/categories-and-inductive-inferences>
- (10) 自然教育学的成本和收益 (The Costs and Benefits of Natural Pedagogy)
<https://www.jove.com/science-education/10128/the-costs-and-benefits-of-natural-pedagogy>
- (11) 皮亚杰守恒任务及任务需求的影响 (Piaget's Conservation Task and the Influence of Task Demands)
<https://www.jove.com/science-education/10131/piaget-s-conservation-task-and-the-influence-of-task-demands>
- (12) 儿童识别图片时对艺术家意图的依赖 (Children's Reliance on Artist Intentions When Identifying Pictures)
<https://www.jove.com/science-education/10117/children-s-reliance-on-artist-intentions-when-identifying-pictures>
- (13) 衡量儿童对证言的信任 (Measuring Children's Trust in Testimony)
<https://www.jove.com/science-education/10130/measuring-children-s-trust-in-testimony>
- (14) 你是聪明还是勤奋? 赞美如何影响孩子的动机 (Are You Smart or Hardworking? How Praise Influences Children's Motivation)
<https://www.jove.com/science-education/10112/are-you-smart-or-hardworking-how-praise-influences-children-s>
- (15) 记忆发展: 反复询问如何导致错误的记忆 (Memory Development: Demonstrating How Repeated Questioning Leads to False Memories)
<https://www.jove.com/science-education/10129/memory-development-demonstrating-how-repeated-questioning-leads-to>
5. 神经心理学 (Neuropsychology) <https://www.jove.com/science-education-library/21/neuropsychology>, 中文字幕和中文文稿
- (1) 裂脑 (The Split Brain)
<https://www.jove.com/science-education/10162/the-split-brain>
- (2) 运动地图 (Motor Maps)
<https://www.jove.com/science-education/10175/motor-maps>
- (3) 神经心理学的观点 (Perspectives on Neuropsychology)
<https://www.jove.com/science-education/10320/perspectives-on-neuropsychology>
- (4) 决策与爱荷华州赌博任务 (Decision-making and the Iowa Gambling Task)
<https://www.jove.com/science-education/10208/decision-making-and-the-iowa-gambling-task>

- (5) 自闭症谱系障碍的执行功能 (Executive Function in Autism Spectrum Disorder)
 - <https://www.jove.com/science-education/10268/executive-function-in-autism-spectrum-disorder>
 - (6) 顺行性失忆症 (Anterograde Amnesia)
 - <https://www.jove.com/science-education/10301/anterograde-amnesia>
 - (7) 情绪识别的生理相关性 (Physiological Correlates of Emotion Recognition)
 - <https://www.jove.com/science-education/10297/physiological-correlates-of-emotion-recognition>
 - (8) 事件相关电位和奇数任务 (Event-related Potentials and the Oddball Task)
 - <https://www.jove.com/science-education/10273/event-related-potentials-and-the-oddball-task>
 - (9) 语言: 语义不一致的 N400 (Language: The N400 in Semantic Incongruity)
 - <https://www.jove.com/science-education/10275/language-the-n400-in-semantic-incongruity>
 - (10) 学习和记忆: 记住的任务 (Learning and Memory: The Remember-Know Task)
 - <https://www.jove.com/science-education/10212/learning-and-memory-the-remember-know-task>
 - (11) 使用基于体素的形态测量法测量灰度差异: 音乐大脑 (Measuring Grey Matter Differences with Voxel-based Morphometry: The Musical Brain)
 - <https://www.jove.com/science-education/10299/measuring-grey-matter-differences-with-voxel-based-morphometry>
 - (12) 多体素模式分析解码听觉成像 (Decoding Auditory Imagery with Multivoxel Pattern Analysis)
 - <https://www.jove.com/science-education/10267/decoding-auditory-imagery-with-multivoxel-pattern-analysis>
 - (13) 视觉关注: 基于对象的注意调控的功能性核磁共振成像 (fMRI) 研究 (Visual Attention: fMRI Investigation of Object-based Attentional Control)
 - <https://www.jove.com/science-education/10272/visual-attention-fmri-investigation-object-based-attentional>
 - (14) 在颅脑外伤中使用扩散张量成像 (Using Diffusion Tensor Imaging in Traumatic Brain Injury)
 - <https://www.jove.com/science-education/10276/using-diffusion-tensor-imaging-in-traumatic-brain-injury>
 - (15) 在行动观察期间使用 TMS 测量动作的兴奋性 (Using TMS to Measure Motor Excitability During Action Observation)
 - <https://www.jove.com/science-education/10270/using-tms-to-measure-motor-excitability-during-action-observation>
6. 感觉和知觉 (Sensation and Perception) <https://www.jove.com/science-education-library/22/sensation-and-perception>, **中文字幕和中文文稿**
- (1) 影象残留的颜色 (Color Afterimages)
 - <https://www.jove.com/science-education/10194/color-afterimages>
 - (2) 找到你的盲点和感性充填在 (Finding Your Blind Spot and Perceptual Filling-in)

- <https://www.jove.com/science-education/10195/finding-your-blind-spot-and-perceptual-filling-in>
- (3) 感觉和知觉的观点 (Perspectives on Sensation and Perception)
<https://www.jove.com/science-education/10321/perspectives-on-sensation-and-perception>
 - (4) 运动诱导的失明 (Motion-induced Blindness)
<https://www.jove.com/science-education/10196/motion-induced-blindness>
 - (5) 橡胶手错觉 (The Rubber Hand Illusion)
<https://www.jove.com/science-education/10291/the-rubber-hand-illusion>
 - (6) 艾姆斯房间 (The Ames Room)
<https://www.jove.com/science-education/10292/the-ames-room>
 - (7) 不注意视盲 (Inattentive Blindness)
<https://www.jove.com/science-education/10319/inattentive-blindness>
 - (8) 空间线索 (Spatial Cueing)
<https://www.jove.com/science-education/10210/spatial-cueing>
 - (9) 注意瞬脱 (The Attentional Blink)
<https://www.jove.com/science-education/10211/the-attentional-blink>
 - (10) 拥挤 (Crowding)
<https://www.jove.com/science-education/10280/crowding>
 - (11) 倒脸效应 (The Inverted-face Effect)
<https://www.jove.com/science-education/10209/the-inverted-face-effect>
 - (12) 麦格克效应 (The McGurk Effect)
<https://www.jove.com/science-education/10295/the-mcgurk-effect>
 - (13) 显而易见的差异 (Just-noticeable Differences)
<https://www.jove.com/science-education/10229/just-noticeable-differences>
 - (14) 查找知觉阈限的楼梯过程 (The Staircase Procedure for Finding a Perceptual Threshold)
<https://www.jove.com/science-education/10231/the-staircase-procedure-for-finding-a-perceptual-threshold>
 - (15) 对象替代遮掩 (Object Substitution Masking)
<https://www.jove.com/science-education/10279/object-substitution-masking>
7. 社会心理学 (Social Psychology) <https://www.jove.com/science-education-library/30/social-psychology>, 中文字幕和中文文稿
- (1) 在助人行为分析情况 (Analyzing Situations in Helping Behavior)
<https://www.jove.com/science-education/10305/analyzing-situations-in-helping-behavior>
 - (2) 功能磁共振成像对解剖的道德判断 (Using fMRI to Dissect Moral Judgment)
<https://www.jove.com/science-education/10306/using-fmri-to-dissect-moral-judgment>
 - (3) 社会心理学的视角 (Perspectives on Social Psychology)
<https://www.jove.com/science-education/10434/perspectives-on-social-psychology>
 - (4) 快速判断准确度评价 (Evaluating the Accuracy of Snap Judgments)
<https://www.jove.com/science-education/10309/evaluating-the-accuracy-of->

[snap-judgments](#)

- (5) 少数之一：符合团体规范 (A Minority of One: Conformity to Group Norms)
<https://www.jove.com/science-education/10331/a-minority-of-one-conformity-to-group-norms>
- (6) 错误归因的觉醒和认知失调 (Misattribution of Arousal and Cognitive Dissonance)
<https://www.jove.com/science-education/10333/misattribution-of-arousal-and-cognitive-dissonance>
- (7) 边际不诚实：添加 10 任务 (Marginal Dishonesty: The Adding-to-10 Task)
<https://www.jove.com/science-education/10307/marginal-dishonesty-the-adding-to-10-task>
- (8) 排斥：被互联网忽视的影响 (Ostracism: Effects of Being Ignored Over the Internet)
<https://www.jove.com/science-education/10336/ostracism-effects-of-being-ignored-over-the-internet>
- (9) 诱导情绪 (Inducing Emotions)
<https://www.jove.com/science-education/10308/inducing-emotions>
- (10) 说服力：影响态度改变的动机因素 (Persuasion: Motivational Factors Influencing Attitude Change)
<https://www.jove.com/science-education/10330/persuasion-motivational-factors-influencing-attitude-change>
- (11) 创建最小的组范式 (Creating the Minimal Group Paradigm)
<https://www.jove.com/science-education/10310/creating-the-minimal-group-paradigm>
- (12) 内隐联想测验 (The Implicit Association Test)
<https://www.jove.com/science-education/10368/the-implicit-association-test>
- (13) 联盟目标出现时发生无意识模仿 (Nonconscious Mimicry Occurs when Affiliation Goals are Present)
<https://www.jove.com/science-education/10335/nonconscious-mimicry-occurs-when-affiliation-goals-are-present>
- (14) 抽象思维或具体思维对自我控制的影响 (Effects of Thinking Abstractly or Concretely on Self-control)
<https://www.jove.com/science-education/10332/effects-of-thinking-abstractly-or-concretely-on-self-control>
- (15) 思考太多会影响决策 (Thinking Too Much Impairs Decision-Making)
<https://www.jove.com/science-education/10334/thinking-too-much-impairs-decision-making>

八、工程学 (Engineering), <https://www.jove.com/science-education/eng> 共 120 个视频。
视频全部有中文字幕。

1. 生物工程 (Bioengineering), <https://www.jove.com/science-education-library/34/bioengineering> 中文字幕和中文文稿

- (1) 生物材料的概述 (Overview of Biomaterials)
<https://www.jove.com/science-education/5797/overview-of-biomaterials>
- (2) 胶原水凝胶 (Collagen Hydrogels)

- <https://www.jove.com/science-education/5786/collagen-hydrogels>
- (3) 丝绸生物材料的静电纺丝 (Electrospinning of Silk Biomaterials)
<https://www.jove.com/science-education/5798/electrospinning-of-silk-biomaterials>
 - (4) BioMEM 设备概述 (Overview of BioMEM Devices)
<https://www.jove.com/science-education/5788/overview-of-biomem-devices>
 - (5) 通过光刻微加工 (Microfabrication via Photolithography)
<https://www.jove.com/science-education/5789/microfabrication-via-photolithography>
 - (6) 软光刻 (Soft Lithography)
<https://www.jove.com/science-education/5790/soft-lithography>
 - (7) 生物过程工程概述 (Overview of Bioprocess Engineering)
<https://www.jove.com/science-education/5791/overview-of-bioprocess-engineering>
 - (8) 合成生物学 (Synthetic Biology)
<https://www.jove.com/science-education/5792/synthetic-biology>
 - (9) 分批和连续生物反应器 (Batch and Continuous Bioreactors)
<https://www.jove.com/science-education/5793/batch-and-continuous-bioreactors>
 - (10) 生物传感器概述 (Overview of Biosensing)
<https://www.jove.com/science-education/5794/overview-of-biosensing>
 - (11) 电化学生物传感器 (Electrochemical Biosensing)
<https://www.jove.com/science-education/5796/electrochemical-biosensing>
 - (12) 光学生物传感器 (Optical Biosensing)
<https://www.jove.com/science-education/5795/optical-biosensing>
 - (13) 组织工程概述 (Overview of Tissue Engineering)
<https://www.jove.com/science-education/5785/overview-of-tissue-engineering>
 - (14) 组织培养 (Histotypic Tissue Culture)
<https://www.jove.com/science-education/5787/histotypic-tissue-culture>
 - (15) 全器官组织培养 (Whole Organ Tissue Culture)
<https://www.jove.com/science-education/5799/whole-organ-tissue-culture>
2. 电子工程 (Electrical engineering) <https://www.jove.com/science-education-library/35/electrical-engineering> **中文字幕和中文文稿**
- (1) 电气安全预防措施和基本设备 (Electrical Safety Precautions and Basic Equipment)
<https://www.jove.com/science-education/10114/electrical-safety-precautions-and-basic-equipment>
 - (2) 磁性元件的特性 (Characterization of Magnetic Components)
<https://www.jove.com/science-education/10164/characterization-of-magnetic-components>
 - (3) 电源杆板介绍 (Introduction to the Power Pole Board)
<https://www.jove.com/science-education/10254/introduction-to-the-power-pole-board>

- (4) dc/dc 升压转换器 (DC/DC Boost Converter)
 - <https://www.jove.com/science-education/10252/dcdc-boost-converter>
 - (5) dc/dc 降压转换器 (DC/DC Buck Converter)
 - <https://www.jove.com/science-education/10253/dcdc-buck-converter>
 - (6) 反激式转换器 (Flyback Converter)
 - <https://www.jove.com/science-education/10251/flyback-converter>
 - (7) 单相变压器 (Single Phase Rectifiers)
 - <https://www.jove.com/science-education/10257/single-phase-rectifiers>
 - (8) 单相整流器 (Single Phase Rectifiers)
 - <https://www.jove.com/science-education/10257/single-phase-rectifiers>
 - (9) 晶闸管整流 (Thyristor Rectifier)
 - <https://www.jove.com/science-education/10255/thyristor-rectifier>
 - (10) 单相逆变器 (Single Phase Inverter)
 - <https://www.jove.com/science-education/10250/single-phase-inverter>
 - (11) 直流电机 (DC Motors)
 - <https://www.jove.com/science-education/10166/dc-motors>
 - (12) 交流异步电动机特性 (AC Induction Motor Characterization)
 - <https://www.jove.com/science-education/10150/ac-induction-motor-characterization>
 - (13) 变频调速交流感应电机 (VFD-fed AC Induction Machine)
 - <https://www.jove.com/science-education/10165/vfd-fed-ac-induction-machine>
 - (14) 交流同步机同步 (AC Synchronous Machine Synchronization)
 - <https://www.jove.com/science-education/10167/ac-synchronous-machine-synchronization>
 - (15) 交流同步电机特性 (AC Synchronous Machine Characterization)
 - <https://www.jove.com/science-education/10168/ac-synchronous-machine-characterization>
3. 机械工程 (Mechanical engineering) <https://www.jove.com/science-education-library/36/mechanical-engineering> 中文字幕和中文文稿
- (1) 浮力和拖曳在浸没的身体 (Buoyancy and Drag on Immersed Bodies)
 - <https://www.jove.com/science-education/10392/buoyancy-and-drag-on-immersed-bodies>
 - (2) 浮动容器的稳定性 (Stability of Floating Vessels)
 - <https://www.jove.com/science-education/10374/stability-of-floating-vessels>
 - (3) 推进力和推力 (Propulsion and Thrust)
 - <https://www.jove.com/science-education/10398/propulsion-and-thrust>
 - (4) 管道网络和压力损失 (Piping Networks and Pressure Losses)
 - <https://www.jove.com/science-education/10389/piping-networks-and-pressure-losses>
 - (5) 淬灭和沸腾 (Quenching and Boiling)
 - <https://www.jove.com/science-education/10404/quenching-and-boiling>
 - (6) 液压跳跃 (Hydraulic Jumps)
 - <https://www.jove.com/science-education/10405/hydraulic-jumps>
 - (7) 换热器分析 (Heat Exchanger Analysis)

- <https://www.jove.com/science-education/10391/heat-exchanger-analysis>
- (8) 制冷概论 (Introduction to Refrigeration)
<https://www.jove.com/science-education/10387/introduction-to-refrigeration>
- (9) 热丝测速 (Hot Wire Anemometry)
<https://www.jove.com/science-education/10464/hot-wire-anemometry>
- (10) 测量紊流 (Measuring Turbulent Flows)
<https://www.jove.com/science-education/10450/measuring-turbulent-flows>
- (11) 通过钝体流的可视化 (Visualization of Flow Past a Bluff Body)
<https://www.jove.com/science-education/10435/visualization-of-flow-past-a-bluff-body>
- (12) 射流撞击斜面板 (Jet Impinging on an Inclined Plate)
<https://www.jove.com/science-education/10443/jet-impinging-on-an-inclined-plate>
- (13) 系统分析中的能量守恒方法 (Conservation of Energy Approach to System Analysis)
<https://www.jove.com/science-education/10449/conservation-of-energy-approach-to-system-analysis>
- (14) 质量守恒和流速测量 (Mass Conservation and Flow Rate Measurements)
<https://www.jove.com/science-education/10445/mass-conservation-and-flow-rate-measurements>
- (15) 用控制容积法测定扁板的撞击力 (Determination of Impingement Forces on a Flat Plate with the Control Volume Method)
<https://www.jove.com/science-education/10444/determination-impingement-forces-on-flat-plate-with-control-volume>
4. 化学工程 (Chemical engineering) <https://www.jove.com/science-education-library/37/chemical-engineering>, 中文字幕和中文文稿
- (1) 测试芬管热交换器的传热效率 (Testing the Heat Transfer Efficiency of a Finned-tube Heat Exchanger)
<https://www.jove.com/science-education/10437/testing-the-heat-transfer-efficiency-of-a-finned-tube-heat-exchanger>
- (2) 利用托盘干燥器研究对流和导电传热 (Using a Tray Dryer to Investigate Convective and Conductive Heat Transfer)
<https://www.jove.com/science-education/10438/using-tray-dryer-to-investigate-convective-conductive-heat>
- (3) 丙二醇溶液的粘度 (Viscosity of Propylene Glycol Solutions)
<https://www.jove.com/science-education/10439/viscosity-of-propylene-glycol-solutions>
- (4) 硅铝粉的法 (Porosimetry of a Silica Alumina Powder)
<https://www.jove.com/science-education/10383/porosimetry-of-a-silica-alumina-powder>
- (5) 用挤出法论证幂律模型 (Demonstration of the Power Law Model Through Extrusion)
<https://www.jove.com/science-education/10382/demonstration-of-the-power-law-model-through-extrusion>

- (6) 气体吸收器 (Gas Absorber) <https://www.jove.com/science-education/10436/gas-absorber>
 - (7) 汽液平衡 (Vapor-liquid Equilibrium) <https://www.jove.com/science-education/10425/vapor-liquid-equilibrium>
 - (8) 回流比对塔板蒸馏效率的影响 (The Effect of Reflux Ratio on Tray Distillation Efficiency) <https://www.jove.com/science-education/10432/the-effect-of-reflux-ratio-on-tray-distillation-efficiency>
 - (9) 液-液萃取效率 (Efficiency of Liquid-liquid Extraction) <https://www.jove.com/science-education/10426/efficiency-of-liquid-liquid-extraction>
 - (10) 液相反应器: 蔗糖反转 (Liquid Phase Reactor: Sucrose Inversion) <https://www.jove.com/science-education/10408/liquid-phase-reactor-sucrose-inversion>
 - (11) 水杨酸的化学改性结晶 (Crystallization of Salicylic Acid via Chemical Modification) <https://www.jove.com/science-education/10407/crystallization-of-salicylic-acid-via-chemical-modification>
 - (12) 填料床反应器中的单相和两相流 (Single and Two-phase Flow in a Packed Bed Reactor) <https://www.jove.com/science-education/10431/single-and-two-phase-flow-in-a-packed-bed-reactor>
 - (13) 烷的加入聚合动力学 (Kinetics of Addition Polymerization to Polydimethylsiloxane) <https://www.jove.com/science-education/10369/kinetics-of-addition-polymerization-to-polydimethylsiloxane>
 - (14) 催化反应器: 乙烯加氢 (Catalytic Reactor: Hydrogenation of Ethylene) <https://www.jove.com/science-education/10427/catalytic-reactor-hydrogenation-of-ethylene>
 - (15) 旋转和寒意 (Evaluating the Heat Transfer of a Spin-and-Chill) <https://www.jove.com/science-education/10440/evaluating-the-heat-transfer-of-a-spin-and-chill>
5. 结构工程 (Structural Engineering) <https://www.jove.com/science-education-library/38/structural-engineering> **中文字幕和中文文稿**
- (1) 材料常数 (Material Constants) <https://www.jove.com/science-education/10363/material-constants>
 - (2) 钢的应力-应变特性 (Stress-Strain Characteristics of Steels) <https://www.jove.com/science-education/10361/stress-strain-characteristics-of-steels>
 - (3) 铝的应力-应变特性 (Stress-Strain Characteristics of Aluminum) <https://www.jove.com/science-education/10362/stress-strain-characteristics-of-aluminum>
 - (4) 冷弯热轧钢在不同温度条件下的冲击试验研究 (Charpy Impact Test of Cold

Formed and Hot Rolled Steels Under Diverse Temperature Conditions)

<https://www.jove.com/science-education/10385/charpy-impact-test-cold-formed-hot-rolled-steels-under-diverse>

- (5) 洛氏硬度试验及处理对钢的影响 (Rockwell Hardness Test and the Effect of Treatment on Steel)

<https://www.jove.com/science-education/10386/rockwell-hardness-test-and-the-effect-of-treatment-on-steel>
 - (6) 钢柱屈曲 (Buckling of Steel Columns)

<https://www.jove.com/science-education/10414/buckling-of-steel-columns>
 - (7) 结构动力学 (Dynamics of Structures)

<https://www.jove.com/science-education/10415/dynamics-of-structures>
 - (8) 金属疲劳 (Fatigue of Metals)

<https://www.jove.com/science-education/10416/fatigue-of-metals>
 - (9) 聚合物拉伸试验 (Tension Tests of Polymers)

<https://www.jove.com/science-education/10418/tension-tests-of-polymers>
 - (10) 纤维增强高分子材料的拉伸试验 (Tension Test of Fiber-Reinforced Polymeric Materials)

<https://www.jove.com/science-education/10417/tension-test-of-fiber-reinforced-polymeric-materials>
 - (11) 混凝土和沥青混合料的骨料 (Aggregates for Concrete and Asphaltic Mixes)

<https://www.jove.com/science-education/10419/aggregates-for-concrete-and-asphaltic-mixes>
 - (12) 新鲜混凝土试验 (Tests on Fresh Concrete)

<https://www.jove.com/science-education/10420/tests-on-fresh-concrete>
 - (13) 硬化混凝土的压缩试验 (Compression Tests on Hardened Concrete)

<https://www.jove.com/science-education/10421/compression-tests-on-hardened-concrete>
 - (14) 硬化混凝土的拉伸试验 (Tests of Hardened Concrete in Tension)

<https://www.jove.com/science-education/10423/tests-of-hardened-concrete-in-tension>
 - (15) 木材试验 (Tests on Wood)

<https://www.jove.com/science-education/10422/tests-on-wood>
6. 生物工程医学 (Biomedical Engineering) <https://www.jove.com/science-education-library/39/biomedical-engineering> 中文字幕和中文文稿
- (1) 使用光学和共聚焦显微镜成像生物样本 (Imaging Biological Samples with Optical and Confocal Microscopy)

<https://www.jove.com/science-education/10476/imaging-biological-samples-with-optical-and-confocal-microscopy>
 - (2) 生物样品的 SEM 成像 (SEM Imaging of Biological Samples)

<https://www.jove.com/science-education/10492/sem-imaging-of-biological-samples>
 - (3) 纳米药物载体的生物分布: SEM 的应用 (Biodistribution of Nano-drug Carriers: Applications of SEM)

<https://www.jove.com/science-education/10472/biodistribution-of-nano->

- [drug-carriers-applications-of-sem](https://www.jove.com/science-education/10397/high-frequency-ultrasound-imaging-of-the-abdominal-aorta)
- (4) 腹主动脉的高频超声成像 (High-frequency Ultrasound Imaging of the Abdominal Aorta)
<https://www.jove.com/science-education/10397/high-frequency-ultrasound-imaging-of-the-abdominal-aorta>
 - (5) 腹部主动脉瘤的定量应变图谱 (Quantitative Strain Mapping of an Abdominal Aortic Aneurysm)
<https://www.jove.com/science-education/10480/quantitative-strain-mapping-of-an-abdominal-aortic-aneurysm>
 - (6) 红外主塔中图像血液和脂质的光声断层扫描 (Photoacoustic Tomography to Image Blood and Lipids in the Infrarenal Aorta)
<https://www.jove.com/science-education/10395/photoacoustic-tomography-to-image-blood-lipids-infrarenal>
 - (7) 心脏磁共振成像 (Cardiac Magnetic Resonance Imaging)
<https://www.jove.com/science-education/10393/cardiac-magnetic-resonance-imaging>
 - (8) 脑动脉瘤血流的计算流体动力学模拟 (Computational Fluid Dynamics Simulations of Blood Flow in a Cerebral Aneurysm)
<https://www.jove.com/science-education/10479/computational-fluid-dynamics-simulations-blood-flow-cerebral>
 - (9) 腹主动脉瘤的近红外荧光成像 (Near-infrared Fluorescence Imaging of Abdominal Aortic Aneurysms)
<https://www.jove.com/science-education/10394/near-infrared-fluorescence-imaging-of-abdominal-aortic-aneurysms>
 - (10) 非侵入性血压测量技术 (Noninvasive Blood Pressure Measurement Techniques)
<https://www.jove.com/science-education/10478/noninvasive-blood-pressure-measurement-techniques>
 - (11) 心电图 (ECG) 信号的采集与分析 (Acquisition and Analysis of an ECG (electrocardiography) Signal)
<https://www.jove.com/science-education/10473/acquisition-and-analysis-of-an-ecg-electrocardiography-signal>
 - (12) 可吸收生物材料的拉伸强度 (Tensile Strength of Resorbable Biomaterials)
<https://www.jove.com/science-education/10471/tensile-strength-of-resorbable-biomaterials>
 - (13) 小鼠脊髓的微 CT 成像 (Micro-CT Imaging of a Mouse Spinal Cord)
<https://www.jove.com/science-education/10475/micro-ct-imaging-of-a-mouse-spinal-cord>
 - (14) 大鼠非侵入性 ACL 损伤后膝关节退化的可视化 (Visualization of Knee Joint Degeneration after Non-invasive ACL Injury in Rats)
<https://www.jove.com/science-education/10477/visualization-knee-joint-degeneration-after-non-invasive-acl-injury>
 - (15) SPECT 和 CT 成像联合用于心脏功能可视化 (Combined SPECT and CT Imaging to Visualize Cardiac Functionality)

<https://www.jove.com/science-education/10396/combined-spect-and-ct-imaging-to-visualize-cardiac-functionality>

7. 材料工程学 (Materials Engineering) <https://www.jove.com/science-education-library/40/materials-engineering> **中文字幕和中文文稿**
 - (1) 光学材料学第 1 部分: 样品制备 (Optical Materialography Part 1: Sample Preparation) <https://www.jove.com/science-education/10406/optical-materialography-part-1-sample-preparation>
 - (2) 光学材料学第 2 部分: 图像分析 (Optical Materialography Part 2: Image Analysis) <https://www.jove.com/science-education/10433/optical-materialography-part-2-image-analysis>
 - (3) X 射线光电子光谱 (X-ray Photoelectron Spectroscopy) <https://www.jove.com/science-education/10474/x-ray-photoelectron-spectroscopy>
 - (4) X 射线衍射 (X-ray Diffraction) <https://www.jove.com/science-education/10446/x-ray-diffraction>
 - (5) 聚焦离子光束 (Focused Ion Beams) <https://www.jove.com/science-education/10482/focused-ion-beams>
 - (6) 定向凝固和相位稳定 (Directional Solidification and Phase Stabilization) <https://www.jove.com/science-education/10485/directional-solidification-and-phase-stabilization>
 - (7) 差分扫描热量测定 (Differential Scanning Calorimetry) <https://www.jove.com/science-education/10487/differential-scanning-calorimetry>
 - (8) 热衍率与激光闪光方法 (Thermal Diffusivity and the Laser Flash Method) <https://www.jove.com/science-education/10488/thermal-diffusivity-and-the-laser-flash-method>
 - (9) 薄膜电镀 (Electroplating of Thin Films) <https://www.jove.com/science-education/10489/electroplating-of-thin-films>
 - (10) 通过测热分析的热膨胀分析 (Analysis of Thermal Expansion via Dilatometry) <https://www.jove.com/science-education/10490/analysis-of-thermal-expansion-via-dilatometry>
 - (11) 电化学阻抗光谱 (Electrochemical Impedance Spectroscopy) <https://www.jove.com/science-education/10491/electrochemical-impedance-spectroscopy>
 - (12) 陶瓷基质复合材料及其弯曲特性 (Ceramic-matrix Composite Materials and Their Bending Properties) <https://www.jove.com/science-education/10481/ceramic-matrix-composite-materials-and-their-bending-properties>
 - (13) 纳米晶体合金和纳米颗粒尺寸稳定性 (Nanocrystalline Alloys and Nano-grain Size Stability) <https://www.jove.com/science-education/10484/nanocrystalline-alloys-and-nano-grain-size-stability>

- (14) 水凝胶合成 (Hydrogel Synthesis)
<https://www.jove.com/science-education/10486/hydrogel-synthesis>
8. 航空工程 (Aeronautical Engineering) <https://www.jove.com/science-education-library/82/aeronautical-engineering> **中文字幕和中文文稿**
- (1) 模型飞机的空气动力学性能: DC-6B (Aerodynamic Performance of a Model Aircraft: The DC-6B)
<https://www.jove.com/science-education/10456/aerodynamic-performance-of-a-model-aircraft-the-dc-6b>
- (2) 推进器特性: 音高、直径和叶片数在性能上的变化 (Propeller Characterization: Variations in Pitch, Diameter, and Blade Number on Performance)
<https://www.jove.com/science-education/10460/propeller-characterization-variations-pitch-diameter-blade-number-on>
- (3) 机翼行为: 克拉克 Y-14 翼上的压力分布 (Airfoil Behavior: Pressure Distribution over a Clark Y-14 Wing)
<https://www.jove.com/science-education/10453/airfoil-behavior-pressure-distribution-over-a-clark-y-14-wing>
- (4) Clark Y-14 翼性能: 高提升设备的部署 (片和板条) (Clark Y-14 Wing Performance: Deployment of High-lift Devices (Flaps and Slats))
<https://www.jove.com/science-education/10454/clark-y-14-wing-performance-deployment-high-lift-devices-flaps>
- (5) 湍流球法: 评估风洞流量质量 (Turbulence Sphere Method: Evaluating Wind Tunnel Flow Quality)
<https://www.jove.com/science-education/10457/turbulence-sphere-method-evaluating-wind-tunnel-flow-quality>
- (6) 交叉圆柱流: 测量压力分布和估计阻力系数 (Cross Cylindrical Flow: Measuring Pressure Distribution and Estimating Drag Coefficients)
<https://www.jove.com/science-education/10451/cross-cylindrical-flow-measuring-pressure-distribution-estimating>
- (7) 喷嘴分析: 沿聚合和融合分流喷嘴的马赫数和压力的变化 (Nozzle Analysis: Variations in Mach Number and Pressure Along a Converging and a Converging-diverging Nozzle)
<https://www.jove.com/science-education/10466/nozzle-analysis-variations-mach-number-pressure-along-converging>
- (8) 施利伦成像: 一种可视化超音速流特性的技术 (Schlieren Imaging: A Technique to Visualize Supersonic Flow Features)
<https://www.jove.com/science-education/10458/schlieren-imaging-a-technique-to-visualize-supersonic-flow-features>
- (9) 水隧道中的流量可视化: 在三角洲翼上观察前沿涡流 (Flow Visualization in a Water Tunnel: Observing the Leading-edge Vortex Over a Delta Wing)
<https://www.jove.com/science-education/10459/flow-visualization-water-tunnel-observing-leading-edge-vortex-over>
- (10) 表面染料流可视化: 观察超音速流中条纹模式的定性方法 (Surface Dye Flow Visualization: A Qualitative Method to Observe Streakline Patterns in Supersonic Flow)

- <https://www.jove.com/science-education/10468/surface-dye-flow-visualization-qualitative-method-to-observe>
- (11) 皮托静态管：测量气流速度的设备 (Pitot-static Tube: A Device to Measure Air Flow Speed)
<https://www.jove.com/science-education/10452/pitot-static-tube-a-device-to-measure-air-flow-speed>
- (12) 恒温测量：研究湍流边界层流的工具 (Constant Temperature Anemometry: A Tool to Study Turbulent Boundary Layer Flow)
<https://www.jove.com/science-education/10455/constant-temperature-anemometry-tool-to-study-turbulent-boundary>
- (13) 压力传感器：使用皮托静态管进行校准 (Pressure Transducer: Calibration Using a Pitot-static Tube)
<https://www.jove.com/science-education/10467/pressure-transducer-calibration-using-a-pitot-static-tube>
- (14) 实时飞行控制：嵌入式传感器校准和数据采集 (Real-time Flight Control: Embedded Sensor Calibration and Data Acquisition)
<https://www.jove.com/science-education/10470/real-time-flight-control-embedded-sensor-calibration-data>
- (15) 多直升机空气动力学：六轴飞行器上的特征推力 (Combined SPECT and CT Imaging to Visualize Cardiac Functionality)
<https://www.jove.com/science-education/10469/multicopter-aerodynamics-characterizing-thrust-on-a-hexacopter>

第二部分：JoVE 核心科学教育 (JoVE Core) 共 441 个视频

<https://www.jove.com/science-education/jovecore>

一、生物核心课程 (Core Biology), <https://www.jove.com/science-education/jovecore> 共 375 个视频, 其中 **340 个有全中文版本**。

1. 基本原理 (Fundamentals)

- (1) 第 1 章 科学探索 (Scientific Inquiry) **全中文版本视频**
<https://www.jove.com/science-education-library/43/scientific-inquiry>
- 1.1 什么是生物学 (What is Biology)
<https://www.jove.com/science-education/10647/?language=Chinese>
- 1.2 生物系统的组织层次 (Levels of Organization)
<https://www.jove.com/science-education/10648/?language=Chinese>
- 1.3 科学方法 (The Scientific Method)
<https://www.jove.com/science-education/10649/?language=Chinese>
- 1.4 归纳推理 (Inductive Reasoning)
<https://www.jove.com/science-education/10651/?language=Chinese>
- 1.5 演绎推理 (Deductive Reasoning)
<https://www.jove.com/science-education/10651/?language=Chinese>
- 1.6 相关性与因果关系 (Correlation and Causation)
<https://www.jove.com/science-education/10652/?language=Chinese>
- 1.7 分类学 (Taxonomy)
<https://www.jove.com/science-education/10653/?language=Chinese>

1.8 系统发育学 (Phylogeny)

<https://www.jove.com/science-education/10966/?language=Chinese>

(2) 第 2 章 生命化学 (Chemistry of Life) **全中文版本**

<https://www.jove.com/science-education-library/44/chemistry-of-life>

2.1 元素周期表和有机元素 (The Periodic Table and Organismal Elements)

<https://www.jove.com/science-education/10655/the-periodic-table-and-organismal-elements>

2.2 原子结构 (Atomic Structure)

<https://www.jove.com/science-education/10966/?language=Chinese>

2.3 电子行为 (Electron Behavior)

<https://www.jove.com/science-education/10657/electron-behavior>

2.4 电子轨道模型 (Electron Orbital Model)

<https://www.jove.com/science-education/10658/electron-orbital-model>

2.5 分子和化合物 (Molecules and Compounds)

<https://www.jove.com/science-education/10659/?language=Chinese>

2.6 分子形状的表现 (Molecular Shapes)

<https://www.jove.com/science-education/10660/?language=Chinese>

2.7 碳骨架 (Carbon Skeletons)

<https://www.jove.com/science-education/10661/?language=Chinese>

2.8 化学反应 (Chemical Reactions)

<https://www.jove.com/science-education/10662/?language=Chinese>

2.9 同位素 (Isotopes)

<https://www.jove.com/science-education/10663/?language=Chinese>

2.10 共价键 (Covalent Bonds)

<https://www.jove.com/science-education/10664/?language=Chinese>

2.11 离子键 (Ionic Bonds)

<https://www.jove.com/science-education/10665/?language=Chinese>

2.12 氢键 (Hydrogen Bonds)

<https://www.jove.com/science-education/10666/?language=Chinese>

2.13 范德华力 (Van der Waals Interactions)

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2.14 水的状态 (States of Water)

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2.15 酸碱性 (pH)

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2.16 溶剂 (Solvents)

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2.18 黏附 (Adhesion)

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2.19 内聚力 (Cohesion)

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2.20 比热容 (Specific Heat)

- <https://www.jove.com/science-education/10674/?language=Chinese>
- 2.21 汽化 (Vaporization)
- <https://www.jove.com/science-education/10675/?language=Chinese>
- (3) 第 3 章 高分子 (Macromolecules) **全中文版本**
- <https://www.jove.com/science-education-library/45/macromolecules>
- 3.1 什么是蛋白质 (What are Proteins)
- <https://www.jove.com/science-education/10677/?language=Chinese>
- 3.2 蛋白质组织结构 (Protein Organization)
- <https://www.jove.com/science-education/10678/?language=Chinese>
- 3.3 蛋白质折叠 (Protein Folding)
- <https://www.jove.com/science-education/10679/?language=Chinese>
- 3.4 什么是碳水化合物 (What are Carbohydrates)
- <https://www.jove.com/science-education/10680/?language=Chinese>
- 3.5 脱水合成 (Dehydration Synthesis)
- <https://www.jove.com/science-education/10681/?language=Chinese>
- 3.6 水解 (Hydrolysis)
- <https://www.jove.com/science-education/10682/?language=Chinese>
- 3.7 什么是脂类 (What are Lipids)
- <https://www.jove.com/science-education/10683/?language=Chinese>
- 3.8 什么是核酸 (What are Nucleic Acids)
- <https://www.jove.com/science-education/10684/?language=Chinese>
- 3.9 磷酸二酯键 (Phosphodiester Linkages)
- <https://www.jove.com/science-education/10685/?language=Chinese>
2. 细胞过程 (Cellular Processes), 共 38 个视频
- (4) 第 4 章 细胞结构和功能 (Cell Structure and Function) **全中文版本**
- <https://www.jove.com/science-education-library/47/cell-structure-and-function>
- 4.1 什么是细胞 (What are Cells)
- <https://www.jove.com/science-education/10687/?language=Chinese>
- 4.2 细胞的大小 (Cell Size)
- <https://www.jove.com/science-education/10688/?language=Chinese>
- 4.3 真核细胞区室化 (Eukaryotic Compartmentalization)
- <https://www.jove.com/science-education/10689/?language=Chinese>
- 4.4 原核生物 (Prokaryotic Cells)
- <https://www.jove.com/science-education/10690/?language=Chinese>
- 4.5 细胞质 (Cytoplasm)
- <https://www.jove.com/science-education/10967/?language=Chinese>
- 4.6 细胞核 (The Nucleus)
- <https://www.jove.com/science-education/10691/?language=Chinese>
- 4.7 内质网 (Endoplasmic Reticulum)
- <https://www.jove.com/science-education/10969/?language=Chinese>
- 4.8 核糖体 (Ribosomes)
- <https://www.jove.com/science-education/10692/?language=Chinese>
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- <https://www.jove.com/science-education/10970/?language=Chinese>
- 4.10 微管 (Microtubules)
<https://www.jove.com/science-education/10693/?language=Chinese>
- 4.11 线粒体 (Mitochondria)
<https://www.jove.com/science-education/10694/?language=Chinese>
- 4.12 缝隙连接 (Gap Junctions)
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- 4.13 细胞外基质 (The Extracellular Matrix)
<https://www.jove.com/science-education/10695/?language=Chinese>
- 4.14 组织 (Tissues)
<https://www.jove.com/science-education/10696/?language=Chinese>
- 4.15 植物细胞壁 (Plant Cell Wall)
<https://www.jove.com/science-education/11084/plant-cell-wall>
- 4.16 疟原虫 (Plasmodesmata)
<https://www.jove.com/science-education/11085/plasmodesmata>
- (5) 第 5 章 细胞膜及细胞运输 (Membranes and Cellular Transport) **全中文版**
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- 5.1 什么是膜 (What are Membranes)
<https://www.jove.com/science-education/10971/?language=Chinese>
- 5.2 膜流动性 (Membrane Fluidity)
<https://www.jove.com/science-education/10972/?language=Chinese/>
- 5.3 什么是电化学梯度 (What is an Electrochemical Gradient)
<https://www.jove.com/science-education/10699/?language=Chinese>
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- 5.7 植物的张力 (Tonicity in Plants)
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- 5.11 二级主动运输 (Secondary Active Transport)
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- <https://www.jove.com/science-education-library/49/cell-signaling>
- 6.1 什么是细胞信号 (What is Cell Signaling)
- 6.2 细菌信号 (Bacterial Signaling)
- <https://www.jove.com/science-education/10713/?language=Chinese>
- 6.3 酵母信号 (Yeast Signaling)
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- 6.4 接触依赖信号 (Yeast Signaling)
- <https://www.jove.com/science-education/10715/?language=Chinese>
- 6.5 自分泌信号 (Autocrine Signaling)
- <https://www.jove.com/science-education/10973/?language=Chinese>
- 6.6 旁分泌信号 (Paracrine Signaling)
- <https://www.jove.com/science-education/10716/?language=Chinese>
- 6.7 突触信号 (Synaptic Signaling)
- <https://www.jove.com/science-education/10717/?language=Chinese>
- 6.8 G 蛋白偶联受体 (G-protein Coupled Receptors)
- <https://www.jove.com/science-education/10718/g?language=Chinese>
- 6.9 内部受体 (Internal Receptors)
- <https://www.jove.com/science-education/11011/?language=Chinese>
- 6.10 内分泌信号 (Endocrine Signaling)
- <https://www.jove.com/science-education/10719/?language=Chinese>
- 6.11 什么是第二信使 (What are Second Messengers)
- <https://www.jove.com/science-education/10720/?language=Chinese>
- 6.12 细胞内信号级联 (Intracellular Signaling Cascades)
- <https://www.jove.com/science-education/10721/?language=Chinese>
- 6.13 离子通道 (Ion Channels)
- <https://www.jove.com/science-education/10722/?language=Chinese>
- 6.14 酶联受体 (Enzyme-linked Receptors)
- <https://www.jove.com/science-education/10723/?language=Chinese>
- (7) 第 7 章 代谢 (Metabolism) **全中文版本**
- <https://www.jove.com/science-education-library/50/metabolism?language=Chinese>
- 7.1 什么是代谢 (Metabolism)
- <https://www.jove.com/science-education/10725/?language=Chinese>
- 7.2 热力学第一定律 (First Law of Thermodynamics)
- <https://www.jove.com/science-education/10726/?language=Chinese>
- 7.3 热力学第二定律 (Second Law of Thermodynamics)
- <https://www.jove.com/science-education/10727/?language=Chinese>
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- 7.5 势能 (Potential Energy)
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- 7.6 自由能 (Free Energy)
<https://www.jove.com/science-education/10730/?language=Chinese>
- 7.7 活化能 (Activation Energy)
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- 7.8 ATP 水解 (Hydrolysis of ATP)
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- 7.9 磷酸化 (Phosphorylation)
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- 7.10 诱导契合模型 (Induced-fit Model)
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- 7.12 酶活抑制 (Enzyme Inhibition)
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- 7.13 反馈抑制 (Feedback Inhibition)
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- 7.15 辅助因子和辅酶 (Cofactors and Coenzymes)
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- (8) 第 8 章 细胞呼吸 (Cellular Respiration) 全中文版本
<https://www.jove.com/science-education-library/51/cellular-respiration?language=Chinese>
- 8.1 什么是细胞呼吸 (What is Cellular Respiration)
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- 8.2 什么是糖酵解 (What is Glycolysis)
<https://www.jove.com/science-education/10737/?language=Chinese>
- 8.3 糖酵解需要能量的阶段 (Energy-requiring Steps of Glycolysis)
<https://www.jove.com/science-education/10738/?language=Chinese>
- 8.4 糖酵解释放能量的阶段 (Energy-releasing Steps of Glycolysis)
<https://www.jove.com/science-education/10739/?language=Chinese>
- 8.5 糖酵解的结果 (Outcomes of Glycolysis)
<https://www.jove.com/science-education/11006/?language=Chinese>
- 8.6 丙酮酸氧化 (Pyruvate Oxidation)
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- 8.7 柠檬酸循环 (The Citric Acid Cycle)
<https://www.jove.com/science-education/10741/?language=Chinese>
- 8.8 柠檬酸循环的产品 (Products of the Citric Acid Cycle)
<https://www.jove.com/science-education/10977/?language=Chinese>
- 8.9 电子传输链 (Electron Transport Chains)
<https://www.jove.com/science-education/10742/?language=Chinese>
- 8.10 化学渗透 (Chemiosmosis)

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- 8.11 电子载体 (Electron Carriers)
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- 8.12 ATP 产量 (ATP Yield)
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- 8.13 发酵 (Fermentation)
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- 8.14 饮食关系 (Dietary Connections)
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- (9) 第 9 章 光合作用 (Photosynthesis) 全中文版 <https://www.jove.com/science-education-library/52/photosynthesis>
- 9.1 什么是光合作用 (What is Photosynthesis)
<https://www.jove.com/science-education/10748/?language=Chinese>
- 9.2 光能 (Light as Energy)
<https://www.jove.com/science-education/10749/?language=Chinese>
- 9.3 叶绿体的结构 (Anatomy of Chloroplasts)
<https://www.jove.com/science-education/10750/?language=Chinese>
- 9.4 光系统 II (Photosystem II)
<https://www.jove.com/science-education/10751/ii?language=Chinese>
- 9.5 光系统 I (Photosystem I)
<https://www.jove.com/science-education/10752/i?language=Chinese>
- 9.6 卡尔文循环 (The Calvin Cycle)
<https://www.jove.com/science-education/10753/?language=Chinese>
- 9.7 C4 通路和 CAM (C4 Pathway and CAM)
<https://www.jove.com/science-education/10754/c4cam?language=Chinese>
- (10) 第 10 章 细胞周期和细胞分裂 (Cell Cycle and Division) 全中文版 <https://www.jove.com/science-education-library/53/cell-cycle-and-division>
- 10.1 什么是细胞周期 (What is the Cell Cycle)
<https://www.jove.com/science-education/10757/?language=Chinese>
- 10.2 原核生物的基因组 DNA (Genomic DNA in Prokaryotes)
<https://www.jove.com/science-education/10758/dna?language=Chinese>
- 10.3 二元裂变 (Binary Fission)
<https://www.jove.com/science-education/10759/?language=Chinese>
- 10.4 真核生物基因组 DNA (Genomic DNA in Eukaryotes)
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- 10.5 间期 (Interphase)
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<https://www.jove.com/science-education/10764/?language=Chinese>

10.9 癌症 (Cancer)

<https://www.jove.com/science-education/10987/?language=Chinese>

3. 遗传学 (Genetics)。

(11) 第 11 章 减数分裂 (Meiosis) **全中文版**

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11.1 什么是减数分裂 (What is Meiosis)

<https://www.jove.com/science-education/10766/?language=Chinese>

11.2 减数分裂 I (Meiosis I)

<https://www.jove.com/science-education/10767/?language=Chinese>

11.3 减数分裂 II (Meiosis II)

<https://www.jove.com/science-education/10768/?language=Chinese>

11.4 染色体互换 (Crossing Over)

<https://www.jove.com/science-education/10769/?language=Chinese>

11.5 不分离 (Nondisjunction)

<https://www.jove.com/science-education/11013/?language=Chinese>

(12) 第 12 章 经典遗传学与现代遗传学 (Membranes and Cellular Transport)

<https://www.jove.com/science-education-library/56/classical-and-modern-genetics> **全中文版**

12.1 遗传术语 (Genetic Lingo)

<https://www.jove.com/science-education/10771/?language=Chinese>

12.2 Punnett 方块 (Punnett Squares)

<https://www.jove.com/science-education/10772/punnett-?language=Chinese>

12.3 单杂交组合 (Monohybrid Crosses)

<https://www.jove.com/science-education/10773/?language=Chinese>

12.4 双杂交组合 (Dihybrid Crosses)

<https://www.jove.com/science-education/10774/?language=Chinese>

12.5 隔离法 (Law of Segregation)

<https://www.jove.com/science-education/10978/?language=Chinese>

12.6 独立重组原则 (Law of Independent Assortment)

<https://www.jove.com/science-education/10979/?language=Chinese>

12.7 测试十字架 (Test Cross)

<https://www.jove.com/science-education/11012/?language=Chinese>

12.8 系谱分析 (Pedigree Analysis)

<https://www.jove.com/science-education/10775/?language=Chinese>

12.9 概率定律 (Probability Laws)

<https://www.jove.com/science-education/10776/?language=Chinese>

12.10 多等位基因性状 (Multiple Allele Traits)

<https://www.jove.com/science-education/10777/?language=Chinese>

12.11 染色体遗传学理论 (Chromosomal Theory of Inheritance)

<https://www.jove.com/science-education/11010/?language=Chinese>

12.12 非核遗传 (Non-nuclear Inheritance)

<https://www.jove.com/science-education/11007/?language=Chinese>

12.13 X 连锁特征 (X-linked Traits)

- <https://www.jove.com/science-education/10980/x?language=Chinese>
- 12.14 伴性遗传疾病 (Sex-linked Disorders)
<https://www.jove.com/science-education/10981/?language=Chinese>
- 12.15 X 染色体失活 (X-Inactivation)
<https://www.jove.com/science-education/11002/x?language=Chinese>
- 12.16 异位显性 (Epistasis)
<https://www.jove.com/science-education/10779/?language=Chinese>
- 12.17 多基因性状 (Polygenic Traits)
<https://www.jove.com/science-education/10778/?language=Chinese>
- 12.18 基因多效性 (Pleiotropy)
<https://www.jove.com/science-education/10780/?language=Chinese>
- 12.19 先天与后天 (Nature and Nurture)
<https://www.jove.com/science-education/10781/?language=Chinese>
- (13) 第 13 章 DNA 结构与功能 (DNA Structure and Function)
<https://www.jove.com/science-education-library/57/dna-structure-and-function> **全中文版视频**
- 13.1DNA 螺旋 (The DNA Helix)
<https://www.jove.com/science-education/10784/dna?language=Chinese>
- 13.2DNA 包装 (DNA Packaging)
<https://www.jove.com/science-education/10785/dna?language=Chinese>
- 13.3基因的结构 (Organization of Genes)
<https://www.jove.com/science-education/10786/?language=Chinese>
- 13.4染色体核型分析 (Karyotyping)
<https://www.jove.com/science-education/10787/?language=Chinese>
- 13.5原核生物的复制 (Replication in Prokaryotes)
<https://www.jove.com/science-education/10788/?language=Chinese>
- 13.6真核生物的复制 (Replication in Eukaryotes)
<https://www.jove.com/science-education/10789/?language=Chinese>
- 13.7校对 (Proofreading)
<https://www.jove.com/science-education/10790/?language=Chinese>
- 13.8 错配 (Mismatch Repair)
<https://www.jove.com/science-education/10791/?language=Chinese>
- 13.9核苷酸切除修复(Nucleotide Excision Repair)
<https://www.jove.com/science-education/10792/?language=Chinese>
- 13.10 突变 (Mutations)
<https://www.jove.com/science-education/10793/?language=Chinese>
- 13.11 转录 (Transcription)
<https://www.jove.com/science-education/10794/?language=Chinese>
- 13.12 翻译 (Translation)
<https://www.jove.com/science-education/10795/?language=Chinese>
- 13.13 细菌转化 (Bacterial Transformation)
<https://www.jove.com/science-education/10982/?language=Chinese>
- (14) 第 14 章 基因表达 (Gene Expression)
<https://www.jove.com/science-education-library/58/gene-expression>

- 14.1 什么是基因表达 (What is Gene Expression)
<https://www.jove.com/science-education/10797/?language=Chinese>
- 14.2 中心法则 (The Central Dogma)
<https://www.jove.com/science-education/10798/?language=Chinese>
- 14.3 转录因子 (Transcription Factors)
<https://www.jove.com/science-education/10983/?language=Chinese>
- 14.4 RNA 结构 (RNA Structure)
<https://www.jove.com/science-education/10799/rna?language=Chinese>
- 14.5 RNA 稳定性 (RNA Stability)
<https://www.jove.com/science-education/11009/rna?language=Chinese>
- 14.6 前 mRNA 加工 (pre-mRNA processing)
<https://www.jove.com/science-education/11003/mrna?language=Chinese>
- 14.7 核糖核酸 (RNA) 的种类 (Types of RNA)
<https://www.jove.com/science-education/10800/?language=Chinese>
- 14.8 微核糖核酸 (MicroRNAs)
<https://www.jove.com/science-education/10801/?language=Chinese>
- 14.9 RNA 拼接 (RNA Splicing)
<https://www.jove.com/science-education/10802/rna?language=Chinese>
- 14.10 表观遗传调控 (Epigenetic Regulation)
<https://www.jove.com/science-education/10803/?language=Chinese>
- 14.11 RNA 干扰 (RNA Interference)
<https://www.jove.com/science-education/10804/rna-?language=Chinese>
- 14.12 操纵子 (Operons)
<https://www.jove.com/science-education/10984/?language=Chinese>
- (15) 第 15 章 生物技术 (Biotechnology) **全中文版视频**
<https://www.jove.com/science-education-library/59/biotechnology>
- 15.1 什么是基因工程 (What is Genetic Engineering)
<https://www.jove.com/science-education-library/59/biotechnology?language=Chinese>
- 15.2 抗生素筛选 (Antibiotic Selection)
<https://www.jove.com/science-education/10807/antibiotic-selection?language=Chinese>
- 15.3 重组 DNA (Recombinant DNA)
<https://www.jove.com/science-education/10808/dna?language=Chinese>
- 15.4 转基因生物 (Transgenic Organisms)
<https://www.jove.com/science-education/10809/?language=Chinese>
- 15.5 成体干细胞 (Adult Stem Cells)
<https://www.jove.com/science-education/10810/?language=Chinese>
- 15.6 胚胎干细胞 (Embryonic Stem Cells)
<https://www.jove.com/science-education/10811/?language=Chinese>
- 15.7 诱导多能干细胞 (IPS) (Induced Pluripotent Stem Cells)
<https://www.jove.com/science-education/10812/?language=Chinese>
- 15.8 体外致突变性 (In-vitro Mutagenesis)

<https://www.jove.com/science-education/10813/?language=Chinese>

15.9 DNA 分离 (DNA Isolation)

<https://www.jove.com/science-education/10814/dna?language=Chinese>

15.10 基因治疗 (Gene Therapy)

<https://www.jove.com/science-education/10815/?language=Chinese>

15.11 生殖性克隆 (Reproductive Cloning)

<https://www.jove.com/science-education/10816/?language=Chinese>

15.12 基因编辑技术 (CRISPR)

<https://www.jove.com/science-education/10817/?language=Chinese>

15.13 互补 DNA (Complementary DNA)

<https://www.jove.com/science-education/10818/dna?language=Chinese>

15.14 PCR (PCR)

<https://www.jove.com/science-education/10819/pcr?language=Chinese>

15.15 基因组学 (Genomics)

<https://www.jove.com/science-education/11122/genomics>

(16) 第 16 章 病毒 (Viruses) **全中文版视频**

<https://www.jove.com/science-education-library/60/viruses>

16.1 什么是病毒 (What are Viruses)

<https://www.jove.com/science-education/10821/?language=Chinese>

16.2 病毒结构 (Viral Structure)

<https://www.jove.com/science-education/10822/?language=Chinese>

16.3 噬菌体的溶解周期 (Lytic Cycle of Bacteriophages)

<https://www.jove.com/science-education/10823/?language=Chinese>

16.4 噬菌体的溶原循环 (Lysogenic Cycle of Bacteriophages)

<https://www.jove.com/science-education/10824/?language=Chinese>

16.5 逆转录病毒生命周期 (Retrovirus Life Cycles)

<https://www.jove.com/science-education/10825/?language=Chinese>

16.6 病毒重组 (Viral Recombination)

<https://www.jove.com/science-education/10826/?language=Chinese>

16.7 病毒突变 (Viral Mutations)

<https://www.jove.com/science-education/10827/?language=Chinese>

4. 人体生物学 (Human Biology)

(17) 第 17 章 营养与消化 (Nutrition and Digestion) **全中文版视频**

<https://www.jove.com/science-education-library/62/nutrition-and-digestion?language=Chinese>

17.1 什么是单胃消化 (What is Monogastric Digestion)

<https://www.jove.com/science-education/10829/?language=Chinese>

17.2 肠道解剖 (Anatomy of the Intestines)

<https://www.jove.com/science-education/10830/?language=Chinese>

17.3 附属器官 (Accessory Organs)

<https://www.jove.com/science-education/10831/?language=Chinese>

17.4 脂质消化 (Lipid Digestion)

<https://www.jove.com/science-education/10832/?language=Chinese>

17.5 蛋白质消化 (Protein Digestion)

- <https://www.jove.com/science-education/10833/?language=Chinese>
- 17.6 碳水化合物消化 (Carbohydrate Digestion)
- <https://www.jove.com/science-education/10834/?language=Chinese>
- 17.7 神经调节 (Neural Regulation)
- <https://www.jove.com/science-education/10835/?language=Chinese>
- 17.8 激素调节 (Hormonal Regulation)
- <https://www.jove.com/science-education/10836/?language=Chinese>
- (18) 第 18 章 神经系统 (Nervous System) <https://www.jove.com/science-education-library/63/nervous-system?language=Chinese> 全中文版视频
- 18.1 什么是神经系统 (What is a Nervous System)
- <https://www.jove.com/science-education/10838/?language=Chinese>
- 18.2 副交感神经系统 (The Parasympathetic Nervous System)
- <https://www.jove.com/science-education/10839/?language=Chinese>
- 18.3 交感神经系统 (The Sympathetic Nervous System)
- <https://www.jove.com/science-education/10840/?language=Chinese>
- 18.4 血脑屏障 (The Blood-brain Barrier)
- <https://www.jove.com/science-education/10841/?language=Chinese>
- 18.5 神经元结构 (Neuron Structure)
- <https://www.jove.com/science-education/10842/?language=Chinese>
- 18.6 突触 (The Synapse)
- <https://www.jove.com/science-education/10997/?language=Chinese>
- 18.7 胶质细胞 (Glial Cells)
- <https://www.jove.com/science-education/10843/?language=Chinese>
- 18.8 静息膜电位 (The Resting Membrane Potential)
- <https://www.jove.com/science-education/10845/?language=Chinese>
- 18.9 动作电位 (Action Potentials)
- <https://www.jove.com/science-education/10844/?language=Chinese>
- 18.10 增强效应 (Long-term Potentiation)
- <https://www.jove.com/science-education/10846/?language=Chinese>
- 18.11 长期抑郁 (Long-term Depression)
- <https://www.jove.com/science-education/10847/?language=Chinese>
- (19) 第 19 章 感觉系统 (Sensory Systems) 全中文版视频
- <https://www.jove.com/science-education-library/64/sensory-systems>
- 19.1 什么是感官系统 (What is a Sensory System)
- <https://www.jove.com/science-education/10849/?language=Chinese>
- 19.2 舌头和味蕾 (The Tongue and Taste Buds)
- <https://www.jove.com/science-education/10850/?language=Chinese>
- 19.3 味觉 (Gustation)
- <https://www.jove.com/science-education/10851/?language=Chinese>
- 19.4 嗅觉 (Olfaction)
- <https://www.jove.com/science-education/10852/?language=Chinese>
- 19.5 听力 (Hearing)
- <https://www.jove.com/science-education/10853/?language=Chinese>
- 19.6 毛细胞 (Hair Cells)

- <https://www.jove.com/science-education/10854/?language=Chinese>
- 19.7 耳蜗 (The Cochlea)
<https://www.jove.com/science-education/10855/?language=Chinese>
- 19.8 前庭系统 (The Vestibular System)
<https://www.jove.com/science-education/10856/?language=Chinese>
- 19.9 视网膜(The Retina)
<https://www.jove.com/science-education/10857/?language=Chinese>
- 19.10 视觉 (Vision)
<https://www.jove.com/science-education/10858/?language=Chinese>
- 19.11 体感(Somatosensation)
<https://www.jove.com/science-education/10859/?language=Chinese>
- 19.12 温度感知 (Thermosensation)
<https://www.jove.com/science-education/10860/?language=Chinese>
- (20) 第 20 章 运动系统 (Musculoskeletal System) **全中文版视频**
<https://www.jove.com/science-education-library/65/musculoskeletal-system>
- 20.1 什么是骨骼系统 (What is the Skeletal System)
<https://www.jove.com/science-education/10863/?language=Chinese>
- 20.2 骨结构 (Bone Structure)
<https://www.jove.com/science-education/10864/?language=Chinese>
- 20.3 关节 (Joints)
<https://www.jove.com/science-education/10865/?language=Chinese>
- 20.4 骨重塑 (Bone Remodeling)
<https://www.jove.com/science-education/10866/?language=Chinese>
- 20.5 肌肉骨骼解剖 (Skeletal Muscle Anatomy)
<https://www.jove.com/science-education/10867/?language=Chinese>
- 20.6 骨骼肌纤维分类 (Classification of Skeletal Muscle Fibers)
<https://www.jove.com/science-education/10868/?language=Chinese>
- 20.7 肌肉收缩 (Muscle Contraction)
<https://www.jove.com/science-education/10869/?language=Chinese>
- 20.8 跨桥循环 (Cross-bridge Cycle)
<https://www.jove.com/science-education/10870/?language=Chinese>
- 20.9 运动单元 (Motor Units)
<https://www.jove.com/science-education/10871/?language=Chinese>
- 20.10 脊髓 (The Spinal Cord)
<https://www.jove.com/science-education/10872/?language=Chinese>
- 20.11 痛觉 (Nociception)
<https://www.jove.com/science-education/10873/?language=Chinese>
- (21) 第 21 章 内分泌系统 (Endocrine System) **全中文版视频**
<https://www.jove.com/science-education-library/66/endocrine-system>
- 21.1 什么是内分泌系统 (What is the Endocrine System)
<https://www.jove.com/science-education/10875/?language=Chinese>
- 21.2 激素的类型 (Types of Hormones)
<https://www.jove.com/science-education/10988/?language=Chinese>
- 21.3 细胞内激素受体 (Intracellular Hormone Receptors)

- <https://www.jove.com/science-education/10876/?language=Chinese>
- 21.4 细胞表面信号 (Cell-surface Signaling)
- <https://www.jove.com/science-education/10877/?language=Chinese>
- 21.5 细胞表面信号 (Feedback Loops)
- <https://www.jove.com/science-education/10878/?language=Chinese>
- 21.6 下丘脑 - 垂体轴 (Hypothalamic-Pituitary Axis)
- <https://www.jove.com/science-education/10879/-?language=Chinese>
- (22) 第 22 章 循环系统和呼吸系统 (Viruses) **全中文版视频**
- <https://www.jove.com/science-education-library/67/circulatory-and-pulmonary-systems>
- 22.1 呼吸系统 (The Respiratory System)
- <https://www.jove.com/science-education/10881/?language=Chinese>
- 22.2 呼吸 (Breathing)
- <https://www.jove.com/science-education/10882/?language=Chinese>
- 22.3 肺活量 (Lung Capacity)
- <https://www.jove.com/science-education/10883/?language=Chinese>
- 22.4 气体交换和运输 (Gas Exchange and Transport)
- <https://www.jove.com/science-education/10884/?language=Chinese>
- 22.5 循环系统的解剖 (Anatomy of the Circulatory System)
- <https://www.jove.com/science-education/10885/?language=Chinese>
- 22.6 心脏解剖 (Anatomy of the Heart)
- <https://www.jove.com/science-education/10886/?language=Chinese>
- 22.7 心脏循环 (The Cardiac Cycle)
- <https://www.jove.com/science-education/10887/?language=Chinese>
- 22.8 血流 (Blood Flow)
- <https://www.jove.com/science-education/10888/?language=Chinese>
- (23) 第 23 章 渗透调节和排泄 (Osmoregulation and Excretion)
- <https://www.jove.com/science-education-library/68/osmoregulation-and-excretion> **全中文版视频**
- 23.1 什么是渗透调节和排泄 (What Are Osmoregulation and Excretion)
- <https://www.jove.com/science-education/11001/?language=Chinese>
- 23.2 肾结构 (Kidney Structure)
- <https://www.jove.com/science-education/10890/?language=Chinese>
- 23.3 过滤 (Filtration)
- <https://www.jove.com/science-education/10891/?language=Chinese>
- 23.4 尿素循环 (Urea Cycle)
- <https://www.jove.com/science-education/10892/?language=Chinese>
- 23.5 激素调节 (Hormonal Regulation)
- <https://www.jove.com/science-education/10893/?language=Chinese>
- 23.6 排泄系统比较 (Comparative Excretory Systems)
- <https://www.jove.com/science-education/10998/?language=Chinese>
- 23.7 鱼类的渗透调节 (Osmoregulation in Fishes)
- <https://www.jove.com/science-education/10989/?language=Chinese>
- 23.8 昆虫中的渗透调节 (Osmoregulation in Insects)

- <https://www.jove.com/science-education/10990/?language=Chinese>
- (24) 第 24 章 免疫系统 (Immune System) <https://www.jove.com/science-education-library/69/immune-system> 全中文版视频
- 24.1 什么是免疫系统 (What is the Immune System)
<https://www.jove.com/science-education/10895/?language=Chinese>
- 24.2 细胞介导的免疫反应 (Cell-mediated Immune Responses)
<https://www.jove.com/science-education/10896/?language=Chinese>
- 24.3 体液免疫反应 (Humoral Immune Responses)
<https://www.jove.com/science-education/10897/?language=Chinese>
- 24.4 抗体结构 (Antibody Structure)
<https://www.jove.com/science-education/10898/?language=Chinese>
- 24.5 亲和力 (Affinity and Avidity)
<https://www.jove.com/science-education/10899/?language=Chinese>
- 24.6 交叉反应 (Cross-reactivity)
<https://www.jove.com/science-education/10900/?language=Chinese>
- 24.7 过敏反应 (Allergic Reactions)
<https://www.jove.com/science-education/10901/?language=Chinese>
- 24.8 发炎 (Inflammation)
<https://www.jove.com/science-education/10902/?language=Chinese>
- 24.9 接种疫苗 (Vaccinations)
<https://www.jove.com/science-education/10903/?language=Chinese>
- (25) 第 25 章 生殖和发育 (Reproduction and Development)
<https://www.jove.com/science-education-library/70/reproduction-and-development> 全中文版视频
- 25.1 精子发生 (Spermatogenesis)
<https://www.jove.com/science-education/10905/?language=Chinese>
- 25.2 卵子发生 (Oogenesis)
<https://www.jove.com/science-education/10906/?language=Chinese>
- 25.3 受精 (Fertilization)
<https://www.jove.com/science-education/10907/?language=Chinese>
- 25.4 解理和囊胚形成 (Cleavage and Blastulation)
<https://www.jove.com/science-education/10908/?language=Chinese>
- 25.5 原肠胚形成 (Gastrulation)
<https://www.jove.com/science-education/10909/?language=Chinese>
- 25.6 神经胚形成 (Neurulation)
<https://www.jove.com/science-education/10910/?language=Chinese>
- 25.7 细胞迁移 (Cell Migration)
<https://www.jove.com/science-education/10911/?language=Chinese>
- 25.8 判定 (Determination)
<https://www.jove.com/science-education/10912/?language=Chinese>
5. 生态学 (Ecology)
- (26) 第 26 章 行为 (Behavior) 全中文版视频
<https://www.jove.com/science-education-library/72/behavior>
- 26.1 什么是行为 (What is Behavior)

- <https://www.jove.com/science-education/10914/?language=Chinese>
- 26.2 印迹 (Imprinting)
<https://www.jove.com/science-education/10915/?language=Chinese>
- 26.3 交流 (Communication)
<https://www.jove.com/science-education/10916/?language=Chinese>
- 26.4 迁移 (Migration)
<https://www.jove.com/science-education/10917/?language=Chinese>
- 26.5 伴侣选择 (Mate Choice)
<https://www.jove.com/science-education/10918/?language=Chinese>
- 26.6 修复了的动作模式 (Fixed Action Patterns)
<https://www.jove.com/science-education/10919/?language=Chinese>
- 26.7 最佳觅食 (Optimal Foraging)
<https://www.jove.com/science-education/10920/?language=Chinese>
- 26.8 父母照顾 (Parental Care)
<https://www.jove.com/science-education/10921/?language=Chinese>
- 26.9 利他主义 (Altruism)
<https://www.jove.com/science-education/10922/?language=Chinese>
- 26.10 包容性健身 (Inclusive Fitness)
<https://www.jove.com/science-education/10923/?language=Chinese>
- (27) 第 27 章 生态系统 (Ecosystems) <https://www.jove.com/science-education-library/73/ecosystems> 全中文版视频
- 27.1 什么是生态系统 (What is an Ecosystem)
<https://www.jove.com/science-education/10926/?language=Chinese>
- 27.2 营养级别 (Trophic Levels)
<https://www.jove.com/science-education/10927/?language=Chinese>
- 27.3 初级生产 (Primary Production)
<https://www.jove.com/science-education/10928/?language=Chinese>
- 27.4 生产效率 (Production Efficiency)
<https://www.jove.com/science-education/10929/?language=Chinese>
- 27.5 生产效率 (Trophic Efficiency)
<https://www.jove.com/science-education/10930/?language=Chinese>
- 27.6 什么是生物地球化学循环 (What are Biogeochemical Cycles)
<https://www.jove.com/science-education/10931/?language=Chinese>
- 27.7 水循环 (The Water Cycle)
<https://www.jove.com/science-education/10932/?language=Chinese>
- 27.8 碳循环 (The Carbon Cycle)
<https://www.jove.com/science-education/10933/?language=Chinese>
- 27.9 氮循环 (The Nitrogen Cycle)
<https://www.jove.com/science-education/10934/?language=Chinese>
- 27.10 磷循环 (The Phosphorus Cycle)
<https://www.jove.com/science-education/10935/?language=Chinese>
- 27.11 硫循环 (The Sulfur Cycle)
<https://www.jove.com/science-education/10936/?language=Chinese>
- 27.12 生物修复 (Bioremediation)

- <https://www.jove.com/science-education/10937/?language=Chinese>
- (28) 第 28 章 种群生态学和群落生态学 (Population and Community Ecology)
<https://www.jove.com/science-education-library/74/population-and-community-ecology> 全中文版视频
- 28.1 什么是种群和社区 (What are Populations and Communities)
<https://www.jove.com/science-education/10939/?language=Chinese>
- 28.2 分布及分散 (Distribution and Dispersion)
<https://www.jove.com/science-education/10940/?language=Chinese>
- 28.3 生活历史 (Life Histories)
<https://www.jove.com/science-education/10941/?language=Chinese>
- 28.4 能源预算 (Energy Budgets)
<https://www.jove.com/science-education/10942/?language=Chinese>
- 28.5 人口增长 (Population Growth)
<https://www.jove.com/science-education/10943/?language=Chinese>
- 28.6 生态位 (Ecological Niches)
<https://www.jove.com/science-education/10968/?language=Chinese>
- 28.7 生态继承 (Ecological Succession)
<https://www.jove.com/science-education/10991/?language=Chinese>
- 28.8 拱心石物种 (Keystone Species)
<https://www.jove.com/science-education/10992/?language=Chinese>
- 28.9 合作关系 (Symbiosis)
<https://www.jove.com/science-education/10944/?language=Chinese>
- 28.10 竞争 (Competition)
<https://www.jove.com/science-education/10993/?language=Chinese>
- 28.11 捕食者与猎物的相互作用 (Predator-Prey Interactions)
<https://www.jove.com/science-education/10996/?language=Chinese>
- 28.12 生态干扰 (Ecological Disturbance)
<https://www.jove.com/science-education/11123/ecological-disturbance>
- (29) 第 29 章 生物多样性与保护 (Biodiversity and Conservation)
<https://www.jove.com/science-education-library/76/biodiversity-and-conservation> 全中文版视频
- 29.1 什么是生物多样性 (What is Biodiversity)
<https://www.jove.com/science-education/10950/?language=Chinese>
- 29.2 对生物多样性的威胁 (Threats to Biodiversity)
<https://www.jove.com/science-education/10951/?language=Chinese>
- 29.3 生物多样性和人类价值观 (Biodiversity and Human Values)
<https://www.jove.com/science-education/10952/?language=Chinese>
- 29.4 什么是保护生物学 (What is Conservation Biology)
<https://www.jove.com/science-education/10994/?language=Chinese>
- 29.5 可持续发展 (Sustainable Development)
<https://www.jove.com/science-education/10995/?language=Chinese>
- 29.6 小规模群体的保护 (Conservation of Small Populations)
<https://www.jove.com/science-education/10999/?language=Chinese>
- 29.7 什么是天气 (What is Weather)

- <https://www.jove.com/science-education/10946/?language=Chinese>
- 29.8 什么是气候 (What is Climate)
<https://www.jove.com/science-education/10947/?language=Chinese>
- 29.9 全球气候变化 (Global Climate Change)
<https://www.jove.com/science-education/10948/?language=Chinese>
- 29.10 保护衰退群体 (Conservation of Declining Populations)
<https://www.jove.com/science-education/11124/conservation-of-declining-populations>
- 29.11 栖息地破碎 (Habitat Fragmentation)
<https://www.jove.com/science-education/11125/habitat-fragmentation>
6. 进化 (Evolution)
- (30) 第 30 章 物种形成和物种多样性 (Speciation and Diversity) **全中文版视频**
<https://www.jove.com/science-education-library/78/speciation-and-diversity>
- 30.1 什么是物种 (What is a Species)
<https://www.jove.com/science-education/10954/?language=Chinese>
- 30.2 物种的形成 (Formation of Species)
<https://www.jove.com/science-education/10955/?language=Chinese>
- 30.3 形态比率 (Speciation Rates)
<https://www.jove.com/science-education/10956/?language=Chinese>
- 30.4 物种遗传学 (Genetics of Speciation)
<https://www.jove.com/science-education/11126/genetics-of-speciation>
- 30.5 混合区 (Hybrid Zones)
<https://www.jove.com/science-education/11127/hybrid-zones>
- (31) 第 31 章 自然选择 (Ecosystems) <https://www.jove.com/science-education-library/79/natural-selection> **全中文版视频**
- 31.1 什么是自然选择 (What is Natural Selection)
<https://www.jove.com/science-education/10958/?language=Chinese>
- 31.2 选择类型 (Types of Selection)
<https://www.jove.com/science-education/10959/?language=Chinese>
- 31.3 频率相关选择 (Frequency-dependent Selection)
<https://www.jove.com/science-education/10960/?language=Chinese>
- 31.4 自然选择的限制 (Limits to Natural Selection)
<https://www.jove.com/science-education/11000/?language=Chinese>
- (32) 第 32 章 群体遗传学 (Population Genetics) **全中文版视频**
<https://www.jove.com/science-education-library/80/population-genetics>
- 32.1 什么是种群遗传学 (What is Population Genetics)
<https://www.jove.com/science-education/10962/?language=Chinese>
- 32.2 哈代 - 温伯格原理 (Hardy-Weinberg Principle)
<https://www.jove.com/science-education/10963/?language=Chinese>
- 32.3 突变, 基因流和遗传漂移 (Mutation, Gene Flow, and Genetic Drift)
<https://www.jove.com/science-education/10964/?language=Chinese>
- 32.4 遗传漂移 (Genetic Drift)
<https://www.jove.com/science-education/11128/genetic-drift>
- 32.5 基因流 (Gene Flow)

- <https://www.jove.com/science-education/11129/gene-flow>
- (33) 第 33 章 进化史 (Evolutionary History) **全中文版视频**
<https://www.jove.com/science-education-library/81/evolutionary-history>
- 33.1 系统发育树 (Phylogenetic Trees)
<https://www.jove.com/science-education/11014/?language=Chinese>
- 33.2 早期地球的条件 (Conditions on Early Earth)
<https://www.jove.com/science-education/11015/?language=Chinese>
- 33.3 土地殖民化 (The Colonization of Land)
<https://www.jove.com/science-education/11016/?language=Chinese>
- 33.4 进化史是什么 (What is Evolutionary History)
<https://www.jove.com/science-education/11130/what-is-evolutionary-history>
- 33.5 进化的证据 (The Evidence for Evolution)
<https://www.jove.com/science-education/11131/the-evidence-for-evolution>
- 33.6 化石记录 (The Fossil Record)
<https://www.jove.com/science-education/11132/the-fossil-record>
- 33.7 趋同进化 (Convergent Evolution)
<https://www.jove.com/science-education/11133/convergent-evolution>
7. 植物生物学 (Plant Biology)
- (34) 第 34 章 植物的结构, 生长和营养 (Plant Structure, Growth, and Nutrition)
<https://www.jove.com/science-education-library/96/plant-structure-growth-and-nutrition>
- 34.1 植物多样性概述 (Introduction to Plant Diversity)
<https://www.jove.com/science-education/11086/introduction-to-plant-diversity>
- 34.2 无维管无核植物 (Non-vascular Seedless Plants)
<https://www.jove.com/science-education/11087/non-vascular-seedless-plants>
- 34.3 有维管无核植物 (Seedless Vascular Plants)
<https://www.jove.com/science-education/11088/seedless-vascular-plants>
- 34.4 种子植物概述 (Introduction to Seed Plants)
<https://www.jove.com/science-education/11089/introduction-to-seed-plants>
- 34.5 植物的基本结构: 根茎叶 (Basic Plant Anatomy: Roots, Stems, and Leaves)
<https://www.jove.com/science-education/11090/basic-plant-anatomy-roots-stems-and-leaves>
- 34.6 植物细胞和组织 (Plant Cells and Tissues)
<https://www.jove.com/science-education/11091/plant-cells-and-tissues>
- 34.7 分生组织与植物生长 (Meristems and Plant Growth)
<https://www.jove.com/science-education/11092/meristems-and-plant-growth>

- 34.8 根, 芽的出生和次生长 (Primary and Secondary Growth in Roots and Shoots)
<https://www.jove.com/science-education/11093/primary-and-secondary-growth-in-roots-and-shoots>
- 34.9 形态发生 (Morphogenesis)
<https://www.jove.com/science-education/11094/morphogenesis>
- 34.10 光的获得 (Light Acquisition)
<https://www.jove.com/science-education/11095/light-acquisition>
- 34.11 水和矿物质的获得 (Water and Mineral Acquisition)
<https://www.jove.com/science-education/11096/water-and-mineral-acquisition>
- 34.12 资源的短途运输 (Short-distance Transport of Resources)
<https://www.jove.com/science-education/11098/xylem-and-transpiration-driven-transport-of-resources>
- 34.13 木质部和蒸腾驱动的资源运输 (Xylem and Transpiration-driven Transport of Resources)
<https://www.jove.com/science-education/11098/xylem-and-transpiration-driven-transport-of-resources>
- 34.14 气孔对蒸腾的调节 (Regulation of Transpiration by Stomata)
<https://www.jove.com/science-education/11099/regulation-of-transpiration-by-stomata>
- 34.15 减少水流失的适应性措施 (Adaptations that Reduce Water Loss)
<https://www.jove.com/science-education/11100/adaptations-that-reduce-water-loss>
- 34.16 韧皮部和糖的运输 (Phloem and Sugar Transport)
<https://www.jove.com/science-education/11101/phloem-and-sugar-transport>
- 34.17 土壤生态系统 (The Soil Ecosystem)
<https://www.jove.com/science-education/11102/the-soil-ecosystem>
- 34.18 植物营养的关键要素 (Key Elements for Plant Nutrition)
<https://www.jove.com/science-education/11103/key-elements-for-plant-nutrition>
- 34.19 细菌和真菌在植物营养中的作用 (The Roles of Bacteria and Fungi in Plant Nutrition)
<https://www.jove.com/science-education/11104/the-roles-of-bacteria-and-fungi-in-plant-nutrition>
- 34.20 附生植物, 寄生虫和食肉动物 (Epiphytes, Parasites, and Carnivores)
<https://www.jove.com/science-education/11105/epiphytes-parasites-and-carnivores>
- 34.21 质外体和共质体 (The Apoplast and Symplast)
<https://www.jove.com/science-education/11106/the-apoplast-and-symplast>
- (35) 第 35 章 植物的繁殖 (Plant Reproduction) <https://www.jove.com/science-education-library/97/plant-reproduction>

- 35.1 花粉和花的结构 (Pollination and Flower Structure)
<https://www.jove.com/science-education/11107/pollination-and-flower-structure>
- 35.2 被子植物的生命周期 (The Angiosperm Life Cycle)
<https://www.jove.com/science-education/11108/the-angiosperm-life-cycle>
- 35.3 种子的结构和孢芽植物的早期发育 (Seed Structure and Early Development of the Sporophyte)
<https://www.jove.com/science-education/11109/seed-structure-and-early-development-of-the-sporophyte>
- 35.4 果实的发育, 结构和功能 (Fruit Development, Structure, and Function)
<https://www.jove.com/science-education/11110/fruit-development-structure-and-function>
- 35.5 无性繁殖 (Asexual Reproduction)
<https://www.jove.com/science-education/11111/asexual-reproduction>
- 35.6 植物组织培养 (Plant Tissue Culture)
<https://www.jove.com/science-education/11112/plant-tissue-culture>
- 35.7 植物育种与生物技术 (Plant Breeding and Biotechnology)
<https://www.jove.com/science-education/11113/plant-breeding-and-biotechnology>
- (36) 第 36 章 植物对环境的反应 (Plant Responses to the Environment)
<https://www.jove.com/science-education-library/98/plant-responses-to-the-environment>
 - 36.1 植物激素 (Plant Hormones)
<https://www.jove.com/science-education/11114/plant-hormones>
 - 36.2 光受体和植物对光的反应 (Photoreceptors and Plant Responses to Light)
<https://www.jove.com/science-education/11115/photoreceptors-and-plant-responses-to-light>
 - 36.3 生物钟和季节性反应 (Biological Clocks and Seasonal Responses)
<https://www.jove.com/science-education/11116/biological-clocks-and-seasonal-responses>
 - 36.4 对重力和触摸的反应 (Responses to Gravity and Touch)
<https://www.jove.com/science-education/11117/responses-to-gravity-and-touch>
 - 36.5 对干旱和洪水的反应 (Responses to Drought and Flooding)
<https://www.jove.com/science-education/11118/responses-to-drought-and-flooding>
 - 36.6 对冷热压力的反应 (Responses to Heat and Cold Stress)
<https://www.jove.com/science-education/11119/responses-to-heat-and-cold-stress>
 - 36.7 对高盐压力的反应 (Responses to Salt Stress)
<https://www.jove.com/science-education/11120/responses-to-salt-stress>
 - 36.8 对病原体和草食动物的防御 (Defenses Against Pathogens and

Herbivores)

<https://www.jove.com/science-education/11121/defenses-against-pathogens-and-herbivores>

二、社会心理学核心课程 (Core Social Psychology), <https://www.jove.com/science-education/corepsych> 共 66 个视频。视频全部有中文字幕

(1) 第 1 章 研究方法 (Research Methods)

<https://www.jove.com/science-education-library/86/research-methods>

1.1 科学方法 (The Scientific Method)

<https://www.jove.com/science-education/11018/the-scientific-method>

1.2 案例研究 (Case Studies)

<https://www.jove.com/science-education/11019/case-studies>

1.3 自然观察 (Naturalistic Observations)

<https://www.jove.com/science-education/11020/naturalistic-observations>

1.4 调查 (Surveys)

<https://www.jove.com/science-education/11021/surveys>

1.5 档案研究 (Archival Research)

<https://www.jove.com/science-education/11022/archival-research>

1.6 纵向研究 (Longitudinal Research)

<https://www.jove.com/science-education/11023/longitudinal-research>

1.7 横断面研究 (Cross-Sectional Research)

<https://www.jove.com/science-education/11024/cross-sectional-research>

1.8 分组设计 (Group Design)

<https://www.jove.com/science-education/11025/group-design>

1.9 析因设计 (Factorial Design)

<https://www.jove.com/science-education/11026/factorial-design>

1.10 安慰剂效应 (The Placebo Effect)

<https://www.jove.com/science-education/11027/the-placebo-effect>

1.11 设盲法 (Blind Procedures)

<https://www.jove.com/science-education/11028/blind-procedures>

1.12 研究中的伦理 (Ethics in Research)

<https://www.jove.com/science-education/11029/ethics-in-research>

1.13 相关 (Correlations)

<https://www.jove.com/science-education/11030/correlations>

1.14 因果 (Cause and Effect)

<https://www.jove.com/science-education/11031/cause-and-effect>

1.15 可靠性和有效性 (Reliability and Validity)

<https://www.jove.com/science-education/11032/reliability-and-validity>

1.16 向均值回归 (Regression Toward the Mean)

<https://www.jove.com/science-education/11033/regression-toward-the-mean>

1.17 集中趋势测度 (Measures of Central Tendency)

<https://www.jove.com/science-education/11034/measures-of-central->

[tendency](#)

1.18 变化：正态分布，范围和标准偏差 (Variation: Normal Distribution, Range, and Standard Deviation)

<https://www.jove.com/science-education/11035/variation-normal-distribution-range-and-standard-deviation>

1.19 统计学意义 (Statistical Significance)

<https://www.jove.com/science-education/11036/statistical-significance>

(2) 第 2 章 社会自我 (The Social Self)

<https://www.jove.com/science-education-library/87/the-social-self>

2.1 自我意识：反映的自我评价和社会比较 (The Sense of Self: Reflected Self-Appraisal and Social Comparison)

<https://www.jove.com/science-education/11037/the-sense-of-self-reflected-self-appraisal-and-social-comparison>

2.2 自我图式 (Self-Schemas)

<https://www.jove.com/science-education/11038/self-schemas>

2.3 特性与状态自尊 (Trait and State Self-Esteem)

<https://www.jove.com/science-education/11039/trait-and-state-self-esteem>

2.4 自我评价：自我增强和自我验证 (Self-Evaluation: Self-Enhancement and Self-Verification)

<https://www.jove.com/science-education/11040/self-evaluation-self-enhancement-and-self-verification>

2.5 自差理论 (Self-Discrepancy Theory)

<https://www.jove.com/science-education/11041/self-discrepancy-theory>

2.6 自我表现：自我监控和自我障碍 (Self-Presentation: Self-Monitoring and Self-Handicapping)

<https://www.jove.com/science-education/11042/self-presentation-self-monitoring-and-self-handicapping>

(3) 第 3 章 社会判断与决策 (Social Judgment and Decision-Making)

<https://www.jove.com/science-education-library/88/social-judgment-and-decision-making>

3.1 理性与直觉 (Reason and Intuition)

<https://www.jove.com/science-education/11043/reason-and-intuition>

3.2 模式 (Schemas)

<https://www.jove.com/science-education/11044/schemas>

3.3 社交脚本 (Social Scripts)

<https://www.jove.com/science-education/11045/social-scripts>

3.4 可用性启发式 (The Availability Heuristic)

<https://www.jove.com/science-education/11046/the-availability-heuristic>

3.5 代表性启发式 (The Representativeness Heuristic)

<https://www.jove.com/science-education/11047/the-representativeness-heuristic>

3.6 锚定和调整启发式 (The Anchoring-and-Adjustment Heuristic)

<https://www.jove.com/science-education/11048/the-anchoring-and-adjustment-heuristic>

- [adjustment-heuristic](https://www.jove.com/science-education/11049/confirmation-biases)
- 3.7 确认偏见 (Confirmation Biases)
<https://www.jove.com/science-education/11049/confirmation-biases>
- 3.8 后见之明偏见 (Hindsight Biases)
<https://www.jove.com/science-education/11050/hindsight-biases>
- 3.9 构图效果 (Framing Effects)
<https://www.jove.com/science-education/11051/framing-effects>
- (4) 第 4 章 理解和影响他人 (Understanding and Influencing Others)
<https://www.jove.com/science-education-library/89/understanding-and-influencing-others>
- 4.1 归因理论 (Attribution Theory)
<https://www.jove.com/science-education/11052/attribution-theory>
- 4.2 基本归因误差 (Fundamental Attribution Error)
<https://www.jove.com/science-education/11053/fundamental-attribution-error>
- 4.3 斯坦福监狱实验 (The Stanford Prison Experiment)
<https://www.jove.com/science-education/11054/the-stanford-prison-experiment>
- 4.4 一致性 (Conformity)
<https://www.jove.com/science-education/11055/conformity>
- 4.5 服从 (Obedience)
<https://www.jove.com/science-education/11056/obedience>
- 4.6 米尔格拉姆对权威的服从试验 (Milgram's Obedience to Authority)
<https://www.jove.com/science-education/11057/milgram-s-obedience-to-authority>
- 4.7 无意识模仿 (Nonconscious Mimicry)
<https://www.jove.com/science-education/11058/nonconscious-mimicry>
- (5) 第 5 章 态度和说服力 (Attitudes and Persuasion)
<https://www.jove.com/science-education-library/90/attitudes-and-persuasion>
- 5.1 态度 (Attitudes)
<https://www.jove.com/science-education/11059/attitudes>
- 5.2 认知失调 (Cognitive Dissonance)
<https://www.jove.com/science-education/11060/cognitive-dissonance>
- 5.3 说服的途径 (Routes of Persuasion)
<https://www.jove.com/science-education/11061/routes-of-persuasion>
- 5.4 说服策略 (Persuasion Strategies)
<https://www.jove.com/science-education/11062/persuasion-strategies>
- 5.5 社会证明 (Social Proof)
<https://www.jove.com/science-education/11063/social-proof>
- (6) 第 6 章 亲密关系 (Close Relationships)
<https://www.jove.com/science-education-library/91/close-relationships>
- 6.1 关系形成 (Relationship Formation)
<https://www.jove.com/science-education/11064/relationship-formation>

- 6.2 社会交流理论 (Social Exchange Theory)
 - <https://www.jove.com/science-education/10713/?language=Chinese>
- 6.3 斯特恩伯格的三角恋爱理论 (Sternberg's Triangular Theory of Love)
 - <https://www.jove.com/science-education/11067/theory-of-romantic-attachment-in-adulthood>
- 6.4 成年时期的浪漫依恋理论 (Theory of Romantic Attachment in Adulthood)
 - <https://www.jove.com/science-education/11067/theory-of-romantic-attachment-in-adulthood>
- (7) 第 7 章 刻板印象, 偏见和歧视 (Stereotypes, Prejudice, and Discrimination)
 - <https://www.jove.com/science-education-library/92/stereotypes-prejudice-and-discrimination>
 - 7.1 内外组 (In- and Out-Groups)
 - <https://www.jove.com/science-education/11068/in-and-out-groups>
 - 7.2 刻板印象, 偏见和歧视 (Stereotypes, Prejudice, and Discrimination)
 - <https://www.jove.com/science-education/11069/stereotypes-prejudice-and-discrimination>
 - 7.3 刻板印象内容模型 (Stereotype Content Model)
 - <https://www.jove.com/science-education/11070/stereotype-content-model>
 - 7.4 罗伯斯山洞实验 (Robbers Cave)
 - <https://www.jove.com/science-education/11071/robbers-cave>
 - 7.5 刻板印象的威胁和自我实现的预言 (Stereotype Threat and Self-fulfilling Prophecies)
 - <https://www.jove.com/science-education/11072/stereotype-threat-and-self-fulfilling-prophecies>
- (8) 第 8 章 帮助和伤害 (Helping and Hurting) <https://www.jove.com/science-education-library/93/helping-and-hurting>
 - 8.1 利己主义和利他主义 (Egoism and Altruism)
 - <https://www.jove.com/science-education/11073/egoism-and-altruism>
 - 8.2 同情 (Empathy)
 - <https://www.jove.com/science-education/11074/empathy>
 - 8.3 社会陷阱 (Social Traps)
 - <https://www.jove.com/science-education/11075/social-traps>
 - 8.4 侵略 (Aggression)
 - <https://www.jove.com/science-education/11076/aggression>
 - 8.5 霸凌 (Bullying)
 - <https://www.jove.com/science-education/11077/bullying>
 - 8.6 旁观者效应 (Bystander Effect)
 - <https://www.jove.com/science-education/11078/bystander-effect>
- (9) 第 9 章 群体动力学 (Group Dynamics) <https://www.jove.com/science-education-library/94/group-dynamics>
 - 9.1 社会便利 (Social Facilitation)
 - <https://www.jove.com/science-education/11079/social-facilitation>

9.2 社会游荡 (Social Loafing)

<https://www.jove.com/science-education/11080/social-loafing>

9.3 群极化 (Group Polarization)

<https://www.jove.com/science-education/11081/group-polarization>

9.4 集体思考 (Groupthink)

<https://www.jove.com/science-education/11082/groupthink>

9.5 去个体化 (Deindividuation)

<https://www.jove.com/science-education/11083/deindividuation>

第三部分：JoVE 实验室手册 (JoVE Lab Manual) 共 64 个视频

一、生物学实验室手册 (Lab manual: biology), <https://www.jove.com/science-education-library/41/lab-bio> 共 32 个视频。视频全部有中文字幕。

(1) 科学方法 (Scientific Method)

<https://www.jove.com/science-education/10552/scientific-method>

(2) 人工选择 (Artificial Selection)

<https://www.jove.com/science-education/10555/artificial-selection>

(3) 生物遗传学 (Genetics of Organisms)

<https://www.jove.com/science-education/10557/genetics-of-organisms>

(4) 哈迪·温伯格与基因漂移 (Hardy-Weinberg & Genetic Drift)

<https://www.jove.com/science-education/10559/hardy-weinberg-genetic-drift>

(5) 进化关系 (Evolutionary Relationships)

<https://www.jove.com/science-education/10561/evolutionary-relationships>

(6) 扩散与渗透 (Diffusion and Osmosis)

<https://www.jove.com/science-education/10622/diffusion-and-osmosis>

(7) 光合作用 (Photosynthesis)

<https://www.jove.com/science-education/10565/photosynthesis>

(8) 细胞呼吸 (Cellular Respiration)

<https://www.jove.com/science-education/10567/cellular-respiration>

(9) 循环系统的生理 (Physiology of the Circulatory System)

<https://www.jove.com/science-education/10625/physiology-of-the-circulatory-system>

(10) 细胞分化 (Cell division)

<https://www.jove.com/science-education/10571/cell-division>

(11) 细菌转化 (Bacterial Transformation)

<https://www.jove.com/science-education/10573/bacterial-transformation>

(12) DNA 分离和限制性内切酶分析 (DNA Isolation and Restriction Enzyme Analysis)

<https://www.jove.com/science-education/10628/dna-isolation-and-restriction-enzyme-analysis>

(13) 能量动力学 (Energy Dynamics)

<https://www.jove.com/science-education/10577/energy-dynamics>

(14) 蒸腾作用 (Transpiration)

- <https://www.jove.com/science-education/10580/transpiration>
- (15) 动物行为 (Animal Behavior)
<https://www.jove.com/science-education/10582/animal-behavior>
- (16) 酶活 (Enzyme Activity)
<https://www.jove.com/science-education/10585/enzyme-activity>
- (17) 细胞结构 (Cell Structure)
<https://www.jove.com/science-education/10587/cell-structure>
- (18) 大分子 (Macromolecules)
<https://www.jove.com/science-education/10590/macromolecules>
- (19) 自然选择 (Natural Selection)
<https://www.jove.com/science-education/10632/natural-selection>
- (20) 灭绝 (Extinction)
<https://www.jove.com/science-education/10594/extinction>
- (21) 衡量生物多样性 (Measuring Biodiversity)
<https://www.jove.com/science-education/10596/measuring-biodiversity>
- (22) 植物多样性 (Plant Diversity)
<https://www.jove.com/science-education/10598/plant-diversity>
- (23) 动物多样性 (Animal Diversity)
<https://www.jove.com/science-education/10637/animal-diversity>
- (24) 微生物和真菌多样性 (Microbial and Fungal Diversity)
<https://www.jove.com/science-education/10601/microbial-and-fungal-diversity>
- (25) 物种分布与生物地理学 (Species Distribution and Biogeography)
<https://www.jove.com/science-education/10603/species-distribution-and-biogeography>
- (26) 群体增长 (Population Growth)
<https://www.jove.com/science-education/10605/population-growth>
- (27) 社区多样性 (Community Diversity)
<https://www.jove.com/science-education/10607/community-diversity>
- (28) 气候变化 (Climate Change)
<https://www.jove.com/science-education/10609/climate-change>
- (29) 群体行为 (Group Behavior)
<https://www.jove.com/science-education/10611/group-behavior>
- (30) 最佳觅食 (Optimal Foraging)
<https://www.jove.com/science-education/10613/optimal-foraging>
- (31) 性选择和伴侣选择 (Sexual Selection and Mate Choice)
<https://www.jove.com/science-education/10615/sexual-selection-and-mate-choice>
- (32) 真社会性和劳动分工 (Eusociality and Division of Labor)
<https://www.jove.com/science-education/10617/eusociality-and-division-of-labor>

二、化学实验室手册 (Lab manual: Chemistry), <https://www.jove.com/science-education-library/99/lab-chem> 共 32 个视频。视频全部有中文字幕。

- (1) 实验技术 (Lab Techniques)
<https://www.jove.com/science-education/11135/lab-techniques>

- (2) 科学测量和实验技术 (Scientific Measurement and Lab Skills)
<https://www.jove.com/science-education/11138/scientific-measurement-and-lab-skills>
- (3) 化学计量, 产物得率和限制性反应物 (Stoichiometry, Product Yield, and Limiting Reactants)
<https://www.jove.com/science-education/11141/stoichiometry-product-yield-and-limiting-reactants>
- (4) 氧化还原反应 (Redox Reactions)
<https://www.jove.com/science-education/11144/redox-reactions>
- (5) 理想气体定律 (Ideal Gas Law)
<https://www.jove.com/science-education/11147/ideal-gas-law>
- (6) 酸碱浓度 (Acid and Base Concentrations)
<https://www.jove.com/science-education/11150/acid-and-base-concentrations>
- (7) 缓冲液 (Buffers)
<https://www.jove.com/science-education/11153/buffers>
- (8) 反应焓 (Enthalpy of Reaction)
<https://www.jove.com/science-education/11156/enthalpy-of-reaction>
- (9) 溶解度 (Solubility)
<https://www.jove.com/science-education/11159/solubility>
- (10) 金属火焰 (Metal Flame Emission)
<https://www.jove.com/science-education/11162/metal-flame-emission>
- (11) 巴尔默系列 (Balmer Series)
<https://www.jove.com/science-education/11165/balmer-series>
- (12) 比尔定律(Beer's Law)
<https://www.jove.com/science-education/11168/beer-s-law>
- (13) 浓度依赖性 (Concentration Dependence)
<https://www.jove.com/science-education/11171/concentration-dependence>
- (14) 温度依赖性 (Temperature Dependence)
<https://www.jove.com/science-education/11174/temperature-dependence>
- (15) 原电池 (Galvanic Cells)
<https://www.jove.com/science-education/11177/galvanic-cells>
- (16) 电解池 (Electrolytic Cells)
<https://www.jove.com/science-education/11180/electrolytic-cells>
- (17) 试验记录的正确保存 (Proper Lab Notebook Keeping)
<https://www.jove.com/science-education/11183/proper-lab-notebook-keeping>
- (18) 基础有机化学技术 (Basic Organic Chemistry Techniques)
<https://www.jove.com/science-education/11186/basic-organic-chemistry-techniques>
- (19) 熔点 (Melting Points)
<https://www.jove.com/science-education/11189/melting-points>
- (20) 沸点 (Boiling Points)
<https://www.jove.com/science-education/11192/boiling-points>
- (21) 重结晶 (Recrystallization)

- <https://www.jove.com/science-education/11195/recrystallization>
- (22) 萃取 (Extraction)
<https://www.jove.com/science-education/11198/extraction>
- (23) 简单蒸馏 (Simple Distillation)
<https://www.jove.com/science-education/11201/simple-distillation>
- (24) 蒸汽蒸馏 (Steam Distillation)
<https://www.jove.com/science-education/11204/steam-distillation>
- (25) 薄层色谱 (Thin-Layer Chromatography)
<https://www.jove.com/science-education/11207/thin-layer-chromatography>
- (26) 柱层析 (Column Chromatography)
<https://www.jove.com/science-education/11210/column-chromatography>
- (27) 酯的水解 (Hydrolysis of an Ester)
<https://www.jove.com/science-education/11213/hydrolysis-of-an-ester>
- (28) 鲁米诺合成 (Synthesis of Luminol)
<https://www.jove.com/science-education/11216/synthesis-of-luminol>
- (29) 酯化作用 (Esterification)
<https://www.jove.com/science-education/11219/esterification>
- (30) 未知醛和酮的鉴定 (Identification of Unknown Aldehydes and Ketones)
<https://www.jove.com/science-education/11222/identification-of-unknown-aldehydes-and-ketones>
- (31) 染料的紫外可见光谱 (UV-Vis Spectroscopy of Dyes)
<https://www.jove.com/science-education/11225/uv-vis-spectroscopy-of-dyes>
- (32) 酒精鉴别 (Identifying Alcohols)
<https://www.jove.com/science-education/11228/identifying-alcohols>