



▶ CHEMISTRY LABORATORY SAFETY VIDEO GENERATED BY AI

27 March, 2025





INTRODUCTION

- Importance of laboratory safety in chemistry
- Common risks: chemical burns, inhalation hazards, fire, spills
- Traditional safety training methods (manuals, lectures, demonstrations)





- AI can generate realistic simulations and videos
- Cost-effective compared to filming real lab scenarios
- Customizable for different lab environments
- Engaging and interactive for students



WHY USE AI?





Home

About Us

Services

Collaboration



TYPES OF AI-GENERATED TOOLS

Minimax; Main function: Text-to-Speech (input text and ai generates speech)

Dreamina; Main function: AI Video (10s)

豆包 (Doubao); Main function: AI Video (5s) & Image

可靈 (Kuling); Main function: AI Video (10s) & Image



视频生成

视频 2.5 Turbo NEW

文生视频

图生视频

多模态编辑

创意描述 (必填)

顯示這位男實驗人員除下這隱形眼鏡



DeepSeek

音效 限免

支持在视频中同时生成音效和背景音乐哦~

高级设置

① 内容由AI生成，禁止利用功能从事违法活动



563
钻石会员

高品质模式

5s

16:9

1条

25 生成

开启浏览器通知，随时接收任务完成提醒 去打开

全部

图片

视频

音频

我收藏的

资产管理

图生视频



首帧图

视频 2.5 Turbo

高品质

视频展示男人佩戴实验安全眼镜，由上至下展示实验正确的着装。由到脚每地方停留两秒，视频一共10秒



多模态编辑

对口型

音效



文生视频

视频 2.5 Turbo

高品质

顯示一位華人男實驗人員除下隱形眼鏡，並且放大拍攝取下的隱形眼鏡



1个任务生成中 查看



新对话

生成男实验人员戴白手套

内容由 AI 生成



生成16:9的照片，並且加入實驗室作背景

我现在要将图片比例调整为 16:9，并添加实验室背景。



🔊 📄 ⬇️ 下载 ... | 👍 🗨️

移除她的聽診器

我现在要移除图片中人物佩戴的听诊器。



发消息或输入 / 选择技能



深度思考

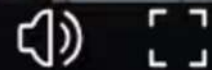
技能







00:03 / 00:10



首帧图



创意描述



视频展示女人佩戴实验安全眼镜，由上至下展示实验正确的着装。由头到脚每地方停留两秒，视频一共10秒

视频 2.5 Turbo

高品质

使用

多模态编辑

对口型

音效

编辑

重新编辑

再次生成

帮我生成视频：

blob:<https://www.doubao.com/97d543ac-963a-4267-97dc-131e04274713>实验人员开完大瓶子后拿起它将他里面的液体到到隔壁的瓶子里。液体是液氮会有少数烟雾出来



分享 ...

视频生成 添加照片，描述你想生成的视频

上传图片

比例

...

① 体验次数 4 次

↑



下午 5:54 11月5日周三

literature review 的中文 - X MiniMax Audio | Free Text X

minimax.io

MINIMAX Audio Video

11,894 Upgrade

Speech Synthesis

Model speech-2.6-hd

personal protective equipment
Personal protective equipment (PPE) is any equipment which protects the wearer from a health or safety risk.
PPE can be categorised into eye and face protection, hand protection, body protection and food protection.
For eye protection, regular glasses are acceptable.
Contact lenses are not allowed as they may absorb and concentrate volatile irritants.
Spectacles with side shields are recommended.
They provide protection to the sides of the eyes.
Goggles can give much better eye protection. However, it is easy to fog.
When dealing with corrosive chemicals which may splash during an experiment, a face shield is

Long Text 2,106 / 5,000 characters

English-detected

Credit Usage

Regenerate

Settings History

Man With Deep Voice English

Voice Modifier UPGRADE

Emotion UPGRADE

Auto

Speed 0.71

Pitch 0

Volume 2.8

Man With Deep Voice: perso...

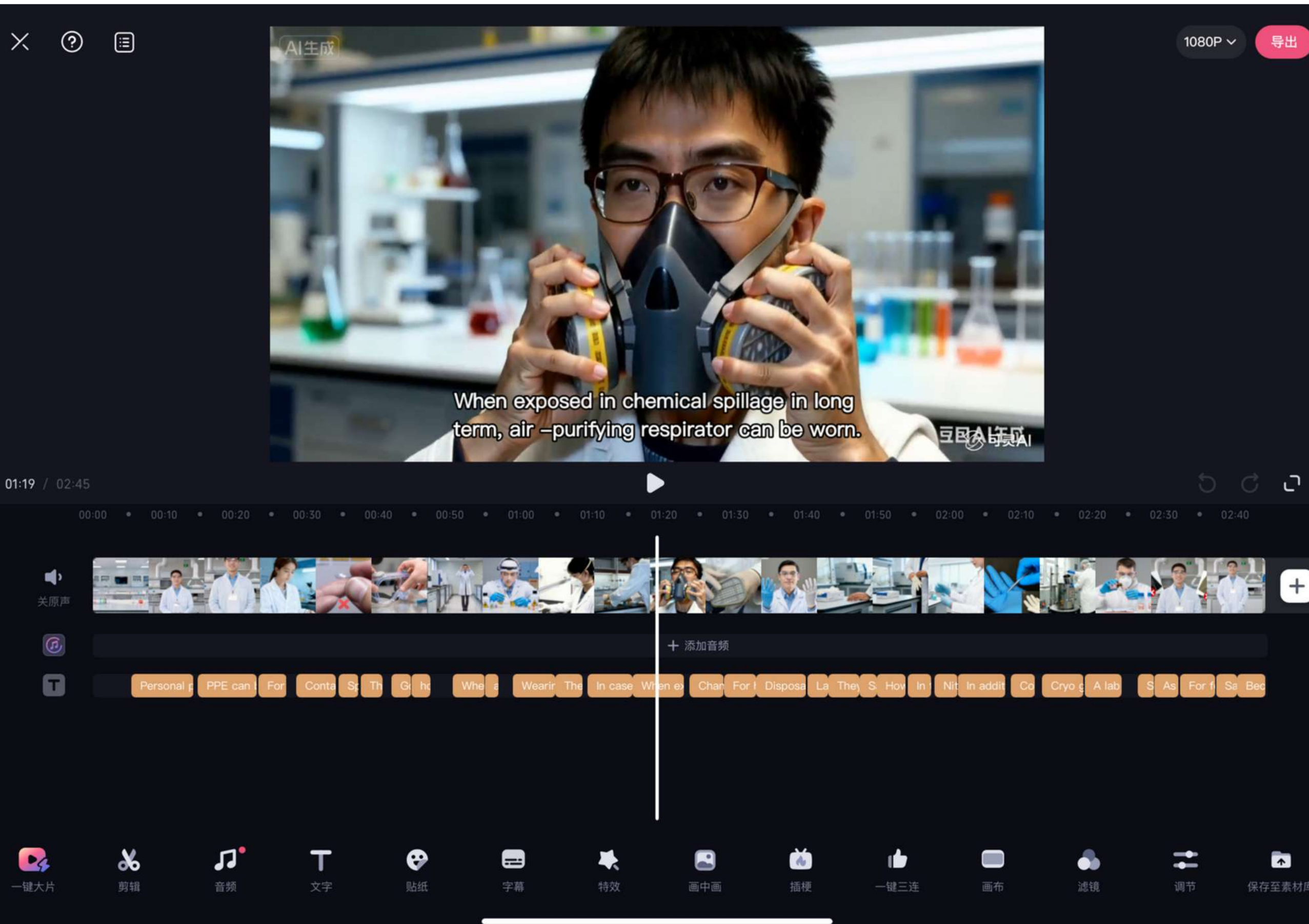
00:00 00:00

MiniMax

- Input script
- Choose the voice
- Plug Generate

AI Sound Generation

Manual Video Editing



- AI is unable to distinguish between right and wrong
- Some incorrect frames need to be removed
- AI helps to generate subtitles



CHALLENGES & CONSIDERATIONS

Home

About Us

Services

Collaboration

- Accuracy of AI-generated content
- Need for expert validation
- Ethical concerns (bias, misuse)
- Integration with existing training programs





CONCLUSION

Home

About Us

Services

Collaboration

- Chemistry lab safety is critical for all learners
- AI-generated videos provide innovative, engaging training
- With proper validation, AI can enhance safety culture worldwide



THANK
YOU