

# 葛梦炎/讲师

院 系	物理系	性 别	女
出生年月	1994.11.10	学 位	理学博士
学 历	博士研究生	毕业院校	华中师范大学
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## 个人简介

2016年9月考入华中师范大学物理科学与技术学院，攻读物理学专业研究生（硕博连读），2021年6月获物理学理学博士学位。同年7月加入南京农业大学理学院物理系。主要从事非线性神经动力学（神经生物物理）方向的理论研究工作。目前已经在 *Nonlinear Dynamics*、*Applied Mathematics and Computation*、*Chaos Solitons & Fractals*、*Neurocomputing* 等学术期刊发表 SCI 论文 20 篇，总被引用 493 余次，其中第一作者论文 9 篇（被 ESI Highly Cited Papers 收录 2 篇）。

## 教学信息

主讲《物理学》。

## 科研项目

主持科研项目：

“华中师范大学优秀博士学位论文培育计划资助项目”，项目编号：2020YBZZ072，2020.10–2021.10，主持人：葛梦炎。

## 参与科研项目:

1. 面上项目, “体细胞重编程过程中基因调控机制研究”, 项目编号: 11775091, 2018–2021, 负责人: 贾亚教授。

2. 青年科学基金项目, “直接耦合分析预测 RNA 空间结构核苷酸间相互作用研究”, 项目编号: 11704140, 2018–2020, 负责人: 赵蕴杰副教授。

## 发表文章

1. **Ge Mengyan, Wang Guowei, Jia Ya.** Influence of the Gaussian colored noise and electromagnetic radiation on the propagation of subthreshold signals in feedforward neural networks. **Science China Technological Sciences**, 2021, 64:847–857.

2. **Ge Mengyan, Jia Ya, Lu LuLu, et al.** Propagation characteristics of weak signal in feedforward Izhikevich neural networks. **Nonlinear Dynamics**, 2020, 99:2355–2367.

3. **Ge Mengyan, Lu LuLu, Xu Ying, et al.** Vibrational mono-/bi-resonance and wave propagation in FitzHugh–Nagumo neural systems under electromagnetic induction. **Chaos Solitons & Fractals**, 2020, 133:109645.

4. **Ge Mengyan, Jia Ya, Xu Ying, et al.** Wave propagation and synchronization induced by chemical autapse in chain feed–forward Hindmarsh–Rose neural network. **Applied Mathematics and Computation**, 2019, 352:136–145. (ESI 高被引文章, 被引 33 次)

5. **Ge Mengyan**, Lu LuLu, Xu Ying, et al. Effects of electromagnetic induction on signal propagation and synchronization in multilayer Hindmarsh–Rose neural networks. **European Physical Journal–Special Topics**, 2019, 228:2455–2464.

6. **Ge Mengyan**, Jia Ya, Xu Ying, et al. Mode transition in electrical activities of neuron driven by high and low frequency stimulus in the presence of electromagnetic induction and radiation. **Nonlinear Dynamics**, 2018, 91(1):515–523. (ESI 高被引文章, 被引 83 次)

7. **Ge Mengyan**, Jia Ya, Kirunda JB, et al. Propagation of firing rate by synchronization in a feed–forward multilayer Hindmarsh–Rose neural network. **Neurocomputing**, 2018, 320:60–68.

8. **Ge Mengyan**, Xu Ying, Zhang ZhaoKang, et al. Autaptic modulation–induced neuronal electrical activities and wave propagation on network under electromagnetic induction. **European Physical Journal–Special Topics**, 2018, 227:799–809.

9. **Ge Mengyan**, Xu Ying, Lu LuLu, et al. The effect of external periodic signals and electromagnetic radiation on autaptic regulation of neuronal firing. **IET System Biology**, 2018, 12:177–184.

10. Wang Guowei, **Ge Mengyan**, Lu Lulu, et al. Study on propagation efficiency and fidelity of subthreshold signal in feed–forward hybrid neural network under electromagnetic radiation. **Nonlinear Dynamics**, 2021, 103(3).

11. Lu Lulu, Jia Ya, **Ge Mengyan**, Xu Ying, Li Anbang, Inverse stochastic resonance in Hodgkin–Huxley neural system driven by Gaussian and non–Gaussian colored noises, **Nonlinear Dynamics**, 2020, 100:877–889.

12. Wang Guowei, Xu Ying, **Ge Mengyan**, et al. Mode transition and energy dependence of FitzHugh–Nagumo neural model driven by high–low frequency electromagnetic radiation. **AEU–International Journal of Electronics and Communications**, 2020, 120:153209.

13. Lu Lulu, Jia Ya, Xu Ying, **Ge Mengyan**, Yang Lijian, Zhan Xuan, Energy dependence on modes of electric activities of neuron driven by different external mixed signals under electromagnetic induction, **Science China–Technological Sciences**, 2019, 62: 427–440.

14. Lu Lulu, Bao Chun, **Ge Mengyan**, Xu Ying, Yang Lijian, Zhan Xuan, Jia Ya, Phase noise–induced coherence resonance in three dimension memristive Hindmarsh–Rose neuron model, **European Physical Journal–Special Topics**, 2019, 228: 2101–2110.

15. Lu Lulu, Jia Ya, John Billy Kirunda, Xu Ying, **Ge Mengyan**, Pei Qiming, Yang Lijian, Effects of noise and synaptic weight on propagation of subthreshold excitatory postsynaptic current signal in a feed–forward neural network, **Nonlinear Dynamics**, 2019, 95:1673–1686.

16. Lu Lulu, **Ge Mengyan**, Xu Ying, Jia Ya, Phase synchronization

and mode transition induced by multiple time delays and noises in coupled FitzHugh–Nagumo model, **Physica A—statistical mechanics and its applications**, 2019, 535: 122419.

17. Xu Ying, Lu Lulu, **Ge Mengyan**, et al. Effects of temporally correlated noise on coherence resonance chimeras in FitzHugh–Nagumo neurons. **European Physical Journal B**, 2019, 92(11).

18. Xu Ying, Jia Ya, Billy KJ, Shen Jian, **Ge Mengyan**, et al. Dynamic Behaviors in Coupled Neuron System with the Excitatory and Inhibitory Autapse under Electromagnetic Induction. **Complexity**, 2018, 2018:1–13.

19. Yousif A, Lu Lulu, **Ge Mengyan**, et al. Effects of intrinsic and extrinsic noises on transposons kinetics. **Chinese Physics B**, 2018, 27(3):030501.

20. Xu Ying, Jia Ya, **Ge Mengyan**, et al. Effects of ion channel blocks on electrical activity of stochastic Hodgkin–Huxley neural network under electromagnetic induction. **Neurocomputing**, 2017, 283(29):196–204.