



Nan Wang

Lecturer, Department of Electronic Engineering, College of Information Science and Engineering, Ocean University of China.

Education

- 2012–2015 **Ph.D.**, *nonlinear dynamics*, Southeast University, China.
- Dissertation: **RESEARCH ON LOGICAL STOCHASTIC RESONANCE IN THE NONLINEAR SYSTEMS**(nomination for best dissertation by China Instrument and Control Society)
- 2009–2012 **M.Sc.**, *instrument science and technology*, Southeast University, China.
- 2005–2009 **B.Eng.**, *measurement and control technology and instrument*, Southeast University, China.

Work Experience

- 2015–now **Lecturer**, *Department of Electronic Engineering*, College of Information Science and Engineering, Ocean University of China.

Research Field

- *Feeble Signal Processing*
- *Machine Learning*
- *Underwater Vision*

Funding

- Logical Stochastic Resonance Based Underwater Image Object Detection, Natural Science Foundation of China (No. 61501060)
- Study of vision based object detection in turbid medium by logical stochastic resonance, China Postdoctoral Science Foundation (No. 2016M590658)
- Fundamental Research Funds for the Central Universities (No. 201713017)
- Natural Science Foundation of Shandong Province (No. ZR2017BF006)

Selective Publications

- [1] **Nan Wang***, Bing Zheng, Haiyong Zheng, and Biao Yang. When underwater degraded images meet logical stochastic resonance. *Nonlinear Dynamics*, 94:295–305, 2018. [<https://doi.org/10.1007/s11071-018-4359-y>]
- [2] **Nan Wang**, Jia Yu, Biao Yang, Haiyong Zheng*, Bing Zheng. Vision-based in situ monitoring of plankton size spectra via a convolutional neural network. *IEEE Journal of Oceanic Engineering*, 2018. (Accepted)
- [3] **Nan Wang**, Bing Zheng, Haiyong Zheng, and Zhibin Yu. Feeble object detection of underwater images through LSR with delay loop. *Optics Express*, 25(19):22490–22498, 2017. [<https://doi.org/10.1364/OE.25.022490>]
- [4] **Nan Wang**, Haiyong Zheng, and Bing Zheng. Underwater image restoration via maximum attenuation identification. *IEEE Access*, PP(99):1–1, 2017. [<https://doi.org/10.1109/ACCESS.2017.2753796>]
- [5] **Nan Wang**, Aiguo Song, and Biao Yang. The effect of time-delayed feedback on logical stochastic resonance. *European Physical Journal B*, 90(6):117, 2017. [<https://doi.org/10.1140/epjb/e2017-80150-4>]
- [6] **Nan Wang** and Aiguo Song. Enhanced logical stochastic resonance in synthetic genetic networks. *IEEE Transactions on Neural Networks & Learning Systems*, 27(12):2736–2739, 2016. [<https://doi.org/10.1109/TNNLS.2015.2495155>]
- [7] Bing Zheng, **Nan Wang***, Haiyong Zheng, Zhibin Yu, and Jinpeng Wang. Object extraction from underwater images through logical stochastic resonance. *Optics Letters*, 41(21):4967, 2016. [<https://doi.org/10.1364/OL.41.004967>]
- [8] **Nan Wang** and Aiguo Song. Parameter-induced logical stochastic resonance. *Neurocomputing*, 155:80–83, 2015. [<https://doi.org/10.1016/j.neucom.2014.12.045>]
- [9] **Nan Wang** and Aiguo Song. Logical stochastic resonance in bistable system under α -stable noise. *European Physical Journal B*, 87(5):1–7, 2014. [<https://doi.org/10.1140/epjb/e2014-50193-2>]
- [10] **Nan Wang** and Aiguo Song. Set-reset latch logical operation induced by colored noise. *Physics Letters A*, 378(22-23):1588–1592, 2014. [<https://doi.org/10.1016/j.physleta.2014.04.003>]