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教育背景

2018.9-2019.9	联合培养博士，地球物理学，斯坦福大学
2016.9-2019.12	博士，地质资源与地质工程，中国石油大学（北京）
2014.9-2016.6	硕士，地质资源与地质工程，中国石油大学（北京）
2010.9-2014.6	学士，勘查技术与工程，长江大学

研究方向

- 复杂介质波动理论;
- 地球物理反演和成像;
- 地震信号处理;
- 高性能并行计算;
- 深度学习.

荣誉奖项

2018	Outstanding Contribution in Reviewing, 《Journal of Applied Geophysics》
2018	博士研究生国家奖学金，中华人民共和国教育部
2018	《Geophysics》亮点论文（Bright Spots Paper），《Geophysics》编辑部
2012	全国大学生数学建模国家二等奖，中国工业与应用数学学会

发表论文

17. Zhao, X., Zhou, H., Chen, H., & **Wang, Y.**(2020). Domain Decomposition for Large-Scale Viscoacoustic Wave Simulation Using Localized Pseudo-Spectral Method. **IEEE Transactions on Geoscience and Remote Sensing**. doi:10.1109/TGRS.2020.3006614

16. **Wang, Y.**, Zhou, H., Zhao, X., & Chen, Y. (2019). Q-compensated viscoelastic reverse time migration using mode-dependent adaptive stabilization scheme. **Geophysics**. 84(4), S301-S315. doi:10.1190/geo2018-0423.1

15. **Wang, Y.**, Zhou, H., Zhao, X., & Chen, Y. (2019). CuQ-RTM: A CUDA-based code package for stable and efficient Q-compensated RTM. **Geophysics**, 84(1), F1-F15. doi:10.1190/GEO2017-0624.1

14. Chen, Y., Chen, W., **Wang, Y.**, & Bai, M. (2019) Least-squares decomposition with time-space constraint for denoising microseismic data. **Geophysical Journal International**, 218(3), 1702-1718. doi:10.1093/gji/ggz145

13. Chen, Y., Bai M., Zhou, Y., Zhang, Q., **Wang, Y.**, & Chen, H. (2019) Substituting smoothing with lowrank decomposition - applications to least-squares reverse time migration of simultaneous source and incomplete seismic data. **Geophysics**, 84(4), S267-S283. doi:10.1190/geo2017-0298.1

12. Wang, L., Zhou, H., & **Wang, Y.**(2019) Three parameters prestack seismic inversion based on L_{1-2} minimization. **Geophysics**, 84(5), R753-R766. doi:10.1190/geo2018-0730.1

11. Wang, N., Zhou, H., Chen, H., **Wang, Y.**, & Fang, J. (2019) An optimized parallelized high-order SGFD modeling package for 3D seismic wave propagation. **Computers & Geosciences**. 131, 102-111. doi:10.1016/j.cageo.2019.06.017

10. Chen, Y., Chen, X. **Wang, Y.**, & Zu, S. (2019). Deblending of simultaneous-source data using a structure-oriented space-varying median filter. **Geophysical Journal International**, 216(2), 1214-1232. doi:10.1093/gji/ggy487

9. Chen, Y., Chen, X., **Wang, Y.**, & Zu, S. (2019). The interpolation of sparse geophysical data. **Surveys in Geophysics**, 40(1), 73-105. doi:10.1007/s10712-018-9501-3

8. Fang, J., Zhou, H., Chen, H., Wang, N., **Wang, Y.**, Sun P., & Zhang J. (2019). Source-independent elastic least-squares reverse time migration. **Geophysics**, 84(1), S1-S16. doi:https://doi.org/10.1190/geo2017-0847.1

7. Wang, L., Zhou, H., **Wang, Y.**, Yu, B., & Fnag, J. (2019). Adaptive Seismic Deconvolution via Convolutional Sparse Coding Model. **IEEE Geoscience and Remote Sensing Letters**. 17(8), 1415 - 1419. doi:10.1109/LGRS.2019.2945799

6. **Wang, Y.**, Ma, X., Zhou, H., & Chen, Y. (2018). L_{1-2} minimization for exact and stable seismic attenuation compensation. **Geophysical Journal International**, 213(3), 1629-1646. doi:10.1093/gji/ggy064

5. **Wang, Y.**, Zhou, H., Chen, H., & Chen, Y. (2018). Adaptive stabilization for Q-compensated reverse time migration. **Geophysics**, 83(1), S15-S32. doi:10.1190/geo2017-0244.1

4. Zhao, X., Zhou, H., **Wang, Y.**, Chen, H., Zhou Z., Sun P., & Zhang J. (2018). A stable approach for Q-compensated viscoelastic reverse time migration using excitation amplitude imaging condition. **Geophysics**, 83(5), S459-S476. doi:10.1190/geo2018-0222.1

3. **Wang, Y.**, Zhou, H., Zu, S., Mao, W., & Chen, Y. (2017). Three-Operator Proximal Splitting Scheme for 3-D Seismic Data Reconstruction. **IEEE Geoscience and Remote Sensing Letters**, 14(10), 1830-1834. doi:10.1109/LGRS.2017.2737786

2. Xia, M., Zhou, H, Li, Q, Chen, H, **Wang, Y.**, & Wang, S. (2017). A General 3D Lattice Spring Model for Modeling Elastic Waves. **Bulletin of the Seismological Society of America**, 107(5), 2194-2212. doi:10.1785/0120170024

1. Chen, H., Zhou, H., Li, Q., & **Wang, Y.**(2016). Two efficient modeling schemes for fractional laplacian viscoacoustic wave equation. **Geophysics**, 81(5), T233-T249. doi:10.1190/geo2015-0660.1

在审论文

1. Ma, X., Li, G., & **Wang, Y.**, Seismic deconvolution using L_{1-2} constrained compressed sensing approach. submitted to **IEEE Geoscience and Remote Sensing Letters**. Major revision.

会议摘要

10. **Wang, Y.**, & Jerry M. Harris (2020). Seismic attenuation models: multiple and fractional generalizations. Abstract at 2020 SEG Annual Meeting, Houston, TX, USA.

9. **Wang, Y.**, Li, D., & Jerry M. Harris (2019). A generalized stabilization scheme for seismic Q compensation. Abstract at 2019 SEG Annual Meeting, San Antonio, TX, USA. doi:10.1190/segam2019-3198472.1

8. **Wang, Y.**, Zhou, H., Li, Q., Zhao, X. & Zhao, X. (2017). Regularized Q-RTM using time-variant filtering in the k-space. Abstract presented at 2017 EAGE Annual Meeting, Paris, France. doi:10.3997/2214-4609.201700676

7. **Wang, Y.**, Zhou, H., Zhao, X., Zhang, Q, & An, Y. (2017). Wavefield reconstruction in attenuating media using time-reversal checkpointing and k-space filtering. Abstract presented at 2017 EAGE Annual Meeting, Paris, France. doi:10.3997/2214-4609.201701152

6. **Wang, Y.**, Zhou H., Zhao, X., Xia, M., An, Y. & Cai, X. (2017). The k-space Greens functions for decoupled constant-Q wave equation and its adjoint equation. Abstract presented at 2017 EAGE Annual Meeting, Paris, France. doi:10.3997/2214-4609.201701153

5. **Wang, Y.**, Zhou, H., Li, Q., Chen, H. Gan, S., & Chen, Y. (2015). An unsplit convolutional perfectly matched layer for visco-acoustic wave equation with fractional time derivatives. Abstract presented at 2015 SEG Annual Meeting, New Orleans, LA, USA. doi:10.1190/segam2015-5835254.1

4. Wang, N., Zhou H., Chen, H., **Wang, Y.**, Yu, B., & Zhou, Z. (2017). Modelling Viscoelastic Waves Using Constant Fractional-order Spatial Derivatives. Abstract presented at 2017 EAGE Annual Meeting, Paris, France. doi:10.3997/2214-4609.201701109

3. Zhao, X., Zhou H., Li, Q., & **Wang, Y.**. (2017). A Method to Avoid the Snapshots Wavefields Storage in Reverse Time Migration. Abstract presented at 2017 EAGE Annual Meeting, Paris, France. doi:10.3997/2214-4609.201700679

2. Wang, N., Zhou H., Chen, H., **Wang, Y.**, & Fang, J. (2018). High-order Time Accuracy Fractional Laplacian Viscoacoustic Simulation Scheme Using Nonstandard Pseudospectral Method. Abstract presented at 2018 EAGE Annual Meeting, Copenhagen, Denmark. doi:10.3997/2214-4609.201801447

1. Wang, L., Zhou, H., **Wang, Y.**, Yu, B., & Long, T. (2018). Elastic-impedance inversion based on L1-2 minimization. Abstract presented at 2018 SEG Annual Meeting, Anaheim, CA, USA. doi:10.1190/segam2018-2983903.1

学术报告

10. **Wang, Y.** Adaptive stabilization scheme for Q-compensated RTM. 第三届“国际青年学者地大论坛”, 武汉, 2019.03.26

9. **Wang, Y.** King Mountain crosswell data imaging with explicitly stabilized Q compensation. **SWP report**, Stanford, CA. Jun. 06, 2019.

8. **Wang, Y.** Physics-informed neural networks for seismic modeling and inversion. **SWP report**, Stanford, CA. May. 14, 2019.

7. **Wang, Y.** Explicit stabilization for Q-RTM: a field data example. **SWP report**, Stanford, CA. Apr. 16, 2019.

6. **Wang, Y.** Seismic attenuation models: multiple and fractional generalizations. **SWP report**, Stanford, CA. Mar. 5, 2019.

5. **Wang, Y.** A generalized stabilization scheme for seismic Q compensation. **SWP report**, Stanford, CA. Jan. 29, 2019.

4. **Wang, Y.** Seismic attenuation compensation via inversion and imaging. **SWP report**, Stanford, CA. Nov. 30, 2018.

3. **Wang, Y.** An overview of fractional attenuation models in exploration geophysics. **SWP report**, Stanford, CA. Nov. 06, 2018.

2. **汪宇锋**，王玲谦，周辉 基于 L_{1-2} 范数约束的地震反褶积方法，第二届油气地球物理学术年会, 青岛。2018.07.12

1. **Wang, Y.** My Journey on Madagascar and Reproducible Research – CuQ-RTM: A CUDA-based open-source package for stable and efficient Q-compensated RTM. 2017 Madagascar School in Shanghai, Shanghai, China. Jul. 11, 2017.

开源研究

2017 **cu$Q$-RTM** is a CUDA-based code package that implements Q-RTM based on a set of stable and efficient strategies, such as streamed CUFFT, checkpointing-assisted time-reversal reconstruction (CATRC) and adaptive stabilization scheme. This package is provided for accelerating conventional CPU-based Q-RTM, and mimicking how a geophysicist writes down a seismic processing modules such as modeling, imaging and inversion in the framework of the CPU-GPU heterogeneous computing platform.