Biondo Leonardo Biondi

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Education

1984	M.Sc.	Electrical Engineering, Politecnico di Milano, Italy
1987	M.S.	Geophysics, Stanford University
1990	Ph.D.	Geophysics, Stanford University

University and Professional Appointments

2018-present	Barney and Estelle Morris Professor of Earth Sciences
2024–present	Affiliated Faculty Member of the BioX Institute, Stanford University
2011–present	Affiliated Faculty Member of the Institute for Computational and Mathematical Engineering, Stanford University
2010-present	Professor of Geophysics, Stanford University
2006-2010	Associate Professor of Geophysics, Stanford University
1999-2006	Associate Professor (Research) of Geophysics, Stanford University
1996-1999	Consulting Associate Professor of Geophysics, Stanford University
1993-2008	Founder and Chief Technical Advisor, 3DGeo Development Inc.
1991-1996	Consulting Assistant Professor of Geophysics, Stanford University
1990-1993	Scientist, Thinking Machines Corp.

Honors and Awards

2025	Honorable Mention for Best Paper in *The Leading Edge* (co-author)
2023	Honorable Mention for Best Paper in *Geophysics* (co-author)
2020	Honorable Mention for Best Paper in *The Leading Edge* (co-author)
2018	Barney and Estelle Morris Professorship in Earth Sciences
2016	Honorable Mention for Best Paper in *Geophysics (*co-author)
2008	Honorable Mention for Best Paper in *Geophysics* (co-author)
2007	Distinguished Instructor Short Course for the Society of Exploration Geophysicists
2005	Louis Cagniard Award from the European Association of Geoscientists and Engineers for the best poster presentation (co-author)
2004	Reginald Fessenden Award from the Society of Exploration Geophysicists

University Leadership Positions

2008-present	Director of the Stanford Earh imaging Project (SEP), which was named Stanford Exploration Project until 2022
2019-2022	Chair of the Geophysics Department, Stanford University

2010–2024	Co-director of Stanford Earth Science Algorithms and Architecture Initiative (SESAAI)
2010–2018	Co-Director of the Stanford Center for Computational Earth and Environmental Science (CEES)
1999-2007	Co-Director of the Stanford Exploration Project (SEP)

Recent Professional Activities

2010- Present	Member of the Research Committee of the Society of Exploration Geophysicists
2024- Present	Member of TGS Advisory Board
2026	Convener of “The Built Environment “ session of “Optical seismology and the Next Era in Seismic Sensing” Fall Meeting organized by the Seismological Society of America – Kona, USA
2025	Convener of “Anthropogenic and Urban Seismology “ session of “Environmental Seismology” Fall Meeting organized by the Seismological Society of America – Denver, USA
2024	Member of the organizing committee of the SEG Summer Research Workshop “Geophysical Research for Gigatonnes CO2 Storage”, Golden, USA
2022	Co-chair and host for SEG Summer Research Workshop "Towards Gigatonnes CO2 Storage - Grand Geophysical Challenge”, Stanford, USA
2022	Member of Organizing Committee of EAGE/SEG Workshop "Geophysical aspect of Smart Cities" in Hong Kong (China)

Recent Invited Presentations

2026	Workshop Keynote Speaker - Smart CCUS: Geophysical Innovations for Subsurface organized by the Society of Exploration Geophysicists at Pennsylvania State University
2026	Workshop Invited Speaker at the annual meeting of the European Association of Geoscientist and Engineers in Aberdeen, Scotland
2025	Invited Speaker - European Conference and Exhibition on Optical Communication in Copenhagen, Denmark
2025	Invited Speaker - Optica Sensing Congress – Long Beach, USA
2025	Invited Speaker - Fiber Optic Sensing Association Mid-Year meeting at UC Berkeley, USA
2025	Invited Speaker - Optical Fiber Communication Conference and Exhibition 2025 in San Francisco, USA
2025	Keynote Speaker – Energy & High Performance Computing Conference at Rice University, USA
2025	Invited Speaker - Incubator of Next-Gen Fiber Sensing: How to exploit telecom Infrastructure – Optica – Washington, USA
2024	Invited Speaker - Department Seminar at ETH, Zurich, Switzerland
2024	Invited Speaker - Department Seminar at the University of Trieste, Trieste, Italy
2024	Invited Speaker - Department Seminar at the Politecnico di Milano, Milan, Italy
2024	Invited Speaker - Department Seminar at the Politecnico di Torino, Turin, Italy

2024 Workshop Invited Speaker at the annual meeting of the European Association of Geoscientist and Engineers in Oslo, Norway

2024 Keynote Speaker – SSA Workshop “Photonic Seismology – Lightening the Way Forward” in Vancouver, Canada

2024 Invited Speaker - 2024 Aquistore Annual General Meeting in Edmonton, Canada.

2024 Keynote Speaker at Workshop “Advancing Carbon Capture, Utilization, and Storage (CCUS): East Asia Perspective” organized by the Society of Exploration Geophysicists in Qingdao, China

2023 Invited Presentation “Fiber-optic seismology for large-scale monitoring of modern cities. at Nokia Bell Labs, USA

2023 Plenary Keynote Speaker at 7th International Conference of Engineering Geophysics in El Ain, Abu Dhabi

2023 Invited Speaker - IEEE Summer Topical Meetings Series – Taormina, Italy

2023 Invited Speaker - MIT ERL – Cambridge, USA

2023 Invited Speaker - King Fahd University of Petroleum and Minerals in Dhahran Saudi Arabia

2022 Invited Speaker - Earth Environmental Sciences Program at the Chinese University of Hong Kong, Hong Kong, China

2022 Guest at an episode of the podcast "Future of Everything" of Stanford School of Engineering hosted by Prof. Russ Altman, Stanford, USA

2022 Invited Speaker at “Waves 2022” meeting at the Ècole Nationale Supérieur de Techniques Avancés in Palaiseau, France

2022 Workshop Invited Speaker at the annual meeting of the European Association of Geoscientist and Engineers in Madrid, Spain

2022 Invited Speaker at Workshop “Machine learning/data analytics in Exploration and Production - Energy Transition", organized by the Society of Exploration Geophysicists in Houston, USA

2022 Invited Speaker at Workshop “Carbon Capture and Storage", organized by JX Nippon online

2021 Keynote Speaker at 2nd Conference on Geophysics for Infrastructure Planning, Monitoring and BIM, Bordeaux, France

Principal Mentor for post-doctoral fellows

2024 – Present Cewen Liu

2023 – 2023 Jingxiao Liu – Assistant Professor at Nanyang Technological University, Singapore

2021– 2022 Bin Luo – Assistant Professor at Southern University of Science and Technology (SUSTech), China

2018 – 2021 Ariele Lellouch – Associate Professor at Tel Aviv University, Israel

2020 – 2020 Nate Lindsey– Vice-President for Science & Innovation at FibreSense

2018 – 2021 Gabriel Fabien-Ouellet – Adjoint Professor at Polytechnique Montréal,, Canada

2013 – 2016 Nori Nakata – Staff Scientist at Lawrence Berkeley National Laboratory

1997 – 1998 Tariq Alkhalifah – Professor at King Abdullah University of Science and Technology (KAUST), Saudi Arabia

Principal Advisor for Ph.D. students with graduation year

Current Elliott Steel - PhD student in Geophysics.

Current Amer Baser Zuabi - PhD student in Geophysics.

Current Ting Wu - PhD student in Geophysics.

Current Ivan Deiana - PhD candidate in Geophysics.

Current Haipeng Li - PhD candidate in Geophysics.

Current Thomas Cullison - PhD candidate in Geophysics.

Current Joe Stitt- PhD candidate in Geophysics.

2026 Rustam Akhmadiev - PhD in Geophysics – Thesis: “Full Waveform Inversion Using Frequency-Domain Model” – Vortex Imaging.

2025 Julio Olivia Frigerio - PhD in Geophysics – Thesis: “ Tomographic Waveform Inversion– PetroBras (Brazil).

2025 Min Jun Park - PhD in Geophysics – Thesis: “Embedding Space Optimization For Enhanced Seismic Monitoring” – Google.

2024 Rahul Sarkar - PhD in ICME– Thesis: “Selected Topics in Seismic Imaging and Algebra” – UC Berkeley.

2023 Milad Bader - PhD in Geophysics – Thesis: “Source and Elastic Full-Waveform Inversion Using Distributed Acoustic Sensing and Perforation Shots in Unconventional Reservoir“– Chevron.

2023 Siyuan Yuan - PhD in Geophysics – Thesis: “Large-Scale and Continuous Subsurface Monitoring Using Distributed Acoustic Sensing in Urban Environments” – TikTok.

2023 Stuart Farris - PhD in Geophysics – Thesis: “Seismic Velocity Model Building With Deep Convolutional Neural Networks” – Hestia Energy.

2022 Guillaume Barnier- PhD in Geophysics – Thesis: “Full Waveform Inversion by Model Extension” – Nvidia.

2022 Joseph Jennings - PhD in Geophysics – Thesis: “Interpretative Seismic Image-Focusing Analysis” – Nvidia.

2020 Fantine Huot - PhD in Geophysics – Thesis: “Story In Three Parts: Earthquakes, Microseismic, And Tectonic Tremors” – Google DeepMind.

2020 Ettore Biondi - PhD in Geophysics – Thesis: “Target-Oriented Elastic Full-Waveform Inversion.” – Assistant Professor at Stanford University.

2020 Alejandro Cabrales - PhD in Geophysics – Thesis: “Joint inversion of reflectivity and background subsurface components” – PeMex (Mexico).

2020 Yinbin Ma - PhD in ICME – Thesis: “Anisotropic waveform inversion for monitoring geomechanical deformation caused by hydrocarbon production –FaceBook.

2019 Huy Le - PhD in Geophysics – Thesis: “Constraining anisotropic waveform inversion with petrophysical and geologic models – TSMC Technology.

2019 Taylor Dhalke - PhD in Geophysics – Thesis: “Waveform inversion using level sets for imaging salt inclusions – Hivemapper.

2018 Eileen Martin - PhD in ICME – Thesis: “Passive Imaging and Characterization of the Subsurface with Distributed Acoustic Sensing” – Associate Professor at Colorado School of Mines.

2018 Jason P. Chang - PhD in Geophysics – Thesis: “Imaging with Ambient Seismic Noise: Beyond Surface Wave Microseisms” – Linkedin.

2017 Gustavo Catao Alves - PhD in Geophysics – Thesis: “Elastic Full Waveform Inversion of Multicomponent Data” – PetroBras (Brazil).

2017 Oahad Barak - PhD in Geophysics – Thesis: “Seismic Rotational Data: Acquisition, Processing and Applications” – Meta.

2016 Yi Shen - PhD in Geophysics – Thesis: “Wave equation migration Q analysis” – China University of Petroleum (China).

2016 Ali Almomin - PhD in Geophysics – Thesis: “Tomographic Full Waveform Inversion” – Saudi Aramco (Saudi Arabia).

2016 Musa Maharramov - PhD in Geophysics – Thesis: “Time Lapse Inverse Theory” – Sinopec.

2015 Chirstopher Leader - PhD in Geophysics – Thesis: “The Separation and Imaging of Continuously Recorded Seismic Data” – SLB.

2015 Yang Zhang - PhD in Geophysics – Thesis: “Velocity Model Building Using Residual Moveout Based Wave Equation Migration Velocity Analysis” – TikTok.

2014 Man Chu Wong - PhD in Geophysics – Thesis: “Imaging with Multiples by Least Squares Reverse Time Migration” – Shell.

2014 Xukai Shen - PhD in Geophysics – Thesis: “Early Arrival Waveform Inversion for Near Surface Velocity Estimation” – BP.

2014 Sjoerd A.L. de Ridder - PhD in Geophysics – Thesis: “Passive Seismic Surface Wave Interferometry for Reservoir Scale imaging” – Associate Professor at University of Leeds (UK).

2014 Yunyue (Elita) Li - PhD in Geophysics – Thesis: “Wave Equation Migration Velocity Analysis for VTI Models with Geological and Rock Physics Constraints” –Professor at Purdue University.

2014 Adam Halpert - PhD in Geophysics – Thesis: “Interpreter Driven Automatic Image Segmentation and Model evaluation” – Chevron.

2012 Gboyega Ayeni - PhD in Geophysics – Thesis: “Time-lapse seismic imaging by linearized joint inversion” – ExxonMobil.

2011 Yaxun Tang - PhD in Geophysics – Thesis: “Imaging and velocity analysis by target-oriented wavefield inversion” – ExxonMobil.

2010 Claudio Guerra Cardoso - PhD in Geophysics – Thesis: “Migration-velocity analysis using image-space generalized wavefields” – PetroBras (Brazil).

2009 Jeff Shragge - PhD in Geophysics – Thesis: “Wave-equation migration in generalized coordinates” –Professor at the Colorado School of Mines.

2008 Alejandro Valenciano - PhD in Geophysics – Thesis: “Imaging by wave-equation inversion”– TGS.

2008 Guojian Shan - PhD in Geophysics – Thesis: “Imaging of steep reflectors in anisotropic media by wavefield extrapolation” – Chevron.

2007 Gabriel Alavarez - PhD in Geophysics – Thesis: “Attenuation of multiples in image space” – Independent Consultant (Colombia).

2007 Brad Artman - PhD in Geophysics – Thesis: “Passive seismic imaging” – Geobartman.

2006 Daniel Rosales - PhD in Geophysics – Thesis: “Imaging of converted-wave Ocean-bottom seismic data” – Baird & Associates.
2005 Marie Clapp - PhD in Geophysics – Thesis: “Imaging under salt: illumination compensation by regularized inversion” – Chevron.
2004 Seth Haines - PhD in Geophysics – Thesis: “Seismoelectric imaging of shallow targets” – USGS.
2007 Jesse Lomask - PhD in Geophysics – Thesis: “Seismic volumetric flattening and segmentation” – S&P.
2004 Paul Sava - PhD in Geophysics – Thesis: “Migration and velocity analysis by wavefield extrapolation” – Professor at the Colorado School of Mines.
2001 Nizar Chemingui - PhD in Geophysics – Thesis: “Imaging irregularly sampled 3D prestack data”– TGS.

Principal Advisor for M.S. students with graduation year

Current Suphakorn (Benz) Poobua - MS in Geophysics.

Current Hamad Alswaidan - MS in Geophysics.

2026 Seunghoo Kim - MS in Geophysics.
2024 Paige Given - MS in Geophysics – Chevron
2024 Hassan Almomin - MS in Geophysics – Chevron
2023 Jonathan Voyles - MS in Geophysics – Chevron
2015 Daniel Blatter- MS in Geophysics – Scripps Institution of Oceanography
2011 Kittinat Taweesintananon - MS in Geophysics – PTT Exploration and Production (Thailand)
2010 Mohammad Maysami - MS in Geophysics – Shopify
2009 Abdullah Al-Theyab - MS in Geophysics – Saudi Aramco (Saudi Aramco)
2008 Nader Moussa - MS in Geophysics
2007 Roland Gunther - MS in Geophysics - Danomics
2006 Ben Witten - MS in Geophysics – Nanometrics
2006 Pierre Jousselin - MS in Geophysics – TotalEnergies (France)
2006 Madhav Vyas- MS in Geophysics – BP
2004 Thomas Tisserant - MS in Geophysics – New York Life
2006 Andrey Karpushin - MS in Geophysics - PGS Kazakhstan (Kazakhstan)
2006 Ioan Vlad- MS in Geophysics - GAMA-1 Technologies
2001 Carmen Mora- MS in Geophysics
2001 Douglas Gratwick - MS in Geophysics – ExxonMobil
2000 Louis Vaillant - MS in Geophysics -Google

Honors and Awards (Advisees)

2025 Yunyue (Elita) Li (PhD advisee) – Virgil Kauffman Gold Medal – Society of Exploration Geophysicists

2025 Yunyue (Elita) Li (PhDcadvisee) –Distinguished Instructor Short Course– Society of Exploration Geophysicists

2025 Yi Shen (PhD advisee)– Special commendation from the Society of Exploration Geophysicists

2024 Eileen Martin (PhD advisee) – J. Clarence Karcher Award – Society of Exploration Geophysicists

2024 Ariel Lellouch (Post-doc mentee) – J. Clarence Karcher Award – Society of Exploration Geophysicists

2024 Milad Bader (PhD advisee) – Exceptional Thesis Award" by the Geophysics Department, Stanford University

2023 Tariq Alkhalifah (Post-doc mentee) – Virgil Kauffman Gold Medal – Society of Exploration Geophysicists

2022 Nori Nakata (Post-doc mentee) – Early Career Award – International Union of Geodesy and Geophysics

2021 Xukai Shen (PhD advisee) – J. Clarence Karcher Award – Society of Exploration Geophysicists

2018 Yunyue Elita Li (PhD advisee) – J. Clarence Karcher Award – Society of Exploration Geophysicists

2017 Sjoerd de Ridder (PhD advisee) – J. Clarence Karcher Award – Society of Exploration Geophysicists

2017 Nori Nakata (Post advisee) – Young Scientist Award – Seismological Society of Japan

2011 Guojian Shan (PhD advisee) – J. Clarence Karcher Award – Society of Exploration Geophysicists

2010 Jeffrey Shragge (PhD advisee) – J. Clarence Karcher Award – Society of Exploration Geophysicists

2007 Paul C. Sava (PhD advisee) - J. Clarence Karcher Award – Society of Exploration Geophysicists

1998 Tariq Alkhalifah (Post-doc mentee) – J. Clarence Karcher Award – Society of Exploration Geophysicists

Books

2010 Biondi, B. L., *3D Seismic Imaging* (2nd edition), Society of Exploration Geophysicists.

2008 Jones, I. F., Bloor, R. I., Biondi, B. L., Etgen, J. T. (eds.), *Prestack Depth Migration and Velocity Model Building*, Society of Exploration Geophysicists.

2007 Biondi, B. L., *Concepts and Applications in 3D Seismic Imaging* (SEG Distinguished Instructor Series No. 10), Society of Exploration Geophysicists.

2006 Biondi, B. L., *3D Seismic Imaging* (1st edition), Society of Exploration Geophysicists.

Book Chapters

2021 Biondi, B. L., Yuan, S., Martin, E. R., Huot, F., Clapp, R. G., Using Telecommunication Fiber Infrastructure for Earthquake Monitoring and Near-Surface Characterization, *Distributed Acoustic Sensing in Geophysics* (ch. 10), American Geophysical Union, 131-148.

2021 Martin, E. R., Lindsey, N. J., Ajo-Franklin, J. B., Biondi, B. L., Introduction to Interferometry of Fiber-Optic Strain Measurements, *Distributed Acoustic Sensing in Geophysics* (ch. 9), American Geophysical Union, 111-129.

2016 Sava, P. C., Biondi, B., Etgen, J., Wave-equation migration velocity analysis by focusing diffractions and reflections, *Seismic Diffraction* (30), Society of Exploration Geophysicists.

2008 Clapp, R. G., Biondi, B., Claerbout, J. F., Incorporating geologic information into reflection tomography, *Prestack Depth Migration and Velocity Model Building* (25), Society of Exploration Geophysicists.

2008 Clapp, R. G., Biondi, B., Tau domain migration velocity analysis using angle CRP gathers and geologic constraints, *Prestack Depth Migration and Velocity Model Building* (25), Society of Exploration Geophysicists.

2008 Biondi, B., Symes, W. W., Angle-domain common-image gathers for migration velocity analysis by wavefield-continuation imaging, *Prestack Depth Migration and Velocity Model Building* (25), Society of Exploration Geophysicists.

2008 Biondi, B., Palacharla, G., 3-D prestack migration of common-azimuth data, *Prestack Depth Migration and Velocity Model Building* (25), Society of Exploration Geophysicists.

2008 Fomel, S. B., Biondi, B. L., The time and space formulation of azimuth moveout, *Prestack Depth Migration and Velocity Model Building* (25), Society of Exploration Geophysicists.

2008 Biondi, B., Chemingui, N., Transformation of 3-D prestack data by azimuth moveout (AMO), *Prestack Depth Migration and Velocity Model Building* (25), Society of Exploration Geophysicists.

2005 Biondi, B., Bevc, D., Seismic imaging of complex structures by reflection seismic data, *Data Analysis and Imaging with Global and Local Arrays* (AGU Monograph), American Geophysical Union.

Refereed Journal Articles

2026 Liu, J., Aggarwal, J., Hwang, D., Lee, J., Wu, Y., Yin, F.; Li, H. Li, Santi, P.; Sohn, H., Biondi, B., Ratti, C., Noh, H., Bridge health monitoring using existing telecommunication fiber-optic networks, *Nature Communications,* online.

2026 Li, H., Wang, N., Durlofsky, L. J., Biondi, B. L., Bayesian Full-Waveform Monitoring of CO_2 Storage With Fluid-Flow Priors via Generative Modeling, *Journal of Geophysical Research: Machine Learning and Computation*, **3** (3).

2025 Liu, J., Li, H., Noh, H., Santi, P., Biondi, B., Ratti, C., Urban sensing using existing fiber-optic network, *Nature Communications,* **16**, 3091.

2025 Liu, J., Li, H., Li, J., Hwang, D., Aggarwal, J., Biondi, B., Noh, H. Y., Urban Monitoring Using Preexisting Telecommunication Fiber-Optic Networks for Distributed Acoustic Sensing: A Review, *IEEE Sensors Journal*, **25** (21): 39353-39370.

2025 Li, H., Liu, J., Mao, S., Yuan, S., Clapp, R. G., Biondi, B. L., Fiber-Optic Seismic Full Waveform Monitoring of Groundwater Dynamics, *Geophysical Research Letters*, **52** (20).

2025 Liu, J., Li, H., Yuan, S., Noh, H. Y., Biondi, B., Characterizing Vehicle-Induced Distributed Acoustic Sensing Signals for Accurate Urban Near-Surface Imaging, *Seismological Research Letters*, **96** (5): 2867-2880.

2025 Bader, M., Clapp, R. G., Nihei, K. T., Biondi, B., Reservoir properties estimation before and after hydraulic stimulation using extended elastic full-waveform inversion and distributed acoustic sensing, *Geophysics*, **90** (5): B221-B235.

2024 Yuan, S., van den Ende, M., Liu, J., Noh, H. Y., Clapp, R., Richard, C., Biondi, B., Spatial Deep Deconvolution U-Net for Traffic Analyses With Distributed Acoustic Sensing, *IEEE Transactions on Intelligent Transportation Systems*, **25** (2): 1913-1924.

2024 Bozzi, E., Agostinetti, N. P., Fichtner, A., Klaasen, S., Ugalde, A., Biondi, B., Yuan, S., Dahm, T., Isken, M., Paitz, P., Walter, F., Baird, A. F., Becerril, C., Nishimura, T., Shen, J., Zhu, T., Saccorotti, G., Modelling uncertainty in P-wave arrival-times retrieved from DAS data: case-studies from 15 fibre optic cables, *Geophysical Journal International*, **239** (3): 1928-1942.

2024 Huot, F., Clapp, R. G., Biondi, B. L., Detecting local earthquakes via fiber-optic cables in telecommunication conduits under Stanford University campus using deep learning, *Computers & Geosciences*, **190**.

2024 Park, M. J., Frigerio, J., Clapp, B., Biondi, B., DeepNRMS: Unsupervised deep learning for noise-robust CO_2 monitoring in time-lapse seismic images, *Geophysics*, **89** (4): IM1-IM11.

2024 Wuestefeld, A., Spica, Z. J., Aderhold, K., Huang, H., Ma, K., Lai, V. H., Miller, M., Urmantseva, L., Zapf, D., Bowden, D. C., et al., The Global DAS Month of February 2023, *Seismological Research Letters*, **95** (3): 1569-1577.

2024 Yuan, S., Liu, J., Noh, H. Y., Clapp, R., Biondi, B., Using Vehicle-Induced DAS Signals for Near-Surface Characterization With High Spatiotemporal Resolution, *Journal of Geophysical Research-Solid Earth*, **129** (4).

2024 Ji, Q., Luo, B., Biondi, B., Exploiting the Potential of Urban DAS Grids: Ambient-Noise Subsurface Imaging Using Joint Rayleigh and Love Waves, *Seismological Research Letters*, **95**, 1794-1811

2023 Bader, M., Clapp, R. G., Nihei, K. T., Biondi, B., Moment tensor inversion of perforation shots using distributed-acoustic sensing, *Geophysics*, **88** (6): WC37-WC45.

2023 Barnier, G., Biondi, E., Clapp, R. G., Biondi, B., Full-waveform inversion by model extension: Practical applications, *Geophysics*, **88** (5): R609-R643.

2023 Barnier, G., Biondi, E., Clapp, R. G., Biondi, B., Full-waveform inversion by model extension: Theory, design, and optimization, *Geophysics*, **88** (5): R579-R607.

2023 Biondi, E., Barnier, G., Biondi, B., Clapp, R. G., Target-oriented elastic full-waveform inversion through acoustic extended image-space redatuming, *Geophysics*, **88** (3): R269-R296.

2023 Liu, J., Yuan, S., Luo, B., Biondi, B., Noh, H. Y., Turning Telecommunication Fiber-Optic Cables into Distributed Acoustic Sensors for Vibration-Based Bridge Health Monitoring, *Structural Control & Health Monitoring*, **2023,** ID3902306.

2023 Jennings, J., Clapp, R., Araya-Polo, M., Biondi, B., Automatic interpretive image-focusing analysis, *Geophysics*, **88** (2): U1-U15.

2023 Spica, Z. J., Ajo-Franklin, J., Beroza, G. C., Biondi, B., Cheng, F., Gaite, B., Luo, B., Martin, E., Shen, J., Thurber, C., et al., PubDAS: A PUBlic Distributed Acoustic Sensing Datasets Repository for Geosciences, *Seismological Research Letters*, **94** (2A): 983-998.

2022 Huot, F., Lellouch, A., Given, P., Luo, B., Clapp, R. G., Nemeth, T., Nihei, K. T., Biondi, B. L., Detection and Characterization of Microseismic Events from Fiber-Optic DAS Data Using Deep Learning, *Seismological Research Letters*, **93** (5): 2543-2553.

2022 Lellouch, A., Luo, B., Huot, F., Clapp, R. G., Given, P., Biondi, E., Nemeth, T., Nihei, K. T., Biondi, B. L., Microseismic analysis over a single horizontal distributed acoustic sensing fiber using guided waves, *Geophysics*, **87** (3): KS83-KS95.

2022 Zhu, W., Xu, K., Darve, E., Biondi, B., Beroza, G. C., Integrating deep neural networks with full-waveform inversion: Reparameterization, regularization, and uncertainty quantification, *Geophysics*, **87** (1): R93-R109.

2022 Biondi, E., Meadows, M. A., Biondi, B., True-amplitude migration through regularized extended linearized waveform inversion, *Geophysics*, **87** (1): S1-S20.

2022 Cabrales-Vargas, A., Sarkar, R., Biondi, B. L., Clapp, R. G., Joint inversion of the reflectivity and the velocity model, *Geophysics*, **87** (1): R1-R12.

2021 Bader, M., Clapp, R. G., Biondi, B., Denoising for full-waveform inversion with expanded prediction-error filters, *Geophysics*, **86** (5): V445-V457.

2021 Luo, B., Lellouch, A., Jin, G., Biondi, B., Simmons, J., Seismic inversion of shale reservoir properties using microseismic-induced guided waves recorded by distributed acoustic sensing, *Geophysics*, **86** (4): R383-R397.

2021 Lellouch, A., Biondi, B. L., Seismic Applications of Downhole DAS, *Sensors*, **21** (9).

2021 Lellouch, A., Biondi, E., Biondi, B. L., Luo, B., Jin, G., Meadows, M. A., Properties of a deep seismic waveguide measured with an optical fiber, *Physical Review Research*, **3** (1).

2021 Lellouch, A., Schultz, R., Lindsey, N. J., Biondi, B. L., Ellsworth, W. L., Low-Magnitude Seismicity With a Downhole Distributed Acoustic Sensing Array-Examples From the FORGE Geothermal Experiment, *Journal of Geophysical Research-Solid Earth*, **126** (1).

2020 Lellouch, A., Lindsey, N. J., Ellsworth, W. L., Biondi, B. L., Comparison between Distributed Acoustic Sensing and Geophones: Downhole Microseismic Monitoring of the FORGE Geothermal Experiment, *Seismological Research Letters*, **91** (6): 3256-3268.

2020 Dahlke, T., Biondi, B., Clapp, R., Applied 3D salt body reconstruction using shape optimization with level sets, *Geophysics*, **85** (5): R437-R446.

2020 Pradhan, A., Dutta, N. C., Le, H. Q., Biondi, B., Mukerji, T., Approximate Bayesian inference of seismic velocity and pore-pressure uncertainty with basin modeling, rock physics, and imaging constraints, *Geophysics*, **85** (5): ID19-ID34.

2020 Lellouch, A., Meadows, M. A., Nemeth, T., Biondi, B., Fracture properties estimation using distributed acoustic sensing recording of guided waves in unconventional reservoirs, *Geophysics*, **85** (5): M85-M95.

2020 Le, H., Clapp, R. G., Levin, S. A., Biondi, B., A pipeline approach for three dimensional time-domain finite-difference multi-parameter waveform inversion on GPUs, *Computers & Geosciences*, **140**.

2020 Spica, Z. J., Perton, M., Martin, E. R., Beroza, G. C., Biondi, B., Urban Seismic Site Characterization by Fiber-Optic Seismology, *Journal of Geophysical Research-Solid Earth*, **125** (3).

2020 Lindsey, N. J., Yuan, S., Lellouch, A., Gualtieri, L., Lecocq, T., Biondi, B., City-Scale Dark Fiber DAS Measurements of Infrastructure Use During the COVID-19 Pandemic, *Geophysical Research Letters*, **47** (16): e2020GL089931.

2019 Lellouch, A., Yuan, S., Ellsworth, W. L., Biondi, B., Velocity-Based Earthquake Detection Using Downhole Distributed Acoustic Sensing-Examples from the San Andreas Fault Observatory at Depth, *Bulletin of the Seismological Society of America*, **109** (6): 2491-2500.

2019 Lellouch, A., Yuan, S., Spica, Z., Biondi, B., Ellsworth, W. L., Seismic Velocity Estimation Using Passive Downhole Distributed Acoustic Sensing Records: Examples From the San

Andreas Fault Observatory at Depth, *Journal of Geophysical Research: Solid Earth*, **124** (7): 6931-6948.

2019 Jennings, J., Jakovljevic, M., Biondi, E., Dahl, J., Biondi, B., Estimating Signal and Structured Noise in Ultrasound Data using Prediction-Error Filters, *Medical Imaging 2019: Ultrasonic Imaging and Tomography*, **10955**.

2018 Martin, E. R., Huot, F., Ma, Y., Cieplicki, R., Cole, S., Karrenbach, M., Biondi, B. L., A Seismic Shift in Scalable Acquisition Demands New Processing: Fiber-optic seismic signal retrieval in urban areas with unsupervised learning for coherent noise removal, *IEEE Signal Processing Magazine*, **35** (2): 31-40.

2017 Lindsey, N. J., Martin, E. R., Dreger, D. S., Freifeld, B., Cole, S., James, S. R., Biondi, B. L., Ajo-Franklin, J. B., Fiber-Optic Network Observations of Earthquake Wavefields, *Geophysical Research Letters*, **44** (23): 11792-11799.

2016 Li, Y., Biondi, B., Clapp, R., Nichols, D., Integrated VTI model building with seismic data, geologic information, and rock-physics modeling - Part 1: Theory and synthetic test, *Geophysics*, **81** (5): C177-C191.

2016 Li, Y., Biondi, B., Clapp, R., Nichols, D., Integrated VTI model building with seismic data, geologic information, and rock-physics modeling - Part 2: Field data test, *Geophysics*, **81** (5): C205-C218.

2016 Chang, J. P., de Ridder, S. A. L., Biondi, B. L., High-frequency Rayleigh-wave tomography using traffic noise from Long Beach, California, *Geophysics*, **81** (2): B43-B53.

2016 Maharramov, M., Biondi, B. L., Meadows, M. A., Time-lapse inverse theory with applications, *Geophysics*, **81** (6).

2015 de Ridder, S. A. L., Biondi, B. L., Ambient seismic noise tomography at Ekofisk, *Geophysics*, **80** (6): B167-B176.

2015 Wong, M., Biondi, B. L., Ronen, S., Imaging with primaries and free-surface multiples by joint least-squares reverse time migration, *Geophysics*, **80** (6): S223-S235.

2015 de Ridder, S. A. L., Biondi, B. L., Near-surface Scholte wave velocities at Ekofisk from short noise recordings by seismic noise gradiometry, *Geophysical Research Letters*, **42** (17): 7031-7038.

2015 de Ridder, S. A. L., Biondi, B. L., Nichols, D., Elliptical-anisotropic eikonal phase velocity tomography, *Geophysical Research Letters*, **42** (3): 758-764.

2014 de Ridder, S. A. L., Biondi, B. L., Clapp, R. G., Time-lapse seismic noise correlation tomography at Valhall, *Geophysical Research Letters*, **41** (17): 6116-6122.

2014 Fichtner, A., Plessix, R.-E., Fleury, C., Biondi, B., Advances in finite-frequency imaging and inversion - Introduction, *Geophysics*, **79** (3): WA1-WA2.

2014 Biondi, B., Almomin, A., Simultaneous inversion of full data bandwidth by tomographic full-waveform inversion, *Geophysics*, **79** (3): WA129-WA140.

2014 Li, Y., Biondi, B., Clapp, R., Nichols, D., Wave-equation migration velocity analysis for VTI models, *Geophysics*, **79** (3): WA59-WA68.

2014 Zhu, T., Harris, J. M., Biondi, B., Q-compensated reverse-time migration, *Geophysics*, **79** (3).

2014 Halpert, A. D., Clapp, R. G., Biondi, B., Salt delineation via interpreter-guided 3D seismic image segmentation, *Interpretation*, **2** (2).

2013 de Ridder, S. A. L., Biondi, B. L., Daily reservoir-scale subsurface monitoring using ambient seismic noise, *Geophysical Research Letters*, **40** (12): 2969-2974.

2013 Zhang, Y., Biondi, B., Moveout-based wave-equation migration velocity analysis, *Geophysics*, **78** (2): U31-U39.

2013 Tang, Y., Biondi, B., Subsalt imaging by target-oriented inversion-based imaging: A 3D field-data example, *Geophysics*, **78** (2): S47-S58.

2013 Tang, Y., Biondi, B., Subsalt velocity estimation by target-oriented wave-equation migration velocity analysis: A 3D field-data example, *Geophysics*, **78** (1): U19-U29.

2011 Guerra, C., Biondi, B., Fast 3D migration-velocity analysis by wavefield extrapolation using the prestack exploding-reflector model, *Geophysics*, **76** (5): WB151-WB167.

2011 Tang, Y., Biondi, B., Target-oriented wavefield tomography using synthesized Born data, *Geophysics*, **76** (5): WB191-WB207.

2010 Biondi, B., Velocity estimation by image-focusing analysis, *Geophysics*, **75** (6): U49-U60.

2010 Ayeni, G., Biondi, B., Target-oriented joint least-squares migration/inversion of time-lapse seismic data sets, *Geophysics*, **75** (3): R61-R73.

2009 Shan, G., Clapp, R., Biondi, B., 3D plane-wave migration in tilted coordinates: A field data example, *Geophysics*, **74** (6): WCA199-WCA209.

2009 Valenciano, A. A., Biondi, B. L., Clapp, R. G., Imaging by target-oriented wave-equation inversion, *Geophysics*, **74** (6): WCA109-WCA120.

2008 Shan, G., Biondi, B., Plane-wave migration in tilted coordinates, *Geophysics*, **73** (5): S185-S194.

2008 Rosales, D. A., Fomel, S., Biondi, B. L., Sava, P. C., Wave-equation angle-domain common-image gathers for converted waves, *Geophysics*, **73** (1): S17-S26.

2007 Alvarez, G., Biondi, B., Guitton, A., Attenuation of specular and diffracted 2D multiples in image space, *Geophysics*, **72** (5): V97-V109.

2007 Lomask, J., Clapp, R. G., Biondi, B., Application of image segmentation to tracking 3D salt boundaries, *Geophysics*, **72** (4): P47-P56.

2007 Biondi, B., Angle-domain common-image gathers from anisotropic migration, *Geophysics*, **72** (2): S81-S91.

2007 Biondi, B., Residual moveout in anisotropic angle-domain common-image gathers, *Geophysics*, **72** (2): S93-S103.

2007 Haines, S. S., Guitton, A., Biondi, B., Seismoelectric data processing for surface surveys of shallow targets, *Geophysics*, **72** (2): G1-G8.

2007 Haines, S. S., Pride, S. R., Klemperer, S. L., Biondi, B., Seismoelectric imaging of shallow targets, *Geophysics*, **72** (2): G9-G20.

2007 Guitton, A., Kaelin, B., Biondi, B., Least-squares attenuation of reverse-time-migration artifacts, *Geophysics*, **72** (1): S19-S23.

2006 Valenciano, A. A., Biondi, B., Guitton, A., Target-oriented wave-equation inversion, *Geophysics*, **71** (4): A35-A38.

2006 Rosales, D. A., Biondi, B., Converted-wave azimuth moveout, *Geophysics*, **71** (3): S99-S110.

2005 Sava, P. C., Biondi, B., Etgen, J., Wave-equation migration velocity analysis by focusing diffractions and reflections, *Geophysics*, **70** (3): U19-U27.

2004 Biondi, B., Tisserant, T., 3D angle-domain common-image gathers for migration velocity analysis, *Geophysical Prospecting*, **52** (6): 575-591.

2004 Sava, P., Biondi, B., Wave-equation migration velocity analysis. I. Theory, *Geophysical Prospecting*, **52** (6): 593-606.

2004 Sava, P., Biondi, B., Wave-equation migration velocity analysis. II. Subsalt imaging examples, *Geophysical Prospecting*, **52** (6): 607-623.

2004 Biondi, B., Symes, W. W., Angle-domain common-image gathers for migration velocity analysis by wavefield-continuation imaging, *Geophysics*, **69** (5): 1283-1298.

2004 Clapp, R. G., Biondi, B., Claerbout, J. F., Incorporating geologic information into reflection tomography, *Geophysics*, **69** (2): 533-546.

2004 Alkhalifah, T. A., Biondi, B., Numerical analysis of the azimuth moveout operator for vertically inhomogeneous media, *Geophysics*, **69** (2): 554-561.

2003 Biondi, B., Equivalence of source-receiver migration and shot-profile migration, *Geophysics*, **68** (4): 1340-1347.

2003 de Hoop, M. V., Le Rousseau, J. H., Biondi, B. L., Symplectic structure of wave-equation imaging: a path-integral approach based on the double-square-root equation, *Geophysical Journal International*, **153** (1): 52-74.

2002 Chemingui, N., Biondi, B., Seismic data reconstruction by inversion to common offset, *Geophysics*, **67** (5): 1575-1585.

2002 Biondi, B., Stable wide-angle Fourier finite-difference downward extrapolation of 3-D wavefields, *Geophysics*, **67** (3): 872-882.

2001 Biondi, B., Kirchhoff imaging beyond aliasing, *Geophysics*, **66** (2): 654-666.

2001 Alkhalifah, T., Fomel, S., Biondi, B., The space-time domain: theory and modelling for anisotropic media, *Geophysical Journal International*, **144** (1): 105-113.

1998 Biondi, B., Fomel, S., Chemingui, N., Azimuth moveout for 3-D prestack imaging, *Geophysics*, **63** (2): 574-588.

1997 Audebert, F., Nichols, D., Rekdal, T., Biondi, B., Lumley, D. E., Urdaneta, H., Imaging complex geologic structure with single-arrival Kirchhoff prestack depth migration, *Geophysics*, **62** (5): 1533-1543.

1996 Biondi, B., Palacharla, G., 3-D prestack migration of common-azimuth data, *Geophysics*, **61** (6): 1822-1832.

1995 Biondi, B., Palacharla, G., 3D depth migration by rotated McClellan filters, *Geophysical Prospecting*, **43** (8): 1005-1020.

1992 Biondi, B., Velocity estimation by beam stack, *Geophysics*, **57** (8): 1034-1047.

1989 Biondi, B. L., Kostov, C., High-resolution velocity spectra using eigenstructure methods, *Geophysics*, **54** (7): 832-842.

1987 Biondi, B., Ronen, J., Dip moveout in shot profiles, *Geophysics*, **52** (11): 1473-1482.

Refereed Magazines Articles

2025 Li, H., Liu, J., Biondi, B. L., Near-surface imaging and monitoring enabled by urban distributed acoustic sensing seismic arrays, *The Leading Edge*, **44** (8): 588-597.

2020 Yuan, S., Lellouch, A., Clapp, R. G., Biondi, B., Near-surface characterization using a roadside distributed acoustic sensing array, *The Leading Edge*, **39** (9): 646-653.

2020 Huff, O., Lellouch, A., Luo, B., Jin, G., Biondi, B., Validating the origin of microseismic events in target reservoir using guided waves recorded by DAS, *The Leading Edge*, **39** (11): 776-784.

2019 Lellouch, A., Horne, S., Meadows, M. A., Farris, S., Nemeth, T., Biondi, B., DAS observations and modeling of perforation-induced guided waves in a shale reservoir, *The Leading Edge*, **38** (11): 858-864.

2018 Martin, E. R., Huot, F., Ma, Y., Cieplicki, R., Cole, S., Karrenbach, M., Biondi, B. L., A Seismic Shift in Scalable Acquisition Demands New Processing: Fiber-Optic Seismic Signal Retrieval in Urban Areas with Unsupervised Learning for Coherent Noise Removal, *IEEE Signal Processing Magazine*, **35** (2): 31-40.

2017 Martin, E. R., Castillo, C. M., Cole, S., Sawasdee, P. S., Yuan, S., Clapp, R., Karrenbach, M., Biondi, B. L., Seismic monitoring leveraging existing telecom infrastructure at the SDASA: Active, passive, and ambient-noise analysis, *The Leading Edge*, **36** (12): 1025-1031.

2016 Li, Y. E., Biondi, B., Nichols, D., Clapp, R., Toward a closed loop from seismic imaging to earth-model building, *The Leading Edge*, **35** (2): 135-139.

2014 Wong, M., Biondi, B., Ronen, S., Imaging with multiples using least-squares reverse time migration, *The Leading Edge*, **33** (9): 970-976.

2014 Biondi, B., Nichols, D., Sava, P., Introduction to this special section: Imaging migration, *The Leading Edge*, **33** (9): 950.

2013 Biondi, B., Almomin, A., Tomographic full-waveform inversion (TFWI) by combining FWI and wave-equation migration velocity analysis, *The Leading Edge*, **32** (9): 1074-1080.

2005 Bevc, D., Biondi, B., Which depth imaging method should you use? A road map through the maze of possibilities, *The Leading Edge*, **24** (6): 602-606.

2002 Fliedner, M. M., Crawley, S., Bevc, D., Popovici, A. M., Biondi, B., Velocity model building by wavefield-continuation imaging in the deepwater Gulf of Mexico, *The Leading Edge*, **21** (12): 1232-1236.

1998 Biondi, B., Mavko, G., Mukerji, T., Rickett, J., Lumley, D., Deutsch, C., Gundesø, R., Thiele, M., Reservoir monitoring: A multidisciplinary feasibility study, *The Leading Edge*, **17** (10): 1404-1414.

Conference Proceedings

2025 Biondi, B., Li, H., Future SMART Cities Enabled by Fiber Sensing, *2025 Optical Fiber Communications Conference and Exhibition (OFC)*.

2024 Akhmadiev, R., Biondi, B., Clapp, R. G., One-way full-waveform inversion using frequency-domain model extension, *SEG Technical Program Expanded Abstracts*, 867-871.

2023 Stitt, J., Clapp, R., Biondi, B., Deep Dix: Enhancing interval velocity model estimation through adversarial regularization, *SEG Technical Program Expanded Abstracts*, 108-112.

2023 Liu, J., Yuan, S., Dong, Y., Biondi, B., Noh, H. Y., TelecomTM: A Fine-Grained and Ubiquitous Traffic Monitoring System Using Pre-Existing Telecommunication Fiber-Optic Cables as Sensors, *Proceedings of the ACM on Interactive Mobile Wearable and Ubiquitous Technologies-IMWUT*, **7** (2).

2022 Biondi, B., Jennings, J., Park, M. J., Farris, S., Clapp, B., Integration of deep neural networks into seismic workflows for low-carbon energy, *SEG Technical Program Expanded Abstracts*, 2986-2988.

2022 Park, M. J., Jennings, J., Clapp, B., Biondi, B., Realistic synthetic data generation using neural style transfer: Application to automatic fault interpretation, *SEG Technical Program Expanded Abstracts*, 1714-1718.

2022 Oliva Frigério, J., Biondi, B., Tomographic waveform inversion (TWI) applied to real seismic data, *SEG Technical Program Expanded Abstracts*, 912-916.

2022 Bader, M., Clapp, R. G., Biondi, B., Moment tensor inversion of perforation shots using distributed acoustic sensing, *SEG Technical Program Expanded Abstracts*, 607-611.

2022 Sarkar, R., Biondi, B., Acoustic waveform inversion with the Lippmann-Schwinger equation constraint, *SEG Technical Program Expanded Abstracts*, 877-881.

2021 Biondi, B., Clapp, R. G., Yuan, S., Huot, F., Scaling up to city-wide dark-fiber seismic arrays: Lessons from five years of the Stanford DAS array project, *SEG Technical Program Expanded Abstracts*, 3225-3229.

2021 Jennings, J., Clapp, B., Biondi, B., Araya-Polo, M., Focusing unfocused faults with deep learning and residual migration, *SEG Technical Program Expanded Abstracts*, 2654-2658.

2021 Frigério, J. O., Biondi, B., Tomographic waveform inversion (TWI), *SEG Technical Program Expanded Abstracts*, 692-696.

2021 Yuan, S., Liu, J., Young Noh, H., Biondi, B., Urban system monitoring using combined vehicle onboard sensing and roadside distributed acoustic sensing, *SEG Technical Program Expanded Abstracts*, 3235-3239.

2021 Biondi, E., Barnier, G., Biondi, B., Clapp, R., Target-oriented elastic full-waveform inversion: Deep-water ocean-bottom-node field-data application, *SEG Technical Program Expanded Abstracts*, 627-631.

2021 Sarkar, R., Biondi, B., A numerical scheme to solve the Lippmann-Schwinger equation for a linearly varying background, *SEG Technical Program Expanded Abstracts*, 2450-2454.

2020 Lellouch, A., Biondi, B., Meadows, M. A., Craven, M., DAS characterization of an unconventional shale reservoir using guided waves, *SEG Technical Program Expanded Abstracts*, 480-484.

2020 Yuan, S., Lellouch, A., Clapp, B., Biondi, B., Near-surface seismic properties characterizations with a roadside distributed acoustic sensing (DAS) array, *SEG Technical Program Expanded Abstracts*, 3457-3461.

2020 Huot, F., Biondi, B., Detecting earthquakes through telecom fiber using a convolutional neural network, *SEG Technical Program Expanded Abstracts*, 3452-3456.

2020 Park, M. J., Jennings, J., Clapp, B., Biondi, B., Seismic data interpolation using a POCS-guided deep image prior, *SEG Technical Program Expanded Abstracts*, 3154-3158.

2020 Cabrales Vargas, A., Biondi, B., Clapp, R., Sarkar, R., Joint inversion of the reflectivity and the background subsurface components, *EAGE Conference Proceedings*.

2019 Bader, M., Clapp, R., Biondi, B., Low frequency de-noising using high frequency prediction error filters, *SEG Technical Program Expanded Abstracts*, 4500-4504.

2019 Pradhan, A., Le, H., Dutta, N. C., Biondi, B., Mukerji, T., Prior velocity modeling and uncertainty analysis with basin modeling and rock physics constraints, *SEG Technical Program Expanded Abstracts*, 5144-5148.

2019 Lellouch, A., Yuan, S., Spica, Z., Biondi, B., Ellsworth, W. L., Velocity analysis and moveout-based event detection using downhole DAS records, *SEG Technical Program Expanded Abstracts*, 989-993.

2019 Biondi, E., Meadows, M., Biondi, B., Amplitude preserving migration through extended acoustic least-squares RTM, *SEG Technical Program Expanded Abstracts*, 4196-4200.

2019 Sarkar, R., Biondi, B., Illumination compensation of shadow zones in extended least squares migrated images by solving the linear inverse problem in tomographic full waveform inversion, *SEG Technical Program Expanded Abstracts*, 4297-4301.

2019 Huot, F., Clapp, R., Biondi, B., Power, B., Stefani, J., Stratigraphy estimation from seismic data using deep learning, *SEG Technical Program Expanded Abstracts*, 2378-2382.

2019 Le, H., Levin, S. A., Biondi, B., Instability of adjoint equations and the use of time reversed forward in acoustic anisotropic full waveform inversion, *SEG Technical Program Expanded Abstracts*, 439-443.

2019 Huot, F., Biondi, B., Lichnewsky, A., Boneti, C., Automatic denoising by 2-D continuous wavelet transform, *SEG Technical Program Expanded Abstracts*, 3944-3948.

2019 Lellouch, A., Biondi, B., Horne, S., Meadows, M. A., Nemeth, T., DAS observation of guided waves in a shale reservoir generated by perforation shots, *SEG Technical Program Expanded Abstracts*, 943-947.

2019 Lellouch, A., Biondi, B., Meadows, M. A., Horne, S., Nemeth, T., Downhole DAS Observation of Guided Waves in a Shale Reservoir Generated by Perforation Shots, *EAGE Conference Proceedings*.

2019 Lellouch, A., Yuan, S., Spica, Z., Biondi, B., Ellsworth, W. L., A Moveout-Based Method for the Detection of Weak Seismic Events Using Downhole DAS Arrays, *EAGE Conference Proceedings*.

2018 Huot, F., Biondi, B., Machine learning algorithms for automated seismic ambient noise processing applied to DAS acquisition, *SEG Technical Program Expanded Abstracts*, 5501-5505.

2018 Huot, F., Biondi, B., Beroza, G., Jump-starting neural network training for seismic problems, *SEG Technical Program Expanded Abstracts*, 2191-2195.

2018 Jennings, J., Biondi, B., Clapp, R., Ronen, S., Combining direct imaging of blended data and data-space deblending using a pattern-based approach, *SEG Technical Program Expanded Abstracts*, 236-240.

2018 Barnier, G., Biondi, E., Biondi, B., Full waveform inversion by model extension, *SEG Technical Program Expanded Abstracts*, 1183-1187.

2018 Jennings, J., Chang, R., Biondi, B., Ronen, S., Multicomponent deblending of marine data using a pattern-based approach, *SEG Technical Program Expanded Abstracts*, 136-140.

2018 Le, H., Pradhan, A., Dutta, N. C., Biondi, B., Mukerji, T., Levin, S. A., Rock physics guided velocity model building, *SEG Technical Program Expanded Abstracts*, 3497-3501.

2018 Huot, F., Martin, E. R., Biondi, B., Automated ambient noise processing applied to fiber optic seismic acquisition (DAS), *SEG Technical Program Expanded Abstracts*, 4688-4692.

2018 Biondi, E., Biondi, B., Barnier, G., Target-oriented elastic full-waveform inversion through extended-migration redatuming, *SEG Technical Program Expanded Abstracts*, 1228-1232.

2018 Alves, G., Biondi, B., Elastic full-waveform inversion of multicomponent ocean-bottom data in the Moere Vest Basin, offshore Norway, *SEG Technical Program Expanded Abstracts*, 1073-1077.

2018 Ma, Y., Clapp, R., Biondi, B., Time-lapse FWI with nonlocal shaping regularization: Toward integrated reservoir monitoring, *SEG Technical Program Expanded Abstracts*, 5333-5337.

2018 Biondi, E., Biondi, B., Barnier, G., Target-oriented elastic full-waveform inversion through acoustic extended migration redatuming, *EAGE Conference Proceedings*.

2018 Farris, S., Araya-Polo, M., Jennings, J., Clapp, B., Biondi, B., Tomography: a Deep Learning vs Full-Waveform Inversion Comparison, *EAGE Conference Proceedings*.

2017 Biondi, B., Martin, E., Cole, S., Karrenbach, M., Lindsey, N., Earthquakes analysis using data recorded by the Stanford DAS array, *SEG Technical Program Expanded Abstracts*, 2752-2756.

2017 Huot, F., Ma, Y., Cieplicki, R., Martin, E., Biondi, B., Automatic noise exploration in urban areas, *SEG Technical Program Expanded Abstracts*, 5027-5032.

2017 Almomin, A., Biondi, B., Balancing amplitude and phase in tomographic full-waveform inversion, *SEG Technical Program Expanded Abstracts*, 1342-1346.

2017 Biondi, E., Barnier, G., Biondi, B., Preconditioned elastic full-waveform inversion with approximated Hessian, *SEG Technical Program Expanded Abstracts*, 1654-1658.

2017 Biondi, B., Almomin, A., Sarkar, R., Application of tomographic FWI (TFWI) to large-scale field datasets: challenges and insights, *EAGE Conference Proceedings*.

2017 Martin, E., Chang, J., Huot, F., Ma, Y., Biondi, B., Urban ambient noise: from dense nodes to DAS, *EAGE Conference Proceedings*.

2017 Maharramov, M., Biondi, B., Full Waveform Inversion for Reservoir Monitoring - Pushing the Limits of Subsurface Resolution, *EAGE Conference Proceedings*.

2017 Martin, E. R., Biondi, B., Karrenbach, M., Cole, S., Continuous Subsurface Monitoring by Passive Seismic with Distributed Acoustic Sensors - The "Stanford Array" Experiment, *EAGE Conference Proceedings*.

2016 Dahlke, T., Clapp, R., Biondi, B., Second-order updating in shape optimization for salt segmentation, *SEG Technical Program Expanded Abstracts*, 5369-5373.

2016 Ma, Y., Maharramov, M., Clapp, R., Biondi, B., Multiparameter full-waveform inversion in the isotropic acoustic media with application to time-lapse seismic inverse problem, *SEG Technical Program Expanded Abstracts*, 5557-5561.

2016 Alves, G., Biondi, B., Imaging condition for elastic reverse time migration, *SEG Technical Program Expanded Abstracts*, 4173-4177.

2015 Almomin, A., Biondi, B., Generalization and amplitude normalization of tomographic full waveform inversion, *SEG Technical Program Expanded Abstracts*, 1309-1313.

2015 Shen, Y., Biondi, B., Clapp, R., Wave-equation based Q tomography from angle-domain common image gathers, *SEG Technical Program Expanded Abstracts*, 4334-4338.

2015 Dahlke, T., Biondi, B., Clapp, R., Domain decomposition of level set updates for salt segmentation, *SEG Technical Program Expanded Abstracts*, 1366-1371.

2015 Le, H., Biondi, B., Clapp, R. G., Levin, S. A., Using a nonlinear acoustic wave equation for anisotropic inversion, *SEG Technical Program Expanded Abstracts*, 467-471.

2015 Maharramov, M., Biondi, B., Meadows, M., Simultaneous TV-regularized time-lapse FWI with application to field data, *SEG Technical Program Expanded Abstracts*, 1236-1241.

2015 Chang, J. P., Biondi, B., Rayleigh-wave tomography using traffic noise at Long Beach, CA, *SEG Technical Program Expanded Abstracts*, 2424-2429.

2015 de Ridder, S. A. L., Biondi, B., Imaging an Incoherent Wavefield without Cross-correlations - Chaotic Wavefield Gradiometry, *EAGE Conference Proceedings*.

2014 Almomin, A., Biondi, B., Preconditioned tomographic full waveform inversion by wavelength continuation, *SEG Technical Program Expanded Abstracts*, 944-948.

2014 Shen, Y., Biondi, B., Clapp, R., Nichols, D., Wave-equation migration Q analysis (WEMQA), *SEG Technical Program Expanded Abstracts*, 3757-3762.

2014 Maharramov, M., Biondi, B., Joint full-waveform inversion of time-lapse seismic data sets, *SEG Technical Program Expanded Abstracts*, 954-959.

2014 de Ridder, S., Biondi, B., Clapp, B., Time-lapse ambient-seismic-noise tomography at Valhall, *SEG Technical Program Expanded Abstracts*, 2229-2234.

2014 Biondi, B., Almomin, A., Efficient and robust waveform-inversion workflow: Tomographic FWI followed by FWI, *SEG Technical Program Expanded Abstracts*, 917-921.

2014 Chang, J. P., Nakata, N., Clapp, R. G., Biondi, B., de Ridder, S., High-frequency surface and body waves from ambient noise cross-correlations at Long Beach, CA, *SEG Technical Program Expanded Abstracts*, 2235-2239.

2014 Wong, M., Biondi, B., Ronen, S., Perkins, C., Merritt, M., Goh, V., Cook, R., Robust least squares RTM on the 3D Deimos ocean bottom node dataset, *SEG Technical Program Expanded Abstracts*, 3086-3091.

2014 Leader, C., Biondi, B., Demigration and image space separation of simultaneously acquired data, *SEG Technical Program Expanded Abstracts*, 88-93.

2013 Almomin, A., Biondi, B., Tomographic full waveform inversion (TFWI) by successive linearizations and scale separations, *SEG Technical Program Expanded Abstracts*, 1048-1052.

2013 Biondi, B., Almomin, A., Tomographic full waveform inversion (TFWI) by extending the velocity model along the time-lag axis, *SEG Technical Program Expanded Abstracts*, 1031-1036.

2013 Chang, J. P., de Ridder, S., Biondi, B., Power spectral densities and ambient noise cross-correlations at Long Beach, *SEG Technical Program Expanded Abstracts*, 2196-2200.

2013 Zhang, Y., Biondi, B., Clapp, R., Accelerating residual moveout based wave-equation migration velocity analysis with compressed sensing, *SEG Technical Program Expanded Abstracts*, 4744-4749.

2013 de Ridder, S., Biondi, B., Repeatability analysis of ambient-seismic-noise tomography on four Valhall data sets, 2004-2010, *SEG Technical Program Expanded Abstracts*, 2124-2128.

2013 Shen, Y., Biondi, B., Clapp, R., Nichols, D., Wave-equation Migration Q Analysis (WEMQA), *EAGE Conference Proceedings*.

2013 Biondi, B., Almomin, A., Tomographic Full Waveform Inversion (TFWI) by Extending the Velocity Model along the Time-lag Axis, *EAGE Conference Proceedings*.

2013 Almomin, A., Biondi, B., Tomographic Full Waveform Inversion (TFWI) by Successive Linearizations and Scale Separations, *EAGE Conference Proceedings*.

2012 Almomin, A., Biondi, B., Tomographic Full Waveform Inversion: Practical and Computationally Feasible Approach, *SEG Technical Program Expanded Abstracts*, 1-5.

2012 Wong, M., Ronen, S., Biondi, B., Joint imaging with Streamer and OBN data, *SEG Technical Program Expanded Abstracts*, 1-5.

2012 Wong, M., Biondi, B., Ronen, S., Imaging with multiples using linearized full-wave inversion, *SEG Technical Program Expanded Abstracts*, 1-5.

2012 Ayeni, G., Biondi, B., Time-lapse seismic imaging by linearized joint inversion – A Valhall Field case study, *SEG Technical Program Expanded Abstracts*, 1-6.

2012 Biondi, B., Almomin, A., Tomographic full waveform inversion (TFWI) by combining full waveform inversion with wave-equation migration velocity analysis, *SEG Technical Program Expanded Abstracts*, 1-5.

2012 Zhang, Y., Biondi, B., Tang, Y., Residual moveout-based wave-equation migration velocity analysis, *SEG Technical Program Expanded Abstracts*, 1-5.

2012 Zhang, Y., Biondi, B., Moveout-based Wave-equation Migration Velocity Analysis, *EAGE Conference Proceedings*.

2012 de Ridder, S., Biondi, B., Continuous Passive Seismic Monitoring of CCS Projects by Correlating Seismic Noise - A Feasibility Study, *EAGE Conference Proceedings*.

2011 Wong, M., Ronen, S., Biondi, B., Least-squares reverse time migration/inversion for ocean bottom data: A case study, *SEG Technical Program Expanded Abstracts*, 2369-2373.

2011 Li, Y., Biondi, B., Migration velocity analysis for anisotropic models, *SEG Technical Program Expanded Abstracts*, 201-206.

2011 Ayeni, G., Biondi, B., Wave-equation inversion of time-lapse seismic data sets, *SEG Technical Program Expanded Abstracts*, 4149-4154.

2011 Tang, Y., Biondi, B., Subsalt velocity analysis by target-oriented wavefield tomography: A 3-D field-data example, *SEG Technical Program Expanded Abstracts*, 3958-3963.

2011 Cardoso, C., Biondi, B., Migration-velocity Analysis Using Image-space Generalized Wavefields, *EAGE Conference Proceedings*.

2011 Halpert, A., Clapp, R. G., Biondi, B., Interpreter Guidance for Automated Seismic Image Segmentation, *EAGE Conference Proceedings*.

2010 de Ridder, S., Biondi, B., Low frequency passive seismic interferometry for land data, *SEG Technical Program Expanded Abstracts*, 4041-4046.

2010 Biondi, B., Velocity estimation by image focusing analysis, *SEG Technical Program Expanded Abstracts*, 4066-4070.

2010 Wong, M., Biondi, B., Ronen, S., Joint least-squares inversion of up- and down-going signal for ocean bottom data sets, *SEG Technical Program Expanded Abstracts*, 2752-2756.

2010 Tang, Y., Biondi, B., Target-oriented wavefield tomography using demigrated Born data, *SEG Technical Program Expanded Abstracts*, 4280-4285.

2010 Guerra, C., Biondi, B., Fast 3D velocity updates using the pre-stack exploding reflector model, *SEG Technical Program Expanded Abstracts*, 4375-4379.

2010 Halpert, A. D., Clapp, R. G., Biondi, B., Speeding up seismic image segmentation, *SEG Technical Program Expanded Abstracts*, 1276-1280.

2010 Biondi, B., Velocity Estimation by Image Focusing Analysis, *EAGE Conference Proceedings*.

2010 Ayeni, G., Biondi, B., Continuous Reservoir Monitoring with Asynchronous Simultaneous-source Seismic Data, *EAGE Conference Proceedings*.

2009 Ayeni, G., Biondi, B., Joint target-oriented wave-equation inversion of multiple time-lapse seismic data sets, *SEG Technical Program Expanded Abstracts*, 3825-3829.

2009 Halpert, A. D., Clapp, R. G., Biondi, B., Seismic image segmentation with multiple attributes, *SEG Technical Program Expanded Abstracts*, 3700-3704.

2009 Guerra, C., Tang, Y., Biondi, B., Wave-equation tomography using image-space phase encoded data, *SEG Technical Program Expanded Abstracts*, 3964-3968.

2009 Biondi, B., Keynote Presentation: Subsalt Imaging by Image-Domain Target-Orientated Wavefield Inversion, *EAGE Conference Proceedings*.

2008 Guitton, A., Fliedner, M., Biondi, B., Ortigosa, F., Fast velocity model building by plane-wave migration in tilted coordinates, automated volume-based picking, and tomography, *SEG Technical Program Expanded Abstracts*, 3270-3274.

2008 Shan, G., Biondi, B., Angle-domain common-image gathers for steep reflectors, *SEG Technical Program Expanded Abstracts*, 3068-3072.

2008 Halpert, A. D., Clapp, R. G., Lomask, J., Biondi, B., Image segmentation for velocity model construction and updating, *SEG Technical Program Expanded Abstracts*, 3088-3092.

2008 Bevc, D., Fliedner, M., Brown, M., Biondi, B., Wavepath tomography for complex velocity areas, *EAGE Conference Proceedings*.

2008 Bevc, D., Fliedner, M. M., Biondi, B., Wavepath Tomography for Model Building and Hazard Detection, *EAGE Conference Proceedings*.

2008 Halpert, A., Lomask, J., Clapp, B., Biondi, B., Automatic interpretation of salt bodies by iterative image segmentation, *EAGE Conference Proceedings*.

2008 Biondi, B., Clapp, B., Valenciano, A., The role of High-performance computing and seismic imaging and interpretation, *EAGE Conference Proceedings*.

2007 Shan, G., Clapp, R., Biondi, B., 3D plane-wave migration in tilted coordinates, *SEG Technical Program Expanded Abstracts*, 2190-2194.

2007 Bevc, D., Fliedner, M. M., Brown, M. P., Biondi, B., Wavepath Tomography for Subsalt Velocity Model Building, *EAGE Conference Proceedings*.

2006 Bednar, J. B., Abriel, W. L., Biondi, B., Levin, S., Cheng, A., SEG Advanced Modeling (SEAM) today and tomorrow, *SEG Technical Program Expanded Abstracts*, 3531-3534.

2006 Alvarez, G., Biondi, B., Mapping of specularly-reflected multiples to image space. An example with 3D synthetic data, *SEG Technical Program Expanded Abstracts*, 2742-2746.

2006 Guitton, A., Kaelin, B., Biondi, B., Least-square attenuation of reverse time migration artifacts, *SEG Technical Program Expanded Abstracts*, 2348-2352.

2006 Shan, G., Biondi, B., Imaging steep salt flank with plane-wave migration in tilted coordinates, *SEG Technical Program Expanded Abstracts*, 2372-2376.

2006 Jousselin, P., Biondi, B., Residual moveout in anisotropic angle-domain common-image gathers with dipping reflectors, *SEG Technical Program Expanded Abstracts*, 224-228.

2006 Biondi, B., Prestack exploding-reflectors modeling for migration velocity analysis, *SEG Technical Program Expanded Abstracts*, 3056-3060.

2006 Biondi, B., Angle-Domain Common Image Gathers and RMO Analysis for Anisotropic Migration, *EAGE Conference Proceedings*.

2006 Valenciano, A. A., Biondi, B., Wave-Equation Angle-Domain Hessian, *EAGE Conference Proceedings*.

2006 Lomask, J., Clapp, B., Biondi, B., Parallel Implementation of Image Segmentation for Tracking 3D Salt Boundaries, *EAGE Conference Proceedings*.

2005 Sen, S., Biondi, B., Common Azimuth migration for elliptical and VTI media, *SEG Technical Program Expanded Abstracts*, 1934-1937.

2005 Valenciano, A. A., Biondi, B., Guitton, A., Target-oriented wave-equation inversion, *SEG Technical Program Expanded Abstracts*, 1662-1665.

2005 Rosales, D. A., Biondi, B., Converted-waves angle-domain common-image gathers, *SEG Technical Program Expanded Abstracts*, 959-962.

2005 Shan, G., Biondi, B., 3D wavefield extrapolation in laterally-varying tilted TI media, *SEG Technical Program Expanded Abstracts*, 104-107.

2005 Shan, G., Biondi, B., Imaging steeply dipping reflectors in TI media by wavefield extrapolation, *SEG Technical Program Expanded Abstracts*, 1906-1909.

2005 Biondi, B., Angle-domain common image gathers for anisotropic migration, *SEG Technical Program Expanded Abstracts*, 1922-1925.

2005 Shragge, J., Sava, P., Shan, G., Biondi, B., Fomel, S., Riemannian Wavefield Extrapolation of Seismic Data, *EAGE Conference Proceedings*.

2005 Bevc, D., Biondi, B., Which Depth Imaging Method should you use? A Roadmap in the Maze of 3-D Depth Imaging, *EAGE Conference Proceedings*.

2005 Rosales, D. A., Biondi, B., Converted Waves Common Azimuth Migration, *EAGE Conference Proceedings*.

2004 Draganov, D., Wapenaar, K., Artman, B., Biondi, B., Migration Methods for Passive Seismic Data, *SEG Technical Program Expanded Abstracts*, 1123-1126.

2004 Shan, G., Biondi, B., Imaging overturned waves by plane-wave migration in tilted coordinates, *SEG Technical Program Expanded Abstracts*, 969-972.

2004 Tisserant, T., Biondi, B., Residual move-out analysis with 3-D angle-domain common-image gathers, *SEG Technical Program Expanded Abstracts*, 2391-2394.

2004 Lomask, J., Biondi, B., Shragge, J., Image segmentation for tracking salt boundaries, *SEG Technical Program Expanded Abstracts*, 2443-2446.

2004 Rosales, D. A., Biondi, B., Acquisition geometry regularization for multicomponent data, *SEG Technical Program Expanded Abstracts*, 2052-2055.

2004 Sava, P., Biondi, B., Etgen, J., Diffraction-focusing migration velocity analysis, *SEG Technical Program Expanded Abstracts*, 2395-2398.

2004 Vlad, I., Biondi, B., Velocity estimation for seismic data exhibiting focusing-effect AVO, *SEG Technical Program Expanded Abstracts*, 2427-2430.

2004 Alvarez, G., Biondi, B., Guitton, A., Attenuation of diffracted multiples in angle domain common image gathers, *SEG Technical Program Expanded Abstracts*, 1301-1304.

2004 Sava, P., Biondi, B., Wave-Equation Migration Velocity Analysis, *EAGE Conference Proceedings*.

2004 Artman, B., Draganov, D., Wapenaar, C., Biondi, B., Direct Migration of Passive Seismic Data, *EAGE Conference Proceedings*.

2004 Haines, S. S., Pride, S. R., Klemperer, S. L., Biondi, B., Development Of Electroseismic Experimental Methods, *EAGE Conference Proceedings*.

2003 Bevc, D., Fliedner, M., Crawley, S., Biondi, B., Wave equation imaging comparisons: Survey sinking vs. shot profile methods, *SEG Technical Program Expanded Abstracts*, 885-888.

2003 Sava, P., Biondi, B., Wave-equation migration velocity analysis by inversion of differential image perturbations, *SEG Technical Program Expanded Abstracts*, 2124-2127.

2003 Valenciano, A. A., Biondi, B., 2-D deconvolution imaging condition for shot-profile migration, *SEG Technical Program Expanded Abstracts*, 1059-1062.

2003 Biondi, B., Narrow-azimuth migration of marine streamer data, *SEG Technical Program Expanded Abstracts*, 897-900.

2003 Sava, P. C., Biondi, B., Migration Velocity Analysis by Recursive Wavefield Extrapolation, *EAGE Conference Proceedings*.

2003 Biondi, B., Clapp, R. G., Symes, W., Velocity Updating from Wavefield-Continuation Migration, *EAGE Conference Proceedings*.

2003 Bevc, D., Fliedner, M. M., Popovici, A. M., Biondi, B., Optimal Velocity Models for Wavefield Continuation Migration, *EAGE Conference Proceedings*.

2003 Bevc, D., Biondi, B., A Roadmap for the Maze of 3-D Depth Imaging Choices, *EAGE Conference Proceedings*.

2003 Sava, P. C., Biondi, B., Analytical Image Perturbations for Wave-Equation Migration Velocity Analysis, *EAGE Conference Proceedings*.

2003 Popovici, A. M., Bevc, D., Biondi, B., Musat, I., Feodorov, O., Interactive and Collaborative Seismic Processing – A Link between Data Processor and Interpreter, *EAGE Conference Proceedings*.

2003 Bevc, D., Fliedner, M. M., Crawley, S., Popovici, A. M., Biondi, B., Improved Subsalt Imaging by Wave Equation Based Velocity Updating, *EAGE Conference Proceedings*.

2002 Biondi, B., Shan, G., Prestack imaging of overturned reflections by reverse time migration, *SEG Technical Program Expanded Abstracts*, 1284-1287.

2002 Biondi, B., Vlad, I., Amplitude preserving prestack imaging of irregularly sampled 3-D data, *SEG Technical Program Expanded Abstracts*, 2170-2173.

2002 Rosales, D., Biondi, B., Sava, P., Stolt prestack residual migration for converted waves, *SEG Technical Program Expanded Abstracts*, 986-989.

2002 Bevc, D., Biondi, B., Which depth imaging method should we use? A roadmap in the maze of 3-D depth imaging, *SEG Technical Program Expanded Abstracts*, 1236-1239.

2002 Fliedner, M. M., Crawley, S., Bevc, D., Popovici, A. M., Biondi, B., Imaging of a rugose salt body in the deep Gulf of Mexico: Kirchhoff versus common azimuth wave-equation migration, *SEG Technical Program Expanded Abstracts*, 1304-1307.

2002 Biondi, B., Clapp, R. G., Prucha, M., Sava, P., 3D Prestack Wave-Equation Imaging - a Rapidly Evolving Technology, *EAGE Conference Proceedings*.

2002 Popovici, A. M., Bevc, D., Crawley, S., Biondi, B., 3D Seismic Imaging for the 21st Century - Common Azimuth Wave-Equation Migration and MVA, *EAGE Conference Proceedings*.

2001 Biondi, B., Stable wide-angle Fourier-finite difference downward extrapolation of 3-D wavefields, *SEG Technical Program Expanded Abstracts*, 1009-1012.

2001 Liu, W., Popovici, A. M., Bevc, D., Biondi, B., 3D migration velocity analysis for common image gathers in the reflection angle domain, *SEG Technical Program Expanded Abstracts*, 885-888.

2001 Liu, W., Bevc, D., Popovici, A. M., Biondi, B., 3D residual velocity analysis and update toolkit for offset-domain prestack depth migration, *SEG Technical Program Expanded Abstracts*, 925-928.

2001 Sava, P., Biondi, B., Fomel, S., Amplitude-preserved common image gathers by wave-equation migration, *SEG Technical Program Expanded Abstracts*, 296-299.

2000 Clapp, R. G., Biondi, B., Tau domain migration velocity analysis using angle CRP gathers and geologic constraints, *SEG Technical Program Expanded Abstracts*, 926-929.

2000 Vaillant, L., Calandra, H., Sava, P., Biondi, B., 3-D wave-equation imaging of a North Sea dataset: Common-azimuth migration + residual migration, *SEG Technical Program Expanded Abstracts*, 874-877.

2000 Biondi, B., Vaillant, L., 3-D wave-equation prestack imaging under salt, *SEG Technical Program Expanded Abstracts*, 906-909.

2000 Bevc, D., Feodorov, O., Popovici, A. M., Biondi, B., Internet-based seismic processing: The future of geophysical computing, *SEG Technical Program Expanded Abstracts*, 2119-2122.

2000 Vaillant, L., Sava, P., Biondi, B., Calandra, H., 3-D Prestack Wave-Equation Migration of a Common-Azimuth North Sea Dataset, *EAGE Conference Proceedings*.

1999 Chemingui, N., Biondi, B., Data regularization by Inversion to Common Offset (ICO), *SEG Technical Program Expanded Abstracts*, 1398-1401.

1999 Biondi, B., Sava, P., Wave-equation migration velocity analysis, *SEG Technical Program Expanded Abstracts*, 1723-1726.

1999 Alkhalifah, T., Fomel, S., Biondi, B., Prestack Time Processing for Arbitrarily Inhomogeneous Media, *EAGE Conference Proceedings*.

1998 Alkhalifah, T., Biondi, B., Fomel, S., Time-domain processing in arbitrarily inhomogeneous media, *SEG Technical Program Expanded Abstracts*, 1756-1759.

1998 Biondi, B., Azimuth moveout vs. dip moveout in inhomogeneous media, *SEG Technical Program Expanded Abstracts*, 1740-1743.

1998 Biondi, B., Preserving Reflection Amplitudes During Partial Stacking in Inhomogeneous Media - Azimuth Moveout Versus Dip Moveout, *EAGE Conference Proceedings*.

1998 Clapp, R. G., Biondi, B., Fomel, S., Alkhalifah, T., Estimating 'Focusing' Velocity by Robust Reflection Tomography in the Time Domain, *EAGE Conference Proceedings*.

1997 Biondi, B., Azimuth moveout + common-azimuth migration: Cost-effective prestack depth imaging of marine data, *SEG Technical Program Expanded Abstracts*, 1375-1378.

1997 Chemingui, N., Biondi, B., Equalization of irregular data by iterative inversion, *SEG Technical Program Expanded Abstracts*, 1115-1118.

1996 Chemingui, N., Biondi, B., Handling the irregular geometry in wide-azimuth surveys, *SEG Technical Program Expanded Abstracts*, 32-35.

1996 Biondi, B., Deutsch, C., Gundesø, R., Lumley, D., Mavko, G., Mukerji, T., Rickett, J., Thiele, M., Reservoir monitoring: A multi-disciplinary feasibility study, *SEG Technical Program Expanded Abstracts*, 1775-1778.

1996 Biondi, B., Mavko, G., Mukerji, T., Rickett, J., Lumley, D., Deutsch, C., Thiele, M., Gundesø, R., Reservoir Monitoring - a Multi-Disciplinary Feasibility Study in 3D, *EAGE Conference Proceedings*.

1995 Biondi, B., Parallel Computing in Seismic Research, *EAGE Conference Proceedings*.

1995 Biondi, B., Fomel, S., Palacharla, G., Prestack Imaging of 3-D Marine Data Sets, *EAGE Conference Proceedings*.

1994 Biondi, B., Palacharla, G., 3-D prestack migration of common-azimuth data, *SEG Technical Program Expanded Abstracts*, 1175-1178.

1994 Rekdal, T., Biondi, B., Paraxial ray tracing in the marmousi model, *SEG Technical Program Expanded Abstracts*, 1406-1409.

1994 Biondi, B., Chemingui, N., Transformation of 3-D prestack data by azimuth moveout (AMO), *SEG Technical Program Expanded Abstracts*, 1541-1544.

1994 Biondi, B., Palacharla, G., 3-D migration using rotated McClellan filters, *SEG Technical Program Expanded Abstracts*, 1278-1281.

1994 Biondi, B., Palacharla, G., 3D Depth migration using rotated McClellan filters, *EAGE Conference Proceedings*.

1992 Biondi, B., Moorhead, W. D., Data parallel algorithm for kirchhoff 3-D DMO, *SEG Technical Program Expanded Abstracts*, 330-333.

1992 Lumley, D. E., Biondi, B., Kirchhoff 3D prestack time migration on a massively parallel supercomputer, *EAGE Conference Proceedings*.

1991 Ji, J., Biondi, B., Depth migration by an unconditionally stable explicit finite-difference method, *SEG Technical Program Expanded Abstracts*, 1122-1125.

1991 Moorhead, B., Biondi, B., Parallel implicit finite-differences prestack migration, *EAGE Conference Proceedings*.

1990 Biondi, B., Velocity estimation by beam stack: Field-data results, *SEG Technical Program Expanded Abstracts*, 1271-1274.

1988 Biondi, B., Interval velocity estimation from beam-stacked data, *SEG Technical Program Expanded Abstracts*, 680-683.

1988 Biondi, B., Kostov, C., High-resolution velocity spectra using eigenstructure methods, *SEG Technical Program Expanded Abstracts*, 890-893.

1987 Kostov, C., Biondi, B., Improved resolution of slant stacks using beam stacks, *SEG Technical Program Expanded Abstracts*, 792-794.

1986 Biondi, B., Ronen, S., Shot profile dip moveout using log-stretch transform, *SEG Technical Program Expanded Abstracts*, 431-434.