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Wasserstein [350]. **Water** [368, 354, 102, 134]. **Wave** [202, 119, 330, 329, 158, 398, 286, 150, 252].
Waveform [162]. **Waveguide** [131].
Waveguides [346]. **Wavenumber** [293, 18].
Waves [368, 74, 82, 313, 190, 347, 380, 276, 320, 157, 353, 341]. **Way** [374]. **Weakly** [87, 12, 400, 69]. **Wealth** [198]. **Web** [222].
Wedge [303, 276]. **Weighted** [174]. **Well** [70, 282, 219]. **Well-Posedness** [70, 219].
Westervelt [257]. **Wetting** [21]. **Whelan** [191]. **White** [328]. **Wiener** [303]. **Wine** [290]. **Winter** [40]. **Within** [78]. **Without** [295]. **Wobbling** [305]. **Wolbachia** [320, 152]. **Wound** [247].
- Year** [302].
Zero [400, 61]. **Zero-Inflated** [61]. **Zoo-plankton** [227].

References

- Jiang:2011:ASS**
- [1] Yu Jiang, Hiroshi Fujiwara, and Gen Nakamura. Approximate steady state models for magnetic resonance elastography. *SIAM Journal on Applied Mathematics*, 71(6):1965–1989, ???? 2011. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic). URL http://pubs.siam.org/siap/resource/1/smjmap/v71/i6/p1965_s1. See erratum [91].
- Griesmaier:2018:MIM**
- [2] Roland Griesmaier and Bastian Harrach. Monotonicity in inverse medium scattering on unbounded domains. *SIAM Journal on Applied Mathematics*, 78(5):2533–2557, ???? 2018. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic). See erratum [181].
- Kirsch:2019:IPA**
- [3] Andreas Kirsch and Andreas Rieder. Inverse problems for abstract evolution equations II: Higher order differentiability for viscoelasticity. *SIAM Journal on Applied Mathematics*, 79(6):2639–2662, ???? 2019. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic). See erratum [133].

- Yariv:2020:LTF**
- [4] Ehud Yariv and Darren Crowdy. Longitudinal thermocapillary flow over a dense bubble mattress. *SIAM Journal on Applied Mathematics*, 80(1):1–19, ???? 2020. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).
- Garde:2020:ODD**
- [5] Henrik Garde and Nuutti Hyvönen. Optimal depth-dependent distinguishability bounds for electrical impedance tomography in arbitrary dimension. *SIAM Journal on Applied Mathematics*, 80(1):20–43, ???? 2020. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).
- Camassa:2020:VDB**
- [6] Roberto Camassa, Gregorio Falqui, Giovanni Ortenzi, Marco Pedroni, and Giuseppe Pitton. On the “Vacuum” dam-break problem: Exact solutions and their long time asymptotics. *SIAM Journal on Applied Mathematics*, 80(1):44–70, ???? 2020. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).
- Yorkston:2020:DSE**
- [7] Adam A. Yorkston, Mark G. Blyth, and Emilian I. Parau. The deformation and stability of an elastic cell in a uniform flow. *SIAM Journal on Applied Mathematics*, 80(1):71–94, ???? 2020. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).
- Ghazaryan:2020:SAF**
- [8] Anna Ghazaryan, Stephane Lafortune, and Vahagn Manukian. Spectral analysis of fronts in a Marangoni-driven thin liquid film flow down a slope. *SIAM Journal on Applied Mathematics*, 80(1):95–118, ???? 2020. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).
- Negrón-Marrero:2020:CRS**
- [9] Pablo V. Negrón-Marrero and Jeyabal Sivaloganathan. On the convergence of a regularization scheme for approximating cavitation solutions with prescribed cavity volume. *SIAM Journal on Applied Mathematics*, 80(1):119–141, ???? 2020. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).
- Chow:2020:ESO**
- [10] Shui nee Chow, Wuchen Li, Jun Lu, and Haomin Zhou. Equilibrium selection via optimal transport. *SIAM Journal on Applied Mathematics*, 80(1):142–159, ???? 2020. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).
- Burger:2020:RCD**
- [11] Martin Burger, Patricia Friele, and Jan-Frederik Pietschmann. On a reaction-cross-diffusion system modeling the growth of glioblastoma. *SIAM Journal on Applied Mathematics*, 80(1):160–182, ???? 2020. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).
- Craciun:2020:ECC**
- [12] Gheorghe Craciun, Jiaxin Jin, and Polly Y. Yu. An efficient characterization of complex-balanced, detailed-balanced, and weakly reversible systems. *SIAM Journal on Applied Mathematics*, 80(1):183–205, ???? 2020. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

- DEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).
- Huang:2020:SAQ**
- [13] Qian Huang, Shuiqing Li, and Wen-An Yong. Stability analysis of quadrature-based moment methods for kinetic equations. *SIAM Journal on Applied Mathematics*, 80(1):206–231, ???? 2020. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).
- Carrillo:2020:PTB**
- [14] Jose A. Carrillo, Xinfu Chen, Qi Wang, Zhian Wang, and Lu Zhang. Phase transitions and bump solutions of the Keller–Segel model with volume exclusion. *SIAM Journal on Applied Mathematics*, 80(1):232–261, ???? 2020. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).
- Hermanns:2020:HTR**
- [15] Miguel Hermanns and Santiago Ibáñez. Harmonic thermal response of thermally interacting geothermal boreholes. *SIAM Journal on Applied Mathematics*, 80(1):262–288, ???? 2020. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).
- Lustri:2020:SHS**
- [16] Christopher J. Lustri, Christopher C. Green, and Scott W. McCue. Selection of a Hele–Shaw bubble via exponential asymptotics. *SIAM Journal on Applied Mathematics*, 80(1):289–311, ???? 2020. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).
- Bressloff:2020:EPG**
- [17] Paul C. Bressloff, Sean D. Lawley, and Patrick Murphy. Effective permeability of a gap junction with age-structured switching. *SIAM Journal on Applied Mathematics*, 80(1):312–337, ???? 2020. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).
- Isakov:2020:LIS**
- [18] Victor Isakov, Shuai Lu, and Boxi Xu. Linearized inverse Schrödinger potential problem at a large wavenumber. *SIAM Journal on Applied Mathematics*, 80(1):338–358, ???? 2020. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).
- Zhou:2020:CDR**
- [19] Yongcheng Zhou. On curvature driven rotational diffusion of proteins on membrane surfaces. *SIAM Journal on Applied Mathematics*, 80(1):359–381, ???? 2020. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).
- Hillen:2020:NAM**
- [20] Thomas Hillen and Andreas Buttenschön. Nonlocal adhesion models for microorganisms on bounded domains. *SIAM Journal on Applied Mathematics*, 80(1):382–401, ???? 2020. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).
- Cui:2020:IPN**
- [21] Hanwen Cui and Weiqing Ren. Interface profile near the contact line in electro-wetting on dielectric. *SIAM Journal on Applied Mathematics*, 80(1):402–421, ???? 2020. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Cao:2020:PDE

- [22] Alexander Cao, Benjamin Lindner, and Peter J. Thomas. A partial differential equation for the mean-return-time phase of planar stochastic oscillators. *SIAM Journal on Applied Mathematics*, 80(1):422–447, ???? 2020. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Muntean:2020:CTL

- [23] Adrian Muntean and Christos Nikolopoulos. Colloidal transport in locally periodic evolving porous media — an upscaling exercise. *SIAM Journal on Applied Mathematics*, 80(1):448–475, ???? 2020. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Estrada-Rodriguez:2020:IPL

- [24] Gissell Estrada-Rodriguez and Heiko Gimperlein. Interacting particles with Lévy strategies: Limits of transport equations for swarm robotic systems. *SIAM Journal on Applied Mathematics*, 80(1):476–498, ???? 2020. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Zhang:2020:SCE

- [25] Tingting Zhang, Geuk Young Jang, Tong In Oh, Kyung Woon Jeung, Hun Wi, and Eung Je Woo. Source consistency electrical impedance tomography. *SIAM Journal on Applied Mathematics*, 80(1):499–520, ???? 2020. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Fazly:2020:API

- [26] Mostafa Fazly, Mark Lewis, and Hao Wang. Analysis of propagation for impulsive reaction-diffusion models. *SIAM*

Journal on Applied Mathematics, 80(1):521–542, ???? 2020. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Gandolfi:2020:BLE

- [27] Alberto Gandolfi, Mimmo Iannelli, and Gabriela Marinoschi. The basal layer of the epidermis: a mathematical model for cell production under a surface density constraint. *SIAM Journal on Applied Mathematics*, 80(1):543–571, ???? 2020. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Li:2020:EDP

- [28] Xiang Li, Qiang Du, and Xiao-Ping Wang. Energy decaying phase-field model for fluid-particle interaction in two-phase flow. *SIAM Journal on Applied Mathematics*, 80(1):572–598, ???? 2020. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Stuart:2020:IOT

- [29] Andrew M. Stuart and Marie-Therese Wolfram. Inverse optimal transport. *SIAM Journal on Applied Mathematics*, 80(1):599–619, ???? 2020. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Chodrow:2020:LSG

- [30] Philip S. Chodrow and Peter J. Mucha. Local symmetry and global structure in adaptive voter models. *SIAM Journal on Applied Mathematics*, 80(1):620–638, ???? 2020. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

- Piacentini:2020:MMP**
- [31] Giulia Piacentini, Paola Goatin, and Antonella Ferrara. A macroscopic model for platooning in highway traffic. *SIAM Journal on Applied Mathematics*, 80(1):639–656, ???? 2020. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).
- Dalwadi:2020:MFD**
- [32] Mohit P. Dalwadi, Sarah L. Waters, Helen M. Byrne, and Ian J. Hewitt. A mathematical framework for developing freezing protocols in the cryopreservation of cells. *SIAM Journal on Applied Mathematics*, 80(2):657–689, ???? 2020. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).
- Ciarletta:2020:EFB**
- [33] Pasquale Ciarletta, Hui-Hui Dai, and Matteo Taffetani. Elastic fingering of a bonded soft disc in traction: Interplay of geometric and physical nonlinearities. *SIAM Journal on Applied Mathematics*, 80(2):690–705, ???? 2020. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).
- Hanke:2020:USS**
- [34] Martin Hanke and Nikolas Porz. Unique solvability of a system of ordinary differential equations modeling a warm cloud parcel. *SIAM Journal on Applied Mathematics*, 80(2):706–724, ???? 2020. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).
- Sirignano:2020:MFA**
- [35] Justin Sirignano and Konstantinos Spiliopoulos. Mean field analysis of neural networks: a law of large numbers. *SIAM Journal on Applied Mathematics*, 80(2):725–752, ???? 2020. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).
- Zabarankin:2020:MDE**
- [36] Michael Zabarankin and Bogdan Grechuk. Matrix difference equations in applied mathematics. *SIAM Journal on Applied Mathematics*, 80(2):753–771, ???? 2020. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).
- Martinez:2020:MAA**
- [37] Carlos Martinez, Andrés Ávila, Francis Mairet, Leslie Meier, and David Jeison. Modeling and analysis of an absorption column connected to a microalgae culture. *SIAM Journal on Applied Mathematics*, 80(2):772–791, ???? 2020. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).
- Gaudiello:2020:TDE**
- [38] Antonio Gaudiello and Michel Lenczner. A two-dimensional electrostatic model of interdigitated comb drive in longitudinal mode. *SIAM Journal on Applied Mathematics*, 80(2):792–813, ???? 2020. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).
- Nguyen:2020:LTA**
- [39] Dang Hai Nguyen, George Yin, and Chao Zhu. Long-term analysis of a stochastic SIRS model with general incidence rates. *SIAM Journal on Applied Mathematics*, 80(2):814–838, ???? 2020. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Bastiaansen:2020:MHB

- [40] Robbin Bastiaansen, Arjen Doelman, Frank van Langevelde, and Vivi Rottschäfer. Modeling honey bee colonies in winter using a Keller–Segel model with a sign-changing chemotactic coefficient. *SIAM Journal on Applied Mathematics*, 80(2):839–863, ???? 2020. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Yuan:2020:EBS

- [41] Lijun Yuan and Ya Yan Lu. Excitation of bound states in the continuum via second harmonic generations. *SIAM Journal on Applied Mathematics*, 80(2):864–880, ???? 2020. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Cogar:2020:ATC

- [42] Samuel Cogar. Analysis of a trace class Stekloff eigenvalue problem arising in inverse scattering. *SIAM Journal on Applied Mathematics*, 80(2):881–905, ???? 2020. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Dickman:2020:TCE

- [43] Lauren R. Dickman, Evan Milliken, and Yang Kuang. Tumor control, elimination, and escape through a compartmental model of dendritic cell therapy for melanoma. *SIAM Journal on Applied Mathematics*, 80(2):906–928, ???? 2020. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Liu:2020:NMT

- [44] Zuhuan Liu, Canrong Tian, and Shigui Ruan. On a network model of two competitors with applications to the invasion

and competition of *Aedes Albopictus* and *Aedes Aegypti* mosquitoes in the United States. *SIAM Journal on Applied Mathematics*, 80(2):929–950, ???? 2020. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Helsing:2020:ECC

- [45] Johan Helsing and Anders Karlsson. An extended charge-current formulation of the electromagnetic transmission problem. *SIAM Journal on Applied Mathematics*, 80(2):951–976, ???? 2020. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Erichson:2020:SPC

- [46] N. Benjamin Erichson, Peng Zheng, Krithika Manohar, Steven L. Brunton, J. Nathan Kutz, and Aleksandr Y. Aravkin. Sparse principal component analysis via variable projection. *SIAM Journal on Applied Mathematics*, 80(2):977–1002, ???? 2020. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Gonzalez-Farina:2020:MMP

- [47] Raquel González-Fariña, Andreas Münch, James M. Oliver, and Robert A. Van Gorder. Modeling microsilica particle formation and growth due to the combustion reaction of silicon monoxide with oxygen. *SIAM Journal on Applied Mathematics*, 80(2):1003–1033, ???? 2020. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

delaHoz:2020:EVF

- [48] Francisco de la Hoz, Sandeep Kumar, and Luis Vega. On the evolution of

- the vortex filament equation for regular M -polygons with nonzero torsion. *SIAM Journal on Applied Mathematics*, 80(2):1034–1056, ???? 2020. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).
- Montobbio:2020:MMF**
- [49] Noemi Montobbio, Alessandro Sarti, and Giovanna Citti. A metric model for the functional architecture of the visual cortex. *SIAM Journal on Applied Mathematics*, 80(2):1057–1081, ???? 2020. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).
- Pandurangi:2020:HAS**
- [50] Shrinidhi S. Pandurangi, Timothy J. Healey, and Nicolas Triantafyllidis. Hidden asymptotic symmetry in a long elastic structure. *SIAM Journal on Applied Mathematics*, 80(3):1083–1100, ???? 2020. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).
- Wei:2020:GBT**
- [51] Chaozhen Wei, Luchan Zhang, Jian Han, David J. Srolovitz, and Yang Xiang. Grain boundary triple junction dynamics: a continuum disconnection model. *SIAM Journal on Applied Mathematics*, 80(3):1101–1122, ???? 2020. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).
- Bersani:2020:UAE**
- [52] A. M. Bersani, A. Borri, A. Milanesi, G. Tomassetti, and P. Vellucci. Uniform asymptotic expansions beyond the tQSSA for the Goldbeter–Koshland switch. *SIAM Journal on Applied Mathematics*, 80(3):1123–1152, ???? 2020.
- CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).
- Aurell:2020:BNW**
- [53] Alexander Aurell and Boualem Djehiche. Behavior near walls in the mean-field approach to crowd dynamics. *SIAM Journal on Applied Mathematics*, 80(3):1153–1174, ???? 2020. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).
- Borgers:2020:MSD**
- [54] Christoph Börgers and Claude Greengard. On the mean square displacement in Lévy walks. *SIAM Journal on Applied Mathematics*, 80(3):1175–1196, ???? 2020. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).
- Leimkuhler:2020:HPA**
- [55] Benedict Leimkuhler, Matthias Sachs, and Gabriel Stoltz. Hypocoercivity properties of adaptive Langevin dynamics. *SIAM Journal on Applied Mathematics*, 80(3):1197–1222, ???? 2020. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).
- Heggerud:2020:TDS**
- [56] Christopher M. Heggerud, Hao Wang, and Mark A. Lewis. Transient dynamics of a stoichiometric cyanobacteria model via multiple-scale analysis. *SIAM Journal on Applied Mathematics*, 80(3):1223–1246, ???? 2020. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).
- Chen:2020:APB**
- [57] Shanshan Chen and Junping Shi. Asymptotic profiles of basic reproduc-

- tion number for epidemic spreading in heterogeneous environment. *SIAM Journal on Applied Mathematics*, 80(3):1247–1271, ???? 2020. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic). See erratum [90].
- Shang:2020:GCP**
- [58] Yilun Shang. Generalized K -core percolation in networks with community structure. *SIAM Journal on Applied Mathematics*, 80(3):1272–1289, ???? 2020. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).
- Lee:2020:HME**
- [59] Yunjeong Lee, Yoon gu Hwang, Hee-Dae Kwon, Jun Yong Choi, and Jee-hyun Lee. Hierarchical mixed-effects model for HIV dynamics. *SIAM Journal on Applied Mathematics*, 80(3):1290–1306, ???? 2020. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).
- Xia:2020:PMA**
- [60] Mingtao Xia, Chris D. Greenman, and Tom Chou. PDE models of adder mechanisms in cellular proliferation. *SIAM Journal on Applied Mathematics*, 80(3):1307–1335, ???? 2020. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).
- Jia:2020:KFZ**
- [61] Chen Jia. Kinetic foundation of the zero-inflated negative binomial model for single-cell RNA sequencing data. *SIAM Journal on Applied Mathematics*, 80(3):1336–1355, ???? 2020. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).
- DEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).
- Segura:2020:DPA**
- [62] Juan Segura, Frank M. Hilker, and Daniel Franco. Degenerate period adding bifurcation structure of one-dimensional bimodal piecewise linear maps. *SIAM Journal on Applied Mathematics*, 80(3):1356–1376, ???? 2020. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).
- Colombo:2020:MMV**
- [63] Rinaldo M. Colombo, Helge Holden, and Francesca Marcellini. On the microscopic modeling of vehicular traffic on general networks. *SIAM Journal on Applied Mathematics*, 80(3):1377–1391, ???? 2020. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).
- Cristofari:2020:TVB**
- [64] Andrea Cristofari, Francesco Rinaldi, and Francesco Tudisco. Total variation based community detection using a nonlinear optimization approach. *SIAM Journal on Applied Mathematics*, 80(3):1392–1419, ???? 2020. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).
- Lim:2020:IGS**
- [65] Mikyoung Lim and Graeme W. Milton. Inclusions of general shapes having constant field inside the core and nonelliptical neutral coated inclusions with anisotropic conductivity. *SIAM Journal on Applied Mathematics*, 80(3):1420–1440, ???? 2020. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

- Cartee:2020:CTM**
- [66] Elliot Cartee and Alexander Vladimirsy. Control-theoretic models of environmental crime. *SIAM Journal on Applied Mathematics*, 80(3):1441–1466, ???? 2020. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).
- Chen:2020:MNS**
- [67] Junqing Chen, Ying Liang, and Jun Zou. Mathematical and numerical study of a three-dimensional inverse eddy current problem. *SIAM Journal on Applied Mathematics*, 80(3):1467–1492, ???? 2020. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).
- Bai:2020:DSM**
- [68] Zhenguo Bai, Yijun Lou, and Xiao-Qiang Zhao. A delayed succession model with diffusion for the impact of dia-pause on population growth. *SIAM Journal on Applied Mathematics*, 80(3):1493–1519, ???? 2020. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).
- Paquin-Lefebvre:2020:WNT**
- [69] Frédéric Paquin-Lefebvre, Wayne Nagata, and Michael J. Ward. Weakly nonlinear theory for oscillatory dynamics in a one-dimensional PDE–ODE model of membrane dynamics coupled by a bulk diffusion field. *SIAM Journal on Applied Mathematics*, 80(3):1520–1545, ???? 2020. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).
- Bourgeois:2020:WPS**
- [70] Laurent Bourgeois and Christophe Hazard. On well-posedness of scattering problems in a Kirchhoff–Love infinite plate. *SIAM Journal on Applied Mathematics*, 80(3):1546–1566, ???? 2020. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).
- Nguyen:2020:MDC**
- [71] Dang H. Nguyen and Edouard Stricker. A method to deal with the critical case in stochastic population dynamics. *SIAM Journal on Applied Mathematics*, 80(3):1567–1589, ???? 2020. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).
- Du:2020:VPF**
- [72] Qiang Du, Ruotai Li, and Lei Zhang. Variational phase field formulations of polarization and phase transition in ferroelectric thin films. *SIAM Journal on Applied Mathematics*, 80(3):1590–1606, ???? 2020. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).
- Kang:2020:MFN**
- [73] Di Kang, Patrick Choi, and Chiu-Yen Kao. Minimization of the first nonzero eigenvalue problem for two-phase conductors with Neumann boundary conditions. *SIAM Journal on Applied Mathematics*, 80(4):1607–1628, ???? 2020. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).
- Harley:2020:STW**
- [74] Kristen E. Harley, Peter van Heijster, Robert Marangell, Graeme J. Pettet, Timothy V. Roberts, and Martin Wechselberger. (In)stability of travelling waves in a model of haptotaxis. *SIAM Journal on Applied Mathematics*, 80(4):1629–1653, ???? 2020. CODEN

- SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).
- Jiang:2020:SIM**
- [75] Wei Jiang, Quan Zhao, and Weizhu Bao. Sharp-interface model for simulating solid-state dewetting in three dimensions. *SIAM Journal on Applied Mathematics*, 80(4):1654–1677, ???? 2020. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).
- Han:2020:RSN**
- [76] Yucen Han, Apala Majumdar, and Lei Zhang. A reduced study for nematic equilibria on two-dimensional polygons. *SIAM Journal on Applied Mathematics*, 80(4):1678–1703, ???? 2020. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).
- Junca:2020:ASM**
- [77] Stéphane Junca and Bruno Lombard. Analysis of a sugimoto model of nonlinear acoustics in an array of Helmholtz resonators. *SIAM Journal on Applied Mathematics*, 80(4):1704–1722, ???? 2020. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).
- Dalwadi:2020:SUN**
- [78] Mohit P. Dalwadi and John R. King. A systematic upscaling of nonlinear chemical uptake within a biofilm. *SIAM Journal on Applied Mathematics*, 80(4):1723–1750, ???? 2020. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).
- Banaji:2020:BOC**
- [79] Murad Banaji. Building oscillatory chemical reaction networks by adding reversible reactions. *SIAM Journal on Applied Mathematics*, 80(4):1751–1777, ???? 2020. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).
- Hsu:2020:HPP**
- [80] Sze-Bi Hsu, Zhihua Liu, and Pierre Magal. A Holling predator-prey model with handling and searching predators. *SIAM Journal on Applied Mathematics*, 80(4):1778–1795, ???? 2020. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).
- Zhang:2020:BAG**
- [81] Qianqian Zhang, Biao Tang, Tianyu Cheng, and Sanyi Tang. Bifurcation analysis of a generalized impulsive Kolmogorov model with applications to pest and disease control. *SIAM Journal on Applied Mathematics*, 80(4):1796–1819, ???? 2020. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).
- Huang:2020:SDT**
- [82] Zhe Huang and Chunhua Ou. Speed determinacy of traveling waves to a stream-population model with Allee effect. *SIAM Journal on Applied Mathematics*, 80(4):1820–1840, ???? 2020. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).
- Chiarello:2020:MML**
- [83] Felisia A. Chiarello, Jan Friedrich, Paola Goatin, and Simone Göttlich. Micro-macro limit of a nonlocal generalized aw-Rascle type model. *SIAM Journal on Applied Mathematics*, 80(4):1841–1861, ???? 2020. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

- Parkinson:2020:MOH**
- [84] Christian Parkinson, David Arnold, Andrea Bertozzi, and Stanley Osher. A model for optimal human navigation with stochastic effects. *SIAM Journal on Applied Mathematics*, 80(4):1862–1881, ???? 2020. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).
- Ferreira:2020:AEI**
- [85] José A. Ferreira, Paula de Oliveira, and Luís Pinto. Aging effect on iontophoretic transdermal drug delivery. *SIAM Journal on Applied Mathematics*, 80(4):1882–1907, ???? 2020. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).
- Mofidi:2020:RPR**
- [86] Hamid Mofidi and Weishi Liu. Reversal potential and reversal permanent charge with unequal diffusion coefficients via classical Poisson–Nernst–Planck models. *SIAM Journal on Applied Mathematics*, 80(4):1908–1935, ???? 2020. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).
- Boros:2020:WRM**
- [87] Balázs Boros, Gheorghe Craciun, and Polly Y. Yu. Weakly reversible mass-action systems with infinitely many positive steady states. *SIAM Journal on Applied Mathematics*, 80(4):1936–1946, ???? 2020. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).
- Ilmavirta:2020:TCT**
- [88] Joonas Ilmavirta, Olli Koskela, and Jesse Railo. Torus computed tomogra-
- phy. *SIAM Journal on Applied Mathematics*, 80(4):1947–1976, ???? 2020. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).
- Spiridonov:2020:MNA**
- [89] Alexander O. Spiridonov, Alina Oktyabrskaya, Evgenii M. Karchevskii, and Alexander I. Nosich. Mathematical and numerical analysis of the generalized complex-frequency eigenvalue problem for two-dimensional optical microcavities. *SIAM Journal on Applied Mathematics*, 80(4):1977–1998, ???? 2020. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).
- Chen:2020:EAP**
- [90] Shanshan Chen and Junping Shi. Erratum: Asymptotic Profiles of Basic Reproduction Number for Epidemic Spreading in Heterogeneous Environment. *SIAM Journal on Applied Mathematics*, 80(4):1999–2000, ???? 2020. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic). See [57].
- Jiang:2020:EAS**
- [91] Yu Jiang, Hiroshi Fujiwara, and Gen Nakamura. Erratum for “Approximate Steady State Models for Magnetic Resonance Elastography”. *SIAM Journal on Applied Mathematics*, 80(4):2001, ???? 2020. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic). See [1].
- Li:2020:GDH**
- [92] Chin-Lung Li and Jinn-Liang Liu. Generalized Debye–Hückel equation from Poisson–Bikerman theory. *SIAM Journal on Applied Mathematics*, 80(5):2003–2023, ???? 2020. CODEN

- SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).
- Garcia-Cervera:2020:BVF**
- [93] Carlos J. García-Cervera, Tiziana Giorgi, and Sooyung Joo. Boundary vortex formation in polarization-modulated orthogonal smectic liquid crystals. *SIAM Journal on Applied Mathematics*, 80(5):2024–2044, ???? 2020. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).
- Lin:2020:MTF**
- [94] Junshan Lin, Stephen P. Shipman, and Hai Zhang. A mathematical theory for Fano resonance in a periodic array of narrow slits. *SIAM Journal on Applied Mathematics*, 80(5):2045–2070, ???? 2020. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).
- Ciesielski:2020:ADB**
- [95] Danielle Ciesielski, Stephanie McCalla, and Tomas Gedeon. Analysis of dynamics of a biphasic isothermal DNA amplification reaction. *SIAM Journal on Applied Mathematics*, 80(5):2071–2097, ???? 2020. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).
- Zemlyanova:2020:IMP**
- [96] Anna Y. Zemlyanova. Interaction of multiple plane straight fractures in the presence of the Steigmann–Ogden surface energy. *SIAM Journal on Applied Mathematics*, 80(5):2098–2119, ???? 2020. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).
- Nazaikinskii:2020:ESD**
- [97] Vladimir E. Nazaikinskii, Pavel G. Bedrikovetsky, Liudmila I. Kuzmina, and Yuri V. Osipov. Exact solution for deep bed filtration with finite blocking time. *SIAM Journal on Applied Mathematics*, 80(5):2120–2143, ???? 2020. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).
- Gao:2020:HDD**
- [98] Daozhou Gao. How does dispersal affect the infection size? *SIAM Journal on Applied Mathematics*, 80(5):2144–2169, ???? 2020. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).
- Reischmann:2020:MMS**
- [99] L. Reischmann and M. A. Peter. Multiscale modeling and simulation of a Cahn–Larché system with phase separation on the microscale. *SIAM Journal on Applied Mathematics*, 80(5):2170–2193, ???? 2020. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).
- Boegli:2020:EMM**
- [100] Sabine Boegli and Christiane Tretter. Eigenvalues of magnetohydrodynamic mean-field dynamo models: Bounds and reliable computation. *SIAM Journal on Applied Mathematics*, 80(5):2194–2225, ???? 2020. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).
- Fikl:2020:JRC**
- [101] Alexandru Fikl and Daniel J. Bodony. Jump relations of certain hypersingular Stokes kernels on regular surfaces.

- SIAM Journal on Applied Mathematics*, 80(5):2226–2248, ???? 2020. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).
- Natchiar:2020:ACR**
- [102] S. R. Monisha Natchiar, Richard E. Hewitt, Phillip D. D. Monks, and Peter Morrall. Asymptotics of coupled reaction-diffusion fronts with multiple static and diffusing reactants: Uranium oxidation in water vapor. *SIAM Journal on Applied Mathematics*, 80(5):2249–2270, ???? 2020. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).
- Zhang:2020:AFM**
- [103] Bo Zhang and Haiwen Zhang. An approximate factorization method for inverse acoustic scattering with phaseless total-field data. *SIAM Journal on Applied Mathematics*, 80(5):2271–2298, ???? 2020. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).
- Dai:2020:MCH**
- [104] Shibin Dai, Bo Li, and Toai Luong. Minimizers for the Cahn–Hilliard energy functional under strong anchoring conditions. *SIAM Journal on Applied Mathematics*, 80(5):2299–2317, ???? 2020. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).
- Fan:2020:ECS**
- [105] Haitao Fan and Chi-Wang Shu. Existence and computation of solutions of a model of traffic involving hysteresis. *SIAM Journal on Applied Mathematics*, 80(6):2319–2337, ???? 2020. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).
- Lindstrom:2020:DSM**
- [106] Torsten Lindström, Yuanji Cheng, and Subhendu Chakraborty. Destabilization, stabilization, and multiple attractors in saturated mixotrophic environments. *SIAM Journal on Applied Mathematics*, 80(6):2338–2364, ???? 2020. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).
- Zhang:2020:NFC**
- [107] Luchan Zhang and Yang Xiang. A new formulation of coupling and sliding motions of grain boundaries based on dislocation structure. *SIAM Journal on Applied Mathematics*, 80(6):2365–2387, ???? 2020. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).
- Fan:2020:NHM**
- [108] Yuwei Fan, Ruo Li, and Lingchao Zheng. A nonlinear hyperbolic model for radiative transfer equation in slab geometry. *SIAM Journal on Applied Mathematics*, 80(6):2388–2419, ???? 2020. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).
- Roques:2020:AGT**
- [109] Lionel Roques, Florian Patout, Olivier Bonnefon, and Guillaume Martin. Adaptation in general temporally changing environments. *SIAM Journal on Applied Mathematics*, 80(6):2420–2447, ???? 2020. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Kwiecinski:2020:IAI

- [110] James A. Kwiecinski, Alain Goriely, and S. Jon Chapman. Interactions of anisotropic inclusions on a fluid membrane. *SIAM Journal on Applied Mathematics*, 80(6):2448–2471, ???? 2020. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Jenssen:2020:ABR

- [111] Helge Kristian Jenssen and Charis Tsikkou. Amplitude blowup in radial isentropic Euler flow. *SIAM Journal on Applied Mathematics*, 80(6):2472–2495, ???? 2020. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Jiang:2020:SPN

- [112] Tianpeng Jiang, Yang Xiang, and Luchan Zhang. Stochastic Peierls–Nabarro model for dislocations in high entropy alloys. *SIAM Journal on Applied Mathematics*, 80(6):2496–2517, ???? 2020. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Xu:2020:CLA

- [113] Jie Xu. Classifying local anisotropy formed by rigid molecules: Symmetries and tensors. *SIAM Journal on Applied Mathematics*, 80(6):2518–2546, ???? 2020. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Li:2020:SAI

- [114] Peijun Li, Jian Zhai, and Yue Zhao. Stability for the acoustic inverse source problem in inhomogeneous media. *SIAM Journal on Applied Mathematics*, 80(6):2631–2656, ???? 2020. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

(6):2547–2559, ???? 2020. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Uhlmann:2020:CNN

- [115] Gunther Uhlmann and Yiran Wang. Convolutional neural networks in phase space and inverse problems. *SIAM Journal on Applied Mathematics*, 80(6):2560–2585, ???? 2020. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Evans:2020:TPB

- [116] Ryan M. Evans, Arvind Balijepalli, and Anthony J. Kearsley. Transport phenomena in biological field effect transistors. *SIAM Journal on Applied Mathematics*, 80(6):2586–2607, ???? 2020. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Wang:2020:PPP

- [117] Zhenkun Wang and Hao Wang. Persistence and propagation of a PDE and discrete-time map hybrid animal movement model with habitat shift driven by climate change. *SIAM Journal on Applied Mathematics*, 80(6):2608–2630, ???? 2020. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Amorim:2020:PPI

- [118] Paulo Amorim. Predator-prey interactions with hunger structure. *SIAM Journal on Applied Mathematics*, 80(6):2631–2656, ???? 2020. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

- Barucq:2020:EAA**
- [119] Hélène Barucq, Florian Faucher, Damien Fournier, Laurent Gizon, and Ha Pham. Efficient and accurate algorithm for the full modal Green's kernel of the scalar wave equation in helioseismology. *SIAM Journal on Applied Mathematics*, 80(6):2657–2683, ???? 2020. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).
- Lawley:2021:EFI**
- [120] Sean D. Lawley. The effects of fast inactivation on conditional first passage times of mortal diffusive searchers. *SIAM Journal on Applied Mathematics*, 81(1):1–24, ???? 2021. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).
- Hu:2021:ITH**
- [121] Guang-Hui Hu, Manmohan Vashisth, and Jiaqing Yang. Inverse time-harmonic electromagnetic scattering from coated polyhedral scatterers with a single far-field pattern. *SIAM Journal on Applied Mathematics*, 81(1):25–46, ???? 2021. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).
- Gordon:2021:TFI**
- [122] Peter V. Gordon, Uday G. Hegde, and Michael C. Hicks. On traveling front of ignition in co-flow laminar reactive jets. *SIAM Journal on Applied Mathematics*, 81(1):47–59, ???? 2021. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).
- Assier:2021:SOQ**
- [123] Raphael C. Assier and I. David Abrahams. A surprising observation in the quarter-plane diffraction problem. *SIAM Journal on Applied Mathematics*, 81(1):60–90, ???? 2021. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).
- Klingenberg:2021:REC**
- [124] Christian Klingenberg, Ru-Yu Lai, and Qin Li. Reconstruction of the emission coefficient in the nonlinear radiative transfer equation. *SIAM Journal on Applied Mathematics*, 81(1):91–106, ???? 2021. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).
- Bessonov:2021:EDS**
- [125] Nikolai Bessonov, Gennady Bocharov, Andreas Meyerhans, Vladimir Popov, and Vitaly Volpert. Existence and dynamics of strains in a nonlocal reaction-diffusion model of viral evolution. *SIAM Journal on Applied Mathematics*, 81(1):107–128, ???? 2021. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).
- Philip:2021:MES**
- [126] Rachel M. Philip, Ian J. Hewitt, and Peter D. Howell. Modeling the effect of surfactant on droplet breakup in a turbulent flow. *SIAM Journal on Applied Mathematics*, 81(1):129–152, ???? 2021. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).
- Mazari:2021:FPN**
- [127] Idriss Mazari and Domènec Ruiz-Balet. A fragmentation phenomenon for a nonenergetic optimal control problem: Optimization of the total population size in logistic diffusive models. *SIAM Journal on Applied Mathematics*, 81(1):153–172, ???? 2021. CODEN

- SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).
- Laurent-Brouty:2021:MTF**
- [128] Nicolas Laurent-Brouty, Guillaume Costeseque, and Paola Goatin. A macroscopic traffic flow model accounting for bounded acceleration. *SIAM Journal on Applied Mathematics*, 81(1):173–189, ???? 2021. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).
- Lee:2021:CPE**
- [129] Wonjun Lee, Siting Liu, Hamidou Tembine, Wuchen Li, and Stanley Osher. Controlling propagation of epidemics via mean-field control. *SIAM Journal on Applied Mathematics*, 81(1):190–207, ???? 2021. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).
- Vynnycky:2021:NTR**
- [130] Michael Vynnycky, Sean McKee, and Lesław Bieniasz. A NonLinear transient reaction–diffusion problem from electroanalytical chemistry. *SIAM Journal on Applied Mathematics*, 81(1):208–232, ???? 2021. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).
- Zhang:2021:SDT**
- [131] Ruming Zhang. Spectrum decomposition of translation operators in periodic waveguide. *SIAM Journal on Applied Mathematics*, 81(1):233–257, ???? 2021. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).
- Gottlich:2021:SOT**
- [132] Simone Göttlich, Michael Herty, Salissou Moutari, and Jennifer Weissen. Second-order traffic flow models on networks. *SIAM Journal on Applied Mathematics*, 81(1):258–281, ???? 2021. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).
- Kirsch:2021:EIP**
- [133] Andreas Kirsch and Andreas Rieder. Erratum: Inverse Problems for Abstract Evolution Equations II: Higher Order Differentiability for Viscoelasticity. *SIAM Journal on Applied Mathematics*, 81(1):282–283, ???? 2021. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic). See [3].
- Pedersen:2021:ACE**
- [134] Geir K. Pedersen. Asymptotic, convergent, and exact truncating series solutions of the linear shallow water equations for channels with power law geometry. *SIAM Journal on Applied Mathematics*, 81(2):285–303, ???? 2021. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).
- Gartland:2021:EFI**
- [135] Eugene C. Gartland, Jr. Electric-field-induced instabilities in nematic liquid crystals. *SIAM Journal on Applied Mathematics*, 81(2):304–334, ???? 2021. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).
- Kim:2021:MHD**
- [136] Yong-Jung Kim and Hyowon Seo. Model for heterogeneous diffusion. *SIAM Journal on Applied Mathematics*, 81(2):335–354, ???? 2021. CODEN

- SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).
- Cances:2021:GCM**
- [137] Annabelle Collin, Thibaut Kritter, Clair Poignard, and Olivier Saut. Joint state-parameter estimation for tumor growth model. *SIAM Journal on Applied Mathematics*, 81(2):355–377, ???? 2021. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).
- Collin:2021:JSP**
- [138] Daniel Gomez, Michael J. Ward, and Juncheng Wei. An asymptotic analysis of localized three-dimensional spot patterns for the Gierer–Meinhardt model: Existence, linear stability, and slow dynamics. *SIAM Journal on Applied Mathematics*, 81(2):378–406, ???? 2021. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).
- Gomez:2021:AAL**
- [139] Chris Cosner and Nancy Rodriguez. The effect of directed movement on the strong Allee effect. *SIAM Journal on Applied Mathematics*, 81(2):407–433, ???? 2021. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).
- Cosner:2021:EDM**
- [140] Chiara Villa, Mark A. Chaplain, and Tommaso Lorenzi. Modeling the emergence of phenotypic heterogeneity in vascularized tumors. *SIAM Journal on Applied Mathematics*, 81(2):434–453, ???? 2021. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).
- Villa:2021:MEP**
- [141] Clément Cancès and David Maltese. A gravity current model with capillary trapping for oil migration in multilayer geological basins. *SIAM Journal on Applied Mathematics*, 81(2):454–484, ???? 2021. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).
- Cances:2021:GCM**
- [142] Peijun Li and Xu Wang. Inverse random source scattering for the Helmholtz equation with attenuation. *SIAM Journal on Applied Mathematics*, 81(2):485–506, ???? 2021. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).
- Li:2021:IRS**
- [143] Giulio Lauretano and Renato Spigler. On the relation between the Lifshitz–Slyozov and the Lifshitz–Slyozov–Wagner models for supersaturated solutions. *SIAM Journal on Applied Mathematics*, 81(2):507–529, ???? 2021. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).
- Lauretano:2021:RBL**
- [144] Markus Breit and Gillian Quiesser. The necessary modeling detail for neuronal signaling: Poisson–Nernst–Planck and cable equation models in one and three dimensions. *SIAM Journal on Applied Mathematics*, 81(2):530–550, ???? 2021. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).
- Breit:2021:NMD**
- [145] Oscar Gonzalez. Theorems on the Stokesian hydrodynamics of a rigid filament in the limit of vanishing radius.
- Gonzalez:2021:TSH**

- SIAM Journal on Applied Mathematics*, 81(2):551–573, ???? 2021. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).
- Babb:2021:PLT**
- [146] T. Babb, G. P. Benham, J. Bows, R. Gonzalez-Farina, K. B. Kiradjiev, W. T. Lee, and S. Tibos. Predicting lift-off time when deep-frying potato dough snacks. *SIAM Journal on Applied Mathematics*, 81(2):574–590, ???? 2021. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).
- Kiradjiev:2021:HMR**
- [147] Kristian B. Kiradjiev, Christopher J. Breward, Ian Griffiths, and Donald W. Schwendeman. A homogenized model for a reactive filter. *SIAM Journal on Applied Mathematics*, 81(2):591–619, ???? 2021. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).
- Barel:2021:PGA**
- [148] Ariel Barel, Thomas Dages, Rotem Manor, and Alfred M. Bruckstein. Probabilistic gathering of agents with simple sensors. *SIAM Journal on Applied Mathematics*, 81(2):620–640, ???? 2021. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).
- Ndenda:2021:FOM**
- [149] Joseph P. Ndenda, John Boscoh H. Njagarah, and Conrad B. Tabi. Fractional-order model for myxomatosis transmission dynamics: Significance of contact, vector control and culling. *SIAM Journal on Applied Mathematics*, 81(2):641–665, ???? 2021. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).
- Lu:2021:MAW**
- [150] Wangtao Lu. Mathematical analysis of wave radiation by a step-like surface. *SIAM Journal on Applied Mathematics*, 81(2):666–693, ???? 2021. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).
- Rauch:2021:CGS**
- [151] Jeffrey Rauch and L. Ridgway Scott. The charge-group summation method for electrostatics of periodic crystals. *SIAM Journal on Applied Mathematics*, 81(2):694–717, ???? 2021. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).
- Zheng:2021:MAI**
- [152] Bo Zheng, Jianshe Yu, and Jia Li. Modeling and analysis of the implementation of the wolbachia incompatible and sterile insect technique for mosquito population suppression. *SIAM Journal on Applied Mathematics*, 81(2):718–740, ???? 2021. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).
- Mentus:2021:OMT**
- [153] Cassidy Mentus and Marcus Roper. Optimal mixing in transport networks: Numerical optimization and analysis. *SIAM Journal on Applied Mathematics*, 81(3):741–764, ???? 2021. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).
- Timms:2021:ARL**
- [154] Robert Timms, Scott G. Marquis, Valentin Sulzer, Colin P. Please, and S. Jonathan Chapman. Asymptotic

- reduction of a lithium-ion pouch cell model. *SIAM Journal on Applied Mathematics*, 81(3):765–788, ???? 2021. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).
- Cantrell:2021:IFD**
- [155] Robert Stephen Cantrell, Chris Cosner, and King-Yeung Lam. Ideal free dispersal under general spatial heterogeneity and time periodicity. *SIAM Journal on Applied Mathematics*, 81 (3):789–813, ???? 2021. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).
- Garnier:2021:PCA**
- [156] Josselin Garnier. Passive communication with ambient noise. *SIAM Journal on Applied Mathematics*, 81 (3):814–833, ???? 2021. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).
- Skene:2021:TLT**
- [157] David M. Skene and Luke G. Bennetts. A transition-loss theory for waves reflected and transmitted by an overwashed body. *SIAM Journal on Applied Mathematics*, 81(3):834–852, ???? 2021. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).
- Friesen:2021:SWF**
- [158] Martin Friesen, Hanno Gottschalk, Barbara Rüdiger, and Antoine Tordeux. Spontaneous wave formation in stochastic self-driven particle systems. *SIAM Journal on Applied Mathematics*, 81 (3):853–870, ???? 2021. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).
- Nicholls:2021:SLS**
- [159] David P. Nicholls and Xin Tong. Simulation of localized surface plasmon resonances in two dimensions via impedance–impedance operators. *SIAM Journal on Applied Mathematics*, 81 (3):871–896, ???? 2021. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).
- Bevilacqua:2021:MMT**
- [160] Giulia Bevilacqua, Pasquale Ciarletta, and Alfio Quarteroni. Morphomechanical model of the torsional C-looping in the embryonic heart. *SIAM Journal on Applied Mathematics*, 81 (3):897–918, ???? 2021. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).
- Bressloff:2021:DSC**
- [161] Paul C. Bressloff. Directional search-and-capture model of cytoneme-based morphogenesis. *SIAM Journal on Applied Mathematics*, 81(3):919–938, ???? 2021. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).
- Albuquerque:2021:LSB**
- [162] Yuri F. Albuquerque, Antoine Lourain, and Irwin Yousept. Level set-based shape optimization approach for sharp-interface reconstructions in time-domain full waveform inversion. *SIAM Journal on Applied Mathematics*, 81 (3):939–964, ???? 2021. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).
- Lewis:2021:EET**
- [163] Owen L. Lewis and James P. Keener. Enhanced electrodifusive transport

- across a mucus layer. *SIAM Journal on Applied Mathematics*, 81(3):965–981, ???? 2021. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).
- Cox:2021:SMN**
- [164] Alexander M. Cox, Emma Horton, Andreas E. Kyprianou, and Denis Villemonais. Stochastic methods for neutron transport equation III: Generational many-to-one and k_{eff} . *SIAM Journal on Applied Mathematics*, 81(3):982–1001, ???? 2021. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).
- Pandian:2021:SDS**
- [165] Arun Pandian, Jiahe Tony Li, and Snezhana I. Abarzhi. Scale-dependent and self-similar Rayleigh–Taylor and Richtmyer–Meshkov dynamics induced by acceleration varying with length scale. *SIAM Journal on Applied Mathematics*, 81(3):1002–1019, ???? 2021. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).
- Ando:2021:SLP**
- [166] Kazunori Ando, Hyeonbae Kang, Yoshihisa Miyanishi, and Takashi Nakazawa. Surface localization of plasmons in three dimensions and convexity. *SIAM Journal on Applied Mathematics*, 81(3):1020–1033, ???? 2021. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).
- Chapman:2021:HFT**
- [167] S. Jonathan Chapman and Zachary M. Wilmott. Homogenization of flow through periodic networks. *SIAM Journal on Applied Mathematics*, 81(3):1116–1140, ???? 2021. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).
- Liu:2021:TUB**
- [168] Jian-Guo Liu, Min Tang, Li Wang, and Zhennan Zhou. Toward understanding the boundary propagation speeds in tumor growth models. *SIAM Journal on Applied Mathematics*, 81(3):1052–1076, ???? 2021. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).
- Yousefnezhad:2021:OCB**
- [169] Mohsen Yousefnezhad, Chiu-Yen Kao, and Seyyed Abbas Mohammadi. Optimal chemotherapy for brain tumor growth in a reaction-diffusion model. *SIAM Journal on Applied Mathematics*, 81(3):1077–1097, ???? 2021. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).
- Fan:2021:GRP**
- [170] Chao Fan, Bo Li, and Michael R. White. A generalized Rayleigh–Plesset equation for ions with solvent fluctuations. *SIAM Journal on Applied Mathematics*, 81(3):1098–1115, ???? 2021. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).
- Khademi:2021:AOA**
- [171] Amin Khademi and Xin Liu. Asymptotically optimal allocation policies for transplant queueing systems. *SIAM Journal on Applied Mathematics*, 81(3):1116–1140, ???? 2021. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Courtais:2021:SOF

- [172] Alexis Courtais, Abderrazak M. Latifi, François Lesage, and Yannick Privat. Shape optimization of fixed-bed reactors in process engineering. *SIAM Journal on Applied Mathematics*, 81(3):1141–1165, ???? 2021. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Kirkland:2021:IVC

- [173] Stephen Kirkland, Zhisheng Shuai, P. van den Driessche, and Xueying Wang. Impact of varying community networks on disease invasion. *SIAM Journal on Applied Mathematics*, 81(3):1166–1189, ???? 2021. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Kodsi:2021:BVP

- [174] Costy Kodsi and Andrey P. Jivkov. Boundary value problem on a weighted graph relevant to the static analysis of truss structures. *SIAM Journal on Applied Mathematics*, 81(3):1190–1201, ???? 2021. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Choi:2021:SPB

- [175] Sun-Ho Choi and Hyowon Seo. Synchronization in a power balance system with inertia and nonlinear derivatives. *SIAM Journal on Applied Mathematics*, 81(3):1202–1225, ???? 2021. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Ferreira:2021:LSL

- [176] J. A. Ferreira, Paula de Oliveira, P. M. da Silva, and M. Grassi. From life-

saving to life-threatening: a mathematical model to simulate bacterial infections in surgical procedures. *SIAM Journal on Applied Mathematics*, 81(3):1226–1247, ???? 2021. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Potts:2021:SSS

- [177] Jonathan R. Potts and Kevin J. Painter. Stable steady-state solutions of some biological aggregation models. *SIAM Journal on Applied Mathematics*, 81(3):1248–1263, ???? 2021. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Nouaoura:2021:MAT

- [178] Sarra Nouaoura, Nahla Abdellatif, Radhouane Fekih-Salem, and Tewfik Sari. Mathematical analysis of a three-tiered model of anaerobic digestion. *SIAM Journal on Applied Mathematics*, 81(3):1264–1286, ???? 2021. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Stana:2021:DDC

- [179] Remus Stana, Grant Lythe, and Carmen Molina-París. Diffusion in a disk with a circular inclusion. *SIAM Journal on Applied Mathematics*, 81(3):1287–1302, ???? 2021. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Ackley:2021:DKP

- [180] Matthew Ackley and Peter Stechlinski. Determining key parameters in riots using lexicographic directional differentiation. *SIAM Journal on Applied Mathematics*, 81(3):1303–1331, ???? 2021.

- CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).
- Griesmaier:2021:EMI**
- [181] Roland Griesmaier and Bastian Harrach. Erratum: Monotonicity in inverse medium scattering on unbounded domains. *SIAM Journal on Applied Mathematics*, 81(3):1332–1337, ???? 2021. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic). See [2].
- Yang:2021:ANS**
- [182] Chang Yang and Léon Matar Tine. Analysis and numerical simulations of a reaction–diffusion model with fixed active bodies. *SIAM Journal on Applied Mathematics*, 81(4):1339–1360, ???? 2021. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).
- King:2021:MAN**
- [183] John R. King, Jakub Kory, and Mariya Ptashnyk. Multiscale analysis of nutrient uptake by plant roots with sparse distribution of root hairs: Nonstandard scaling. *SIAM Journal on Applied Mathematics*, 81(4):1361–1388, ???? 2021. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).
- Yu:2021:LGS**
- [184] Yue Yu, Gianmarc Grazioli, Nolan E. Phillips, and Carter T. Butts. Local graph stability in exponential family random graph models. *SIAM Journal on Applied Mathematics*, 81(4):1389–1415, ???? 2021. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).
- Mahler:2021:ACM**
- [185] Barbara I. Mahler. Analysis of contagion maps on a class of networks that are spatially embedded in a torus. *SIAM Journal on Applied Mathematics*, 81(4):1416–1440, ???? 2021. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).
- Dekens:2021:FPS**
- [186] Léonard Dekens and Florian Lavigne. Front propagation of a sexual population with evolution of dispersion: a formal analysis. *SIAM Journal on Applied Mathematics*, 81(4):1441–1460, ???? 2021. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).
- Kaltenbacher:2021:ILT**
- [187] Barbara Kaltenbacher and Vanja Nikolić. The inviscid limit of third-order linear and nonlinear acoustic equations. *SIAM Journal on Applied Mathematics*, 81(4):1461–1482, ???? 2021. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).
- Bennetts:2021:CRI**
- [188] L. G. Bennetts and M. H. Meylan. Complex resonant ice shelf vibrations. *SIAM Journal on Applied Mathematics*, 81(4):1483–1502, ???? 2021. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).
- Canic:2021:NGM**
- [189] Suncica Canić, Yifan Wang, and Martina Bukac. A next-generation mathematical model for drug-eluting stents. *SIAM Journal on Applied Mathematics*, 81(4):1503–1529, ???? 2021. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

- DEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).
- Joshi:2021:ANI**
- [190] Pu-Zhao Kow and Jenn-Nan Wang. On the characterization of nonradiating sources for the elastic waves in anisotropic inhomogeneous media. *SIAM Journal on Applied Mathematics*, 81(4):1530–1551, ???? 2021. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).
- Kow:2021:CNS**
- [191] Thomas Koprucki, Anieza Maltsi, and Alexander Mielke. On the Darwin–Howie–Whelan equations for the scattering of fast electrons described by the Schrödinger equation. *SIAM Journal on Applied Mathematics*, 81(4):1552–1578, ???? 2021. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).
- Koprucki:2021:DHW**
- [192] Tao Feng, Zhipeng Qiu, and Yun Kang. Recruitment dynamics of social insect colonies. *SIAM Journal on Applied Mathematics*, 81(4):1579–1599, ???? 2021. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).
- Feng:2021:RDS**
- [193] Fang-Di Dong, Jin Shang, William Fagan, and Bingtuan Li. Persistence and spread of solutions in a two-species Lotka–Volterra competition-diffusion model with a shifting habitat. *SIAM Journal on Applied Mathematics*, 81(4):1600–1622, ???? 2021. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).
- Dong:2021:PSS**
- [194] Badal Joshi and Gheorghe Craciun. Autocatalytic networks: an intimate relation between network topology and dynamics. *SIAM Journal on Applied Mathematics*, 81(4):1623–1644, ???? 2021. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).
- Ma:2021:MPN**
- [195] Manman Ma, Zhenli Xu, and Liwei Zhang. Modified Poisson–Nernst–Planck model with Coulomb and hard-sphere correlations. *SIAM Journal on Applied Mathematics*, 81(4):1645–1667, ???? 2021. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).
- Yaman:2021:IPP**
- [196] Olha Ivanyshyn Yaman and Frédérique Le Louër. An inverse parameter problem with generalized impedance boundary condition for two-dimensional linear viscoelasticity. *SIAM Journal on Applied Mathematics*, 81(4):1668–1690, ???? 2021. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).
- Gorder:2021:LBI**
- [197] Robert A. Van Gorder, Alissa Kamilova, Rolf G. Birkeland, and Andrew L. Krause. Locating the baking isotherm in a Söderberg electrode: Analysis of a moving thermistor model. *SIAM Journal on Applied Mathematics*, 81(4):1691–1716, ???? 2021. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

- Polk:2021:NWD**
- [198] Sam L. Polk and Bruce M. Boghosian. The nonuniversality of wealth distribution tails near wealth condensation criticality. *SIAM Journal on Applied Mathematics*, 81(4):1717–1741, ???? 2021. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).
- Cassidy:2021:DDD**
- [199] Tyler Cassidy. Distributed delay differential equation representations of cyclic differential equations. *SIAM Journal on Applied Mathematics*, 81(4):1742–1766, ???? 2021. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).
- Turzi:2021:DDT**
- [200] Stefano Turzi. Drift-diffusion transport in a randomly inhomogeneous one-dimensional medium. *SIAM Journal on Applied Mathematics*, 81(4):1767–1780, ???? 2021. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).
- El-Morshedy:2021:ACD**
- [201] Hassan A. El-Morshedy and Alfonso Ruiz-Herrera. Asymptotic convergence in delay differential equations arising in epidemiology and physiology. *SIAM Journal on Applied Mathematics*, 81(4):1781–1798, ???? 2021. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).
- Bao:2021:ISP**
- [202] Gang Bao, Xiang Xu, and Jian Zhai. Inverse spectral problem for a damped wave operator. *SIAM Journal on Applied Mathematics*, 81(5):1799–1820, ???? 2021. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).
- Robert:2021:SMNa**
- [203] Philippe Robert and Gaëtan Vignoud. Stochastic models of neural synaptic plasticity. *SIAM Journal on Applied Mathematics*, 81(5):1821–1846, ???? 2021. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).
- Parshad:2021:SNR**
- [204] Rana D. Parshad, Kwadwo Antwi-Fordjour, and Eric M. Takyi. Some novel results in two species competition. *SIAM Journal on Applied Mathematics*, 81(5):1847–1869, ???? 2021. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).
- Wentz:2021:BCS**
- [205] Jacqueline M. Wentz and David M. Bortz. Boundedness of a class of spatially discrete reaction–diffusion systems. *SIAM Journal on Applied Mathematics*, 81(5):1870–1892, ???? 2021. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).
- Forien:2021:EMV**
- [206] Raphaël Forien, Guodong Pang, and Étienne Pardoux. Epidemic models with varying infectivity. *SIAM Journal on Applied Mathematics*, 81(5):1893–1930, ???? 2021. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).
- Betermin:2021:TFO**
- [207] Laurent Bétermin. Theta functions and optimal lattices for a grid cells model.

- SIAM Journal on Applied Mathematics*, 81(5):1931–1953, ???? 2021. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).
- Klibanov:2021:LLI**
- [208] Michael V. Klibanov, Jingzhi Li, and Wenlong Zhang. Linear lavrent'ev integral equation for the numerical solution of a nonlinear coefficient inverse problem. *SIAM Journal on Applied Mathematics*, 81(5):1954–1978, ???? 2021. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).
- Arens:2021:MEC**
- [209] Tilo Arens, Roland Griesmaier, and Marvin Knöller. Maximizing the electromagnetic chirality of thin dielectric tubes. *SIAM Journal on Applied Mathematics*, 81(5):1979–2006, ???? 2021. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).
- Bueler:2021:CLF**
- [210] Ed Bueler. Conservation laws for free-boundary fluid layers. *SIAM Journal on Applied Mathematics*, 81(5):2007–2032, ???? 2021. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).
- Hansen:2021:ODD**
- [211] Jakob Hansen and Robert Ghrist. Opinion dynamics on discourse sheaves. *SIAM Journal on Applied Mathematics*, 81(5):2033–2060, ???? 2021. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).
- Schreyer:2021:MRM**
- [212] Lynn Schreyer, Nikos Voulgarakis, Zachary Hilliard, Sergey Lapin, and Loren Cobb. Modeling refugee movement based on a continuum mechanics phase-field approach of porous media. *SIAM Journal on Applied Mathematics*, 81(5):2061–2082, ???? 2021. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).
- Bertoglio:2021:RPM**
- [213] Cristobal Bertoglio, David Nolte, Grigory Panasenko, and Konstantinas Pileckas. Reconstruction of the pressure in the method of asymptotic partial decomposition for the flows in tube structures. *SIAM Journal on Applied Mathematics*, 81(5):2083–2110, ???? 2021. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).
- Dong:2021:ACP**
- [214] Jiu-Gang Dong. Avoiding collisions and pattern formation in flocks. *SIAM Journal on Applied Mathematics*, 81(5):2111–2129, ???? 2021. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).
- Ha:2021:DSA**
- [215] Seung-Yeal Ha and Hansol Park. A dynamical systems approach for the shape matching of polytopes along rigid-body motions. *SIAM Journal on Applied Mathematics*, 81(5):2130–2152, ???? 2021. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).
- Li:2021:DFG**
- [216] Ruo Li, Weiming Li, and Lingchao Zheng. Direct flux gradient approximation to moment closure of kinetic equations. *SIAM Journal on Applied Mathematics*, 81(5):2153–2179, ???? 2021.

- CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).
- Zabarankin:2021:IPD**
- [217] Michael Zabarankin and Ying Zhang. Inverse problem for drop deformation in nonlinear electrohydrodynamics. *SIAM Journal on Applied Mathematics*, 81(5):2180–2194, ???? 2021. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).
- Schreiber:2021:EQS**
- [218] Sebastian J. Schreiber, Shuo Huang, Jifa Jiang, and Hao Wang. Extinction and quasi-stationarity for discrete-time, endemic SIS and SIR models. *SIAM Journal on Applied Mathematics*, 81(5):2195–2217, ???? 2021. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).
- Hodneland:2021:WPD**
- [219] Erlend Hodneland, Xiaozhe Hu, and Jan M. Nordbotten. Well-posedness and discretization for a class of models for mixed-dimensional problems with high-dimensional gap. *SIAM Journal on Applied Mathematics*, 81(5):2218–2245, ???? 2021. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).
- Gorb:2021:AEH**
- [220] Yuliya Gorb and Yuri Kuznetsov. Asymptotic expansions for high-contrast scalar and vectorial PDEs. *SIAM Journal on Applied Mathematics*, 81(5):2246–2264, ???? 2021. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).
- Oblakova:2021:RSC**
- [221] A. Oblakova, A. Al Hanbali, R. J. Boucherie, J. C. W. van Ommeren, and W. H. M. Zijm. Roots, symmetry, and contour integrals in queuing-type systems. *SIAM Journal on Applied Mathematics*, 81(5):2265–2295, ???? 2021. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).
- Kawano:2021:DPS**
- [222] Alexandre Kawano, Antonino Morassi, and Ramón Zaera. Detecting a prey in a spider orb-Web from in-plane vibration. *SIAM Journal on Applied Mathematics*, 81(6):2297–2322, ???? 2021. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).
- Petit:2021:RWD**
- [223] Julien Petit, Renaud Lambiotte, and Timoteo Carletti. Random walks on dense graphs and graphons. *SIAM Journal on Applied Mathematics*, 81(6):2323–2345, ???? 2021. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).
- Coclite:2021:GEE**
- [224] G. M. Coclite, F. Maddalena, G. Puglisi, M. Romano, and G. Saccomandi. The Gardner equation in elastodynamics. *SIAM Journal on Applied Mathematics*, 81(6):2346–2361, ???? 2021. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).
- Robert:2021:SMNb**
- [225] Philippe Robert and Gaëtan Vignoud. Stochastic models of neural synaptic plasticity: a scaling approach. *SIAM Journal on Applied Mathematics*, 81

- (6):2362–2386, ???? 2021. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).
- Ji:2021:SRM**
- [226] Xia Ji and Xiaodong Liu. Source reconstruction with multifrequency sparse scattered fields. *SIAM Journal on Applied Mathematics*, 81(6):2387–2404, ???? 2021. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).
- Tao:2021:DDN**
- [227] Yiwen Tao, Sue Ann Campbell, and Francis J. Poulin. Dynamics of a diffusive nutrient-phytoplankton-zooplankton model with spatio-temporal delay. *SIAM Journal on Applied Mathematics*, 81(6):2405–2432, ???? 2021. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).
- Levitin:2021:IEL**
- [228] Michael Levitin, Peter Monk, and Virginia Selgas. Impedance eigenvalues in linear elasticity. *SIAM Journal on Applied Mathematics*, 81(6):2433–2456, ???? 2021. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).
- Alexander:2021:RSE**
- [229] Amanda M. Alexander and Sean D. Lawley. Reaction–subdiffusion equations with species-dependent movement. *SIAM Journal on Applied Mathematics*, 81(6):2457–2479, ???? 2021. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).
- Cheng:2021:LME**
- [230] Jiaqi Cheng, Peter Chesson, and Xiaoying Han. The lottery model for ecological competition in nonstationary environments. *SIAM Journal on Applied Mathematics*, 81(6):2480–2502, ???? 2021. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).
- Li:2021:SIS**
- [231] Peijun Li, Xiaohua Yao, and Yue Zhao. Stability for an inverse source problem of the biharmonic operator. *SIAM Journal on Applied Mathematics*, 81(6):2503–2525, ???? 2021. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).
- Crowdy:2021:VMF**
- [232] Darren G. Crowdy. Viscous Marangoni flow driven by insoluble surfactant and the complex Burgers equation. *SIAM Journal on Applied Mathematics*, 81(6):2526–2546, ???? 2021. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).
- Dang:2021:HNS**
- [233] Thuyen Dang, Yuliya Gorb, and Silvia Jiménez Bolaños. Homogenization of nondilute suspension of viscous fluid with magnetic particles. *SIAM Journal on Applied Mathematics*, 81(6):2547–2568, ???? 2021. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).
- Hu:2021:THA**
- [234] Guanghui Hu, Wangtao Lu, and Andreas Rathsfeld. Time-harmonic acoustic scattering from locally perturbed periodic curves. *SIAM Journal on*

- Applied Mathematics*, 81(6):2569–2595, ???? 2021. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).
- Ledoux:2021:ABE**
- [235] Jeremy Ledoux, Sebastián Riffo, and Julien Salomon. Analysis of the blade element momentum theory. *SIAM Journal on Applied Mathematics*, 81(6):2596–2621, ???? 2021. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).
- Isaacson:2021:HRD**
- [236] Samuel A. Isaacson, Jingwei Ma, and Konstantinos Spiliopoulos. How reaction-diffusion PDEs approximate the large-population limit of stochastic particle models. *SIAM Journal on Applied Mathematics*, 81(6):2622–2657, ???? 2021. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).
- Mercier:2021:VMA**
- [237] Jean-François Mercier. Variational methods for acoustic radiation in a duct with a shear flow and an absorbing boundary. *SIAM Journal on Applied Mathematics*, 81(6):2658–2683, ???? 2021. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).
- Cohen:2021:NMA**
- [238] Reed B. Cohen and Jiaxu Li. A novel model and its analysis on the metabolic regulations of glucose, insulin, and glucagon. *SIAM Journal on Applied Mathematics*, 81(6):2684–2703, ???? 2021. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic). CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic). See erratum [342].
- Bottcher:2021:CQR**
- [239] Lucas Böttcher and Mason A. Porter. Classical and quantum random-walk centrality measures in multilayer networks. *SIAM Journal on Applied Mathematics*, 81(6):2704–2724, ???? 2021. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic). See erratum [342].
- Deng:2022:GPE**
- [240] Youjun Deng, Hongyu Liu, Xianchao Wang, and Wei Wu. On geometrical properties of electromagnetic transmission eigenfunctions and artificial mirage. *SIAM Journal on Applied Mathematics*, 82(1):1–24, ???? 2022. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic). URL <https://pubs.siam.org/doi/10.1137/21M1413547>.
- Lunz:2022:ONC**
- [241] Davin Lunz. Optimizing noisy complex systems liable to failure. *SIAM Journal on Applied Mathematics*, 82(1):25–48, ???? 2022. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic). URL <https://pubs.siam.org/doi/10.1137/21M1416126>.
- Lu:2022:DRT**
- [242] Jianfeng Lu, Jeremy L. Marzuola, and Alexander B. Watson. Defect resonances of truncated crystal structures. *SIAM Journal on Applied Mathematics*, 82(1):49–74, ???? 2022. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic). URL <https://pubs.siam.org/doi/10.1137/21M1415601>.

- Ambrosi:2022:EMM**
- [243] D. Ambrosi, L. Deorsola, S. Turzi, and M. Zoppello. Elementary mechanics of the mitral valve. *SIAM Journal on Applied Mathematics*, 82(1):75–94, ???? 2022. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic). URL <https://pubs.siam.org/doi/10.1137/21M1416655>.
- Zhou:2022:SME**
- [244] Peng Zhou and Qihua Huang. A spatiotemporal model for the effects of toxicants on populations in a polluted river. *SIAM Journal on Applied Mathematics*, 82(1):95–118, ???? 2022. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic). URL <https://pubs.siam.org/doi/10.1137/21M1405629>.
- Li:2022:MRB**
- [245] Hongjie Li, Hongyu Liu, and Jun Zou. Minnaert resonances for bubbles in soft elastic materials. *SIAM Journal on Applied Mathematics*, 82(1):119–141, ???? 2022. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic). URL <https://pubs.siam.org/doi/10.1137/21M1400572>.
- Zhigun:2022:NDR**
- [246] Anna Zhigun and Christina Surulescu. A novel derivation of rigorous macroscopic limits from a micro-meso description of signal-triggered cell migration in fibrous environments. *SIAM Journal on Applied Mathematics*, 82(1):142–167, ???? 2022. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic). URL <https://pubs.siam.org/doi/10.1137/20M1365442>.
- Psaltis:2022:HSW**
- [247] Steven Psaltis, Robert Timms, Colin Please, and S. Jonathan Chapman. Homogenization of spirally wound high-contrast layered materials. *SIAM Journal on Applied Mathematics*, 82(1):168–193, ???? 2022. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic). URL <https://pubs.siam.org/doi/10.1137/20M1377904>.
- Gamba:2022:RTP**
- [248] Irene M. Gamba, Qin Li, and Anjali Nair. Reconstructing the thermal phonon transmission coefficient at solid interfaces in the phonon transport equation. *SIAM Journal on Applied Mathematics*, 82(1):194–220, ???? 2022. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic). URL <https://pubs.siam.org/doi/10.1137/20M1381666>.
- Huang:2022:SNT**
- [249] Kuang Huang and Qiang Du. Stability of a nonlocal traffic flow model for connected vehicles. *SIAM Journal on Applied Mathematics*, 82(1):221–243, ???? 2022. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic). URL <https://pubs.siam.org/doi/10.1137/20M1355732>.
- Liu:2022:MSM**
- [250] Xiaodong Liu, Shixu Meng, and Bo Zhang. Modified sampling method with near field measurements. *SIAM Journal on Applied Mathematics*, 82(1):244–266, ???? 2022. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic). URL <https://pubs.siam.org/doi/10.1137/21M1432235>.

- Fogelson:2022:DFB**
- [251] Aaron L. Fogelson, Anna C. Nelson, Cheryl Zapata-Allegro, and James P. Keener. Development of fibrin branch structure before and after gelation. *SIAM Journal on Applied Mathematics*, 82(1):267–293, ????. 2022. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic). URL <https://pubs.siam.org/doi/10.1137/21M1401024>.
- Miroshnichenko:2022:PLM**
- [252] Taisia Miroshnichenko, Vladimir Gubernov, Sergey Minaev, Vladimir Mislavskii, and Junnosuke Okajima. Piecewise linear model of phytoplankton wave propagation in periodical vortex flow. *SIAM Journal on Applied Mathematics*, 82(1):294–312, ????. 2022. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic). URL <https://pubs.siam.org/doi/10.1137/21M1405861>.
- Kincl:2022:TAR**
- [253] Ondrej Kincl, Michal Pavelka, Frantisek Marsík, and Miroslav Sedláček. Theoretical analysis of rolling fluid turbines. *SIAM Journal on Applied Mathematics*, 82(1):313–329, ????. 2022. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic). URL <https://pubs.siam.org/doi/10.1137/21M1392796>.
- Altmann:2022:LDG**
- [254] Robert Altmann, Patrick Henning, and Daniel Peterseim. Localization and delocalization of ground states of Bose–Einstein condensates under disorder. *SIAM Journal on Applied Mathematics*, 82(1):330–358, ????. 2022. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic). URL <https://pubs.siam.org/doi/10.1137/21M1431813>.
- Ballif:2022:ASS**
- [255] Guillaume Ballif, Frédérique Clément, and Romain Yvinec. Averaging of a stochastic slow-fast model for population dynamics: Application to the development of ovarian follicles. *SIAM Journal on Applied Mathematics*, 82(1):359–380, ????. 2022. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic). URL <https://pubs.siam.org/doi/10.1137/21M1409615>.
- Liu:2022:QLT**
- [256] A. Liu and F. M. G. Magpantay. A quantification of long transient dynamics. *SIAM Journal on Applied Mathematics*, 82(2):381–407, ????. 2022. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic). URL <https://pubs.siam.org/doi/10.1137/20M1367131>.
- Acosta:2022:NUI**
- [257] Sebastian Acosta, Gunther Uhlmann, and Jian Zhai. Nonlinear ultrasound imaging modeled by a Westervelt equation. *SIAM Journal on Applied Mathematics*, 82(2):408–426, ????. 2022. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic). URL <https://pubs.siam.org/doi/10.1137/21M1431813>.
- Darde:2022:CAE**
- [258] J. Dardé, N. Hyvönen, T. Kuutela, and T. Valkonen. Contact adapting electrode model for electrical impedance tomography. *SIAM Journal on Applied Mathematics*, 82(2):427–449, ????. 2022. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic). URL <https://pubs.siam.org/doi/10.1137/21M1431813>.

2022. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic). URL <https://pubs.siam.org/doi/10.1137/21M1396125>.
- Brun:2022:MPS**
- [259] Mats K. Brun, Elyes Ahmed, Jan M. Nordbotten, and Nils ChrStenseth. Modeling the process of speciation using a multiscale framework including a posteriori error estimates. *SIAM Journal on Applied Mathematics*, 82(2):450–475, ???? 2022. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic). URL <https://pubs.siam.org/doi/10.1137/21M1405228>.
- Marchner:2022:CNA**
- [260] Philippe Marchner, Xavier Antoine, Christophe Geuzaine, and Hadrien Bériot. Construction and numerical assessment of local absorbing boundary conditions for heterogeneous time-harmonic acoustic problems. *SIAM Journal on Applied Mathematics*, 82(2):476–501, ???? 2022. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic). URL <https://pubs.siam.org/doi/10.1137/21M1414929>.
- Ciallella:2022:LDR**
- [261] Alessandro Ciallella, Emilio N. M. Cirillo, and Barbara Vantaggi. Localization of defects via residence time measures. *SIAM Journal on Applied Mathematics*, 82(2):502–525, ???? 2022. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic). URL <https://pubs.siam.org/doi/10.1137/20M1380284>.
- Buze:2022:SFA**
- [262] Maciej Buze, Thoms E. Woolley, and Angela Mihai. A stochastic framework for atomistic fracture. *SIAM Journal on Applied Mathematics*, 82(2):526–548, ???? 2022. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic). URL <https://pubs.siam.org/doi/10.1137/21M1416436>.
- Benes:2022:QNA**
- [263] Michal Benes, Miroslav Kolár, and Daniel Sevcovic. Qualitative and numerical aspects of a motion of a family of interacting curves in space. *SIAM Journal on Applied Mathematics*, 82(2):549–575, ???? 2022. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic). URL <https://pubs.siam.org/doi/10.1137/21M1417181>.
- Liu:2022:NMP**
- [264] Shuang Liu, Yuan Lou, and Pengfei Song. A new monotonicity for principal eigenvalues with applications to time-periodic patch models. *SIAM Journal on Applied Mathematics*, 82(2):576–601, ???? 2022. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic). URL <https://pubs.siam.org/doi/10.1137/20M1320973>.
- Lai:2022:ITD**
- [265] Ru-Yu Lai, Kui Ren, and Ting Zhou. Inverse transport and diffusion problems in photoacoustic imaging with nonlinear absorption. *SIAM Journal on Applied Mathematics*, 82(2):602–624, ???? 2022. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic). URL <https://pubs.siam.org/doi/10.1137/21M1436178>.

- Kirk:2022:MEH**
- [266] Toby L. Kirk, Jack Evans, Colin P. Please, and S. Jonathan Chapman. Modeling electrode heterogeneity in lithium-ion batteries: Unimodal and bimodal particle-size distributions. *SIAM Journal on Applied Mathematics*, 82(2):625–653, ???? 2022. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic). URL <https://pubs.siam.org/doi/10.1137/20M1344305>.
- Chen:2022:TNP**
- [267] Shanshan Chen, Junping Shi, Zhisheng Shuai, and Yixiang Wu. Two novel proofs of spectral monotonicity of perturbed essentially nonnegative matrices with applications in population dynamics. *SIAM Journal on Applied Mathematics*, 82(2):654–676, ???? 2022. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic). URL <https://pubs.siam.org/doi/10.1137/20M1345220>.
- Vynnycky:2022:TNO**
- [268] Michael Vynnycky and Sean McKee. On a transient nonlinear one-dimensional reaction-diffusion equation with a point-source initial condition. *SIAM Journal on Applied Mathematics*, 82(2):677–693, ???? 2022. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic). URL <https://pubs.siam.org/doi/10.1137/21M140701X>.
- Dalby:2022:ODF**
- [269] James Dalby, Patrick E. Farrell, Apala Majumdar, and Jingmin Xia. One-dimensional ferromematics in a channel: Order reconstruction, bifurcations, and multistability. *SIAM Journal on Applied Mathematics*, 82(2):694–719, ???? 2022. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic). URL <https://pubs.siam.org/doi/10.1137/21M1427863>.
- Meng:2022:EMT**
- [270] Qingle Meng, Zhengjian Bai, Huaiyan Diao, and Hongyu Liu. Effective medium theory for embedded obstacles in elasticity with applications to inverse problems. *SIAM Journal on Applied Mathematics*, 82(2):720–749, ???? 2022. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic). URL <https://pubs.siam.org/doi/10.1137/21M1431369>.
- Fox:2022:HQM**
- [271] Rodney O. Fox and Frédérique Laurent. Hyperbolic quadrature method of moments for the one-dimensional kinetic equation. *SIAM Journal on Applied Mathematics*, 82(2):750–771, ???? 2022. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic). URL <https://pubs.siam.org/doi/10.1137/21M1406143>.
- Tang:2022:AAS**
- [272] Tao Tang, Boyi Wang, and Jiang Yang. Asymptotic analysis on the sharp interface limit of the time-fractional Cahn-Hilliard equation. *SIAM Journal on Applied Mathematics*, 82(3):773–792, ???? 2022. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic). URL <https://pubs.siam.org/doi/10.1137/21M1427863>.
- Park:2022:CGS**
- [273] Youngmin Park, Prashant Singh, and Thomas G. Fai. Coarse-grained stochastic model of myosin-driven vesicles into

- dendritic spines. *SIAM Journal on Applied Mathematics*, 82(3):793–820, ???? 2022. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic). URL <https://pubs.siam.org/doi/10.1137/21M1434180>.
- Nie:2022:EDD**
- [274] Hua Nie, Yao Shi, and Jianhua Wu. The effect of diffusion on the dynamics of a predator-prey chemostat model. *SIAM Journal on Applied Mathematics*, 82(3):821–848, ???? 2022. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic). URL <https://pubs.siam.org/doi/10.1137/21M1432090>.
- Negrón-Marrero:2022:IEC**
- [275] Pablo V. Negrón-Marrero and Jeyabal Sivaloganathan. Infinite energy cavitating solutions: a variational approach. *SIAM Journal on Applied Mathematics*, 82(3):849–871, ???? 2022. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic). URL <https://pubs.siam.org/doi/10.1137/21M1427711>.
- Nethercote:2022:DAW**
- [276] Matthew A. Nethercote, Anastasia V. Kisil, and Raphael C. Assier. Diffraction of acoustic waves by a wedge of point scatterers. *SIAM Journal on Applied Mathematics*, 82(3):872–898, ???? 2022. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic). URL <https://pubs.siam.org/doi/10.1137/21M1438608>.
- Gao:2022:EAI**
- [277] Daozhou Gao, Justin M. W. Munganga, P. van den Driessche, and Lei Zhang. Effects of asymptomatic infections on the spatial spread of infectious diseases. *SIAM Journal on Applied Mathematics*, 82(3):899–923, ???? 2022. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic). URL <https://pubs.siam.org/doi/10.1137/21M1398434>.
- Dondl:2022:EMS**
- [278] Patrick Dondl, Patrina S. P. Poh, and Marius Zeinhofer. An efficient model for scaffold mediated bone regeneration. *SIAM Journal on Applied Mathematics*, 82(3):924–949, ???? 2022. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic). URL <https://pubs.siam.org/doi/10.1137/21M1401887>.
- Gu:2022:GRM**
- [279] Binan Gu, Lou Kondic, and Linda J. Cummings. A graphical representation of membrane filtration. *SIAM Journal on Applied Mathematics*, 82(3):950–975, ???? 2022. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic). URL <https://pubs.siam.org/doi/10.1137/21M1424743>.
- Su:2022:GSC**
- [280] Wei Su and Xiang Zhang. Global stability and Canard explosions of the predator-prey model with the sigmoid functional response. *SIAM Journal on Applied Mathematics*, 82(3):976–1000, ???? 2022. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic). URL <https://pubs.siam.org/doi/10.1137/21M1437755>.
- Rastegin:2022:ESE**
- [281] Alexey Rastegin. Estimating the Shannon entropy and (un)certainty rela-

- tions for design-structured POVMs. *SIAM Journal on Applied Mathematics*, 82(3):1001–1019, ???? 2022. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic). URL <https://pubs.siam.org/doi/10.1137/21M1408105>.
- Cao:2022:BJI**
- [282] Yining Cao and Xiaoming Wang. The Beavers–Joseph interface boundary condition is well approximated by the Beavers–Joseph–Saffman–Jones interface boundary condition. *SIAM Journal on Applied Mathematics*, 82(3):1020–1044, ???? 2022. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic). URL <https://pubs.siam.org/doi/10.1137/21M1462386>.
- Jin:2022:ROD**
- [283] Bangti Jin and Yavar Kian. Recovery of the order of derivation for fractional diffusion equations in an unknown medium. *SIAM Journal on Applied Mathematics*, 82(3):1045–1067, ???? 2022. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic). URL <https://pubs.siam.org/doi/10.1137/21M1398264>.
- Chao:2022:PRE**
- [284] Ying Chao and Molei Tao. Parametric resonance for enhancing the rate of metastable transition. *SIAM Journal on Applied Mathematics*, 82(3):1068–1090, ???? 2022. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic). URL <https://pubs.siam.org/doi/10.1137/21M144966X>.
- Werner:2022:DIM**
- [285] Philipp Werner, Martin Burger, Flo-
rian Frank, and Harald Garcke. A diffuse interface model for cell blebbing including membrane–cortex coupling with linker dynamics. *SIAM Journal on Applied Mathematics*, 82(3):1091–1112, ???? 2022. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic). URL <https://pubs.siam.org/doi/10.1137/21M1433642>.
- Li:2022:ISP**
- [286] Jianliang Li, Peijun Li, and Xu Wang. Inverse source problems for the stochastic wave equations: Far-field patterns. *SIAM Journal on Applied Mathematics*, 82(4):1113–1134, ???? 2022. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic). URL <https://pubs.siam.org/doi/10.1137/21M1467663>.
- Grabovsky:2022:RSF**
- [287] Yury Grabovsky. Reconstructing Stieltjes functions from their approximate values: a search for a needle in a haystack. *SIAM Journal on Applied Mathematics*, 82(4):1135–1166, ???? 2022. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic). URL <https://pubs.siam.org/doi/10.1137/21M1392279>.
- Wittwer:2022:MPM**
- [288] Nicolás Alejandro Barnafi Wittwer, Simone Di Gregorio, Luca Dede’, Paolo Zunino, Christian Vergara, and Alfio Quarteroni. A multiscale poromechanics model integrating myocardial perfusion and the epicardial coronary vessels. *SIAM Journal on Applied Mathematics*, 82(4):1167–1193, ???? 2022. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

- URL <https://pubs.siam.org/doi/10.1137/21M1424482>.
- Niethammer:2022:OBD**
- [289] B. Niethammer, R. L. Pego, A. Schlichting, and J. J. L. Velázquez. Oscillations in a Becker–Döring model with injection and depletion. *SIAM Journal on Applied Mathematics*, 82(4):1194–1219, ???? 2022. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic). URL <https://pubs.siam.org/doi/10.1137/20M1398664>.
- Schenk:2022:EUN**
- [290] Christina Schenk and Volker H. Schulz. Existence, uniqueness, and numerical modeling of wine fermentation based on integro-differential equations. *SIAM Journal on Applied Mathematics*, 82(4):1220–1245, ???? 2022. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic). URL <https://pubs.siam.org/doi/10.1137/20M1362309>.
- Dages:2022:DSP**
- [291] Thomas Dages and Alfred M. Bruckstein. Doubly stochastic pairwise interactions for agreement and alignment. *SIAM Journal on Applied Mathematics*, 82(4):1246–1266, ???? 2022. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic). URL <https://pubs.siam.org/doi/10.1137/21M1394680>.
- Jiang:2022:TGB**
- [292] Kai Jiang, Wei Si, and Jie Xu. Tilt grain boundaries of hexagonal structures: a spectral viewpoint. *SIAM Journal on Applied Mathematics*, 82(4):1267–1286, ???? 2022. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic). URL <https://pubs.siam.org/doi/10.1137/21M1457928>.
- Li:2022:NER**
- [293] Anne-Sophie Bonnet-Ben Dhia, Simon N. Chandler-Wilde, and Sonia Fliss. On the half-space matching method for real wavenumber. *SIAM Journal on Applied Mathematics*, 82(4):1287–1311, ???? 2022. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic). URL <https://pubs.siam.org/doi/10.1137/21M1459216>.
- Willis:2022:HSI**
- [294] Nathan Willis, Chee Han Tan, Christel Hohenegger, and Braxton Osting. High spots for the ice-fishing problem with surface tension. *SIAM Journal on Applied Mathematics*, 82(4):1312–1335, ???? 2022. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic). URL <https://pubs.siam.org/doi/10.1137/21M1458879>.
- Liang:2022:TEC**
- [295] Nan Liang, Maoxing Liu, Yongzheng Sun, Rui Xiao, and Lingzhi Zhao. Time and energy costs for synchronization of Kuramoto-oscillator networks with or without noise perturbation. *SIAM Journal on Applied Mathematics*, 82(4):1336–1355, ???? 2022. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic). URL <https://pubs.siam.org/doi/10.1137/21M1457928>.
- Li:2022:NER**
- [296] Conway Li, Neville Fowkes, Brendan Florio, and Miccal Matthews.

- Near-exact radiating fins via boundary tracing. *SIAM Journal on Applied Mathematics*, 82(4):1356–1368, ???? 2022. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic). URL <https://pubs.siam.org/doi/10.1137/22M1476228>.
- Aguayo:2022:AOI**
- [297] Jorge Aguayo and Hugo Carrillo Linycopi. Analysis of obstacles immersed in viscous fluids using Brinkman’s law for steady Stokes and Navier–Stokes equations. *SIAM Journal on Applied Mathematics*, 82(4):1369–1386, ???? 2022. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic). URL <https://pubs.siam.org/doi/10.1137/20M138569X>.
- Schnitzer:2022:APP**
- [298] Ory Schnitzer and Richard Porter. Acoustics of a partially partitioned narrow slit connected to a half-plane: Case study for exponential quasi-bound states in the continuum and their resonant excitation. *SIAM Journal on Applied Mathematics*, 82(4):1387–1410, ???? 2022. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic). URL <https://pubs.siam.org/doi/10.1137/22M1470426>.
- Li:2022:BTL**
- [299] Conway Li, Neville Fowkes, and Michael Matthews. Boundary tracing for Laplace’s equation with conformal mapping. *SIAM Journal on Applied Mathematics*, 82(4):1411–1422, ???? 2022. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic). URL <https://pubs.siam.org/doi/10.1137/22M1476241>.
- Ancona:2022:SSA**
- [300] Fabio Ancona, Alberto Bressan, and Maria Teresa Chiri. Soil searching by an artificial root. *SIAM Journal on Applied Mathematics*, 82(4):1423–1445, ???? 2022. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic). URL <https://pubs.siam.org/doi/10.1137/20M1338678>.
- Hiptmair:2022:SQR**
- [301] Ralf Hiptmair, Andrea Moiola, and Euan A. Spence. Spurious quasi-resonances in boundary integral equations for the Helmholtz transmission problem. *SIAM Journal on Applied Mathematics*, 82(4):1446–1469, ???? 2022. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic). URL <https://pubs.siam.org/doi/10.1137/21M1447052>.
- Kraitzman:2022:SMB**
- [302] Noa Kraitzman, Keith Promislow, and Brian Wetton. Slow migration of brine inclusions in first-year sea ice. *SIAM Journal on Applied Mathematics*, 82(4):1470–1494, ???? 2022. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic). URL <https://pubs.siam.org/doi/10.1137/21M1440244>.
- Kunz:2022:DRA**
- [303] Valentin D. Kunz and Raphael Assier. Diffraction by a right-angled no-contrast penetrable wedge revisited: a double Wiener–Hopf approach. *SIAM Journal on Applied Mathematics*, 82(4):1495–1519, ???? 2022. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic). URL <https://pubs.siam.org/doi/10.1137/21M1461861>.

- Davies:2022:CME**
- [304] Cameron Davies, Tongseok Lim, and Robert J. McCann. Classifying minimum energy states for interacting particles: Spherical shells. *SIAM Journal on Applied Mathematics*, 82(4):1520–1536, ???? 2022. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic). URL <https://pubs.siam.org/doi/10.1137/21M1455309>.
- Goldsztein:2022:WPB**
- [305] Guillermo H. Goldsztein. Wobbling of pedestrian bridges. *SIAM Journal on Applied Mathematics*, 82(4):1537–1557, ???? 2022. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic). URL <https://pubs.siam.org/doi/10.1137/21M1463148>.
- Hua:2022:ERO**
- [306] Yifan Hua, Kevin Miller, Andrea L. Bertozzi, Chen Qian, and Bao Wang. Efficient and reliable overlay networks for decentralized federated learning. *SIAM Journal on Applied Mathematics*, 82(4):1558–1586, ???? 2022. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic). URL <https://pubs.siam.org/doi/10.1137/21M1465081>.
- Sun:2022:DDF**
- [307] Gui-Quan Sun, Hong-Tao Zhang, Li-Li Chang, Zhen Jin, Hao Wang, and Shigui Ruan. On the dynamics of a diffusive foot-and-mouth disease model with nonlocal infections. *SIAM Journal on Applied Mathematics*, 82(4):1587–1610, ???? 2022. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic). URL <https://pubs.siam.org/doi/10.1137/21M1412992>.
- Ammari:2022:VTB**
- [308] Habib Ammari, Francesco Fiorani, and Erik Orvehed Hiltunen. On the validity of the tight-binding method for describing systems of subwavelength resonators. *SIAM Journal on Applied Mathematics*, 82(4):1611–1634, ???? 2022. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic). URL <https://pubs.siam.org/doi/10.1137/21M1449804>.
- Bruna:2022:PSS**
- [309] Maria Bruna, Martin Burger, Antonio Esposito, and Simon M. Schulz. Phase separation in systems of interacting active Brownian particles. *SIAM Journal on Applied Mathematics*, 82(4):1635–1660, ???? 2022. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic). URL <https://pubs.siam.org/doi/10.1137/21M1452524>.
- Fayolle:2022:SSS**
- [310] Guy Fayolle, Jean-Marc Lasgouttes, and Carlos Flores. Stability and string stability of car-following models with reaction-time delay. *SIAM Journal on Applied Mathematics*, 82(5):1661–1679, ???? 2022. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic). URL <https://pubs.siam.org/doi/10.1137/21M1443650>.
- Wang:2022:SSR**
- [311] Hao Wang, Kai Wang, and Yong-Jung Kim. Spatial segregation in reaction-diffusion epidemic models. *SIAM Journal on Applied Mathematics*, 82(5):1680–1709, ???? 2022. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

- URL <https://pubs.siam.org/doi/10.1137/22M1485814>.
- Zhang:2022:MBF**
- [312] Wenzhong Zhang, Bo Wang, and Wei Cai. A matrix basis formulation for the dyadic Green's functions of Maxwell's equations in layered media. *SIAM Journal on Applied Mathematics*, 82(5):1710–1732, ???? 2022. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic). URL <https://pubs.siam.org/doi/10.1137/21M1429102>.
- Iwasaki:2022:SWR**
- [313] Satoru Iwasaki, Shuichi Jimbo, and Yoshihisa Morita. Standing waves of reaction-diffusion equations on an unbounded graph with two vertices. *SIAM Journal on Applied Mathematics*, 82(5):1733–1763, ???? 2022. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic). URL <https://pubs.siam.org/doi/10.1137/21M1454572>.
- Chang:2022:SOC**
- [314] Lili Chang, Wei Gong, Zhen Jin, and Gui-Quan Sun. Sparse optimal control of pattern formations for an SIR reaction-diffusion epidemic model. *SIAM Journal on Applied Mathematics*, 82(5):1764–1790, ???? 2022. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic). URL <https://pubs.siam.org/doi/10.1137/22M1472127>.
- Jahedi:2022:RSA**
- [315] Sana Jahedi, Timothy Sauer, and James A. Yorke. Robustness of solutions of almost every system of equations. *SIAM Journal on Applied Mathematics*, 82(5):1791–1807, ???? 2022. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic). URL <https://pubs.siam.org/doi/10.1137/22M1483529>.
- Shi:2022:NLC**
- [316] Baoming Shi, Yucen Han, and Lei Zhang. Nematic liquid crystals in a rectangular confinement: Solution landscape, and bifurcation. *SIAM Journal on Applied Mathematics*, 82(5):1808–1828, ???? 2022. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic). URL <https://pubs.siam.org/doi/10.1137/21M1447404>.
- Feng:2022:GCP**
- [317] Lirui Feng, Yi Wang, and Jianhong Wu. Generic convergence to periodic orbits for monotone flows with respect to 2-cones and applications to SEIRS models. *SIAM Journal on Applied Mathematics*, 82(5):1829–1850, ???? 2022. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic). URL <https://pubs.siam.org/doi/10.1137/21M1466566>.
- Cang:2022:SOT**
- [318] Zixuan Cang, Qing Nie, and Yanxiang Zhao. Supervised optimal transport. *SIAM Journal on Applied Mathematics*, 82(5):1851–1877, ???? 2022. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic). URL <https://pubs.siam.org/doi/10.1137/22M1469171>.
- Wang:2022:GDF**
- [319] Jiafu Wang, Shan Zhang, and Lin Wang. Global dynamics of a Filippov SIQR model with delayed relay

- control. *SIAM Journal on Applied Mathematics*, 82(6):1879–1902, ???? 2022. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic). URL <https://pubs.siam.org/doi/10.1137/21M1462830>.
- Qu:2022:MSW**
- [320] Zhuolin Qu, Tong Wu, and James M. Hyman. Modeling spatial waves of wolbachia invasion for controlling mosquito-borne diseases. *SIAM Journal on Applied Mathematics*, 82(6):1903–1929, ???? 2022. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic). URL <https://pubs.siam.org/doi/10.1137/21M1440384>.
- Klimm:2022:MMG**
- [321] Florian Klimm, Nick S. Jones, and Michael T. Schaub. Modularity maximization for graphons. *SIAM Journal on Applied Mathematics*, 82(6):1930–1952, ???? 2022. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic). URL <https://pubs.siam.org/doi/10.1137/22M1492003>.
- Lippitt:2022:SIM**
- [322] William Lippitt, Sunder Sethuraman, and Xueying Tang. Stationarity and inference in multistate promoter models of stochastic gene expression via stick-breaking measures. *SIAM Journal on Applied Mathematics*, 82(6):1953–1986, ???? 2022. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic). URL <https://pubs.siam.org/doi/10.1137/21M1440876>.
- Higham:2022:MFA**
- [323] Desmond John Higham and Henry-Louis de Kergorlay. Mean field anal-
- ysis of hypergraph contagion models. *SIAM Journal on Applied Mathematics*, 82(6):1987–2007, ???? 2022. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic). URL <https://pubs.siam.org/doi/10.1137/21M1440219>.
- Popovic:2022:LDA**
- [324] Lea Popovic and Giovanni Zoroddu. Large deviations for additive functionals of reflected jump-diffusions. *SIAM Journal on Applied Mathematics*, 82(6):2008–2035, ???? 2022. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic). URL <https://pubs.siam.org/doi/10.1137/21M1446162>.
- Sahneh:2022:EEP**
- [325] Faryad D. Sahneh, William Fries, Joseph C. Watkins, and Joceline Lega. Epidemics from the eye of the pathogen. *SIAM Journal on Applied Mathematics*, 82(6):2036–2056, ???? 2022. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic). URL <https://pubs.siam.org/doi/10.1137/21M1450719>.
- Ledger:2022:MOC**
- [326] P. D. Ledger and W. R. B. Lionheart. Minimal object characterizations using harmonic generalized polarizability tensors and symmetry groups. *SIAM Journal on Applied Mathematics*, 82(6):2057–2079, ???? 2022. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic). URL <https://pubs.siam.org/doi/10.1137/22M1471547>.

- | | |
|---|--|
| <div style="border: 1px solid black; padding: 5px; text-align: center;">Matin:2022:NCD</div> <p>[327] Hossein Nick Zinat Matin and Richard B. Sowers. Near-collision dynamics in a noisy car-following model. <i>SIAM Journal on Applied Mathematics</i>, 82(6):2080–2110, ????. 2022. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic). URL https://pubs.siam.org/doi/10.1137/21M1454055.</p> <div style="border: 1px solid black; padding: 5px; text-align: center;">Zhang:2022:CIM</div> <p>[328] Yaming Zhang, Thomas Stiehl, and Min Tang. A continuous integral model for white blood cell production. <i>SIAM Journal on Applied Mathematics</i>, 82(6):2111–2130, ????. 2022. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic). URL https://pubs.siam.org/doi/10.1137/22M147668X.</p> <div style="border: 1px solid black; padding: 5px; text-align: center;">Demeio:2023:WPS</div> <p>[329] Lucio Demeio and Stefano Lenci. Wave propagation on a string resting on a general nonlinear substrate. <i>SIAM Journal on Applied Mathematics</i>, 83(1):1–24, ????. 2023. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic). URL https://pubs.siam.org/doi/10.1137/22M1503488.</p> <div style="border: 1px solid black; padding: 5px; text-align: center;">Borcea:2023:PWP</div> <p>[330] Liliana Borcea, Josselin Garnier, and Knut Sølna. Paraxial wave propagation in random media with long-range correlations. <i>SIAM Journal on Applied Mathematics</i>, 83(1):25–51, ????. 2023. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic). URL https://pubs.siam.org/doi/10.1137/22M149524X.</p> | <div style="border: 1px solid black; padding: 5px; text-align: center;">Cheng:2023:EFO</div> <p>[331] Xinyu Cheng, Zhaojun Fu, and Brian Wetton. Equivalent formulations of the oxygen depletion problem, other implicit moving boundary value problems, and implications for numerical approximation. <i>SIAM Journal on Applied Mathematics</i>, 83(1):52–78, ????. 2023. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic). URL https://pubs.siam.org/doi/10.1137/21M1419167.</p> <div style="border: 1px solid black; padding: 5px; text-align: center;">Pelinovsky:2023:KIA</div> <p>[332] Dmitry Pelinovsky and Guido Schneider. KP-II approximation for a scalar Fermi–Pasta–Ulam system on a 2D square lattice. <i>SIAM Journal on Applied Mathematics</i>, 83(1):79–98, ????. 2023. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic). URL https://pubs.siam.org/doi/10.1137/22M1509369.</p> <div style="border: 1px solid black; padding: 5px; text-align: center;">Fang:2023:FRD</div> <p>[333] Chengran Fang, Demian Wassermann, and Jing-Rebecca Li. Fourier representation of the diffusion MRI signal using layer potentials. <i>SIAM Journal on Applied Mathematics</i>, 83(1):99–121, ????. 2023. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic). URL https://pubs.siam.org/doi/10.1137/21M1439572.</p> <div style="border: 1px solid black; padding: 5px; text-align: center;">Klimasara:2023:MSS</div> <p>[334] Paweł Klimasara and Marta Tyrańska. A model of seasonal savanna dynamics. <i>SIAM Journal on Applied Mathematics</i>, 83(1):122–143, ????. 2023. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).</p> |
|---|--|

- tronic). URL <https://pubs.siam.org/doi/10.1137/21M1461393>.
- Lunz:2023:MOC**
- [335] Davin Lunz and J. Frédéric Bonnans. Modeling and optimal control of a two-species bioproducing microbial consortium. *SIAM Journal on Applied Mathematics*, 83(1):144–171, ???? 2023. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic). URL <https://pubs.siam.org/doi/10.1137/22M1476113>.
- Pichor:2023:APG**
- [336] Katarzyna Pichór and Ryszard Rudnicki. Asymptotic properties of a general model of immune status. *SIAM Journal on Applied Mathematics*, 83(1):172–193, ???? 2023. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic). URL <https://pubs.siam.org/doi/10.1137/21M1466906>.
- Putra:2023:FPA**
- [337] Prama Putra, Hadrien Oliveri, Travis Thompson, and Alain Goriely. Front propagation and arrival times in networks with application to neurodegenerative diseases. *SIAM Journal on Applied Mathematics*, 83(1):194–224, ???? 2023. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic). URL <https://pubs.siam.org/doi/10.1137/21M1467547>.
- Schmeller:2023:GFC**
- [338] Leonie Schmeller and Dirk Peschka. Gradient flows for coupling order parameters and mechanics. *SIAM Journal on Applied Mathematics*, 83(1):225–253, ???? 2023. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic). URL <https://pubs.siam.org/doi/10.1137/22M1480963>.
- Wei:2023:ENE**
- [339] Chaozhen Wei and Min Wu. An Eulerian nonlinear elastic model for compressible and fluidic tissue with radially symmetric growth. *SIAM Journal on Applied Mathematics*, 83(1):254–275, ???? 2023. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic). URL <https://pubs.siam.org/doi/10.1137/21M1463653>.
- Fan:2023:DMT**
- [340] Guihong Fan, Juan Li, Jacques Bélair, and Huaiping Zhu. Delayed model for the transmission and control of COVID-19 with fangcang shelter hospitals. *SIAM Journal on Applied Mathematics*, 83(1):276–301, ???? 2023. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic). URL <https://pubs.siam.org/doi/10.1137/21M146154X>.
- Xu:2023:UID**
- [341] Xiaoxu Xu, Guanghui Hu, Bo Zhang, and Haiwen Zhang. Uniqueness in inverse diffraction grating problems with infinitely many plane waves at a fixed frequency. *SIAM Journal on Applied Mathematics*, 83(1):302–326, ???? 2023. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic). URL <https://pubs.siam.org/doi/10.1137/22M1480963>.
- Bottcher:2023:ECQ**
- [342] Lucas Böttcher and Mason A. Porter. Erratum: Classical and quantum random-walk centrality measures in

- multilayer networks. *SIAM Journal on Applied Mathematics*, 83(1):327–328, ???? 2023. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic). URL <https://pubs.siam.org/doi/10.1137/22M1522139>. See [239].
- Bansal:2023:SMN**
- [343] Diksha Bansal, Dipa Ghosh, and Sarthok Sircar. Selection mechanism in non-Newtonian Saffman–Taylor fingers. *SIAM Journal on Applied Mathematics*, 83(2):329–353, ???? 2023. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic). URL <https://pubs.siam.org/doi/10.1137/22M1485838>.
- Britton:2023:OIS**
- [344] Tom Britton and Lasse Leskelä. Optimal intervention strategies for minimizing total incidence during an epidemic. *SIAM Journal on Applied Mathematics*, 83(2):354–373, ???? 2023. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic). URL <https://pubs.siam.org/doi/10.1137/22M1504433>.
- Qiao:2023:MAN**
- [345] Zhonghua Qiao, Zhenli Xu, Qian Yin, and Shenggao Zhou. A Maxwell–Ampère Nernst–Planck framework for modeling charge dynamics. *SIAM Journal on Applied Mathematics*, 83(2):374–393, ???? 2023. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic). URL <https://pubs.siam.org/doi/10.1137/22M1477891>.
- Meng:2023:SMM**
- [346] Shixu Meng. Single mode multi-frequency factorization method for the inverse source problem in acoustic waveguides. *SIAM Journal on Applied Mathematics*, 83(2):394–417, ???? 2023. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic). URL <https://pubs.siam.org/doi/10.1137/21M1462891>.
- Li:2023:ISP**
- [347] Wei Li, John C. Schotland, Yang Yang, and Yimin Zhong. Inverse source problem for acoustically-modulated electromagnetic waves. *SIAM Journal on Applied Mathematics*, 83(2):418–435, ???? 2023. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic). URL <https://pubs.siam.org/doi/10.1137/22M1480690>.
- Dubovskaya:2023:AMF**
- [348] Alina Dubovskaya, Susan C. Fennell, Kevin Burke, James P. Gleeson, and Doireann O’Kiely. Analysis of mean-field approximation for Deffuant opinion dynamics on networks. *SIAM Journal on Applied Mathematics*, 83(2):436–459, ???? 2023. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic). URL <https://pubs.siam.org/doi/10.1137/22M1499765>.
- Awasthi:2023:EAT**
- [349] Piyush Awasthi, Mahendar Kumar, and Yana Nec. Effects of anisotropy in tridimensional diffusion: Flow patterns and transport efficiency. *SIAM Journal on Applied Mathematics*, 83(2):460–483, ???? 2023. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic). URL <https://pubs.siam.org/doi/10.1137/22M1476642>.

Cui:2023:WHF

- [350] Jianbo Cui, Shu Liu, and Haomin Zhou. Wasserstein Hamiltonian flow with common noise on graph. *SIAM Journal on Applied Mathematics*, 83(2):484–509, ???? 2023. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic). URL <https://pubs.siam.org/doi/10.1137/22M1490697>.

Zhang:2023:SEA

- [351] Hai-E Zhang, Gen-Qi Xu, and Zhong-Jie Han. Stability and eigenvalue asymptotics of multi-dimensional fully magnetic effected piezoelectric system with friction-type infinite memory. *SIAM Journal on Applied Mathematics*, 83(2):510–529, ???? 2023. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic). URL <https://pubs.siam.org/doi/10.1137/22M1486790>.

Zhang:2023:IBP

- [352] Jimin Zhang, Pingping Cong, and Meng Fan. Interactions between pelagic and benthic producers: Asymmetric competition for light and nutrients. *SIAM Journal on Applied Mathematics*, 83(2):530–552, ???? 2023. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic). URL <https://pubs.siam.org/doi/10.1137/22M1491290>.

Valovik:2023:MEN

- [353] Dmitry V. Valovik. Maxwell’s equations with nonlinear inhomogeneous constitutive relation: Guided waves in a film filled with inhomogeneous Kerr medium. *SIAM Journal on Applied Mathematics*, 83(2):553–575, ???? 2023. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

tronic). URL <https://pubs.siam.org/doi/10.1137/22M1489587>.

Gai:2023:RMC

- [354] Chunyi Gai and Theodore Kolokolnikov. Resource-mediated competition between two plant species with different rates of water intake. *SIAM Journal on Applied Mathematics*, 83(2):576–602, ???? 2023. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic). URL <https://pubs.siam.org/doi/10.1137/21M144623X>.

Zemlyanova:2023:APP

- [355] Anna Y. Zemlyanova and Lauren M. White. An axisymmetric problem for a patch loaded material surface attached to the boundary of an elastic semi-space. *SIAM Journal on Applied Mathematics*, 83(2):603–624, ???? 2023. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic). URL <https://pubs.siam.org/doi/10.1137/22M1523753>.

Feppon:2023:SRO

- [356] Florian Feppon, Zijian Cheng, and Habib Ammari. Subwavelength resonances in one-dimensional high-contrast acoustic media. *SIAM Journal on Applied Mathematics*, 83(2):625–665, ???? 2023. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic). URL <https://pubs.siam.org/doi/10.1137/22M1503841>.

Li:2023:NPM

- [357] Buyang Li, Yonglin Li, and Weiying Zheng. A new perfectly matched layer method for the Helmholtz equation in nonconvex domains. *SIAM Journal on Applied Mathematics*, 83(2):666–694,

- ???? 2023. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic). URL <https://pubs.siam.org/doi/10.1137/22M1482524>.
- Katsevich:2023:RDR**
- [358] Alexander Katsevich. Resolution of 2 dimensional reconstruction of functions with nonsmooth edges from discrete Radon transform data. *SIAM Journal on Applied Mathematics*, 83(2):695–724, ???? 2023. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic). URL <https://pubs.siam.org/doi/10.1137/21M1466712>.
- Hanevy:2023:AAF**
- [359] Niall Hanevy and Doireann O’Kiely. Asymptotic analysis for fiber drawing processes. *SIAM Journal on Applied Mathematics*, 83(2):725–747, ???? 2023. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic). URL <https://pubs.siam.org/doi/10.1137/22M1470074>.
- Banaji:2023:SRP**
- [360] Murad Banaji. Splitting reactions preserves nondegenerate behaviors in chemical reaction networks. *SIAM Journal on Applied Mathematics*, 83(2):748–769, ???? 2023. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic). URL <https://pubs.siam.org/doi/10.1137/22M1478392>.
- Mascali:2023:SET**
- [361] Giovanni Mascali. Some electric, thermal, and thermoelectric properties of suspended monolayer graphene. *SIAM Journal on Applied Mathematics*, 83(2):770–790, ???? 2023. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic). URL <https://pubs.siam.org/doi/10.1137/22M1488831>.
- Niu:2023:WIH**
- [362] Yuanling Niu, Hao Kang, Pingyang Wang, Chenchen Guo, Fan Nie, Hongbin Ji, Jiarui Wu, and Luonan Chen. Why increase of heterogeneity signals pre-deterioration during tumor progression: a unified mathematical model. *SIAM Journal on Applied Mathematics*, 83(2):791–815, ???? 2023. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic). URL <https://pubs.siam.org/doi/10.1137/22M1497729>.
- Glendinning:2023:NFD**
- [363] Paul A. Glendinning and David J. W. Simpson. Normal forms, differentiable conjugacies, and elementary bifurcations of maps. *SIAM Journal on Applied Mathematics*, 83(2):816–836, ???? 2023. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic). URL <https://pubs.siam.org/doi/10.1137/22M1503701>.
- Montefusco:2023:RHL**
- [364] Alberto Montefusco, Christof Schütte, and Stefanie Winkelmann. A route to the hydrodynamic limit of a reaction-diffusion master equation using gradient structures. *SIAM Journal on Applied Mathematics*, 83(2):837–861, ???? 2023. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic). URL <https://pubs.siam.org/doi/10.1137/22M1488831>.
- Bressloff:2023:ATD**
- [365] Paul C. Bressloff. Accumulation time of diffusion in a 3D singularly perturbed domain. *SIAM Journal on Applied Mathematics*, 83(2):862–886, ???? 2023. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic). URL <https://pubs.siam.org/doi/10.1137/22M1497729>.

- plied Mathematics*, 83(2):862–881, ???? 2023. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic). URL <https://pubs.siam.org/doi/10.1137/22M1475843>.
- Vynnycky:2023:AMG**
- [366] Michael Vynnycky, Bharath V. Rangavittal, and Björn Glaser. An asymptotic model for gas-solid flow in a countercurrent moving bed reactor. *SIAM Journal on Applied Mathematics*, 83(2):882–908, ???? 2023. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic). URL <https://pubs.siam.org/doi/10.1137/22M1496293>.
- Hayat:2023:DTJ**
- [367] Amaury Hayat, Benedetto Piccoli, and Sydney Truong. Dissipation of traffic jams using a single autonomous vehicle on a ring road. *SIAM Journal on Applied Mathematics*, 83(3):909–937, ???? 2023. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic). URL <https://pubs.siam.org/doi/10.1137/21M1414346>.
- Doak:2023:NSW**
- [368] Alex Doak, Guido Baardink, Paul A. Milewski, and Anton Souslov. Nonlinear shallow-water waves with vertical odd viscosity. *SIAM Journal on Applied Mathematics*, 83(3):938–965, ???? 2023. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic). URL <https://pubs.siam.org/doi/10.1137/22M149082X>.
- Miyoshi:2023:GSI**
- [369] Hiroyuki Miyoshi and Darren G. Crowdy. Generalized Schwarz integral formulas for multiply connected domains. *SIAM Journal on Applied Mathematics*, 83(3):966–984, ???? 2023. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic). URL <https://pubs.siam.org/doi/10.1137/22M1506419>.
- Dosmagulova:2023:OCP**
- [370] Karlygash Dosmagulova, Vladimir Mityushev, and Zhanat Zhunussova. On the optimal conductivity of packed two-dimensional dispersed composites. *SIAM Journal on Applied Mathematics*, 83(3):985–999, ???? 2023. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic). URL <https://pubs.siam.org/doi/10.1137/22M1527660>.
- Worsfold:2023:DFS**
- [371] Jeremy R. Worsfold, Tim Rogers, and Paul Milewski. Density fluctuations in stochastic kinematic flows. *SIAM Journal on Applied Mathematics*, 83(3):1000–1024, ???? 2023. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic). URL <https://pubs.siam.org/doi/10.1137/22M1494166>.
- Hong:2023:CTF**
- [372] Hyukpyo Hong, Bryan S. Hernandez, Jinsu Kim, and Jae Kyoung Kim. Computational translation framework identifies biochemical reaction networks with special topologies and their long-term dynamics. *SIAM Journal on Applied Mathematics*, 83(3):1025–1048, ???? 2023. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic). URL <https://pubs.siam.org/doi/10.1137/22M150469X>.

Wang:2023:LMS

- [373] Sára Wang, Mirza Karamehmedović, and Faouzi Triki. Localization of moving sources: Uniqueness, stability, and Bayesian inference. *SIAM Journal on Applied Mathematics*, 83(3):1049–1073, ???? 2023. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic). URL <https://pubs.siam.org/doi/10.1137/22M1500691>.

Mozumder:2023:TWC

- [374] Ali Mozumder, Artur Safin, Susan E. Minkoff, and John Zweck. A two-way coupled model of visco-thermo-acoustic effects in photoacoustic trace gas sensors. *SIAM Journal on Applied Mathematics*, 83(3):1074–1097, ???? 2023. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic). URL <https://pubs.siam.org/doi/10.1137/21M1447659>.

Qu:2023:MIM

- [375] Zhuolin Qu, Denis Patterson, Lauren M. Childs, Christina J. Edholm, Joan Ponce, Olivia Prosper, and Lihong Zhao. Modeling immunity to malaria with an age-structured PDE framework. *SIAM Journal on Applied Mathematics*, 83(3):1098–1125, ???? 2023. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic). URL <https://pubs.siam.org/doi/10.1137/21M1464427>.

Adriazola:2023:ADE

- [376] Jimmie Adriazola and Roy H. Goodman. Apodizer design to efficiently couple light into a fiber Bragg grating. *SIAM Journal on Applied Mathematics*, 83(3):1126–1145, ???? 2023.

CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic). URL <https://pubs.siam.org/doi/10.1137/22M1507759>.

Celora:2023:DCP

- [377] Giulia L. Celora, Matthew G. Hennessy, Andreas Muench, Barbara Wagner, and Sarah Waters. The dynamics of a collapsing polyelectrolyte gel. *SIAM Journal on Applied Mathematics*, 83(3):1146–1171, ???? 2023. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic). URL <https://pubs.siam.org/doi/10.1137/21M1419726>.

Girardin:2023:AEC

- [378] Léo Girardin and Baptiste Maucourt. Agro-ecological control of a pest-host system: Preventing spreading. *SIAM Journal on Applied Mathematics*, 83(3):1172–1195, ???? 2023. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic). URL <https://pubs.siam.org/doi/10.1137/22M1508066>.

Gao:2023:IPP

- [379] Yixian Gao, Hongyu Liu, and Yang Liu. On an inverse problem for the plate equation with passive measurement. *SIAM Journal on Applied Mathematics*, 83(3):1196–1214, ???? 2023. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic). URL <https://pubs.siam.org/doi/10.1137/22M1499881>.

MacLaurin:2023:PRW

- [380] J. MacLaurin. Phase reduction of waves, patterns, and oscillations subject to spatially extended noise. *SIAM Journal on*

- Applied Mathematics*, 83(3):1215–1244, ???? 2023. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic). URL <https://pubs.siam.org/doi/10.1137/21M1451221>.
- Zheng:2023:APT**
- [381] Zhong Zheng. Accumulation of particles towards the envelope of a fluid-infused patch under evaporation. *SIAM Journal on Applied Mathematics*, 83(3):1245–1271, ???? 2023. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic). URL <https://pubs.siam.org/doi/10.1137/22M1472784>.
- Huang:2023:OSC**
- [382] Wenlin Huang, Jin Liang, and Yuchao Dong. Optimal stochastic control problem for a carbon emission reduction process. *SIAM Journal on Applied Mathematics*, 83(3):1272–1295, ???? 2023. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic). URL <https://pubs.siam.org/doi/10.1137/22M1496840>.
- Liu:2023:TVF**
- [383] X. Liu, J. Song, F. Pourahmadian, and H. Haddar. Time- versus frequency-domain inverse elastic scattering: Theory and experiment. *SIAM Journal on Applied Mathematics*, 83(3):1296–1314, ???? 2023. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic). URL <https://pubs.siam.org/doi/10.1137/22M1522437>.
- Bailo:2023:BPF**
- [384] Rafael Bailo, José A. Carrillo, and Jingwei Hu. Bound-preserving finite-volume schemes for systems of continuity equations with saturation. *SIAM Journal on Applied Mathematics*, 83(3):1315–1339, ???? 2023. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic). URL <https://pubs.siam.org/doi/10.1137/22M1488703>.
- Chen:2023:SRP**
- [385] Junren Chen and Michael K. Ng. Signal reconstruction from phase-only measurements: Uniqueness condition, minimal measurement number and beyond. *SIAM Journal on Applied Mathematics*, 83(4):1341–1365, ???? 2023. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic). URL <https://pubs.siam.org/doi/10.1137/21M1432077>.
- Autry:2023:MFR**
- [386] Eric Autry, Daniel Carter, Gregory J. Herschlag, Zach Hunter, and Jonathan C. Mattingly. Metropolized forest recombination for Monte Carlo sampling of graph partitions. *SIAM Journal on Applied Mathematics*, 83(4):1366–1391, ???? 2023. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic). URL <https://pubs.siam.org/doi/10.1137/21M1418010>.
- Garnier:2023:PDM**
- [387] Josselin Garnier, Ziyu Lu, and Laurent Mertz. A piecewise deterministic Markov process approach modeling a dry friction problem with noise. *SIAM Journal on Applied Mathematics*, 83(4):1392–1421, ???? 2023. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic). URL <https://pubs.siam.org/doi/10.1137/22M1480847>.

- Herrmann:2023:IHP**
- [388] Michael Herrmann and Barbara Niethammer. Instability of hysteretic phase interfaces in a mean-field model with inhomogeneities. *SIAM Journal on Applied Mathematics*, 83(4):1422–1443, ???? 2023. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic). URL <https://pubs.siam.org/doi/10.1137/22M153197X>.
- Chemnitz:2023:SSS**
- [389] Robin Chemnitz. Sensitivity of steady states in networks with application to Markov chains and chemical reaction networks. *SIAM Journal on Applied Mathematics*, 83(4):1444–1466, ???? 2023. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic). URL <https://pubs.siam.org/doi/10.1137/22M150770X>.
- Li:2023:FHB**
- [390] Sirui Li and Jie Xu. Frame hydrodynamics of biaxial nematics from molecular-theory-based tensor models. *SIAM Journal on Applied Mathematics*, 83(4):1467–1495, ???? 2023. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic). URL <https://pubs.siam.org/doi/10.1137/21M1465792>.
- Jin:2023:IPS**
- [391] Bangti Jin, Yavar Kian, and Zhi Zhou. Inverse problems for subdiffusion from observation at an unknown terminal time. *SIAM Journal on Applied Mathematics*, 83(4):1496–1517, ???? 2023. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic). URL <https://pubs.siam.org/doi/10.1137/22M1529105>.
- Bressloff:2023:RES**
- [392] Paul C. Bressloff. Renewal equations for single-particle diffusion in multilayered media. *SIAM Journal on Applied Mathematics*, 83(4):1518–1545, ???? 2023. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic). URL <https://pubs.siam.org/doi/10.1137/23M1545835>.
- Li:2023:DPH**
- [393] Wei Li, Junshan Lin, and Hai Zhang. Dirac points for the honeycomb lattice with impenetrable obstacles. *SIAM Journal on Applied Mathematics*, 83(4):1546–1571, ???? 2023. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic). URL <https://pubs.siam.org/doi/10.1137/22M1505116>.
- Jia:2023:ATD**
- [394] Chen Jia and Youming Li. Analytical time-dependent distributions for gene expression models with complex promoter switching mechanisms. *SIAM Journal on Applied Mathematics*, 83(4):1572–1602, ???? 2023. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic). URL <https://pubs.siam.org/doi/10.1137/22M147219X>.
- Lyu:2023:PSE**
- [395] Jhih-Hong Lyu and Tai-Chia Lin. PB-steric equations: a general model of Poisson–Boltzmann equations. *SIAM Journal on Applied Mathematics*, 83(4):1603–1622, ???? 2023. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic). URL <https://pubs.siam.org/doi/10.1137/22M1516270>.

- Ablowitz:2023:UAF**
- [396] Mark J. Ablowitz, Justin T. Cole, and S. D. Nixon. Unified approach to Floquet lattices, topological insulators, and their nonlinear dynamics. *SIAM Journal on Applied Mathematics*, 83(4):1623–1653, ???? 2023. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic). URL <https://pubs.siam.org/doi/10.1137/22M1496979>.
- Li:2023:FMI**
- [397] Jiwei Li, Lingyun Qiu, Zhongjing Wang, and Hui Yu. Flow measurement: an inverse problem formulation. *SIAM Journal on Applied Mathematics*, 83(4):1654–1676, ???? 2023. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic). URL <https://pubs.siam.org/doi/10.1137/22M1530720>.
- Kraisler:2023:TMW**
- [398] Joseph Kraisler, Wei Li, Kui Ren, John C. Schotland, and Yimin Zhong. Transport models for wave propagation in scattering media with nonlinear absorption. *SIAM Journal on Applied Mathematics*, 83(4):1677–1695, ???? 2023. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic). URL <https://pubs.siam.org/doi/10.1137/22M1533505>.
- Jahedi:2023:SSN**
- [399] Sana Jahedi, Timothy Sauer, and James A. Yorke. Structured systems of nonlinear equations. *SIAM Journal on Applied Mathematics*, 83(4):1696–1716, ???? 2023. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic). URL <https://pubs.siam.org/doi/10.1137/22M1529178>.
- Craciun:2023:AFW**
- [400] Gheorghe Craciun, Jiaxin Jin, and Polly Y. Yu. An algorithm for finding weakly reversible deficiency zero realizations of polynomial dynamical systems. *SIAM Journal on Applied Mathematics*, 83(4):1717–1737, ???? 2023. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic). URL <https://pubs.siam.org/doi/10.1137/22M1499558>.
- Ghandriche:2023:SRO**
- [401] Ahcene Ghandriche and Mourad Sini. Simultaneous reconstruction of optical and acoustical properties in photoacoustic imaging using plasmonics. *SIAM Journal on Applied Mathematics*, 83(4):1738–1765, ???? 2023. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic). URL <https://pubs.siam.org/doi/10.1137/22M1534730>.
- Skardal:2023:PFO**
- [402] Per Sebastian Skardal. Pattern formation and oscillations in nonlinear random walks on networks. *SIAM Journal on Applied Mathematics*, 83(5):1767–1784, ???? 2023. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic). URL <https://pubs.siam.org/doi/10.1137/22M1536662>.
- Jiang:2023:PMS**
- [403] Xue Jiang, Maohui Lyu, Tao Yin, and Weiyang Zheng. A PML method for signal-propagation problems in axon. *SIAM Journal on Applied Mathematics*, 83(5):1785–1805, ???? 2023. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

- URL <https://pubs.siam.org/doi/10.1137/22M1544063>.
- Wang:2023:BRR**
- [404] Feng-Bin Wang, Lei Zhang, and Xiao-Qiang Zhao. Basic reproduction ratios for time-periodic homogeneous evolution systems. *SIAM Journal on Applied Mathematics*, 83(5):1806–1831, ???? 2023. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic). URL <https://pubs.siam.org/doi/10.1137/22M1531865>.
- Ying:2023:MCS**
- [405] Fabian Ying, Alisdair O. G. Wallis, Mason A. Porter, Sam D. Howison, and Mariano Beguerisse-Díaz. Minimizing congestion in single-source, single-sink queueing networks. *SIAM Journal on Applied Mathematics*, 83(5):1832–1853, ???? 2023. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic). URL <https://pubs.siam.org/doi/10.1137/21M1457515>.
- Ren:2023:BLL**
- [406] Xiaofeng Ren and Juncheng Wei. The BCC lattice in a long-range interaction system. *SIAM Journal on Applied Mathematics*, 83(5):1854–1871, ???? 2023. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic). URL <https://pubs.siam.org/doi/10.1137/22M1511722>.
- Cao:2023:UTP**
- [407] Fei Cao and Sébastien Motsch. Uncovering a two-phase dynamics from a dollar exchange model with bank and debt. *SIAM Journal on Applied Mathematics*, 83(5):1872–1891, ???? 2023. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic). URL <https://pubs.siam.org/doi/10.1137/22M1526563>.
- Parkinson:2023:ARD**
- [408] Yuyue Zhang, Liqi Xie, Yueping Dong, Jicai Huang, Shigui Ruan, and Yasuhiro Takeuchi. Bifurcation analysis in a tumor-immune system interaction model with dendritic cell therapy and immune response delay. *SIAM Journal on Applied Mathematics*, 83(5):1892–1914, ???? 2023. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic). URL <https://pubs.siam.org/doi/10.1137/22M1533979>.
- Zhang:2023:BAT**
- [409] Jialei Li, Xiaodong Liu, and Qingxiang Shi. Reconstruction of multiscale elastic sources from multifrequency sparse far field patterns. *SIAM Journal on Applied Mathematics*, 83(5):1915–1934, ???? 2023. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic). URL <https://pubs.siam.org/doi/10.1137/22M1544257>.
- Li:2023:RME**
- [410] Serena Dipierro, Giovanni Giacomin, and Enrico Valdinoci. Analysis of the Lévy flight foraging hypothesis in \mathbf{R}^n and unreliability of the most rewarding strategies. *SIAM Journal on Applied Mathematics*, 83(5):1935–1968, ???? 2023. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic). URL <https://pubs.siam.org/doi/10.1137/22M1526563>.
- Dipierro:2023:ALF**
- [411] Christian Parkinson and Weinan Wang.

Analysis of a reaction-diffusion SIR epidemic model with noncompliant behavior. *SIAM Journal on Applied Mathematics*, 83(5):1969–2002, ???? 2023. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic). URL <https://pubs.siam.org/doi/10.1137/23M1556691>.

Meng:2023:DDB

- [412] Shixu Meng. Data-driven basis for reconstructing the contrast in inverse scattering: Picard criterion, regularity, regularization, and stability. *SIAM Journal on Applied Mathematics*, 83(5):2003–2026, ???? 2023. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic). URL <https://pubs.siam.org/doi/10.1137/23M1545409>.

Cebra:2023:SSC

- [413] Christopher Cebra and Alexander Strang. Similarity suppresses cyclicity: Why similar competitors form hierarchies. *SIAM Journal on Applied Mathematics*, 83(5):2027–2051, ???? 2023. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic). URL <https://pubs.siam.org/doi/10.1137/22M1503099>.

Piu:2023:DSA

- [414] Matteo Piu, Michael Herty, and Gabriella Puppo. Derivation and stability analysis of a macroscopic multilane model for traffic flow. *SIAM Journal on Applied Mathematics*, 83(5):2052–2072, ???? 2023. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic). URL <https://pubs.siam.org/doi/10.1137/22M1543288>.