

LIST OF PUBLICATIONS OF GEORGE C. HSIAO

(for the last five years as of September, 2021)

2021

- Hsiao, G.C., and Wendland, W. L., On the propagation of acoustic waves in a thermo-electro-magneto-elastic solid *Applicable Analysis*, Accepted 19, September 2021, Published online: 05 October 2021 <https://doi.org/10.1080/00036811.2021.1986027>.
- Gatica, G. N., Hsiao, G. C., and Meddahi, S., Further developments on boundary-field equation methods for nonlinear transmission problems *J. Math. Anal. Appl.* 502 (2021) 125262
- Hsiao, G.C., and S'anchez-Vizuet, T., Time-dependent wave-structure Interaction revisited. Thermo-Piezoelectric Scatterers In: Special Issue on Fluid Structure Interaction: Methods and Applications *Fluids* **2021** 6, no. 3: 101. <https://doi.org/10.3390/fluids6030101>
- Hsiao, G.C., and S'anchez-Vizuet, T., Boundary integral formulations for transient thermoelasticity with combined - type boundary conditions *SIAM J. Math. Anal.* **53**, 4 (2021) 3888-3911. <https://doi.org/10.1137/20M1372834>
- Hsiao, G.C., and Wendland, W. L., *Boundary Integral Equations*, Second Edition, Applied Mathematical Sciences Series Volume 164, Springer-Verlag 2021, 783 pp. <https://link.springer.com/book/10.1007/978-3-030-71127-6>
- Gilbert, B. P., Hsiao, G. C., and Ronkese, R. J., *Differential Equations, A Maple Supplement*, Second Edition CRC Press 2021, 243 pp. <https://www.routledge/Textbooks-in-Mathematics/book-series/CANDHTEXBOOMTH>

2020

- Hsiao, G.C., and S'anchez-Vizuet, T. S., Boundary integral formulations for transient thermoelasticity with combined - type boundary conditions *SIAM J. Math. Anal.*, submitted
- Hsiao, G.C., and S'anchez-Vizuet, T. S., Time-domain boundary integral methods in linear thermoelasticity *SIAM J. Math. Anal.*, **52**, 3 (2020) 2463-2490, DOI. 10.1137/19M1298652

2019

- Gilbert, R. P., and Hsiao, G. C., Time dependent solution for the Biot equations. In: *Analysis as a Life*, Sergei Rogosin and Ahmet Okay Çelebi (eds.), Trends in Mathematics, (2019), 171–191. Springer Nature Switzerland AG 2019, https://doi.org/10.1007/978-3-030-02650-9_9.
- Xu, L. Zhang, S., and Hsiao, G. C., Nonsingular kernel boundary integral and finite element coupling method, *Applied Numerical Mathematics* **137** (2019), 80–90. <https://doi.org/10.1016/j.apnum.2018.11.012>
- Hsiao, G.C., S'anchez-Vizuet, T., Sayas, F.-J., and Weinacht, R. J., A time-dependent wave-thermoelastic solid interaction. *IMA Journal of Numerical Analysis* **39** (2019), 924–956 doi:10.1093/imanum/dry016 Advance Access publication on 10 April 2018

2018

- **A Chapter in Encyclopedia of Computational Mechanics**
Hsiao, G.C., Steinbach, O., and Wendland, W.L., Boundary Element Method: Foundation and Error Analysis in *Encyclopedia of Computational Mechanics Second edition*, Edited by Erwin Stein, René de Borst and Thomas J. R. Hughes. **Fundamental Part II**, pp. 1-62. © 2017 John Wiley & Sons, Ltd. DOI: 10.1002/9781119176817.ecm2007

2017

- Yin, T., Hsiao, G.C., and Xu, L., Boundary integral equation methods for the two-dimensional fluid-solid interaction problem, *SIAM J. Numer. Anal.*, **55**, 5 (2017), 2361–2393. DOI:10.1137/16M1075673
- Gilbert, R.P., Hsiao, G.C., and Shoushani, M., The Biot model for an anisotropic poro-elastic media. *ZAMM · Z. Angew. Math. Mech.* **97**, 2 (2017), 130–143. doi:10.1002/zamm.201600039
- Hsiao, G.C., S'anchez- Vizuet , T., annd Sayas, F.-J., Boundary and coupled boundary-finite element methods for transient wave- structure interaction, Advance Access publication on May 10, 2016 IMA J. Numer. Anal., **37**, 1 (2017), 237–265. doi:10.1093/imanum/drw009
- Hsiao, G.C, Sayas, F.-J., and Weinacht, R. J., Time-dependent fluid-structure interaction, *Math. Meth. Appl. Sci.*, **40**, (2017), 486–500. In Special Issue: Singularities, Integral Equations and Electromagnetism, dedicated to M. Costabel on the occasion of his 65th birthday - Part 2 <https://onlinelibrary.wiley.com/toc/10991476/2017/40/2>