

A) Journal papers

A-1 C.~Y.~Wang, H.~H.~Liu, S.~Y.~Chung, C.~H.~Teng, C.~P.~Chen, H.~C.~Chang, High-accuracy waveguide leaky-mode analysis using a multidomain pseudospectral frequency-domain method incorporated with stretched coordinate PML, *IEEE/OSA J. of Lightw. Technol.*, 31, pp. 2347-2360, (2013).

A-2 C.~Y.~Wang, S.~Y.~Chung, C.~H.~Teng, J.~K.~Wang, C.~P.~Chen, H.~C.~Chang, A high-accuracy multidomain Legendre pseudospectral frequency-domain method with penalty scheme for solving scattering and coupling problems of nano-cylinders, *IEEE/OSA J. Lightw. Technol.*, 31, pp. 768-778, (2013).

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A-4 S.~Y.~Chung, C.~Y.~Wang, C.~H.~Teng, C.~P.~Chen, H.~C.~Chang, Simulations of dielectric and plasmonic waveguide-coupled ring resonators using the Legendre pseudospectral time-domain method, *J. Lightw. Technol.*, 30, pp. 1733-1742, (2012).

A-5 C. H. Teng, I. L. Chern, M. C. Lai, Simulating binary fluid-surfactant dynamics by a phase field model, *Discrete and Continuous Dynamical Systems-Series B (DCDS-B)*, 17, pp 1289-1307, (2012).

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pseudo-spectral time-domain calculation, *Optics Express*, 17 , pp. 14211-14228, (2009).

A-10 C. H. Teng, B. Y. Lin, H. C. Chang, H. C. Hsu, C. N. Lin, K. A. Feng, A Legendre pseudospectral penalty scheme for solving time-domain Maxwell's equations, *J. Sci. Comput.*, 36, pp. 351-390, (2008).

A-11 P. J. Chiang, C. L. Wu, C. H. Teng, C. S. Yang, H. C. Chang, Full-vectorial optical waveguide mode solvers using multidomain pseudospectral frequency-domain (PSFD) formulations, *IEEE Journal of Quantum Electronics*, 44, pp. 56-66, (2008).

A-12 K. A. Feng, C. H. Teng, M. H. Chen, A pseudospectral penalty scheme for 2D isotropic elastic wave computations, *J. Sci. Comput.*, 33, pp. 313-348, (2007).

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A-16 C. H. Teng, S. P. Lin, J. N. Chen, Absolute and convective instability of a viscous liquid curtain in viscous gas, *J. Fluid Mech.* 332, pp. 105-120, (1997).

B. Conference papers:

B-1 H. C. Chang, S. Y. Chung, C. Y. Wang, C. H. Teng, J. K. Wang, and C. P. Chen, "Applications of the Multidomain Legendre Pseudospectral Time-Domain Method to Plasmonics Problems," in *Proceedings of IEEE 2nd International Symposium on Next-Generation Electronics (ISNE 2013)*, paper OC-M-I-(1)-1, Kaohsiung, Taiwan, R.O.C., February 25–26, 2013. (invited paper)

B-2 S. Y. Chung, C. Y. Wang, C. H. Teng, J. K. Wang, C. P. Chen, and H. C. Chang, "Numerical Modeling of Nanophotonics and Plasmonics Problems Using the Multidomain Legendre Pseudospectral Time-Domain Method," *Proceedings of the*

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B-5 S. Y. Chung, C. Y. Wang, C. H. Teng, C. P. Chen, and H. C. Chang, "Numerical investigation of Light scattering by coupled plasmonic nanospheres using a high-accuracy multidomain Legendre pseudospectral time-domain method," in XXXth General Assembly and Scientific Symposium of International Union of Radio Science (URSI-GASS 2011) Proceedings (CD-ROM), paper DP3.4, Istanbul, Turkey, Aug. 2011

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