

David J. McGee- Conferences

Conference publications

4. O. Senel, B. Gruppuso*, J. Strobelt, and D. J. McGee. “Continuous laser printing of surface relief microstructures on photomechanically-responsive azopolymer films using structured optical polarization.” In *Advanced Fabrication Technologies for Micro/Nano Optics and Photonics XVII*, vol. 12898, pp. 76-82. SPIE, 2024.
3. J. Strobelt, M. Van Soelen*, and D. J. McGee, “Direct laser writing of micrograting arrays using a spatial light modulator”, *Proc. SPIE 12433, Advanced Fabrication Technologies for Micro/NanoOptics and Photonics XVI*, 1243304 (15 March 2023).
2. J. Strobelt, D. Stolz, M. Leven, L. Kurlandski*, H. Abourahma, and D.J. McGee, “*One-step fabrication of surface relief dot-matrix holograms using supramolecular azopolymer thin films*”, *Proc. SPIE 11710, Practical Holography XXXV: Displays, Materials, and Applications*, 1171008 (5 March 2021); doi: 10.1117/12.2582763
1. T.H. Stievater, W.S. Rabinovich, H.S. Newman, R. Mahon, P.G. Goetz, J.L. Ebel, and D.J. McGee, “*Measurement of thermal-mechanical noise in MEMS microstructures*”, SPIE-International Society for Optical Engineering meeting, San Jose, CA, January 2003. Published in *Proceedings of SPIE Vol. 4983, MOEMS and Miniaturized Systems III*, edited by J. H. Smith, P. A. Krulevitch, H. K. Lakner, (SPIE, Bellingham, WA 2003).

Conference presentations

41. D. J. McGee, “*Photopatterned microstructures on azopolymer films via continuous film translation*”, Joint Conference of the Italian and European Community of Condensed Matter Physics- CMD FisMat2024, European Physical Society, Braga, Portugal, September 2024 (Invited).
40. D. J. McGee, “*An overview of spatial light modulator techniques for polarization-driven writing of surface microstructures on azopolymer films*”, presented at 4th International Conference on Photoalignment and Photopatterning in Soft Materials, St. Petersburg, FL, December 2023.
39. D. J. McGee, J. Strobelt, O. Senel, B. Gruppuso*, N. Pyontek*, “*Polarization modulation techniques for photopatterning complex surface relief microstructures in azopolymer thin films*”, Joint Conference of the Italian and European Community of Condensed Matter Physics- CMD FisMat2023, European Physical Society, Milan, Italy, September 2023 (Invited).
38. J. Strobelt, D. Stolz, M. Leven, L. Kurlandski*, and D. J. McGee, “*Nanoimprint Lithography for the Replication of Optical Microstructures on Azopolymer Thin Films*”, Conference on Lasers and Electro-Optics/European Quantum Electronics Conference, Munich, Germany, June 2021
37. J. Krüger, T. Calvelo, N. Bolle*, I. Reed*, S. Masiuk*, R. Conwell*, and D. J. McGee, “*Optically reconfigurable surface microstructures on polymeric thin films*”, Conference on Lasers and Electro-Optics/European Quantum Electronics Conference, Munich, Germany, June 2019.

36. K. Herman*, J. Krüger, C. Mileham*, N. Bolle*, H. Abourahma, and D.J. McGee, “*Probing the Hydrogen Bond in Photoresponsive Supramolecular Azobenzene-Polymer Films*”, American Chemical Society National Meeting, Boston, MA, August 2018.
35. E. Graff*, D. Curran*, D.J. McGee, and H. Abourahma, “*Crystal engineering of azobenzene cocrystals with non-linear optical properties*”, American Chemical Society National Meeting, San Francisco, CA, April 2017.
34. B. Campos*, E. Witkowski*, S. Bergmann, and D.J. McGee, “*Optically induced birefringence and surface mass transport in SU-8 photoresist doped with azobenzene chromophores*”, Conference on Lasers and Electro-Optics/European Quantum Electronics Conference, Munich, Germany, June 2017.
33. M. Vollmann*, P. Getek, K. Olear*, C. Combs*, B. Campos*, E. Witkowski*, E. Cain*, and D.J. McGee, “*Photopatterned surface relief gratings in azobenzene-amorphous polycarbonate thin films*”, Bulletin of the American Physical Society, APS March Meeting, Boston, MA, March 2016.
32. D.J. McGee, M. Shenouda*, A. Plachy, J. Choi, and P. Gopalan, “*Photoinduced birefringence in chromophore-functionalized single walled carbon nanotubes*”, Materials Research Society Fall Meeting, Boston, MA, December 2014.
31. D. J. McGee, C. Huang, M. Kim, M. Arnold, N. Safron, and P. Gopalan, “*Optical and Electro-Optical Modulation of Biomimetically-Functionalized Carbon Nanomaterials*”, Materials Research Society Fall Meeting, Boston MA, November 2013.
30. J. Choi, C. Huang, D.J. McGee, M. Kim, B. Braeuer, P. Gopalan, “*Optical second harmonic generation to probe photoisomerization dynamics in chromophore-functionalized nanotubes*”, Materials Research Society Fall Meeting, Boston MA, November 2012 .
29. D.J. McGee, J. Schleusener, Y. Saito, P. Gopalan, “*Nonlinear optical characterization of chromophore-functionalized POSS nanoparticles in a polymeric host*”, Conference on Lasers and Electro-Optics, San Jose, CA, May 2012.
28. J. Choi*, B. Braeuer, P. Gopalan, D.J. McGee, “*Thin film fabrication and electric field induced poling of an azo-dye doped cyclic olefin copolymer*”, American Physical Society March Meeting, Boston, MA, March 2012.
27. C. Huang, R. K. Wang, B. M. Wong, D. J. McGee, F. Léonard, M. A. Eriksson, P. Gopalan, “*Carbon nanotubes functionalized with switchable dipolar molecules*”, Materials Research Society Fall Meeting, Boston MA, December 2011 .
26. P. Gopalan, M. Kim, Y. Zhang, D.J. McGee, M.A. Eriksson, “*Optical and electro-optical modulation of biomimetically-functionalized carbon nanotubes*”, Nanoelectronic Devices for Defense & Security Conference, Polytechnic Institute of New York University, Brooklyn, NY, September 2011.

25. V. Velasquez*, D. Martin*, D. J. McGee, H. E. Katz, "*Improved photostability of Disperse Red 1 infused in a nanoporous silicate monolith*", International Conference on Quantum Electronics, Munich, June 2009.
24. M. Leolukman, P. Paoprasert, S.J. Diaz*, D.J. McGee, and P. Gopalan, "*Nonlinear optical characterization of H-bonded chromophores in linear-dendritic block copolymers*", Conference on Lasers and Electro-Optics, Baltimore, MD, June 2009.
23. M. Leolukman, P. Paoprasert, B. Kelly*, D.J. McGee, and P. Gopalan, "*Poling of nonlinear optical chromophores in nanostructured polymeric materials*", American Chemical Society Spring meeting, Salt Lake City, UT, March 2009.
22. M. Leolukman, P. Paoprasert, V. Makhija*, D. J. McGee, and P. Gopalan, "*Orientational relaxation in poled PS-b-P4VP electro-optic block copolymers*", 10th International Conference on Organic Nonlinear Optics, Santa Fe, NM, May 2008.
21. M. Leolukman, P. Paoprasert, D. J. McGee, V. Makhija*, and P. Gopalan, "*Poling of dipolar chromophores in block copolymer domains*", 10th International Conference on Organic Nonlinear Optics, Santa Fe, NM, May 2008.
20. V. Campbell, D. J. McGee, A. Caruso*, N. Woodward*, and P. Gopalan, "*Study of chromophore orientation and photorefractive effects in branched electro-optic chromophores*", American Chemical Society Spring meeting, San Diego, CA, March 2005.
19. D.J. McGee, J. Fukunaga, and P. Gopalan, "*Electro optic polymers for integrated optics*", Council on Undergraduate Research National Conference, LaCrosse, WI, June 2004.
18. M. Yang*, J. Fukunaga, and D.J. McGee, "*Stillbene chromophores for photorefractive applications*", American Chemical Society Spring meeting, Anaheim, CA, March 2004.
17. P. Gopalan, H. Katz, and D. J. McGee, "*Design of star-shaped electro-optic chromophores: synthesis and correlation of guest-host morphology with electro-optic activity*", Materials Research Society Fall meeting, Boston, MA, December 2003.
16. P. Gopalan, H. Katz, and D. J. McGee, "*Star-shaped azo based dipolar chromophores: design, synthesis, matrix compatibility and electro-optic activity*", American Chemical Society Fall meeting, New York, NY, September 2003.
15. D. J. McGee, D. Benjamin*, T. Missal*, and J. Fukunaga, "*Holography with photorefractive polymers- an interdisciplinary research program for undergraduate physics and chemistry majors*", Council on Undergraduate Research National Conference, New London, CT June 2002.
14. W. S. Rabinovich, G. C. Gilbreath, R. Mahon, P. Goetz, D. J. McGee, D. S. Katzer, S. Binari, T. Meehan, J. Rende, E. Waluschka, "*Cat's eye modulating retro-reflectors for free-space optical data transfer*", Proceedings of the NASA Earth Science Technology Conference, Greenbelt, MD, 2001.
13. M. Klotz, J. Goff, G. Wood, D.J. McGee, R. Anderson, C. Wood*, and G. Salamo, "*Three dimensional holographic fixing in a photorefractive crystal*", Optical Society of America Annual Meeting, Providence, RI, October 2000.

12. J. Supplee, D. Benjamin*, J. Kinast*, D. J. McGee, R. Martini, and E. Whittaker, “*Harmonic generation- a mechanical educational demonstration*”, Bulletin of the American Physical Society, 45, (3), 2000.
11. D.J. McGee, C.R. Carlen*, “*Investigation of chromophore solubility and concentration effects in doped photorefractive polymers*”, Optical Society of America Annual Meeting, Baltimore, MD, October 1998
10. D.J. McGee, C. Salter, “*Organic photorefractive nonlinear optics in the undergraduate physics and chemistry laboratory*”, Council on Undergraduate Research National Conference, Pasadena, CA, June 1998.
9. D.J. McGee, “*Innovative Laboratory Experiments in Physical Optics*”, Central Pennsylvania Section American Association of Physics Teachers Meeting, Shippensburg, PA, April 1997.
8. D.J. McGee, “*Helium-Neon laser kit workshop*”, Northeast Regional American Association of Physics Teachers Annual Meeting, Princeton University, October 1995.
7. Z. Chen, D.J. McGee, N.B. Abraham, “*Patterns, Pattern Dynamics, and Pattern Correlations in a Photorefractive Bidirectional Ring Resonator*”, Nonlinear Dynamics in Optical Systems Conference, Rochester, NY, June 1995.
6. Z. Chen, D.J. McGee, N.B. Abraham, “*Bidirectional Oscillation in a Photorefractive Ring Resonator*”, Photorefractive Materials, Effects, and Devices Conference, Estes Park, CO, June 1995.
5. Z. Chen, D.J. McGee, N.B. Abraham, “*Correlated and de-correlated alternating patterns in a bidirectional photorefractive resonator*”, 1995 International Quantum Electronics Conference, Baltimore, MD, May 1995.
4. N.B. Abraham, D.J. McGee, Z. Chen, “*Spatio-temporal correlation in a bidirectional photorefractive oscillator*”, International Workshop on Measures of Spatio-Temporal Dynamics, Bryn Mawr, PA, May 1995.
3. Z. Chen, D.J. McGee, N.B. Abraham, “*Temporal instabilities and chaos in a photorefractive four-wave mixing ring resonator*”, Bulletin of the American Physical Society, 39, (3), 1994.
2. D.J. McGee, Z. Chen, N.B. Abraham, “*Pattern dynamics in a bidirectional photorefractive ring resonator*”, Optical Society of America Annual Meeting, Dallas, TX, October 1994.
1. D.J. McGee, Z. Chen, N.B. Abraham, “*Irregularly timed sequential mode alternation and pattern dynamics in a bidirectional ring resonator with a photorefractive medium*”, 1994 International Quantum Electronics Conference, Anaheim, CA, May 1994.