

Maria Theresa Dulay

Senior Research Scientist, Basic Life, Rad/Precision Health and Integrated Diagnostics

Publications

PUBLICATIONS

- **Preformulated, Shelf-Stable, Dendritic Cell-Targeting Nanogel mRNA Vaccine Delivery Platform.** *Bioconjugate chemistry*
Latarski, A. E., Durán, V., Schaar, B. T., Dulay, M. T., Einav, S., DeSimone, J. M.
2026
- **A 3D-Printed Scaffolded Hydrogel Microneedle Array Biosensor for Real-Time, Continuous Monitoring.** *Advanced materials (Deerfield Beach, Fla.)*
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2026: e73325
- **Tunable Applicator for Microneedle-Based Medical Devices** *ADVANCED MATERIALS TECHNOLOGIES*
Ilyn, D., Hwang, J., Coates, I. A., Dobson, J., Hung, A. H., Kamat, N. U., Tumbleston, J. R., Dulay, M. T., Jacobson, G. B., DeSimone, J. M.
2026
- **Engineering Ultra-Soft Porous Hydrogel Scaffolds via High-Resolution 3D Printing to Enhance Cell-Based Therapy for Glioblastoma** *ADVANCED MATERIALS TECHNOLOGIES*
Garcia-Avila, J., Zhang, Y., Carlberg, L. E., Stockwell, C., Hwang, J., Dulay, M. T., Hingtgen, S. D., Perry, J. L., DeSimone, J. M.
2026
- **Free-Form Microfluidic Microneedle Array Patches** *ADVANCED FUNCTIONAL MATERIALS*
Coates, I. A., Driskill, M. M., Rajesh, N. U., Lipkowitz, G., Ilyn, D., Xu, Y., Dulay, M. T., Jacobson, G. B., Tumbleston, J. R., Perry, J. L., Tian, S., DeSimone, J. M.
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- **Transfection via RNA-Based Nanoparticles: Comparing Encapsulation vs Adsorption Approaches of RNA Incorporation.** *Bioconjugate chemistry*
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- **High-resolution stereolithography: Negative spaces enabled by control of fluid mechanics.** *Proceedings of the National Academy of Sciences of the United States of America*
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- **3D-Printed Latticed Microneedle Array Patches for Tunable and Versatile Intradermal Delivery.** *Advanced materials (Deerfield Beach, Fla.)*
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