

# **ACKNOWLEDGEMENTS**

“...to educate graduate students in advanced materials and to introduce them to novel ways of doing research in a collaborative, multidisciplinary environment.”

—from the Graduate Student Manual, Department of Materials, UCSB

The research presented in this dissertation is just one of many examples of the open and collaborative research environment fostered at UCSB. It is always interesting to explain that, yes, I am a materials student, although I am advised by professors in Electrical and Mechanical Engineering. While, any work in MEMS is interdisciplinary by its very nature, optical MEMS devices in particular require a diverse set of backgrounds ranging from solid mechanics to quantum mechanics, and it is here that my diverse advisorship comes in handy. Thus, I would like to begin by thanking Professors John Bowers and Noel MacDonald for the guidance they have given me over the past few years. Professor Bowers has always been there to provide insight into a diverse range of topics including fabrication, device design, and characterization; as well as an introduction to the finer things in life, including sailing and wine tasting. I would like to thank Professor MacDonald for his invaluable insight into all things MEMS, and for giving me the freedom to be the one black sheep of the group working on compound-semiconductor-based devices. Being the sixth member of the UCSB MEMS group allowed me to better understand the trials and tribulations of getting a research group up and running. Further appreciation goes out to Professor Kim Turner for her indispensable lessons on the linear and non-linear dynamics of microsystems, and to Professors Evelyn Hu and Art Gossard for their unique perspectives and for reviewing this dissertation.

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