

PERSONAL PARTICULARS	Dan <u>Daniel</u> Institute of Materials Research and Engineering 2 Fusionopolis Way, Singapore 138634 ✉ daniel@imre.a-star.edu.sg 🌐 https://dandaniel.me	
AREAS OF SPECIALIZATION	fluid mechanics, wetting and adhesion, atomic force microscopy, functional/superhydrophobic/lubricated surfaces, biofouling	
EDUCATION	MSc/Ph.D in Applied Physics, 2011-2017 University of Harvard (USA) BA in Physics (Hons, 1st Class), 2007-2010 Cambridge University (UK)	
EMPLOYMENT	Scientist II, Institute of Materials Research and Engineering (Singapore), 2017-present Research Engineer, Institute of Microelectronics (Singapore), 2010-2011	
AWARDS/GRANTS	A*STAR NSS(BS/PhD) scholarship, 2007–2017 A*STAR SERC Career Development Award 2018 : ~ 150K grant for independent research <i>“Ultra-sensitive, high-resolution chemical force mapping of surfaces for wetting applications”</i> Developing a novel AFM technique for ultra-sensitive surface characterization Selected to attend the Lindau Nobel Laureate Meeting 2019	
INVENTION DISCLOSURES	<i>“Microscopic spectroscopic reflectometry for local film thickness measurements in wetting applications”</i> Contributors : <u>D. Daniel</u>, submitted on 12 Dec 2018	
INVITED TALKS	<i>“Bioinspired liquid repellent surfaces”</i> BIGHEART Seminar hosted by Prof. Luke P. Lee National University of Singapore, Singapore (February 16, 2017) <i>“All SLIPS are slippery ; some SLIPS are more slippery than others”</i> Adaptive Surface Technologies Inc, MA, USA (May 05, 2017) <i>“Nearly-zero contact angle hysteresis on lubricated surfaces”</i> Institute of Mathematical Sciences, National University of Singapore, Singapore (May 15, 2018) <i>“Hydration lubrication of polyzwitterionic brushes”</i> Satellite meeting at Droplet 2019, hosted by Prof. Halim Kusummatmaja Durham University, UK (September 15, 2019)	
TEACHING/ SUPERVISION	Teaching Assistant for AP235 (Harvard University), 2012–2013 : Graduate class in “Chemistry in Materials Science and Engineering” Supervised 3 undergraduate students from University of Waterloo (Canada), 2014–2017 : led to 3 publications in <i>Nat. Phys.</i>, <i>Phys. Rev. Lett.</i>, and <i>Phys. Rev. X</i> Supervised 1 master student from University of Twente (Netherlands), 2018	

COMMUNITY SERVICE	Reviewer for <i>Soft Matter</i> , <i>Phys. Rev. Fluids</i> , <i>Phys. Rev. Lett.</i> , and <i>Phys. Rev. X</i> Reviewer (with PhD supervisor) for <i>Nat. Comm.</i> , <i>Sci. Adv.</i> and <i>Nat. Phys.</i>
PUBLICATION LIST	S.K. Arya, K.C. Lee, B.D. Dahalan, Daniel and A.R.A. Rahman, "Breast tumor cell detection at single cell resolution using an electrochemical impedance technique." <i>Lab Chip</i> 12, 2362–2368 (2012). (IF : 6.0, citation : 54) D. Daniel, M.N. Mankin, R.A. Belisle, T.-S. Wong and J. Aizenberg, "Lubricant-infused micro/nano-structured surfaces with tunable dynamic omniphobicity at high temperatures" <i>Appl. Phys. Lett.</i> 102, 231603 (2013). (IF : 3.5, citation : 81) J. Cui, D. Daniel, A. Grinthal, K. Lin and J. Aizenberg, "Dynamic polymer systems with self-regulated secretion for the control of surface properties and material healing" <i>Nat. Mat.</i> 14, 790–795 (2015). (IF : 39.7, citation : 96) S. Sunny, G. Cheng, D. Daniel, P. Lo, S. Ochoa, C. Howell, N. Vogel, A. Majid and J. Aizenberg, "Transparent antifouling material for improved operative field visibility in endoscopy." <i>Proc. Natl. Acad. Sci. USA</i> 113, 11676–11681 (2016). (IF : 9.7, citation : 39) D. Daniel, J.V.I. Timonen, R. Li, S.J. Velling, and J. Aizenberg, "Oleoplaning droplets on lubricated surfaces." <i>Nat. Phys.</i> 13, 1020–1025 (2017). (IF : 22.8, citation : 30) D. Daniel*, X. Yao and J. Aizenberg, "Stable liquid jets bouncing off soft gels." <i>Phys. Rev. Lett.</i> 120, 028006 (2018) *co-corresponding author (IF : 8.8, citation : 1) D. Daniel*, J.V.I. Timonen, R. Li, S.J. Velling, M.J. Kreder, A. Tetreault and J. Aizenberg "Origins of extreme liquid repellency on structured, flat, and lubricated surfaces" <i>Phys. Rev. Lett.</i> 120, 244503 (2018) *co-corresponding author (IF : 8.8, citation : 4) M.J. Kreder, D. Daniel*, A. Tetreault, Z. Cao, B. Lemaire, J.V.I Timonen and J. Aizenberg "Film dynamics and lubricant depletion by droplets moving on lubricated surfaces" <i>Phys. Rev. X</i> 8, 031053 (2018) *contributes equally (IF : 14.4, citation : 5) J. Jiang, J. Gao, H. Zhang, W. He, J. Zhang, D. Daniel and X. Yao, "Directional Pumping of Water and Oil Microdroplets on Slippery Surface", <i>Proc. Natl. Acad. Sci. USA</i> (2019). (IF : 9.7, citation : 0). h-index : 5, citation count : ~ 300
PUBLICATION UNDER REVIEW	D. Daniel* , A. Chia, L. Moh, X.Q. Koh, R.R. Liu, X. Zhang, and N. Tomczak*, " Hydration lubrication of polyzwitterionic brushes leads to nearly adhesion- and friction-free droplet motion ", <i>Sci. Adv.</i> *co-corresponding author

REFERENCES

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Additional references available upon request