

References

- Davidson A., B. Al-Qallaf and D. B. Das. "Transdermal drug delivery by coated microneedles: Geometry effects on effective skin thickness and drug permeability." *Chemical Engineering Research and Design* 2008; 86(11): 1196-1206.
- Johnson A. R., C. L. Caudill, J. R. Tumbleston, C. J. Bloomquist, K. A. Moga, A. Ermoshkin, D. Shirvanyants, S. J. Mecham, J. C. Luft and J. M. DeSimone. "Single-step fabrication of computationally designed microneedles by continuous liquid interface production." *PloS one* 2016; 11(9): e0162518.
- Kavaldzhiev M., J. E. Perez, Y. Ivanov, A. Bertoncini, C. Liberale and J. Kosel. "Biocompatible 3D printed magnetic micro needles." *Biomedical Physics & Engineering Express* 2017; 3(2): 025005.
- Lambert P. H. and P. E. Laurent. "Intradermal vaccine delivery: Will new delivery systems transform vaccine administration?" *Vaccine* 2008; 26(26): 3197-3208.
- Li W., R. N. Terry, J. Tang, M. R. Feng, S. P. Schwendeman and M. R. Prausnitz. "Rapidly separable microneedle patch for the sustained release of a contraceptive." *Nature Biomedical Engineering* 2019; 3(3): 220-229.
- Prausnitz M. R., J. A. Mikszta, M. Cormier and A. K. Andrianov. *Microneedle-Based Vaccines. Vaccines for Pandemic Influenza*. R. W. Compans and W. A. Orenstein. Berlin, Heidelberg, Springer Berlin Heidelberg 2009; 369-393.
- Römgens A. M., D. L. Bader, J. A. Bouwstra and C. W. J. Oomens. "Predicting the optimal geometry of microneedles and their array for dermal vaccination using a computational model." *Computer Methods in Biomechanics and Biomedical Engineering* 2016; 19(15): 1599-1609.
- Samant P. P. and M. R. Prausnitz. "Mechanisms of sampling interstitial fluid from skin using a microneedle patch." *Proceedings of the National Academy of Sciences* 2018; 115(18): 4583-4588.
- van der Maaden, K., E. M. Varypataki, H. Yu, S. Romeijn, W. Jiskoot and J. Bouwstra. "Parameter optimization toward optimal microneedle-based dermal vaccination." *European Journal of Pharmaceutical Sciences* 2014; 64: 18-25.
- Widera G., J. Johnson, L. Kim, L. Libiran, K. Nyam, P. E. Daddona and M. Cormier. "Effect of delivery parameters on immunization to ovalbumin following intracutaneous administration by a coated microneedle array patch system." *Vaccine* 2006; 24(10): 1653-1664.
- Mackenzie M. The k-beauty acropass trouble cure patch uses microneedles to treat cystic acne. 2018 July 19 [cited 2020 Feb 15]. Available from: <https://www.allure.com/story/acropass-trouble-cure-patch>
- Phosae B. เข็มจี้จากน้ำตาล พลิกโฉมอุตสาหกรรมเข็มฉีดยา. *Krungthep Turakij*. [serial online] 2018 August 07 [cited 2020 Feb 15]. Available from: <https://www.bangkokbiznews.com/news/detail/809555>