List of publications of Pierre Lambert

List fulfilling the Guide for applicants 2018's requirements

1. Published works, as an author, a co-author or a publisher

1. **Lambert, P.**, et al. (2013, September 30). *Surface Tension Effects in Microsystems: Engineering Below the Capillary Length*. Springer.

2. **Lambert, P.**, & Raman, V. (2009, February). *Recueil d'exercices pour le cours de mécanique rationnelle*. Presses Universitaires de Bruxelles.

3. **Lambert, P.** (2007). *Capillary Forces in Microassembly*. NY: Springer.

4. **Lambert, P.** (2004, April). *Mécanique appliquée: Notes de cours à l'attention des étudiants de première candidature HORTA*. Presses universitaires de Bruxelles.

2. Book chapters or participation to a collective book, as an author or a co-author of the section

1. Mastrangeli, M., & **Lambert, P.** (2013). Lateral capillary forces. In *Surface Tension in Microsystems: Engineering Below the Capillary Length* (1 ed., pp. 45-69). Springer.
   https://dipot.ulb.ac.be/dspace/bitstream/2013/152633/1/MastrangeliCh3.pdf

2. **Lambert, P.**, & Ginsburgh, V. (2011, January). Microworld Modeling in Vacuum and Gaseous Environments. In M. Telo & M. Telo (Eds.), *Robotic Microassembly* (pp. 1-54). Piscataway: John Wiley and Sons. doi:10.1002/9780470634417.ch1

3. **Lambert, P.**, & Ginsburgh, V. (2011, January). Microworld Modeling: Impact of Liquid and Roughness. In M. Telo & M. Telo (Eds.), *Robotic Microassembly* (pp. 55-105). Piscataway: John Wiley and Sons. doi:10.1002/9780470634417.ch2

4. Gauthier, M., **Lambert, P.**, & Régnier, S. (2010). The Physics of the Microworld. In *Microrobotics for micromanipulation* (1 ed., pp. 1-98). Wiley. doi:10.1002/9781118622810.ch1

5. Chaillet, N., Hafez, M., & **Lambert, P.** (2010). Actuators for Microrobotics. In *Microrobotics for micromanipulation* (1 ed., pp. 99-178). Wiley. doi:10.1002/9781118622810.ch2

6. Gauthier, M., **Lambert, P.**, & Régnier, S. (2010). Microhandling and Micromanipulation Strategies. In *Microrobotics for micromanipulation* (1 ed., pp. 179-242). Wiley. doi:10.1002/9781118622810.ch3

7. Chau, A., **Lambert, P.**, Delchambre, A., & Bouillard, P. (2003). Behaviour of Flexure Hinges for Use as Articulations in High Precision Mechanisms. In H. Knobloch & Y. Kaminorz (Eds.), *MicroNano Integration* (pp. 287-288). Postdam: Springer.(VDI-Buch). doi:10.1007/978-3-642-18727-8_42

8. **Lambert, P.**, Ginsburgh, V., Ginsburgh, V., & Chaillet, N. (s.d.). La microrobotique: applications à la micromanipulation. In M. Telo & M. Telo (Eds.), *Micropréhension et stratégies de micromanipulation*. Editions Hermès.

9. **Lambert, P.**, Chaillet, N., & Hafez, M. (s.d.). La microrobotique: applications à la micromanipulation. In M. Telo & M. Telo (Eds.), *Actionneurs pour la microrobotique*. Editions Hermès.

10. **Lambert, P.**, Ginsburgh, V., & Hafez, M. (s.d.). La microrobotique: applications à la micromanipulation. In M. Telo & M. Telo (Eds.), *La physique du micromonde*.

3. Articles published in peer-review journals

1. Compère, P., **Lambert, P.**, Gernay, S., Labousse, S., & Gilet, T. (2017, November 08). Multiscale tarsal adhesion kinematics of freely-walking dock beetles. *Journal of the Royal Society interface*.

2. Toncheva, A., Willocq, B., Khelifat, F., Douhéret, O., **Lambert, P.**, Dubois, P., & Raquez, J.-M. (2017, November 01). Bilayer solvent and vapor-triggered actuators made of cross-linked polymer architectures via Diels-Alder pathways. *Journal of materials chemistry. B*, *5*(28), 5556-5563. doi:10.1039/c7tb01661a

3. Wang, J.-P., Francois, B., & **Lambert, P.** (2017, September 10). Equations for hydraulic conductivity estimation from particle size distribution: A dimensional analysis. *Water resources research*. doi:10.1002/2017WR020888

   https://dipot.ulb.ac.be/dspace/bitstream/2013/258409/3/Wang_et_al-2017-Water_Resources_Research.pdf

4. Wang, J.-P., Hu, N., Francois, B., & **Lambert, P.** (2017, September 01). Estimating Water Retention Curves and Strength Properties of Unsaturated Sandy Soils from Basic Soil Gradation Parameters. *Water resources research*, *53*(7), 6069-6088. doi:10.1002/2017WR020411

   https://dipot.ulb.ac.be/dspace/bitstream/2013/253734/3/WRR_paper.pdf

5. Blanc, L., Delchambre, A., & **Lambert, P.** (2017, July 11). Flexible Medical Devices: Review of Controllable Stiffness Solutions. *Actuators*, *6*(3), 23. doi:10.3390/act6030023

   https://dipot.ulb.ac.be/dspace/bitstream/2013/254519/3/actuators-06-00023.pdf

6. Terrazas Mallea, R., Bolopion, A., Beugnot, J.-C., **Lambert, P.**, & Gauthier, M. (2017, April). Laser-induced thermocapillary convective flows: A new approach for non-contact actuation at microscale at the fluid/gas interface. *IEEE/ASME transactions on mechatronics*, *22*(2), 693-704. doi:10.1109/TMECH.2016.2639821

7. Munoz, E., Quispe, J., **Lambert, P.**, Bolopion, A., Terrazas Mallea, R., Régnier, S., & Vela, E. (2017, March 20). Optimizing the Speed of Single Infrared-Laser-Induced Thermocapillary Flows Micromanipulation by Using Design of Experiments. *Journal of micro-bio robotics*. doi:10.1007/s12213-017-0097-3

8. Fernandez Toledano, J. C., Blake, T., **Lambert, P.**, & De Coninck, J. (2017, March 14). On the cohesion of fluids and their adhesion to solids: Young's equation at the atomic scale. *Advances in colloid and interface science*. doi:10.1016/j.cis.2017.03.006
https://dipot.ulb.ac.be/dspace/bitstream/2013/248328/3/Elsevier_231955.pdf

9. Ribaut, C., Loyez, M., Larrieu, J.-C., Chevineau, S., **Lambert, P.**, Remmelink, M., Wathiez, R., & Caucheteur, C. C. (2017). Cancer biomarker sensing using packaged plasmonic optical fiber gratings : towards in vivo diagnosis. *Biosensors & bioelectronics*, *92*, 449-456. doi:10.1016/j.bios.2016.10.081

10. Mastrangeli, M., Zhou, Q., Sariola, V., & **Lambert, P.** (2017). Surface Tension-driven Self-Alignment. *Soft matter*, *13*, 304-327. doi:10.1039/c6sm02078j
https://dipot.ulb.ac.be/dspace/bitstream/2013/240482/3/c6sm02078j.pdf

11. Hellegouarch, S., Fueyo Roza, L., Artoos, K., **Lambert, P.**, & Collette, C. (2016, October). Linear encoder based low frequency inertial sensor. *International Journal of Optomechatronics*, *10*(3-4), 120-129. doi:10.1080/15599612.2016.1217109

12. Gernay, S., Federle, W., **Lambert, P.**, & Gilet, T. (2016, August 03). Elasto-capillarity in insect fibrillar adhesion. *Journal of the Royal Society interface*. doi:10.1098/rsif.2016.0371
https://dipot.ulb.ac.be/dspace/bitstream/2013/234933/3/Gernay20160371.full.pdf

13. Matsuoka, H. H., Kanda, T. T., Wakimoto, S. S., Suzumori, K. K., & **Lambert, P.** (2016). Development of a rubber soft actuator driven with gas/liquid phase change. *International Journal of Automation Technology*, *10*(4), 517-524.

14. Wang, J.-P., Gallo, E., Francois, B., Gabrieli, F., & **Lambert, P.** (2016). Capillary force and rupture of funicular liquid bridges between three spherical bodies. *Powder technology*, *305*, 89-98. doi:10.1016/j.powtec.2016.09.060
https://dipot.ulb.ac.be/dspace/bitstream/2013/238381/4/Elsevier_222008.pdf

15. Collette, C., **Lambert, P.**, Hellegouarch, S., Fueyo Roza, L., & Artoos, K. (2015, December). Linear encoder based low frequency inertial sensor. *MATEC Web of Conferences*, *32*, 06001. doi:10.1051/matecconf/20153206001

16. Mastrangeli, M., Arutinov, G., Smits, E. C. P., & **Lambert, P.** (2015). Modeling capillary forces for large displacements. *Microfluidics and Nanofluidics*, *18*(4), 695-708. doi:10.1007/s10404-014-1469-9
https://dipot.ulb.ac.be/dspace/bitstream/2013/175260/4/Mastrangeli-MufNaf2014.pdf

17. Arutinov, G., Mastrangeli, M., Van Heck, G., **Lambert, P.**, Den Toonder, J. M. J. J., Dietzel, A., & Smits, E. C. P. (2015). Capillary Gripping and Self-alignment: A Route Towards Autonomous Heterogeneous Assembly. *IEEE transactions on robotics*, *31*(4), 1033 - 1043. doi:10.1109/TRO.2015.2452775
https://dipot.ulb.ac.be/dspace/bitstream/2013/200946/3/Arutinov_T-RO2015.pdf

18. Buttafuoco, A., Lenders, C., Clavel, R., **Lambert, P.**, & Kinnaert, M. (2014). Design, Manufacturing and Implementation of a Novel 2-Axis Force Sensor for Haptic Applications. *Sensors and actuators. A, Physical*., sna.2014.01.019. doi:10.1016/j.sna.2014.01.019

https://dipot.ulb.ac.be/dspace/bitstream/2013/153989/1/V5-corrections.pdf

19. Arutinov, G., Smits, E. C. P., Albert, P., **Lambert, P.**, & Mastrangeli, M. (2014). In-Plane Mode Dynamics of Capillary Self-Alignment. *Langmuir*, *30*(43), 13092–13102. doi:10.1021/la502831r
https://dipot.ulb.ac.be/dspace/bitstream/2013/177816/1/la502831r.pdf

20. Mertens, B., De Leener, B., Debeir, O., Beumier, C. M., **Lambert, P.**, & Delchambre, A. (2013, May 08). Robust Structured Light Pattern for Use with a Spatial Light Modulator in 3-D Endoscopy. *International Journal of Optomechatronics*, *7*(2), 105-121. doi:10.1080/15599612.2013.785041
https://dipot.ulb.ac.be/dspace/bitstream/2013/143725/1/15599612.2013.785041.pdf

21. Casier, R., Lenders, C., Sausse, M., Gauthier, M., & **Lambert, P.** (2013, May 07). Position Measurement/Tracking Comparison of the Instrumentation in a Droplet-Actuated-Robotic Platform. *Sensors*, *13*(5), 10.3390/s130505857, 5857-5869. doi:10.3390/s130505857
https://dipot.ulb.ac.be/dspace/bitstream/2013/143994/1/casier2013.pdf

22. Valsamis, J.-B., Mastrangeli, M., & **Lambert, P.** (2013). Vertical excitation of axisymmetric liquid bridges. *European journal of mechanics. B, Fluids*, *38*, 47-57. doi:10.1016/j.euromechflu.2012.09.008
https://dipot.ulb.ac.be/dspace/bitstream/2013/169421/1/Elsevier_153051.pdf

23. Dong, W., Gauthier, M., Lenders, C., & **Lambert, P.** (2012). A gas bubble-based parallel micro manipulator: conceptual design and kinematics model. *Journal of micromechanics and microengineering*, *22*(5), 057001. doi:10.1088/0960-1317/22/5/057001

24. Daunay, B., **Lambert, P.**, Jalabert, L., Kumemura, M., Renaudot, R., Agache, V., & Fujita, H. (2012). Effect of Substrate Wettability in Liquid Dielectrophoresis (LDEP) Based Droplets Generation: Theoretical Analysis and Experimental Confirmation. *Lab on a chip*, *12*(2), 361-368. doi:10.1039/C1LC20625G

25. Lenders, C., Gauthier, M., Cojan, R., & **Lambert, P.** (2012). Three DOF Microrobotic Platform Based on Capillary Actuation. *IEEE transactions on robotics*, *28*(5), 1157-1161. doi:10.1109/TRO.2012.2199009

26. Gabrieli, F., **Lambert, P.**, Cola, S., & Calvetti, F. (2012). Micromechanical modelling of erosion due to evaporation in a partially wet granular slope. *International journal for numerical and analytical methods in geomechanics*, *36*(7), 918-943. doi:10.1002/nag.1038
https://dipot.ulb.ac.be/dspace/bitstream/2013/116005/3/116005.pdf

27. Ivan, I. A., Agnus, J., & **Lambert, P.** (2011). PMN-PT (lead magnesium niobate-lead titanate) piezoelectric material micromachining by excimer laser ablation and dry etching (DRIE). *Sensors and actuators. A, Physical*, *177*, 37-47. doi:10.1016/j.sna.2011.09.015
https://dipot.ulb.ac.be/dspace/bitstream/2013/120305/1/Elsevier_101232.pdf

28. Tortissier, G., Ginet, P., Jalabert, L., **Lambert, P.**, Kim, B., & Fujita, H. (2011). CF4 plasma treatment-assisted inkjet printing for color pixel flexible display. *Journal of micromechanics and microengineering*, *21*, 105021. doi:10.1088/0960-1317/21/10/105021

29. Park, J., Nishida, S., **Lambert, P.**, Kawakatsu, H., & Fujita, H. (2011). High-resolution cantilever biosensor resonating at air–liquid in a microchannel. *Lab on a chip*. doi:10.1039/C1LC20608G

30. Sausse, M., & **Lambert, P.** (2011). Compact polymer multi-nozzles electrospray device with integrated microfluidic feeding system. *Journal of electrostatics*, *69*(4), 313-319. doi:10.1016/j.elstat.2011.04.006
https://dipot.ulb.ac.be/dspace/bitstream/2013/120323/1/Elsevier_101258.pdf

31. Xie, H., **Lambert, P.**, & Régnier, S. (2011). Analysis of nanoscale mechanical grasping under ambient conditions. *Journal of micromechanics and microengineering*, *21*, 045009. doi:10.1088/0960-1317/21/4/045009

32. Renaudot, R., Agache, V., Daunay, B., **Lambert, P.**, Kumemura, M., Fouillet, Y., Collard, D., & Fujita, H. (2011). Optimization of Liquid DiElectroPhoresis (LDEP) Digital Microfluidic Transduction for Biomedical Applications. *Micromachines*, *2*, 258-273. doi:10.3390/mi2020258

33. Vandaele, V., Delchambre, A., & **Lambert, P.** (2011). Acoustic wave levitation: Handling of components. *Journal of applied physics*, *109*, 124901. doi:10.1063/1.3594245
https://dipot.ulb.ac.be/dspace/bitstream/2013/120744/1/vandaele11.pdf

34. Lenders, C., Gauthier, M., & **Lambert, P.** (2011). Parallel microrobot actuated by capillary effects. *Proceedings - IEEE International Conference on Robotics and Automation*,, 5980290 6015-6020. doi:10.1109/ICRA.2011.5980290

35. Xie, H., **Lambert, P.**, & Régnier, S. (2011). Modeling and implementation of nanoscale robotic grasping. *Proceedings - IEEE International Conference on Robotics and Automation*,, 5979658 3634-3639. doi:10.1109/ICRA.2011.5979658

36. Porta, M., Fantoni, G., & **Lambert, P.** (2010). An Integrated and Compact Device for Microassembly Exploiting Electrostatic Sorting and Capillary Grasping. *C I R P - Journal of Manufacturing Science and Technology*, *3*(3), 185-190. doi:http://dx.doi.org/10.1016/j.cirpj.2010.09.002
https://dipot.ulb.ac.be/dspace/bitstream/2013/65485/1/Elsevier_42281.pdf

37. Alvo, S., **Lambert, P.**, Gauthier, M., & Régnier, S. (2010). A van der Waals Force Based Adhesion Model for Micromanipulation. *Journal of adhesion science and technology*, *24*, 2415-2428. doi:10.1163/016942410X508334

38. **Lambert, P.**, Mastrangeli, M., Valsamis, J.-B., & Degrez, G. (2010). Spectral analysis and experimental study of lateral capillary dynamics for flip-chip applications. *Microfluidics and Nanofluidics*, *9*, 797-807.
https://dipot.ulb.ac.be/dspace/bitstream/2013/152603/1/LambertMufNaf2010.pdf

39. Mastrangeli, M., Valsamis, J.-B., Van Hoof, C., Celis, J.-P., & **Lambert, P.** (2010). Lateral capillary forces of cylindrical fluid menisci: a comprehensive quasi-static study. *Journal of micromechanics and microengineering*, *20*, 075041.
https://dipot.ulb.ac.be/dspace/bitstream/2013/152604/1/MastrangeliJMM2010.pdf

40. Chau, A. H. L., Pirlot, M., Delchambre, A., & **Lambert, P.** (2010). Theoretical and Experimental Study of the Influence of AFM Tip Geometry and Orientation on Capillary Force. *Journal of adhesion science and technology*, *24*, 2499-2510. doi:10.1163/016942410X508307

41. Sausse, M., Berke, P., Massart, T., Régnier, S., & **Lambert, P.** (2009, December 31). Variation of the Electrostatic Adhesion Force on a Rough Surface due to the Deformation of Roughness Asperities During Micromanipulation of a Spherical Rigid Body. *Journal of adhesion science and technology*, *23*(9), 1303-1325.

42. Tam, E., Sausse, M., **Lambert, P.**, Delchambre, A., & Delplancke, M.-P. (2009, June). Electrostatic forces in micromanipulation: Experimental characterization and simulation including roughness. *Applied surface science*, *255*(18), 7898-7904. doi:10.1016/j.apsusc.2009.04.150
https://dipot.ulb.ac.be/dspace/bitstream/2013/68239/1/Elsevier_45329.pdf

43. De Greef, A., **Lambert, P.**, & Delchambre, A. (2009). Towards flexible medical instruments: Review of flexible fluidic actuators. *Precision engineering*, *33*, 311-321.

44. Sausse, M., Delchambre, A., Régnier, S., & **Lambert, P.** (2009). Electrostatic forces in micromanipulations: review of analytical models and simulations including roughness. *Applied surface science*, *253*, 6203-6210. doi:10.1016/j.apsusc.2007.01.098
https://dipot.ulb.ac.be/dspace/bitstream/2013/65496/1/Elsevier_42296.pdf

45. **Lambert, P.**, Chau, A., Delchambre, A., & Régnier, S. (2008). Comparison between Two Capillary Forces Models. *Langmuir*, *24*(7), 3157-3163.

46. Lenders, C., Valsamis, J.-B., Desaedeleer, M., Delchambre, A., & **Lambert, P.** (2008). Assembly of a micro ball-bearing using a capillary gripper and a microcomponent feeder. *IFIP*, *260*, 265-274. doi:10.1007/978-0-387-77405-3_26

47. Chau, A., Rignier, S. S., Delchambre, A., & **Lambert, P.** (2007, April). Three-dimensional model for capillary nanobridges and capillary forces. *Modelling and simulation in materials science and engineering*, *15*(3), 009, 305-317. doi:10.1088/0965-0393/15/3/009

48. Chau, A., Régnier, S., Delchambre, A., & **Lambert, P.** (2007). A general 3D model for capillary nanobridges and capillary forces. *Modelling and simulation in materials science and engineering*, *15*, 305-317.

49. **Lambert, P.**, & Régnier, S. (2006, June). Surface and contact forces models within the framework of microassembly. *Journal of micromechatronics*, *3*(2), 123-157. doi:10.1163/156856306777544970

50. **Lambert, P.**, & Régnier, S. (2006). Physics for Micromanipulation. *Journal of micromechatronics*, *3*(2), 123-157.

51. **Lambert, P.**, Seigneur, F., Koelemeijer, S., & Jacot, J. (2006). A case study of surface tension gripping: the watch bearing. *Journal of micromechanics and microengineering*, *16*(7), 1267-1276.

52. **Lambert, P.**, Seigneur, F., Koelemeijer, S., & Jacot, J. (2006). Design of a capillary gripper for a submillimetric application. *IFIP*, *198*, 3-10. doi:10.1007/0-387-31277-3_1

53. **Lambert, P.**, & Delchambre, A. (2005). A Study of Capillary Forces as a gripping Principle. *Assembly automation*, *25*(4), 275-283.

54. Vandaele, V., **Lambert, P.**, & Delchambre, A. (2005). Non contact handling in microassembly: acoustical levitation. *Precision engineering*, *29*, 491-505.

55. **Lambert, P.**, & Delchambre, A. (2005). Parameters ruling capillary forces at the submillimetric scale. *Langmuir*, *25*, 9537-9543.

56. **Lambert, P.**, Valentini, A., Lagrange, B., De Lit, P., & Delchambre, A. (2003). Design and performances of a one-degree-of-freedom guided nano-actuator. *Robotics and computer-integrated manufacturing*, *19*, 89-98. doi:10.1016/S0736-5845(02)00065-0
https://dipot.ulb.ac.be/dspace/bitstream/2013/65781/3/Elsevier_42304.pdf

4. Articles published in conference proceedings

1. Guelpa, V., Prax, J.-S., Vitry, Y., Lehmann, O., Dehaeck, S., Sandoz, P., Clévy, C., Le Fort-Piat, N., **Lambert, P.**, & Laurent, G. J. (2017, July 10). 3D-Printed Vision-Based Micro-Force Sensor Dedicated to In Situ SEM Measurements. *Proc. of IEEE International Conference on Advanced Intelligent Mechatronics*.

2. Blanc, L., Francois, B., Delchambre, A., & **Lambert, P.** (2017, August 28). Granular Jamming as Controllable Sti#ness Mechanism for Endoscopic and Catheter Applications. *23ème Congrès Français de Mécanique*.

3. Wang, J.-P., Francois, B., & **Lambert, P.** (2017, October 19). From basic particle gradation parameters to water retention curves of unsaturated sandy soils. *15th Int. Conference of the International Association for Computer Methods and Recent Advances in Geomechanics*.
https://dipot.ulb.ac.be/dspace/bitstream/2013/256370/3/Jipeng_IACMAG_full.pdf

4. Dehaeck, S., Scheid, B., & **Lambert, P.** (2018, April 23). Zero-overlap stitching of microlens arrays with two-photon polymerisation. *SPIE Photonics Europe*.

5. Terrazas Mallea, R., Beugnot, J.-C., **Lambert, P.**, Bolopion, A., & Gauthier, M. (2017, October 01). 1D manipulation of a micrometer size particle actuated via thermocapillary convective flows. *Proc. IEEE/RSJ International Conference on Intelligent Robots and Systems*.

6. Innocenti, B., Larrieu, J.-C., Pianigiani, S., **Lambert, P.**, Paolanti, M., Bernardini, M. M., Cenci, A., & Frontoni, E. (2016, August 29). Development of an automatic procedure to mechanically characterize soft tissue materials. *MESA 2016: 12th IEEE/ASME International Conference on Mechatronic and Embedded Systems and Applications*.
https://dipot.ulb.ac.be/dspace/bitstream/2013/239232/3/MESA_2016.pdf

7. Collette, C., **Lambert, P.**, Hellegouarch, S., Fueyo Roza, L., & Artoos, K. (2015). Linear encoder based low frequency inertial sensor. *Optomechatronics conference*.

8. Majcherczyk, N., Rabenorosoa, K., Clévy, C., Mincheva, R., Raquez, J.-M., Viallon, M., Mastrangeli, M., & **Lambert, P.** (2014). Experimental Characterization of Drobot: Towards Closed-Loop Control. *IEEE/ASME International Conference on Advanced Intelligent Mechatronics: AIM 2014* (pp. 961--966). IEEE.
https://dipot.ulb.ac.be/dspace/bitstream/2013/172014/1/AIM.pdf

9. Mertens, B., De Leener, B., Debeir, O., Beumier, C. M., **Lambert, P.**, & Delchambre, A. (2012, October 29). Robust structured light pattern for use with a hologram in 3D endoscopy. *IEEE International Symposium on Optomechatronic Technologies (ISOT), 2012* (p. 6).

10. Daunay, B., **Lambert, P.**, Jalabert, L., Collard, D., & Fujita, H. (2011, June 15). OPTIMIZATION OF LIQUID DIELECTROPHORESIS (L-DEP) BASED DEVICES TOWARDS CONDUCTIVE BIOLOGICAL LIQUIDS HANDLING. *Proc. of IEEE Transducers*.

11. Daunay, B., **Lambert, P.**, Collard, D., & Fujita, H. (2011). Etude par plans d'expériences de la génération de goutelettes obtenues par diélectrophorèse liquide (LDEP). *in Proc. of Congrès Français de Mécanique* (p. Accepted for publication).

12. Xie, H., **Lambert, P.**, & Régnier, S. (2011). Modeling and Implementation of Robotic Nanoscale Grasping. *Proceedings of IEEE ICRA Conference* (pp. 3634-3639).

13. Lenders, C., Gauthier, M., & **Lambert, P.** (2011). Parallel Microrobot Actuated by Capillary Effects. *Proceedings of IEEE ICRA Conference* (pp. 6015-6020).

14. De Greef, A., **Lambert, P.**, Delwiche, T., Lenders, C., & Delchambre, A. (2009). Flexible Fluidic Actuators: Determining Force and Position Without Force or Position Sensors. *Proceedings of the IEEE ISAM2009 conference* (p. 6).

15. Sausse, M., Pierobon, M., & **Lambert, P.** (2009). Determination of EHD generated droplet size: review of models and experimental tools. *Of the European Aerosol Conference*.

16. Lenders, C., Gauthier, M., & **Lambert, P.** (2009). Microbubble Generation Using a Syringe Pump. *Proceedings of the 2009 IEEE International Conference on Intelligent Robots and Systems*.

17. De Greef, A., **Lambert, P.**, Delwiche, T., Lenders, C., & Delchambre, A. (2009). deleteFlexible Fluidic Actuators: Determining Force and Position Without Force or Position Sensors. *Proceedings of the IEEE ISAM 2009 Conference* (p. 6).

18. Sausse, M., Pierobon, M., & **Lambert, P.** (2009). Determination of EHD Generated Droplet Size: Review of Models and Experimental Tools. *Proceedings of the European Aerosol Conference*.

19. Bastin, N., Chau, A., & **Lambert, P.** (2008). Effects of relative humidity on capillary forces. *Proceedings of IROS08*.

20. Lenders, C., Valsamis, J.-B., Desaedeleer, M., Delchambre, A., & **Lambert, P.** (2008). Assembly of a micro ball bearing using a capillary gripper and a microcomponent feeder. In S. Ratchev & S. Koelemeijer (Eds.), *Micro-Assembly Technologies and Applications: IFIP TC5 WG5.5 Fourth International Precision Assembly Seminar*. Springer. (IFIP, 260).

21. Sausse, M., Delchambre, A., Régnier, S., & **Lambert, P.** (2007, June). Electrostatic forces and micromanipulator design: on the importance of surface topography parameters. *2007 IEEE/ASME International Conference on Advanced Intelligent Mechatronics*.

22. Sausse, M., Delchambre, A., Régnier, S., & **Lambert, P.** (2007, April). Displacement of an object placed in an electric field: application to micro-assembly. *EUSPEN 7th International Conference*.

23. Sausse, M., Delchambre, A., Régnier, S., & **Lambert, P.** (2007). Electrostatic forces and micromanipulator design: on the importance of surface topography parameters. *2007 IEEE/ASME International Conference on Advanced Intelligent Mechatronics*.

24. Vitard, J., **Lambert, P.**, & Régnier, S. (2007). Study of Cylinder/plan Capillary Force Near Millimeter Scale and Experimental Validation. *IEEE International Symposium on Assembly and Manufacturing*.

25. Sausse, M., Delchambre, A., Régnier, S., & **Lambert, P.** (2007). Displacement of an object placed in an electric field: application to micro-assembly. *EUSPEN 7th International Conference*.

26. Chau, A., Régnier, S., Delchambre, A., & **Lambert, P.** (2007). Influence of geometrical parameters on capillary forces. *IEEE International Symposium on Assembly and Manufacturing*.

27. **Lambert, P.**, Valsamis, J.-B., Seigneur, F., Koelemeijer, S., Delchambre, A., & Jacot, J. (2006, November). Surface tension gripping applied to mesoscopic case study. *Proc. of the 1st CIRP - International Seminar on Assembly Systems*.

28. **Lambert, P.**, Sausse, M., Chau, A., Vandaele, V., Valsamis, J.-B., & Delchambre, A. (2006, October). Surface Forces Modelling: Application to Microassembly. *Proc. of IARP*.

29. **Lambert, P.**, Seigneur, F., Koelemeijer, S., Jacot, J., & Delchambre, A. (2006, May). Use of surface tension in micromanipulation. *Proceedings of the 7th National Congress on Theoretical and Applied Mechanics*.

30. Sausse, M., **Lambert, P.**, Delchambre, A., & Régnier, S. (2006, May). Influence of surface topography in electrostatic forces simulations for microassembly. *5th International Workshop on Microfactories*.

31. **Lambert, P.**, Seigneur, F., Koelemeijer, S., Delchambre, A., & Jacot, J. (2006). Surface tension gripping applied to a mesoscopic case study. *Actes du 1st CIRP International Seminar on Assembly Systems* (pp. 153-158).

32. Valsamis, J.-B., Delchambre, A., & **Lambert, P.** (2006). An experimental study of prehension parameters during manipulation task. *Actes (CD-ROM) du 5th International Workshop on Microfactories* (p. 5).

33. Chau, A., Delchambre, A., & **Lambert, P.** (2006). Towards a general three dimensional model for capillary nanobridges and capillary forces. *Actes (CD-ROM) du 5th International Workshop on Microfactories* (p. 5).

34. **Lambert, P.**, Seigneur, F., Koelemeijer, S., & Jacot, J. (2006). Design of a Capillary Gripper for a Submillimetric Application. *Precision Assembly Technologies for Mini and Micro Products: Proceedings of the IFIP TC5 WG5.5 Third International Precision Assembly Seminar* (pp. 3-10). Springer.

35. Schmid, D., Koelemeijer, S., Jacot, J., & **Lambert, P.** (2006). Microchip assembly with capillary gripper. *Actes (CD-ROM) du 5th International Workshop on Microfactories* (p. 4).

36. Vitard, J., **Lambert, P.**, Chau, A., & Pirlot, M. (2006). Capillary Forces Models for the Interaction Between a Cylinder and a Plane. *Actes (CD-ROM) du 5th International Workshop on Microfactories* (p. 4).

37. Chau, A., **Lambert, P.**, & Delchambre, A. (2005). A general 3D model to compute capillary force. *Proc. Micromechanics Europe 2005* (pp. 156-159).

38. Chau, A., **Lambert, P.**, & Delchambre, A. (2005). Modélisation de la condensation capillaire pour le micro-assemblage. *Modelling of electrostatic forces for microassembly: Première journée sur la modélisation et l'analyse dimensionnelle*.

39. Frennet, M., **Lambert, P.**, & Delchambre, A. (2004). Catching and Releasing of Small Parts Using Capillary Forces. *Proc. IEEE Mechatronics and Robotics Conference* (pp. 1048-1053).

40. **Lambert, P.**, Vandaele, V., & Delchambre, A. (2004). Non-Contact Handling in Micro-Assembly: State of the Art. *Actes papier de l'International Precision Assembly Seminar* (pp. 67-76).

41. **Lambert, P.**, & Delchambre, A. (2004). Capillary Forces: Use an Modelling in MicroAssembly. *International Conference on Intelligent Manipulation and Grasping* (pp. 29-30).

42. Chau, A., **Lambert, P.**, Bouillard, P., & Delchambre, A. (2003). Behaviour of Flexible Hinges for Use as Articulations in High Precision Mechanisms. *MicroNano Integration* (pp. 287-288).

43. Vandaele, V., **Lambert, P.**, Delchambre, A., & Bouillard, P. (2003). Design and Implementation of a Flexible Guiding System in Translation. *MicroNano Integration* (pp. 293-295).

44. **Lambert, P.**, Letier, P., & Delchambre, A. (2003). Capillary and Surface Tension in the Manipulation of Small Parts. *International Symposium on Assembly and Task Planning (IEEE ISATP2003)* (pp. 54-59).

45. **Lambert, P.**, & Delchambre, A. (2003). Forces acting on microparts: towards a numerical approach for gripper design and manipulation strategies in microassembly. *Actes papier de l'International Precision Assembly Seminar* (pp. 79-84).

46. **Lambert, P.**, Lagrange, B., Valentini, A., De Lit, P., Marsico, C., & Delchambre, A. (2002). Design and performances of a piezoelectric stick-slip nanoactuator. *Proc. Of the 12th Conference on Flexible Automation and Intelligent Manufacturing* (pp. 582-591). Oldenburg Verlag.

5. Oral presentations during conferences, which include a review committee

1. Blanc, L., Francois, B., & **Lambert, P.** (2016). *Granular jamming as controllable stiffness mechanism for endoscopic and catheter applications*. Paper session presented at iSMIT2016 - Conference of the international Society for Medical Innovation and Technology (28: 05-08/10/2016: Delft, The Netherlands).
   https://dipot.ulb.ac.be/dspace/bitstream/2013/239702/3/iSMIT_Loic_BLANC_ULB_FRIA.pdf

2. Robert, F., Duchateau, V., Raman, V., Boey, C., & **Lambert, P.** (2007). *Détecter les préconceptions pour corriger les représentations erronées des étudiants: application à la mécanique et à l'électronique*. Paper session presented at 24e congrès de l'Association internationale de pédagogie universitaire (AIPU) (05-2007).

3. De Greef, A., **Lambert, P.**, & Delchambre, A. (2006). *A minimally invasive surgery actuator based on a flexible and inflatable structure*. Paper session presented at IEEE Benelux EMBS Symposium (07-08/12/2006: Bruxelles).

4. Sausse, M., **Lambert, P.**, & Delchambre, A. (2005, May). *Modelling of electrostatic forces for microassembly*. Paper session presented at Première journée sur la modélisation et l'analyse dimensionnelle (mai 2005: Lausanne).

5. **Lambert, P.**, & Delchambre, A. (2005). *Design Rules for a Capillary Gripper in Microassembly*. Paper session presented at International Symposium on Assembly and Task Planning (IEEE ISATP2005) (19-21/07/2005: Montréal).

6. **Lambert, P.**, & Zhou, Q. (s.d.). *Fluidic assembly and capillary forces*. Paper session presented at conférence Smart Systems Integration (10-11/03/2009).

6. Patents

1. Lenders, C., Gauthier, M., & **Lambert, P.** (2011, April 14). *Meniscus-Supported Compliant Table*.