

# List of publications of Pierre Lambert

List fulfilling the [Guide for applicants 2026](#)'s requirements

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

1. **Lambert, P.**, & Mastrangeli, M. (2019). *Microscale Surface Tension and its Applications*.
2. **Lambert, P.**, et al. (2013). *Surface Tension Effects in Microsystems: Engineering Below the Capillary Length*. Springer.
3. **Lambert, P.**, & Raman, V. (2009). *Recueil d'exercices pour le cours de mécanique rationnelle*. Presses Universitaires de Bruxelles.
4. **Lambert, P.** (2007). *Capillary Forces in Microassembly*. NY: Springer.
5. **Lambert, P.** (2004). *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. Toncheva, A., Blanc, L., **Lambert, P.**, Dubois, P., & Raquez, J.-M. (2019). Mechanically Responsive Materials for Soft Robotics. In H. Koshima (Ed.), *Chapter 11: Multi-responsive Polymer Actuators by Thermo-reversible Chemistry* (1 ed., pp. 277-306). Wiley-VCH Verlag GmbH & Co. KGaA.
2. 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>
3. **Lambert, P.**, & Régnier, S. (2011). Microworld Modeling in Vacuum and Gaseous Environments. In *Robotic Microassembly* (pp. 1-54). Piscataway: John Wiley and Sons. doi:10.1002/9780470634417.ch1
4. **Lambert, P.**, & Régnier, S. (2011). Microworld Modeling: Impact of Liquid and Roughness. In *Robotic Microassembly* (pp. 55-105). Piscataway: John Wiley and Sons. doi:10.1002/9780470634417.ch2
5. Chau, A., Régnier, S., Delchambre, A., & **Lambert, P.** (2011). Theoretical and experimental study of the influence of AFM tip geometry and orientation on capillary force. In *Adhesion Aspects in MEMS/NEMS* (pp. 165-176). CRC Press.
6. Alvo, S., **Lambert, P.**, Gauthier, M., & Régnier, S. (2011). A van der waals force-based adhesion model for micromanipulation. In *Adhesion Aspects in MEMS/NEMS* (pp. 77-90). CRC Press.

7. 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
8. 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
9. 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
10. Agnus, J., Chaillet, N., Hafez, M., Gauthier, M., **Lambert, P.**, & Régnier, S. (2008). La microrobotique: applications à la micromanipulation. In *La physique du micromonde*.
11. **Lambert, P.**, Chaillet, N., & Hafez, M. (2008). La microrobotique: applications à la micromanipulation. In *Actionneurs pour la microrobotique*. Editions Hermès.
12. Régnier, S., Chaillet, N., & **Lambert, P.** (2008). La microrobotique: applications à la micromanipulation. In *Micropréhension et stratégies de micromanipulation*. Editions Hermès.
13. 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

### 3. Articles published in peer-review journals

1. Salah, M., Bordes, Y., Clévy, C., Ulliac, G., Luzet, V., Chafaï, A., Kadic, M., **Lambert, P.**, & Rabenoroso, K. (2025). Towards bi-material 3D printed soft microrobots using two-photon polymerisation. *Journal of micro-bio robotics*, 21(1), 7. doi:10.1007/s12213-025-00185-4  
 <https://dipot.ulb.ac.be/dspace/bitstream/2013/390884/3/salah2025.pdf>
2. Rigaut, C., Deruyver, L., Goole, J., **Lambert, P.**, & Haut, B. (2025). A comprehensive analytical model for predicting drug absorption in the olfactory region: Application to nose-to-brain delivery. *International journal of pharmaceutics*, 125392. doi:10.1016/j.ijpharm.2025.125392  
 <https://dipot.ulb.ac.be/dspace/bitstream/2013/389167/3/permeation.pdf>  
 <https://dipot.ulb.ac.be/dspace/bitstream/2013/389167/4/rigaut2025.pdf>
3. de Lara, T. M., Amez-Droz, L., Chah, K., **Lambert, P.**, Collette, C., & Caucheteur, C. (2024). Fabrication of Bragg Gratings in Flat Silica Substrates Using the Femtoprint Device and Use for Sensing. *Proceedings of SPIE - The International Society for Optical Engineering*, 13005, 130050M. doi:10.1117/12.3020927  
 <https://dipot.ulb.ac.be/dspace/bitstream/2013/376793/3/delara2024-SPIE-Fabrication.pdf>

4. Rigaut, C., Giaprakis, A., Deruyver, L., Goole, J., **Lambert, P.**, & Haut, B. (2024). The air conditioning in the nose of mammals depends on their mass and on their maximal running speed. *Scientific Reports*, 14(1). doi:10.1038/s41598-024-59768-z  
 [https://dipot.ulb.ac.be/dspace/bitstream/2013/373314/1/doi\\_356958.pdf](https://dipot.ulb.ac.be/dspace/bitstream/2013/373314/1/doi_356958.pdf)
5. Rigaut, C., Deruyver, L., Niesen, M., Vander Ghinst, M., Goole, J., **Lambert, P.**, & Haut, B. (2023). What Are the Key Anatomical Features for the Success of Nose-to-Brain Delivery? A Study of Powder Deposition in 3D-Printed Nasal Casts. *Pharmaceutics*, 15(12), 2661. doi:10.3390/pharmaceutics15122661  
 [https://dipot.ulb.ac.be/dspace/bitstream/2013/365327/1/doi\\_348971.pdf](https://dipot.ulb.ac.be/dspace/bitstream/2013/365327/1/doi_348971.pdf)
6. Amez-Droz, L., Tunon De Lara Ramos, M., Collette, C., Caucheteur, C., & **Lambert, P.** (2023). Instrumented Flexible Glass Structure: A Bragg Grating Inscribed with Femtosecond Laser Used as a Bending Sensor. *Sensors*, 23(19), 11. doi:10.3390/s23198018  
 [https://dipot.ulb.ac.be/dspace/bitstream/2013/364162/1/doi\\_347806.pdf](https://dipot.ulb.ac.be/dspace/bitstream/2013/364162/1/doi_347806.pdf)
7. Tunon De Lara Ramos, M., Amez-Droz, L., Chah, K., **Lambert, P.**, Collette, C., & Caucheteur, C. (2023). Femtosecond pulse laser-engineered glass flexible structures instrumented with an in-built Bragg grating sensor. *Optics express*, 31(18), 29730-29743. doi:10.1364/OE.497482  
 [https://dipot.ulb.ac.be/dspace/bitstream/2013/362809/3/optics\\_express.pdf](https://dipot.ulb.ac.be/dspace/bitstream/2013/362809/3/optics_express.pdf)
8. Piñan Basualdo, F., Bolopion, A., Gauthier, M., **Lambert, P.**, & Piñan Basualdo, F. (2023). Solving the non-linear motion in a micromanipulation system powered by thermocapillary flows. *IEEE Robotics and Automation Letters*, 1-6. doi:10.1109/LRA.2023.3288378  
 <https://dipot.ulb.ac.be/dspace/bitstream/2013/359865/3/Article.pdf>
9. de Lara, T. M., Chah, K., Amez-Droz, L., **Lambert, P.**, Collette, C., & Caucheteur, C. (2023). Femtosecond Laser Micro/Nano-Machining of Silica Glass Planar Substrates for the Production of Bragg Gratings. *Proceedings of SPIE - The International Society for Optical Engineering*, 12643, 126433D. doi:10.1117/12.2678419  
 [https://dipot.ulb.ac.be/dspace/bitstream/2013/371526/3/delara2023\\_oe-31-18-29730.pdf](https://dipot.ulb.ac.be/dspace/bitstream/2013/371526/3/delara2023_oe-31-18-29730.pdf)
10. Tunon de Lara, M., Chah, K., Amez-Droz, L., **Lambert, P.**, Collette, C., & Caucheteur, C. (2023). Bragg grating manufacturing in planar silica substrates. *Proceedings of SPIE - The International Society for Optical Engineering*, 12572, 125720X. doi:10.1117/12.2665471  
 [https://dipot.ulb.ac.be/dspace/bitstream/2013/370791/3/delara2022\\_SPIE.pdf](https://dipot.ulb.ac.be/dspace/bitstream/2013/370791/3/delara2022_SPIE.pdf)
11. Piñan Basualdo, F., Stéphan, O., Bolopion, A., Gauthier, M., & **Lambert, P.** (2023). Pose Control of Millimeter-Scale Objects in a Laser-Powered Thermocapillary Manipulation Platform. *IEEE/ASME transactions on mechatronics*, 1-10. doi:10.1109/TMECH.2023.3274371  
 <https://dipot.ulb.ac.be/dspace/bitstream/2013/359349/3/TMECH3274371.pdf>  
 [https://dipot.ulb.ac.be/dspace/bitstream/2013/359349/4/TMECH3274371\\_published.pdf](https://dipot.ulb.ac.be/dspace/bitstream/2013/359349/4/TMECH3274371_published.pdf)
12. Barbot, A., Ortiz, F., Bolopion, A., Gauthier, M., & **Lambert, P.** (2023). Exploiting Liquid Surface Tension in Microrobotics. *Annual reviews in control*, 6.  
 <https://dipot.ulb.ac.be/dspace/bitstream/2013/362805/3/barbot2022.pdf>

13. Decroly, G., Chafaï, A., De Timary Vanden Berghe De Binckum, G., Gandolfo, G., Delchambre, A., & **Lambert, P.** (2023). A Voxel#Based Approach for the Generation of Advanced Kinematics at the Microscale. *Advanced Intelligent Systems*. doi:10.1002/aisy.202200394  
<https://dipot.ulb.ac.be/dspace/bitstream/2013/357268/3/decroly2023.pdf>
14. Deruyver, L., Rigaut, C., Gomez, A., **Lambert, P.**, Haut, B., & Goole, J. (2023). In vitro Evaluation of Paliperidone Palmitate Loaded Cubosomes Effective for Nasal-to-Brain Delivery. *International Journal of Nanomedicine (Online)*. doi:10.2147/IJN.S397650  
<https://dipot.ulb.ac.be/dspace/bitstream/2013/356655/3/Deruyver2023.pdf>
15. Calmet, H., Oks, D., Santiago, A., Houzeaux, G., Corfec, A. L., Deruyver, L., Rigaut, C., **Lambert, P.**, Haut, B., & Goole, J. (2022). Validation and Sensitivity analysis for a nasal spray deposition computational model. *International journal of pharmaceutics*, 626, 122118. doi:10.1016/j.ijpharm.2022.122118  
<https://dipot.ulb.ac.be/dspace/bitstream/2013/349192/3/Calmet2022.pdf>  
[https://dipot.ulb.ac.be/dspace/bitstream/2013/349192/4/Validation\\_of\\_in\\_silico\\_in\\_vitro-1.pdf](https://dipot.ulb.ac.be/dspace/bitstream/2013/349192/4/Validation_of_in_silico_in_vitro-1.pdf)
16. Collard, Y., Piñan Basualdo, F., Bolopion, A., Gauthier, M., **Lambert, P.**, & Vandewalle, N. (2022). Controlled transitions between metastable states of 2D magnetocapillary crystals. *Scientific Reports*, 12(1). doi:10.1038/s41598-022-20035-8  
[https://dipot.ulb.ac.be/dspace/bitstream/2013/350201/3/Collard\\_et\\_al-2022-Scientific\\_Reports.pdf](https://dipot.ulb.ac.be/dspace/bitstream/2013/350201/3/Collard_et_al-2022-Scientific_Reports.pdf)
17. Chafaï, A., Ibrahimi, A., & **Lambert, P.** (2022). A Volume-Tuning Capillary Gripper That Enhances Handling Capabilities and Enables Testing of Micro-Components. *Micromachines*, 13(8). doi:10.3390/mi13081323  
<https://dipot.ulb.ac.be/dspace/bitstream/2013/348146/3/micromachines-13-01323.pdf>
18. Rigaut, C., Deruyver, L., Goole, J., Haut, B., & **Lambert, P.** (2022). Instillation of a Dry Powder in Nasal Casts: Parameters Influencing the Olfactory Deposition With Uni- and Bi-Directional Devices. *Frontiers in Medical Technology*, 4. doi:10.3389/fmedt.2022.924501  
<https://dipot.ulb.ac.be/dspace/bitstream/2013/344890/3/Rigaut2022.pdf>
19. Tunon de Lara, M., Chah, K., Amez-Droz, L., **Lambert, P.**, Collette, C., & Caucheteur, C. (2022). Production of an Optical Waveguide in Planar Glass Substrate Fabricated with Femtoprint. *Proceedings of SPIE - The International Society for Optical Engineering*, 12142, 121421K. doi:10.1117/12.2625304  
[https://dipot.ulb.ac.be/dspace/bitstream/2013/361043/3/delara2022\\_SPIE.pdf](https://dipot.ulb.ac.be/dspace/bitstream/2013/361043/3/delara2022_SPIE.pdf)
20. Piñan Basualdo, F., Gardi, G., Wang, W., Demir, S., Bolopion, A., Gauthier, M., **Lambert, P.**, & Sitti, M. (2022). Control and Transport of Passive Particles Using Self-Organized Spinning Micro-Disks. *IEEE Robotics and Automation Letters*.  
[https://dipot.ulb.ac.be/dspace/bitstream/2013/337612/3/pinan2022LRA3143306\\_postprint.pdf](https://dipot.ulb.ac.be/dspace/bitstream/2013/337612/3/pinan2022LRA3143306_postprint.pdf)
21. Decroly, G., **Lambert, P.**, & Delchambre, A. (2021). A Soft Pneumatic Two-Degree-of-Freedom Actuator for Endoscopy. *Frontiers in robotics and AI*, 8. doi:10.3389/frobt.2021.768236

- [https://dipot.ulb.ac.be/dspace/bitstream/2013/333928/1/doi\\_317572.pdf](https://dipot.ulb.ac.be/dspace/bitstream/2013/333928/1/doi_317572.pdf)
22. Piñan Basualdo, F., Terrazas Mallea, R., Scheid, B., Bolopion, A., Gauthier, M., & **Lambert, P.** (2021). Effect of insoluble surfactants on a thermocapillary flow. *Physics of fluids*, 33(7), 072106. doi:10.1063/5.0055373  
[https://dipot.ulb.ac.be/dspace/bitstream/2013/327876/3/2021\\_POF\\_33\\_072106.pdf](https://dipot.ulb.ac.be/dspace/bitstream/2013/327876/3/2021_POF_33_072106.pdf)
  23. Kravtcova, A., Toncheva, A., Rantataro, S., Peltola, E., Raquez, J.-M., **Lambert, P.**, & Zhou, Q. (2021). Shape Memory Polymer-Based Insertable Electrode Array towards Minimally Invasive Subdural Implantation. *IEEE sensors journal*, 1-1. doi:10.1109/JSEN.2021.3078358  
[https://dipot.ulb.ac.be/dspace/bitstream/2013/326567/1/doi\\_310211.pdf](https://dipot.ulb.ac.be/dspace/bitstream/2013/326567/1/doi_310211.pdf)  
<https://dipot.ulb.ac.be/dspace/bitstream/2013/326567/5/Kratcova2021.pdf>
  24. Deruyver, L., Rigaut, C., **Lambert, P.**, Haut, B., & Goole, J. (2021). The importance of pre-formulation studies and of 3D-printed nasal casts in the success of a pharmaceutical product intended for nose-to-brain delivery. *Advanced drug delivery reviews*, 113826. doi:10.1016/j.addr.2021.113826  
[https://dipot.ulb.ac.be/dspace/bitstream/2013/325273/3/Review\\_preprint.pdf](https://dipot.ulb.ac.be/dspace/bitstream/2013/325273/3/Review_preprint.pdf)  
<https://dipot.ulb.ac.be/dspace/bitstream/2013/325273/4/Deruyver2021.pdf>
  25. Debelle, A., de Rooster, H., Bianchini, E., Lonys, L., Huberland, F., Vanhoestenbergh, A., **Lambert, P.**, Acuna Otarola, V., Smets, H., Giannotta, F., Delchambre, A., Sandersen, C., Bolen, G., Egyptien, S., Deleuze, S., Devière, J., & Nonclercq, A. (2021). Optimization and assessment of a novel gastric electrode anchoring system designed to be implanted by minimally invasive surgery. *Medical engineering & physics*, 92, 93-101. doi:10.1016/j.medengphy.2021.05.004  
<https://dipot.ulb.ac.be/dspace/bitstream/2013/324276/3/1-s2.0-S1350453321000473-main.pdf>
  26. Decroly, G., Raffoul, R., Deslypere, C., Leroy, P., Van Hove, L., Delchambre, A., & **Lambert, P.** (2021). Optimization of Phase-Change Material–Elastomer Composite and Integration in Kirigami-Inspired Voxel-Based Actuators. *Frontiers in robotics and AI*, 8. doi:10.3389/frobt.2021.672934  
[https://dipot.ulb.ac.be/dspace/bitstream/2013/323321/1/doi\\_306965.pdf](https://dipot.ulb.ac.be/dspace/bitstream/2013/323321/1/doi_306965.pdf)
  27. Piñan Basualdo, F., Bolopion, A., Gauthier, M., & **Lambert, P.** (2021). A microrobotic platform actuated by thermocapillary flows for manipulation at the air-water interface. *Science Robotics*, 6(52), eabd3557. doi:10.1126/scirobotics.abd3557  
[https://dipot.ulb.ac.be/dspace/bitstream/2013/327879/3/Franco\\_Science\\_Robotics.pdf](https://dipot.ulb.ac.be/dspace/bitstream/2013/327879/3/Franco_Science_Robotics.pdf)
  28. Chafaï, A., Vitry, Y., Dehaeck, S., Gallaire, F., Scheid, B., Colinet, P., & **Lambert, P.** (2021). Two-dimensional modelling of transient capillary driven damped micro-oscillations and self-alignment of objects in microassembly. *Journal of fluid mechanics*, 910, A6. doi:10.1017/jfm.2020.919  
[https://dipot.ulb.ac.be/dspace/bitstream/2013/319160/3/2021\\_JFM\\_910\\_A6.pdf](https://dipot.ulb.ac.be/dspace/bitstream/2013/319160/3/2021_JFM_910_A6.pdf)
  29. Decroly, G., Toncheva, A., Blanc, L., Raquez, J.-M., Lessinnes, T., Delchambre, A., & **Lambert, P.** (2020). Programmable Stimuli-Responsive Actuators for Complex Motions

- in Soft Robotics: Concept, Design and Challenges. *Actuators*, 9(4), 131. doi:10.3390/act9040131  
[https://dipot.ulb.ac.be/dspace/bitstream/2013/315510/1/doi\\_299154.pdf](https://dipot.ulb.ac.be/dspace/bitstream/2013/315510/1/doi_299154.pdf)
30. Blanc, L., Francois, B., Delchambre, A., & **Lambert, P.** (2020). Characterization and Modeling of Granular Jamming: Models for Mechanical Design. *Granular matter*, 23(6). doi:10.1007/s10035-020-01071-5  
[https://dipot.ulb.ac.be/dspace/bitstream/2013/319826/3/blanc2021\\_PostPrint-GranMatter-lblanc.pdf](https://dipot.ulb.ac.be/dspace/bitstream/2013/319826/3/blanc2021_PostPrint-GranMatter-lblanc.pdf)
  31. Lehmann, O., Rauch, J. Y., Vitry, Y., Pinsard, T., **Lambert, P.**, & Gauthier, M. (2020). Miniaturized robotics: The smallest camera operator bot pays tribute to David Bowie. *IEEE robotics & automation magazine*, 27(3), 10.1109/MRA.2020.2992277, 22-28. doi:10.1109/MRA.2020.2992277  
[https://dipot.ulb.ac.be/dspace/bitstream/2013/309035/3/Lehmann2020\\_manuscript.pdf](https://dipot.ulb.ac.be/dspace/bitstream/2013/309035/3/Lehmann2020_manuscript.pdf)
  32. Iazzolino, A., Tourtit, Y., Chafaï, A., Gilet, T., **Lambert, P.**, & Tadrist, L. (2020). Pick up and release of micro-objects: A motion-free method to change the conformity of a capillary contact. *Soft matter*, 16(3), 754-763. doi:10.1039/c9sm02093d  
[https://dipot.ulb.ac.be/dspace/bitstream/2013/303296/3/SoftMatter\\_Rev\\_20191117.pdf](https://dipot.ulb.ac.be/dspace/bitstream/2013/303296/3/SoftMatter_Rev_20191117.pdf)
  33. Wang, J.-P., Francois, B., & **Lambert, P.** (2020). From Basic Particle Gradation Parameters to Water Retention Curves and Tensile Strength of Unsaturated Granular Soils. *International journal of geomechanics*, 26(6), 05020003. doi:10.1061/(ASCE)GM.1943-5622.0001677  
[https://dipot.ulb.ac.be/dspace/bitstream/2013/308567/3/38\\_Wang\\_et\\_al\\_ASCE\\_GM.pdf](https://dipot.ulb.ac.be/dspace/bitstream/2013/308567/3/38_Wang_et_al_ASCE_GM.pdf)
  34. Forbes, B., Bommer, R., Goole, J., Hellfritsch, M., De Kruijf, W., **Lambert, P.**, Caivano, G., Regard, A., Schiaretta, F., Trenkel, M., Vecellio, L., Williams, G., Sonvico, F., & Scherließ, R. (2020). A consensus research agenda for optimising nasal drug delivery. *Expert opinion on drug delivery*, 17(2), 127-132. doi:10.1080/17425247.2020.1714589  
<https://dipot.ulb.ac.be/dspace/bitstream/2013/335290/3/Forbes-EPDD2020-Proofs.pdf>
  35. Decroly, G., Mertens, B., **Lambert, P.**, & Delchambre, A. (2019). Design, characterization and optimization of a soft fluidic actuator for minimally invasive surgery. *International Journal of Computer Assisted Radiology and Surgery*. doi:10.1007/s11548-019-02081-2  
[https://dipot.ulb.ac.be/dspace/bitstream/2013/294914/3/Decroly2019\\_Article\\_DesignCharacterizationAndOptim.pdf](https://dipot.ulb.ac.be/dspace/bitstream/2013/294914/3/Decroly2019_Article_DesignCharacterizationAndOptim.pdf)  
<https://dipot.ulb.ac.be/dspace/bitstream/2013/294914/4/main.pdf>
  36. Taniguchi, T., Blanc, L., Asahi, T., Koshima, H., & **Lambert, P.** (2019). Statistical Modeling of Photo-Bending Actuation of Hybrid Silicones Mixed with Azobenzene Powder. *Actuators*, 8(68).  
<https://dipot.ulb.ac.be/dspace/bitstream/2013/295408/3/actuators-08-00068-v2.pdf>
  37. Taniguchi, T., Blanc, L., Asahi, T., Koshimizu, H., & **Lambert, P.** (2019). Statistical Modeling of Photo-Bending Actuation of Hybrid Silicones Mixed with Azobenzene Powder. *Actuators*, 8(68).  
<https://dipot.ulb.ac.be/dspace/bitstream/2013/295400/3/actuators-08-00068-v2.pdf>

38. Fuentes, C., Hatipogullari, M., Van Hoof, S., Vitry, Y., Dehaeck, S., Du Bois, V., **Lambert, P.**, Colinet, P., Seveno, D., & Van Vuure, A. (2019). Contact line stick-slip motion and meniscus evolution on micrometer-size wavy fibres. *Journal of colloid and interface science*, 540, 544-553. doi:10.1016/j.jcis.2019.01.045  
[https://dipot.ulb.ac.be/dspace/bitstream/2013/283562/3/Elsevier\\_267189.pdf](https://dipot.ulb.ac.be/dspace/bitstream/2013/283562/3/Elsevier_267189.pdf)  
<https://dipot.ulb.ac.be/dspace/bitstream/2013/283562/5/1-s2.0-S0021979719300578-main.pdf>
39. Tourtit, Y., Gilet, T., & **Lambert, P.** (2019). Rupture of a Liquid Bridge between a Cone and a Plane. *Langmuir*, 35(37), 11979-11985. doi:10.1021/acs.langmuir.9b01295  
<https://dipot.ulb.ac.be/dspace/bitstream/2013/297057/3/TOURTIT2019.pdf>
40. **Lambert, P.**, & Mastrangeli, M. (2019). Microscale surface tension and its applications. *Micromachines*, 10(8), 526. doi:10.3390/mi10080526  
[https://dipot.ulb.ac.be/dspace/bitstream/2013/292735/1/doi\\_276362.pdf](https://dipot.ulb.ac.be/dspace/bitstream/2013/292735/1/doi_276362.pdf)
41. Innocenti, B., Larrieu, J.-C., **Lambert, P.**, & Pianigiani, S. (2019). Automatic Characterization of soft tissue material properties during mechanical tests. *Muscles, Ligaments and Tendons Journal*, 7(4), 538.  
<https://dipot.ulb.ac.be/dspace/bitstream/2013/288550/4/Innocenti2017.pdf>  
<https://dipot.ulb.ac.be/dspace/bitstream/2013/288550/3/Innocenti2017.pdf>  
[https://dipot.ulb.ac.be/dspace/bitstream/2013/288550/5/Innocenti2017\\_postprint.pdf](https://dipot.ulb.ac.be/dspace/bitstream/2013/288550/5/Innocenti2017_postprint.pdf)
42. Dehaeck, S., Cavaiani, M., Chafaï, A., Tourtit, Y., Vitry, Y., & **Lambert, P.** (2019). Hybrid Two-Scale Fabrication of Sub-Millimetric Capillary Grippers. *Micromachines*, 10, 224. doi:10.3390/mi10040224  
[https://dipot.ulb.ac.be/dspace/bitstream/2013/288547/3/doi\\_272174.pdf](https://dipot.ulb.ac.be/dspace/bitstream/2013/288547/3/doi_272174.pdf)
43. Blanc, L., Pol, A., Bertrand, F., Delchambre, A., **Lambert, P.**, & Gabrieli, F. (2019). Granular Jamming as Controllable Stiffness Mechanism for Medical Devices. *Trends in mathematics*.  
[https://dipot.ulb.ac.be/dspace/bitstream/2013/288549/3/blanc2018\\_MicroToMacro\\_ULB\\_Padova\\_Paper\\_postprint.pdf](https://dipot.ulb.ac.be/dspace/bitstream/2013/288549/3/blanc2018_MicroToMacro_ULB_Padova_Paper_postprint.pdf)
44. Terrazas Mallea, R., De Maeijer, A., Bolopion, A., Gauthier, M., Kinnaert, M., & **Lambert, P.** (2019). Thermocapillary micromanipulation: force characterization and Cheerios interactions. *Journal of micro-bio robotics*, 15(1), 13-22. doi:10.1007/s12213-019-00117-z  
[https://dipot.ulb.ac.be/dspace/bitstream/2013/320543/3/terrazas2019\\_postprint.pdf](https://dipot.ulb.ac.be/dspace/bitstream/2013/320543/3/terrazas2019_postprint.pdf)
45. Wang, J.-P., Andò, E. C. G., Charrier, P., Salager, S., **Lambert, P.**, & Francois, B. (2019). Micro-scale investigation of unsaturated sand in mini-triaxial shearing using X-ray CT. *Géotechnique letters*, 9(4), 269-277. doi:10.1680/jgele.18.00214  
[https://dipot.ulb.ac.be/dspace/bitstream/2013/308569/3/37\\_Wang\\_et\\_al\\_2019\\_Geotechnics\\_Letters.pdf](https://dipot.ulb.ac.be/dspace/bitstream/2013/308569/3/37_Wang_et_al_2019_Geotechnics_Letters.pdf)
46. Gilet, T., Gernay, S., Aquilante, L., Mastrangeli, M., & **Lambert, P.** (2019). Adhesive elastocapillary force on a cantilever beam. *Soft matter*, 15(19), 3999-4007. doi:10.1039/c9sm00217k  
<https://dipot.ulb.ac.be/dspace/bitstream/2013/320287/3/Gilet2019preprint.pdf>

47. Loyez, M., Larrieu, J.-C., Chevineau, S., Rimmelink, M., Leduc, D., Bondue, B., **Lambert, P.**, Devière, J., Wattiez, R., & Caucheteur, C. (2019). In situ cancer diagnosis through online plasmonics. *Biosensors & bioelectronics*, 131, 104-112. doi:10.1016/j.bios.2019.01.062  
[https://dipot.ulb.ac.be/dspace/bitstream/2013/286995/1/Elsevier\\_270622.pdf](https://dipot.ulb.ac.be/dspace/bitstream/2013/286995/1/Elsevier_270622.pdf)  
[https://dipot.ulb.ac.be/dspace/bitstream/2013/286995/5/loyez2019\\_postprint.pdf](https://dipot.ulb.ac.be/dspace/bitstream/2013/286995/5/loyez2019_postprint.pdf)
48. Wang, J.-P., **Lambert, P.**, De Kock, T., Cnudde, V., & Francois, B. (2019). Investigation of the effect of specific interfacial area on strength of unsaturated granular materials by X-ray tomography. *Acta Geotechnica*. doi:10.1007/s11440-019-00765-2  
[https://dipot.ulb.ac.be/dspace/bitstream/2013/284901/3/Wang2019\\_Investigation\\_PREPRINT.pdf](https://dipot.ulb.ac.be/dspace/bitstream/2013/284901/3/Wang2019_Investigation_PREPRINT.pdf)
49. Gilet, T., Heepe, L., **Lambert, P.**, Compère, P., & Gorb, S. S. (2018). Liquid secretion and setal compliance: the beetle's winning combination for a robust and reversible adhesion. *Current opinion in insect science (Online)*, 30, 19-25. doi:10.1016/j.cois.2018.08.002  
[https://dipot.ulb.ac.be/dspace/bitstream/2013/281542/5/gilet2018\\_postprint.pdf](https://dipot.ulb.ac.be/dspace/bitstream/2013/281542/5/gilet2018_postprint.pdf)  
[https://dipot.ulb.ac.be/dspace/bitstream/2013/281542/1/Elsevier\\_265169.pdf](https://dipot.ulb.ac.be/dspace/bitstream/2013/281542/1/Elsevier_265169.pdf)
50. Toncheva, A., Khelifa, F., Paint, Y., Voué, M., **Lambert, P.**, Dubois, P., & Raquez, J.-M. (2018). Fast IR-Actuated Shape-Memory Polymers Using in Situ Silver Nanoparticle-Grafted Cellulose Nanocrystals. *ACS Applied Materials & Interfaces*, 10(35), 29933-29942. doi:10.1021/acami.8b10159
51. Terrazas Mallea, R., Piron, D., Bolopion, A., **Lambert, P.**, & Gauthier, M. (2018). Thermocapillary convective flows generated by laser points or patterns: Comparison for the noncontact micromanipulation of particles at the interface. *IEEE Transactions on Robotics and Automation*, 3(4), 3255-3262.
52. Terrazas Mallea, R., Bolopion, A., Beugnot, J.-C., **Lambert, P.**, & Gauthier, M. (2018). Closed-loop particle motion control using laser-induced thermocapillary convective flows at the fluid/gas interface at micrometric scale. *IEEE/ASME transactions on mechatronics*. doi:10.1109/TMECH.2018.2843887  
[https://dipot.ulb.ac.be/dspace/bitstream/2013/271743/3/terrazas2018\\_TMECH2843887\\_WithChanges.pdf](https://dipot.ulb.ac.be/dspace/bitstream/2013/271743/3/terrazas2018_TMECH2843887_WithChanges.pdf)
53. Dehaeck, S., **Lambert, P.**, & Scheid, B. (2018). Adaptive Stitching for Meso-Scale Printing with Two-Photon Lithography. *Additive Manufacturing*, 21, 589-597. doi:10.1016/j.addma.2018.03.026  
[https://dipot.ulb.ac.be/dspace/bitstream/2013/270256/4/Elsevier\\_253883.pdf](https://dipot.ulb.ac.be/dspace/bitstream/2013/270256/4/Elsevier_253883.pdf)  
[https://dipot.ulb.ac.be/dspace/bitstream/2013/270256/3/2018\\_AM\\_21\\_589.pdf](https://dipot.ulb.ac.be/dspace/bitstream/2013/270256/3/2018_AM_21_589.pdf)
54. Terrazas Mallea, R., Bolopion, A., Beugnot, J.-C., **Lambert, P.**, & Gauthier, M. (2017). 1D manipulation of a micrometer size particle actuated via thermocapillary convective flows. *Proceedings of the ... IEEE/RSJ International Conference on Intelligent Robots and Systems*, 2017-September, 8202187, 408-413. doi:10.1109/IROS.2017.8202187
55. Compère, P., **Lambert, P.**, Gernay, S., Labousse, S., & Gilet, T. (2017). Multiscale tarsal adhesion kinematics of freely-walking dock beetles. *Journal of the Royal Society interface*.


56. Gernay, S. M., Labousse, S., **Lambert, P.**, Compère, P., & Gilet, T. (2017). Multi-scale tarsal adhesion kinematics of freely-walking dock beetles. *Journal of the Royal Society interface*, 14(136), 20170493. doi:10.1098/rsif.2017.0493
57. Toncheva, A., Willocq, B., Khelifat, F., Douhéret, O., **Lambert, P.**, Dubois, P., & Raquez, J.-M. (2017). 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
58. Innocenti, B., Larrieu, J.-C., **Lambert, P.**, & Pianigiani, S. (2017). Automatic characterization of soft tissues material properties during mechanical tests. *Muscles, Ligaments and Tendons Journal*, 7(4), 529-537.
59. Wang, J.-P., Francois, B., & **Lambert, P.** (2017). Equations for hydraulic conductivity estimation from particle size distribution: A dimensional analysis. *Water resources research*, 53(9), 8127-8134. doi:10.1002/2017WR020888  
[https://dipot.ulb.ac.be/dspace/bitstream/2013/258409/3/Wang\\_et\\_al-2017-Water\\_Resources\\_Research.pdf](https://dipot.ulb.ac.be/dspace/bitstream/2013/258409/3/Wang_et_al-2017-Water_Resources_Research.pdf)
60. Wang, J.-P., Hu, N., Francois, B., & **Lambert, P.** (2017). 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](https://dipot.ulb.ac.be/dspace/bitstream/2013/253734/3/WRR_paper.pdf)
61. Blanc, L., Delchambre, A., & **Lambert, P.** (2017). 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>  
[https://dipot.ulb.ac.be/dspace/bitstream/2013/254519/4/doi\\_238146.pdf](https://dipot.ulb.ac.be/dspace/bitstream/2013/254519/4/doi_238146.pdf)
62. Terrazas Mallea, R., Bolopion, A., Beugnot, J.-C., **Lambert, P.**, & Gauthier, M. (2017). 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
63. Munoz, E., Quispe, J., **Lambert, P.**, Bolopion, A., Terrazas Mallea, R., Régnier, S., & Vela, E. (2017). 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
64. Fernandez Toledano, J. C., Blake, T., **Lambert, P.**, & De Coninck, J. (2017). 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](https://dipot.ulb.ac.be/dspace/bitstream/2013/248328/3/Elsevier_231955.pdf)
65. Ribaut, C., Loyez, M., Larrieu, J.-C., Chevineau, S., **Lambert, P.**, Rimmelink, 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  
[https://dipot.ulb.ac.be/dspace/bitstream/2013/249214/3/Elsevier\\_232841.pdf](https://dipot.ulb.ac.be/dspace/bitstream/2013/249214/3/Elsevier_232841.pdf)

66. 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>
67. Hellegouarch, S., Fueyo Roza, L., Artoos, K., **Lambert, P.**, & Collette, C. (2016). Linear encoder based low frequency inertial sensor. *International Journal of Optomechatronics*, 10(3-4), 120-129. doi:10.1080/15599612.2016.1217109
68. Gernay, S., Federle, W., **Lambert, P.**, & Gilet, T. (2016). 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>
69. 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](https://dipot.ulb.ac.be/dspace/bitstream/2013/238381/4/Elsevier_222008.pdf)  
<https://dipot.ulb.ac.be/dspace/bitstream/2013/238381/3/j.powtec.2016.09.060>
70. Matsuoka, H., Kanda, T., Wakimoto, S., Suzumori, 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.
71. Collette, C., **Lambert, P.**, Hellegouarch, S., Fueyo Roza, L., & Artoos, K. (2015). Linear encoder based low frequency inertial sensor. *MATEC Web of Conferences*, 32, 06001. doi:10.1051/mateconf/20153206001  
[https://dipot.ulb.ac.be/dspace/bitstream/2013/237573/3/doi\\_221200.pdf](https://dipot.ulb.ac.be/dspace/bitstream/2013/237573/3/doi_221200.pdf)
72. Arutinov, G., Mastrangeli, M., Van Heck, G., **Lambert, P.**, Den Toonder, J. M. 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](https://dipot.ulb.ac.be/dspace/bitstream/2013/200946/3/Arutinov_T-RO2015.pdf)
73. 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>
74. 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>
75. 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>
76. Mertens, B., De Leener, B., Debeir, O., Beumier, C. M., **Lambert, P.**, & Delchambre, A. (2013). 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>
77. Casier, R., Lenders, C., Sausse, M., Gauthier, M., & **Lambert, P.** (2013). 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/2013/143994/4/doi\\_127688.pdf](https://dipot.ulb.ac.be/dspace/bitstream/2013/143994/4/doi_127688.pdf)  
 <https://dipot.ulb.ac.be/dspace/bitstream/2013/143994/1/casier2013.pdf>
  78. 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](https://dipot.ulb.ac.be/dspace/bitstream/2013/169421/1/Elsevier_153051.pdf)
  79. 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>
  80. 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
  81. 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
  82. 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
  83. 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>
  84. 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  
 [https://dipot.ulb.ac.be/dspace/bitstream/2013/120743/3/doi\\_101690.pdf](https://dipot.ulb.ac.be/dspace/bitstream/2013/120743/3/doi_101690.pdf)
  85. 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](https://dipot.ulb.ac.be/dspace/bitstream/2013/120305/1/Elsevier_101232.pdf)

86. 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
87. 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
88. Sausse, M., & **Lambert, P.** (2011). Compact polymer multi-nozzles electro spray 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](https://dipot.ulb.ac.be/dspace/bitstream/2013/120323/1/Elsevier_101258.pdf)
89. 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
90. 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
91. 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>
92. 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:10.1016/j.cirpj.2010.09.002  
[https://dipot.ulb.ac.be/dspace/bitstream/2013/65485/1/Elsevier\\_42281.pdf](https://dipot.ulb.ac.be/dspace/bitstream/2013/65485/1/Elsevier_42281.pdf)
93. Chau, A., Régnier, S., 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
94. **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. doi:10.1007/s10404-010-0595-2  
<https://dipot.ulb.ac.be/dspace/bitstream/2013/152603/1/LambertMufNaf2010.pdf>
95. Sausse, M., Berke, P., Massart, T. J., Régnier, S., & **Lambert, P.** (2009). 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. doi:10.1163/156856109X434026  
[https://dipot.ulb.ac.be/dspace/bitstream/2013/145158/3/PBerke\\_JAST\\_revised\\_version.pdf](https://dipot.ulb.ac.be/dspace/bitstream/2013/145158/3/PBerke_JAST_revised_version.pdf)
96. Tam, E., Sausse, M., **Lambert, P.**, Delchambre, A., & Delplancke, M.-P. (2009). 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](https://dipot.ulb.ac.be/dspace/bitstream/2013/68239/1/Elsevier_45329.pdf)
97. De Greef, A., **Lambert, P.**, & Delchambre, A. (2009). Towards flexible medical instruments: Review of flexible fluidic actuators. *Precision engineering*, 33, 311-321.
  98. 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](https://dipot.ulb.ac.be/dspace/bitstream/2013/65496/1/Elsevier_42296.pdf)
  99. 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  
[https://dipot.ulb.ac.be/dspace/bitstream/2013/182575/3/doi\\_166202.pdf](https://dipot.ulb.ac.be/dspace/bitstream/2013/182575/3/doi_166202.pdf)
  100. **Lambert, P.**, Chau, A., & Delchambre, A. (2008). Comparison between Two Capillary Forces Models. *Langmuir*, 24(7), 3157-3163.
  101. Chau, A., Rignier, S., Delchambre, A., & **Lambert, P.** (2007). 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
  102. Chau, A., **Lambert, P.**, Delchambre, A., & Régnier, S. (2007). A general 3D model for capillary nanobridges and capillary forces. *Modelling and simulation in materials science and engineering*, 15, 305-317.
  103. **Lambert, P.**, & Régnier, S. (2006). Surface and contact forces models within the framework of microassembly. *Journal of micromechatronics*, 3(2), 123-157. doi:10.1163/156856306777544970
  104. **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  
[https://dipot.ulb.ac.be/dspace/bitstream/2013/166228/3/doi\\_149858.pdf](https://dipot.ulb.ac.be/dspace/bitstream/2013/166228/3/doi_149858.pdf)
  105. **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.
  106. **Lambert, P.** (2006). Physics for Micromanipulation. *Journal of micromechatronics*, 3(2), 123-157.
  107. **Lambert, P.**, & Delchambre, A. (2005). Parameters ruling capillary forces at the submillimetric scale. *Langmuir*, 25, 9537-9543.
  108. **Lambert, P.**, & Delchambre, A. (2005). A Study of Capillary Forces as a gripping Principle. *Assembly automation*, 25(4), 275-283.

109. Vandaele, V., **Lambert, P.**, & Delchambre, A. (2005). Non contact handling in microassembly: acoustical levitation. *Precision engineering*, 29, 491-505.
110. **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](https://dipot.ulb.ac.be/dspace/bitstream/2013/65781/3/Elsevier_42304.pdf)

#### 4. Articles published in conference proceedings

1. Mertens, B., De Leener, B., Debeir, O., Beumier, C. M., **Lambert, P.**, Delchambre, A., et al. (2012). Robust Structured Light Pattern for Use with a Hologram in 3D Endoscopy. In *Proceedings of the 2012 International Symposium on Optomechatronic Technologies (ISOT'12)* IEEE.
2. Blanc, L., Francois, B., Delchambre, A., & **Lambert, P.** (2017). Granular Jamming as Controllable Stiffness Mechanism for Endoscopic and Catheter Applications. *23ème Congrès Français de Mécanique (28 Août - 1 Septembre 2017: Lille)*
3. Tunon De Lara Ramos, M., Amez-Droz, L., Chah, K., **Lambert, P.**, Collette, C., & Caucheteur, C. (2024). *Fabrication of Bragg Gratings in Flat Silica Substrates Using the Femtoprint Device and Use for Sensing*. SPIE Photonic Europe(Avril 2024: Strasbourg, France)  
 [https://dipot.ulb.ac.be/dspace/bitstream/2013/375275/3/Manuscript\\_TunonDeLara.pdf](https://dipot.ulb.ac.be/dspace/bitstream/2013/375275/3/Manuscript_TunonDeLara.pdf)
4. Tunon De Lara Ramos, M., Amez-Droz, L., Chah, K., **Lambert, P.**, Collette, C., & Caucheteur, C. (2023). *Characterisation of optical waveguides engraved in silica planar substrates with a femtosecond laser process*. IEEE Photonics Society Benelux Chapter(25 November 2023: Gand)  
 [https://dipot.ulb.ac.be/dspace/bitstream/2013/375274/3/Manuscript\\_2023\\_IEEE\\_Tunon\\_de\\_Lara\\_Mateo.pdf](https://dipot.ulb.ac.be/dspace/bitstream/2013/375274/3/Manuscript_2023_IEEE_Tunon_de_Lara_Mateo.pdf)
5. Tunon De Lara Ramos, M., Chah, K., Amez-Droz, L., **Lambert, P.**, Collette, C., & Caucheteur, C. (2023). *Femtosecond Laser Micro/Nano-Machining of Silica Glass Planar Substrates for the Production of Bragg Gratings*. European Workshop on Optical Fibre Sensors(May 26th 2023: Mons, Belgium)  
 [https://dipot.ulb.ac.be/dspace/bitstream/2013/359104/3/Mateo\\_Tunon\\_de\\_Lara\\_Manuscript\\_EWOFs.pdf](https://dipot.ulb.ac.be/dspace/bitstream/2013/359104/3/Mateo_Tunon_de_Lara_Manuscript_EWOFs.pdf)
6. Tunon De Lara Ramos, M., Chah, K., Amez-Droz, L., **Lambert, P.**, Collette, C., & Caucheteur, C. (2023). *Bragg grating manufacturing in planar silica substrates*. SPIE Optics + Optoelectronics 2023(24-27 april 2023: Prague Czech Republic)  
 [https://dipot.ulb.ac.be/dspace/bitstream/2013/359100/3/Manuscript\\_Mateo\\_Tunon\\_De\\_Lara\\_SPIE.pdf](https://dipot.ulb.ac.be/dspace/bitstream/2013/359100/3/Manuscript_Mateo_Tunon_De_Lara_SPIE.pdf)
7. Amorosi, A., Amez-Droz, L., Teloi, M., Lakkis, M. H., Ding, B., Watchi, J., Di Fronzo, C., Jamshidi, R., **Lambert, P.**, & Collette, C. (2022). *High resolution compact vertical inertial sensor for atomic quantum gravimeter hybridization*. ISMA-USD Noise and Vibration Engineering Conference 2022(2022: Leuven)


-  [https://dipot.ulb.ac.be/dspace/bitstream/2013/345522/3/AMOROSI\\_AMEZDROZ\\_ISMA\\_2022\\_Sensors.pdf](https://dipot.ulb.ac.be/dspace/bitstream/2013/345522/3/AMOROSI_AMEZDROZ_ISMA_2022_Sensors.pdf)
8. Dehaeck, S., Scheid, B., & **Lambert, P.** (2018). Zero-overlap stitching of microlens arrays with two-photon polymerisation. *Proceedings of SPIE - The International Society for Optical Engineering [ 0277-786X ]*. Vol. 10675 (p. 106750) (April 2018: Strassbourg).
  9. Wang, J.-P., Francois, B., & **Lambert, P.** (2017). 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](https://dipot.ulb.ac.be/dspace/bitstream/2013/256370/3/Jipeng_IACMAG_full.pdf)
  10. Terrazas Mallea, R., Beugnot, J.-C., **Lambert, P.**, Bolopion, A., & Gauthier, M. (2017). 1D manipulation of a micrometer size particle actuated via thermocapillary convective flows. *Proc. IEEE/RSJ International Conference on Intelligent Robots and Systems IROS'2017(24-28 September 2017: Vancouver)*
  11. 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). 3D-Printed Vision-Based Micro-Force Sensor Dedicated to In Situ SEM Measurements. *Proc. of IEEE International Conference on Advanced Intelligent Mechatronics AIM 2017(3-7 July 2017: Munich)*  
 <https://dipot.ulb.ac.be/dspace/bitstream/2013/253737/3/guelpa2017.pdf>
  12. Innocenti, B., Larrieu, J.-C., Pianigiani, S., **Lambert, P.**, Paolanti, M., Bernardini, M. M., Cenci, A., & Frontoni, E. (2016). 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* (August 29-31, 2016)  
 [https://dipot.ulb.ac.be/dspace/bitstream/2013/239232/3/MESA\\_2016.pdf](https://dipot.ulb.ac.be/dspace/bitstream/2013/239232/3/MESA_2016.pdf)
  13. Collette, C., **Lambert, P.**, Hellegouarch, S., Fueyo Roza, L., & Artoos, K. (2015). Linear encoder based low frequency inertial sensor. *Optomechatronics conference* (Neuchatel)
  14. 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. In *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>
  15. Mertens, B., De Leener, B., Debeir, O., Beumier, C. M., **Lambert, P.**, & Delchambre, A. (2012). Robust structured light pattern for use with a hologram in 3D endoscopy. *IEEE International Symposium on Optomechatronic Technologies (ISOT), 2012* (p. 6).
  16. Daunay, B., **Lambert, P.**, Jalabert, L., Collard, D., & Fujita, H. (2011). OPTIMIZATION OF LIQUID DIELECTROPHORESIS (L-DEP) BASED DEVICES TOWARDS CONDUCTIVE BIOLOGICAL LIQUIDS HANDLING. *Proc. of IEEE Transducers*
  17. Daunay, B., **Lambert, P.**, Collard, D., & Fujita, H. (2011). Etude par plans d'expériences de la génération de gouttelettes obtenues par diélectrophorèse liquide (LDEP). in *Proc. of Congrès Français de Mécanique* (p. Accepted for publication).

18. Xie, H., **Lambert, P.**, & Régnier, S. (2011). Modeling and Implementation of Robotic Nanoscale Grasping. *Proceedings of IEEE International Conference on Robotics and Automation Conference* (pp. 3634-3639) IEEE ICRA(May 2011: Shanghai). doi:10.1109/ICRA.2011.5979658
19. Lenders, C., Gauthier, M., & **Lambert, P.** (2011). Parallel Microrobot Actuated by Capillary Effects. *Proceedings of IEEE ICRA Conference* (pp. 6015-6020) IEEE ICRA(May 2011: Shanghai). doi:10.1109/ICRA.2011.5980290
20. 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* IEEE IROS 2009(October 2009: Saint-Louis (Missouri))
21. 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* European Aerosol Conference(2009: Karlsruhe)
22. 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) IEEE ISAM 2009 Conference(17-20 November 2009: Suwon, Korea).
23. 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) (17-20/11/2009: Suwon, Korea).
24. Sausse, M., Pierobon, M., & **Lambert, P.** (2009). Determination of EHD generated droplet size: review of models and experimental tools. *Of the European Aerosol Conference* (Karlsruhe)
25. Bastin, N., Chau, A., & **Lambert, P.** (2008). Effects of relative humidity on capillary forces. *Proceedings of IROS08* (23-25/09/2008: Nice)
26. 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*. (IFIP, 260). Springer.
27. 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*
28. 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* (2007)
29. 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* (2007: Bremen, Germany)

30. Chau, A., Régnier, S., Delchambre, A., & **Lambert, P.** (2007). Influence of geometrical parameters on capillary forces. *IEEE International Symposium on Assembly and Manufacturing* (2007)
31. **Lambert, P.**, Valsamis, J.-B., Seigneur, F., Koelemeijer, S., Delchambre, A., & Jacot, J. (2006). Surface tension gripping applied to mesoscopic case study. *Proc. of the 1st CIRP - International Seminar on Assembly Systems*
32. **Lambert, P.**, Sausse, M., Chau, A., Vandaele, V., Valsamis, J.-B., & Delchambre, A. (2006). Surface Forces Modelling: Application to Microassembly. *Proc. of IARP*
33. Sausse, M., **Lambert, P.**, Delchambre, A., & Régnier, S. (2006). Influence of surface topography in electrostatic forces simulations for microassembly. *5th International Workshop on Microfactories*
34. **Lambert, P.**, Seigneur, F., Koelemeijer, S., Jacot, J., & Delchambre, A. (2006). Use of surface tension in micromanipulation. *Proceedings of the 7th National Congress on Theoretical and Applied Mechanics* (Mons)
35. 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) (25-27/10/2006: Besançon).
36. 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) (25-27/10/2006: Besançon).
37. 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) (25-27/10/2006: Besançon).
38. **Lambert, P.**, Seigneur, F., Koelemeijer, S., & Jacot, J. (2006). Design of a Capillary Gripper for a Submillimetric Application. In *Precision Assembly Technologies for Mini and Micro Products: Proceedings of the IFIP TC5 WG5.5 Third International Precision Assembly Seminar* (pp. 3-10) Springer.
39. **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) (15-17/11/2006: Stuttgart).
40. Vitard, J., **Lambert, P.**, Chau, A., & Régnier, S. (2006). Capillary Forces Models for the Interaction Between a Cylinder and a Plane. *Actes (CD-ROM) du 5th International Workshop on Microfactories* (p. 4) (25-27/10/2006: Besançon).
41. Chau, A., **Lambert, P.**, & Delchambre, A. (2005). A general 3D model to compute capillary force. *Proc. Micromechanics Europe 2005* (pp. 156-159) (04-06/09/2005: Göteborg, Sweden).

42. 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* (xx/05/2005: Lausanne)
43. **Lambert, P.**, & Delchambre, A. (2004). Capillary Forces: Use an Modelling in MicroAssembly. *International Conference on Intelligent Manipulation and Grasping* (pp. 29-30) (01-02/07/2004: Genoa, Italy).
44. 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) (13-15/09/2004: Aachen, Allemagne).
45. **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) (12-13/02/2004: Bad Hofgastein, Austria).
46. **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) (10-11/07/2003: Besançon).
47. Vandaele, V., **Lambert, P.**, Delchambre, A., & Bouillard, P. (2003). Design and Implementation of a Flexible Guiding System in Translation. *MicroNano Integration* (pp. 293-295) Proc. Int. Forum on MicroNano Integration(03-04/12/2003: Potsdam, Germany).
48. 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) Proc. Int. Forum on MicroNano Integration(03-04/12/2003: Potsdam, Germany).
49. **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) (17-19/03/2003: Bad Hofgastein, Austria).
50. **Lambert, P.**, Lagrange, B., Valentini, A., De Lit, P., Marsico, C., & Delchambre, A. (2002). Design and performances of a piezoelectric stick-slip nanoactuator. In *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. Tunon De Lara Ramos, M., Chah, K., Amez-Droz, L., **Lambert, P.**, Collette, C., & Caucheteur, C. (2023). *Bragg grating manufacturing in planar silica substrates*. Paper session presented at SPIE Optics + optoelectronics (23rd april 2023 - 27th april 2023: Prague, Clarion Congress hotel Prague, Czech Republic).  
 [https://dipot.ulb.ac.be/dspace/bitstream/2013/359087/3/12572-36-Tunon\\_de\\_Lara.pptx](https://dipot.ulb.ac.be/dspace/bitstream/2013/359087/3/12572-36-Tunon_de_Lara.pptx)
2. Piñan Basualdo, F., Bolopion, A., Gauthier, M., & **Lambert, P.** (2022). *Laser-induced thermocapillary manipulation at the air-water interface*. Paper session presented at

International Conference on Manipulation, Automation and Robotics at Small Scales (MARSS).

[https://dipot.ulb.ac.be/dspace/bitstream/2013/351575/3/FPinan\\_MARSS\\_2022.pdf](https://dipot.ulb.ac.be/dspace/bitstream/2013/351575/3/FPinan_MARSS_2022.pdf)

3. Deruyver, L., Rigaut, C., Goole, J., Haut, B., & **Lambert, P.** (2022). *Optimisation of Nose-to-Brain Delivery for Patient with and without Septum Perforation*. Paper session presented at World Meeting on Pharmaceutics, Biopharmaceutics and Pharmaceutical Technology (13: 28 - 31 Mars 2022: Rotterdam).
4. Tunon De Lara Ramos, M., Chah, K., **Lambert, P.**, Amez-Droz, L., Collette, C., & Caucheteur, C. C. (2021). *Fabrication of an optical waveguide using the femtoprint process*. Paper session presented at IEEE : Photonics Benelux annual Symposium (26/11/2021: Mons, Belgique).  
[https://dipot.ulb.ac.be/dspace/bitstream/2013/351570/3/IEEE\\_Mons\\_2021\\_MTunon\\_de\\_Lara\\_Presentation.pdf](https://dipot.ulb.ac.be/dspace/bitstream/2013/351570/3/IEEE_Mons_2021_MTunon_de_Lara_Presentation.pdf)
5. Piñan Basualdo, F., **Lambert, P.**, Bolopion, A., & Gauthier, M. (2021). *Light-induced thermocapillary manipulation*. Paper session presented at International Symposium on Optomechatronic Technology (ISOT).  
[https://dipot.ulb.ac.be/dspace/bitstream/2013/351576/3/ISOT2021\\_Pinan.pdf](https://dipot.ulb.ac.be/dspace/bitstream/2013/351576/3/ISOT2021_Pinan.pdf)
6. Chafaï, A., & **Lambert, P.** (2021). *Capillary Handling in High Dynamics Micro-Assembly Lines*. Paper session presented at Workshop on Capillary Micromanipulation (1: March 2021).
7. 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).
8. 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).
9. Sausse, M., **Lambert, P.**, & Delchambre, A. (2005). *Modelling of electrostatic forces for microassembly*. Paper session presented at Première journée sur la modélisation et l'analyse dimensionnelle (mai 2005: Lausanne).
10. **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).
11. **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., **Lambert, P.**, & Gauthier, M. (2011). *Meniscus-Supported Compliant Table*.