


List of publications of Pierre Lambert

List fulfilling the [Guide for applicants 2019](#)'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.**, & Régnier, S. (2011, January). Microworld Modeling in Vacuum and Gaseous Environments In *Robotic Microassembly* (pp. 1-54). Piscataway: John Wiley and Sons. doi:10.1002/9780470634417.ch1
3. **Lambert, P.**, & Régnier, S. (2011, January). Microworld Modeling: Impact of Liquid and Roughness In *Robotic Microassembly* (pp. 55-105). Piscataway: John Wiley and Sons. doi:10.1002/9780470634417.ch2
4. 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
5. 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
6. 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
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.**, Chaillet, N., & Hafez, M. (s.d.). La microrobotique: applications à la micromanipulation In *Actionneurs pour la microrobotique*. Editions Hermès.
9. Régnier, S., Chaillet, N., & **Lambert, P.** (s.d.). La microrobotique: applications à la micromanipulation In *Micropréhension et stratégies de micromanipulation*. Editions Hermès.
10. Agnus, J., Chaillet, N., Hafez, M., Gauthier, M., **Lambert, P.**, & Régnier, S. (s.d.). La microrobotique: applications à la micromanipulation In *La physique du micromonde*.

3. Articles published in peer-review journals

1. 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
2. Gilet, T., Heepe, L., **Lambert, P.**, Compère, P., & Gorb, S. S. (2018, December). 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/2013/281542/1/Elsevier_265169.pdf
3. Toncheva, A., Khelifa, F., Paint, Y., Voué, M., **Lambert, P.**, Dubois, P., & Raquez, J.-M. (2018, September). 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/acsami.8b10159
4. Terrazas Mallea, R., Bolopion, A., Beugnot, J.-C., **Lambert, P.**, & Gauthier, M. (2018, June 13). Closed-loop particle motion control using laser-induced thermocapillary convective flows at the fluid/gas interface at micrometric scale *IEEE/ASME transactions on mechatronics*.
 https://dipot.ulb.ac.be/dspace/bitstream/2013/271743/3/terrazas2018_TMECH2843887_WithChanges.pdf
5. 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/2013/270256/3/2018_AM_21_589.pdf
 https://dipot.ulb.ac.be/dspace/bitstream/2013/270256/4/Elsevier_253883.pdf
6. Terrazas Mallea, R., Bolopion, A., Beugnot, J.-C., **Lambert, P.**, & Gauthier, M. (2017, December). 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


7. 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*.
8. 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
9. Gernay, S. M., Labousse, S., **Lambert, P.**, Compère, P., & Gilet, T. (2017, November). 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
10. Innocenti, B., Larrieu, J.-C., **Lambert, P.**, & Pianigiani, S. (2017, October). Automatic characterization of soft tissues material properties during mechanical tests *Muscles, Ligaments and Tendons Journal*, 7(4), 529-537.
11. 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*, 53(9), 8127-8134. doi:10.1002/2017WR020888
[ULB 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)
12. 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
[ULB 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)
13. 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
[ULB https://dipot.ulb.ac.be/dspace/bitstream/2013/254519/3/actuators-06-00023.pdf](https://dipot.ulb.ac.be/dspace/bitstream/2013/254519/3/actuators-06-00023.pdf)
14. 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
15. 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
16. 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
[ULB 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)
17. 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>
18. 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
 19. 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
 20. 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>
 21. 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.
 22. 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
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 23. 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/mateconf/20153206001
 24. 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>
 25. 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
 26. 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
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 27. 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

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28. 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>
 29. 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>
 30. 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
 31. 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>
 32. 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
 33. 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
 34. 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
 35. 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
 36. 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
 37. 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

38. 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
39. 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
40. Vandaele, V., Delchambre, A., & Lambert, P. (2011). Acoustic wave levitation: Handling of components *Journal of applied physics*, 109, 124901. doi:10.1063/1.3594245
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41. 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
42. 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
43. 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>
44. 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>
45. 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
46. 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
47. 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. doi:10.1163/156856109X434026
 https://dipot.ulb.ac.be/dspace/bitstream/2013/145158/3/PBerke_JAST_revised_version.pdf

48. 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
49. De Greef, A., **Lambert, P.**, & Delchambre, A. (2009). Towards flexible medical instruments: Review of flexible fluidic actuators *Precision engineering*, 33, 311-321.
50. 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
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51. 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
52. **Lambert, P.**, Chau, A., & Delchambre, A. (2008). Comparison between Two Capillary Forces Models *Langmuir*, 24(7), 3157-3163.
53. Chau, A., Rignier, 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
54. 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.
55. **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
56. **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.
57. **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
58. **Lambert, P.** (2006). Physics for Micromanipulation *Journal of micromechatronics*, 3(2), 123-157.
59. **Lambert, P.**, & Delchambre, A. (2005). A Study of Capillary Forces as a gripping Principle *Assembly automation*, 25(4), 275-283.
60. **Lambert, P.**, & Delchambre, A. (2005). Parameters ruling capillary forces at the submillimetric scale *Langmuir*, 25, 9537-9543.

61. Vandaele, V., **Lambert, P.**, & Delchambre, A. (2005). Non contact handling in microassembly: acoustical levitation *Precision engineering*, 29, 491-505.
62. **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
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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). 3D-Printed Vision-Based Micro-Force Sensor Dedicated to In Situ SEM Measurements Abstract session presented at AIM 2017(3-7 July 2017: Munich).
2. Wang, J.-P., Francois, B., & **Lambert, P.** (2017). From basic particle gradation parameters to water retention curves of unsaturated sandy soils Abstract session presented at .
 https://dipot.ulb.ac.be/dspace/bitstream/2013/256370/3/Jipeng_IACMAG_full.pdf
3. Mertens, B., De Leener, B., Debeir, O., Beumier, C. M., **Lambert, P.**, Delchambre, A., et al. (2012, October 29). Robust Structured Light Pattern for Use with a Hologram in 3D Endoscopy *Proceedings of the 2012 International Symposium on Optomechatronic Technologies (ISOT'12)*. IEEE.
4. Blanc, L., Francois, B., Delchambre, A., & **Lambert, P.** (2017). Granular Jamming as Controllable Stiffness Mechanism for Endoscopic and Catheter Applications Abstract session presented at (28 Août - 1 Septembre 2017: Lille).
5. Dehaeck, S., Scheid, B., & **Lambert, P.** (2018). Zero-overlap stitching of microlens arrays with two-photon polymerisation Abstract session presented at (April 2018: Strassbourg).
6. 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 Abstract session presented at IROS'2017(24-28 September 2017: Vancouver).
7. 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 Abstract session presented at (August 29-31, 2016).
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8. Collette, C., **Lambert, P.**, Hellegouarch, S., Fueyo Roza, L., & Artoos, K. (2015). Linear encoder based low frequency inertial sensor Abstract session presented at (Neuchatel).
9. 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.
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13. Xie, H., **Lambert, P.**, & Régnier, S. (2011). Modeling and Implementation of Robotic Nanoscale Grasping Abstract session presented at IEEE ICRA(May 2011: Shanghai). doi:10.1109/ICRA.2011.5979658
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15. De Greef, A., **Lambert, P.**, Delwiche, T., Lenders, C., & Delchambre, A. (2009). Flexible Fluidic Actuators: Determining Force and Position Without Force or Position Sensors Abstract session presented at (17-20/11/2009: Suwon, Korea).
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23. Chau, A., Régnier, S., Delchambre, A., & **Lambert, P.** (2007). Influence of geometrical parameters on capillary forces Abstract session presented at (2007).
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25. Sausse, M., Delchambre, A., Régnier, S., & **Lambert, P.** (2007). Displacement of an object placed in an electric field: application to micro-assembly Abstract session presented at (2007: Bremen, Germany).
26. **Lambert, P.**, Valsamis, J.-B., Seigneur, F., Koelemeijer, S., Delchambre, A., & Jacot, J. (2006, November). Surface tension gripping applied to mesoscopic case study Abstract session presented at .
27. **Lambert, P.**, Sausse, M., Chau, A., Vandaele, V., Valsamis, J.-B., & Delchambre, A. (2006, October). Surface Forces Modelling: Application to Microassembly Abstract session presented at .
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31. Valsamis, J.-B., Delchambre, A., & **Lambert, P.** (2006). An experimental study of prehension parameters during manipulation task Abstract session presented at (25-27/10/2006: Besançon).
32. Schmid, D., Koelemeijer, S., Jacot, J., & **Lambert, P.** (2006). Microchip assembly with capillary gripper Abstract session presented at (25-27/10/2006: Besançon).
33. Chau, A., Delchambre, A., & **Lambert, P.** (2006). Towards a general three dimensional model for capillary nanobridges and capillary forces Abstract session presented at (25-27/10/2006: Besançon).
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35. Vitard, J., **Lambert, P.**, Chau, A., & Régnier, S. (2006). Capillary Forces Models for the Interaction Between a Cylinder and a Plane Abstract session presented at (25-27/10/2006: Besançon).
36. Chau, A., **Lambert, P.**, & Delchambre, A. (2005). A general 3D model to compute capillary force Abstract session presented at (04-06/09/2005: Göteborg, Sweden).
37. Chau, A., **Lambert, P.**, & Delchambre, A. (2005). Modélisation de la condensation capillaire pour le micro-assemblage Abstract session presented at (xx/05/2005: Lausanne).
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39. **Lambert, P.**, Vandaele, V., & Delchambre, A. (2004). Non-Contact Handling in Micro-Assembly: State of the Art Abstract session presented at (12-13/02/2004: Bad Hofgastein, Austria).
40. Frennet, M., **Lambert, P.**, & Delchambre, A. (2004). Catching and Releasing of Small Parts Using Capillary Forces Abstract session presented at (13-15/09/2004: Aachen, Allemagne).
41. Chau, A., **Lambert, P.**, Bouillard, P., & Delchambre, A. (2003). Behaviour of Flexible Hinges for Use as Articulations in High Precision Mechanisms Abstract session presented at Proc. Int. Forum on MicroNano Integration(03-04/12/2003: Potsdam, Germany).
42. Vandaele, V., **Lambert, P.**, Delchambre, A., & Bouillard, P. (2003). Design and Implementation of a Flexible Guiding System in Translation Abstract session presented at Proc. Int. Forum on MicroNano Integration(03-04/12/2003: Potsdam, Germany).
43. **Lambert, P.**, & Delchambre, A. (2003). Forces acting on microparts: towards a numerical approach for gripper design and manipulation strategies in microassembly Abstract session presented at (17-19/03/2003: Bad Hofgastein, Austria).
44. **Lambert, P.**, Letier, P., & Delchambre, A. (2003). Capillary and Surface Tension in the Manipulation of Small Parts Abstract session presented at (10-11/07/2003: Besançon).
45. **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).

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2. Robert, F., Duchateau, V., Raman, V., Boey, C., & **Lambert, P.** (2007). *Détecer 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., **Lambert, P.**, & Gauthier, M. (2011, April 14). *Meniscus-Supported Compliant Table*.