

## Papers / Preprints / Awards : (1996~2022)

1. Y. Tanaka, R. Suzuki, K. Edamura, S. Yokota: Design and fabrication of micro gripper using functional fluid power, International Journal of Automation Technology, Vol. 16, No. 4, pp448-455 (2022)
2. Y. Kuroboshi, K. Takemura, K. Edamura: Understanding of electro-conjugate fluid flow with dibutyl decandioate using numerical simulation-Calculating ion mobility using molecular dynamics simulation, Sensors and Actuators B: Chemical, Vol255P1(2018), pp448-453 (in press • DOI information: 10.1016/j.snb.2017.08.007)
3. Yoshiki Iijima, Kenjiro Takemura, Kazuya Edamura: Droplet generating device for Droplet-based  $\mu$  TAS using electro-conjugate fluid, Smart Materials and Structures IOP Publishing 26/5 2017/04/06 10.1088/1361-665X/aa65c1
4. Dong HAN, Shinichi Yokota, Kazuya Edamura, Joon-wan KIM: Dynamic Characteristics of Hybrid 3D-printed Mini Finger Embedding ECF (Electro-conjugate Fluid) Micropump, 20th International Conference on Mechatronics Technology (ICMT2016) , p. 89-90, Oct. 2016.
5. S. Eom, H. Masuda, S. Yokota, K. Yoshida, K. Edamura : An ECF-jet driven mini hydraulic piston actuator, Sensors and Actuators A: Physical, Vol.247, PP164/171 (2016. 8)
6. Y. Iijima, K. Takemura, K. Edamura : Droplet Generating Device for Droplet-based  $\mu$  TAS using Electro-conjugate Fluid, The 15th International Conference on Electrorheological Fluids and Magnetorheological Suspensions (2016. 7)
7. Joon-Wan Kim, Thanh V. X. Nguyen, Kazuya Edamura, Shinichi Yokota : Triangular Prism and Slit Electrode Pair for ECF Jetting Fabricated by Thick Micromold and Electroforming as Micro Hydraulic Pressure Source for Soft Microrobots, International Journal of Automation Technology, Vol. 10, No. 4, p. 470-478, Jul. 2016.
8. K. Takemura, K. Kobayashi, K. Edamura : Biocompatibility of a droplet-mixing device using an electro-conjugate fluid, JSME Mechanical Engineering Journal, Vol. 3, No. 2, 2016. [DOI: 10.1299/mej.15-00421]

9. Sang In EOM, Hiroki Masuda, Shinichi Yokota, Kazuhiro Yoshida, Kazuya Edamura: An ECF-jet driven Mini hydraulic piston actuator, Sensors and Actuators A, Vol. 247, pp. 164-171, May. 2016.
10. Joon-wan Kim, Kazuyoshi Kondo, Shinichi Yokota, Kazuya Edamura: MEMS-Fabricated Needle & Ring Electrode Pair (NRE) and its Application to the Braille Cell, The 4th Japan-China Joint Workshop on Fluid Power, Proceedins of The 4th Japan-China Joint Workshop on Fluid Power, The Japan Fluid Power System Society(JFPS), pp. 71-73, May. 2016.
11. Kenjiro Takemura, Kiho Kobayashi, Kazuya Edamura: Biocompatibility of a droplet-mixing device using an electro-conjugate fluid, JSME Mechanical Engineering Journal, 3/ 2, No.15-00421, 2016/02
12. Yoshiki Iijima, Kyohei Hosoda, Kenjiro Takemura, Koji Fukagata, Kazuya Edamura : Numerical simulation of electro-conjugate fluid flow considering electric double layer, JSME Mechanical Engineering Journal, 2/ 6, No. 15-00341, 2015/11/13
13. J. Kim, S.Furuki, S.Yokota, K.Edamura: Study on increasing output power density in ECF micropumps, The KSFC 2015 Autumn Conference on Drive & Control in Buson (2015.10)

**BEST PAPER AWARD (KSFC2015, Buson)**

14. Y. Iijima, K. Hosoda, K. Takemura, K. Fukagata, K. Edamura : Numerical simulation of electro-conjugate fluid flow considering electric double layer, JSME Mechanical Engineering Journal, Vol. 2, No. 6, 2015. [DOI: 10.1299/mej.15-00341]
15. Y. Iijima, K. Hosoda, K. Takemura, S. Yokota, K. Edamura : Numerical Simulation of Electro-conjugation Fluid Flow Considering Electric Double Layer, The 6th International Conference on Manufacturing, Machine Design, and Tribology, 466-467, 2015.4
16. Y. Sakurai, T. Nakada, K. Edamura : Liquid Cooling System for CPU by Electro-Conjugate Fluid, Advances in Mechanical Engineering, Vol.2014, Article ID 1253D1, 7pages (2014)
17. Kiho Kobayashi, Kenjiro Takemura, Shinichi Yokota, Kazuya Edamura : Bioluminescence Verification for Droplets Mixing Device using Electro-conjugate Fluid, Proc. EMBS Micro and Nanotechnology in Medicine Conference, 96, 2014/12/08

18. K. Kobayashi, K. Takemura, S. Yokota, K. Edamura : Bioluminescence Verification for Droplets Mixing Device using Electro-Conjugate Fluid, Proc. EMBS Micro and Nanotechnology in Medicine Conference, 96 (2014.12)
19. Y. Sakurai, T. Nakada, K. Edamura : Proposal of New ECF-pump without Bonding Agent, Proc. of the 9th JFPS International Symposium on Fluid Power, 139/144 (2014.10)
20. K. Kondo, J. Kim, S. Yokota, K. Edamura : Miniaturization of braille cells by utilizing ECF micro-actuators, The 18th International Conference on Mechatronics Technology (ICMT2014) in Taipei (2014.10)

**Best Paper Award (ICMT2014, Taipei)**

21. Mika Naraki, Kenjiro Takemura, Shinichi Yokota, Kazuya Edamura : Effect of Electrode Materials on Electro-conjugate Fluid Flow Generation, Proc. The 9th International Symposium on Fluid Power, p p447-451, 2014/10
22. S. Ueno, K. Takemura, S. Yokota, K. Edamura : Micro Inchworm Robot using Electro-conjugate Fluid, the Journal of Sensors & Actuators A, Elsevier, Vol. 216, PP. 36/42, (2014/05/22)
23. J. Kim, M. Satoh, S. Yokota, K. Edamura : Micropump-Integrated Eccentric Tube Type Microactuator by Electro-Conjugate Fluid, Proc. ACTUATOR2014, (2014)
24. Shohei Ueno, Kenjiro Takemura, Shinichi Yokota, Kazuya Edamura : Micro Flexible Robot Hand using Electro-conjugate Fluid, Proc. SPIE, Micro/Nano Materials, Devices, and Systems, SPIE, 8923, 8923U-1, 2013/12
25. Kyohei Hosoda, Kenjiro Takemura, Koji Fukagata, Shinichi Yokota, Kazuya Edamura : Proc. SPIE, Micro/Nano Materials, Devices, and Systems, SPIE, 8923, 8923Z, 2013/12
26. Y. Sakurai, T. Nakada, K. Edamura, Development of Mesh Type ECF-pump, Proc. of The 12th International Symposium on Fluid Control, Measurement and Visualization, os5-02-2, 1/8 (2013.11)
27. S. Ueno, K. Takemura, S. Yokota, K. Edamura : An Inchworm Robot using Electro-conjugate Fluid, Proc. The 12th International Symposium on Fluid Control, Measurement and Visualization, OS5-02-3, 2013/11
28. K. Kobayashi, K. Takemura, S. Yokota, K. Edamura : Droplet  $\mu$ TAS using Electro-conjugate Fluid - feedback position control of multiple droplets in flow channel matrix -, the Journal of Sensors & Actuators A, Elsevier, Vol. 198, PP. 1/7, (2013/08/05)

29. S. Ueno, K. Takemura, S. Yokota, K. Edamura : An Inchworm Robot using Electro-conjugate Fluid, The 12th FLUCOME, Nara, OS5-02-3, (2013)
30. J. Kim, S. Yamashita, S. Yokota, K. Edamura : Flexible Microgripper by Integrating Balloon-type Microactuators with Built-in ECF Micropumps, The 12th FLUCOME, Nara, OS5-02-3, (2013)
31. H. Gu, J. Kim, S. Yokota, K. Edamura : Study on Output Characteristics of downsized ECF micropump, Proc ICMT2013, Cheju, Korea, (2013)
32. S. Eom, S. Yokota, J. Kim, k. Yoshida, K. Edamura: A silicone rubber bimorph actuator driven by bidirectional ECF jet generator, Proc ICMT2013, Cheju, Korea, (2013)
33. J. Kim, S. Yamashita, S. Yokota, K. Edamura: Micropump-Integrated Balloon Type Microactuators, Proc of ICMDT2013, B5-03, Busan, Korea, (2013)
34. J. Kim, Y. Yamada, S. Yokota, K. Edamura: High Performance ECF Micropump by the 3D Integration of MEMS fabricated electrodes, Proc, 8th ICFP2013, Hangzhou, China, (2013)
35. Kenichiro Tokida, Akihiro Yamaguchi, Kenjiro Takemura, Shinichi Yokota, Kazuya Edamura : A Bio-inspired Robot Using Electro-conjugate Fluid, Journal of Robotics and Mechatronics, 25/ 1, 16-24, 2013/02
36. Y. Abe, K. Takemura, K. Sato, S. Yokota, K. Edamura: Active Flow Channel Matrix using Electro-Conjugate Fluid, Proc. Workshop2012 of MNMC, Lahaina, Dec3-7, (2012)
37. Y. Abe, K. Takemura, S. Yokota, K. Edamura: Active Flow Channel Matrix using Electro-conjugate Fluid for  $\mu$  TAS application, JFPS International Journal of Fluid Power System, , Vol.5, No.1, PP.11/15, (2012)
38. Y. Yamada, J. Kim, S. Yokota, K. Edamura: ECF micropump by the 3D Integration of MEMS-fabricated Triangular Prism and Slit (TPS) Electrode Pairs, Proc. of ICMT2012, Tenjian, China, , pp.10-15, (2012)
39. J. Kim, Y. Miyagawa, S. Yokota, K. Edamura: Study on Closed Loop ECF Micro Devices for Cooling a Micro Chip, Proc. of ICMT2012, Tenjian, China, pp. 6-9, (2012)
40. S. Eom, S. Yokota, J. Kim, K. Edamura: New Design of an Electrode for ECF Jet Micro Cylinder, Proc. of ICMT2012, Tenjian, China, pp.16-19, (2012)
41. K. Tokida, A. Yamaguchi, K. Takemura, S. Yokota, K. Edamura, A Bio-inspired Robot Using Electro-conjugate Fluid, Journal of Robotics and Mechatronics, 2012. (in press)
42. K. Mori, A. Yamaguchi, K. Takemura, S. Yokota, K. Edamura: Control of a Novel

Flexible Finger using Electro-conjugate Fluid with Built-in Angle Sensor, the Journal of Sensors & Actuators: A. Physical, Vol.183, pp.75-83, (2012)

43. J. Kim, T. Yoshimoto, S. Yokota, K. Edamura: Proposition of a Focus-tunable ECF microlens by MEMS technology, the International Journal of Automation Technology (IJAT), Vol.6, issue.4, pp.476/481, (2012)
44. J. Kim, T. Suzuki, S. Yokota, K. Edamura: Tube-type micropump by using electro-conjugated fluid (ECF), the Journal of Sensors and Actuators, A, Vol.174, pp.155/161, (2012)
45. A. Yamaguchi, K. Takemura, S. Yokota, K. Edamura: A Robot Hand Using Electro-conjugate Fluid: Grasping experiment with balloon actuators inducing a palm motion of robot hand, the Journal of Sensors & Actuators: A. Physical, Vol.174, pp.181/188, (2012)
46. A. Yamaguchi, K. Takemura, S. Yokota, K. Edamura: A Robot Finger Using Electro-conjugate Fluid, the Journal of Advanced Robotics, Vol.26, pp.861/876, (2012)

#### **Best Student Paper Award (ICMT2011, Melbourne)**

47. A. Yamaguchi, K. Takemura, S. Yokota, K. Edamura: An In-pipe Mobile Robot Using Electro-Conjugate Fluid, Journal of Advanced Mechanical Design, Systems, and manufacturing, Vol.5, No.3, pp.214-226, (2011)
48. J. Kim, T. Nguyen, S. Yokota, K. Edamura: High Performance ECF (Electro-Conjugate Fluid) Micropump by the In-plane Integration of MEMS fabricated electrodes, Proc. 15th ICMT2011, pp.546-551, Paper#117, Melbourne, Australia, (2011)
49. H. Wang, J. Kim, Y. Saito, S. Yokota, K. Edamura: Parameter Optimization on Power Density of MEMS-based Micro Triangular-prism-slit Electrode Array as an ECF-jet Generator, Proc. 15th ICMT2011, pp.421-425, Paper#89, Melbourne, Australia, (2011)

#### **Best Conference Paper Finalist (FPM2011, Beijing)**

50. K. Tokida, A. Yamaguchi, K. Takemura, S. Yokota, K. Edamura: A Bio-inspired Robot Using Electro-conjugate Fluid, Proc. 15th ICMT2011, pp.85-90, Paper#22, Melbourne, Australia, (2011)

51. S. Eom, H. Masuda, S. Yokota, K. Yoshida, K. Edamura: Study about micro cylinder for bidirectional rolling diaphragm actuator using ECF jet, Proc. 15th ICMT2011, pp. 401-404, Paper#99, Melbourne, Australia, (2011)
52. A. Yashiki, K. Takemura, S. Yokota, K. Edamura: A Flexible Pump Using Electro-Conjugate Fluid for Liquid Cooling of Electronic Chips, pp. 174-179, Proc. 15th ICMT2011, Paper#41, Melbourne, Australia, (2011)
53. A. Yamaguchi, K. Takemura, S. Yokota, K. Edamura: A Robot Hand Using Electro-conjugate Fluid, the Journal of Sensors & Actuators: A, Vol. 170, pp. 139-146, (2011)
54. K. Mori, H. Yamamoto, K. Takemura, S. Yokota, K. Edamura: Dominant Factors Inducing Electro-conjugate Fluid Flow, the Journal of Sensors and Actuators, A, Vol. 167, pp. 84/90, (2011)
55. T. Nguyen, T. Imamura, J. Kim, S. Yokota, K. Edamura: MEMS-Based Liquid-Rate Gyroscope Using Electro-Conjugate Fluid, Proc. 20th MAGDA, 1B25, pp. 115-118, Kaohsiung, Taiwan, (2011)
56. K. Mori, H. Yamamoto, K. Takemura, S. Yokota, K. Edamura: The Control of Bellows Actuator using Electro-conjugate Fluid, Proc. 8th ISFP-JFPS, Okinawa, pp. 488/494, (2011)
57. J. Kim, S. Yokota, Kazuya Edamura: Needle-ring Electrode Pair as an ECF Jet Generator by Using MEMS Technology, Proc. 8th ISFP-JFPS, Okinawa, pp. 482/487, (2011)
58. H. Wang, J. Kim, S. Yokota, K. Edamura: Parameter Optimization of MEMS-based Micro Triangular-prism-slit Electrode Pair as an Electro-conjugate Fluid Jet Generator, Proc. 8th ISFP-JFPS, Okinawa, pp. 477/481, (2011)
59. A. Yamaguchi, K. Takemura, S. Yokota, K. Edamura: In-Pipe Mobile Robot Using Electro-conjugate Fluid, Proc. 8th ISFP-JFPS, Okinawa, pp. 456/463, (2011)
60. T. Imamura, T. Suzuki, J. Kim, S. Yokota, K. Edamura: Development of MEMS-based ECF Micro Rate Gyro, Proc. 8th ISFP-JFPS, Okinawa, pp. 464/470, (2011)
61. K. Mori, H. Yamamoto, K. Takemura, S. Yokota, K. Edamura: Dominant Factors Inducing Electro-conjugate Fluid Flow the Journal of Sensors and Actuators, A, Vol. 167, pp. 84/90, (2011)
62. J. Kim, S. Yokota, K. Edamura: ECF-jet Micro-generator with Multiple Needle-Hole Electrode Pairs, Proc. of ICMDT2011, pp. 235/236, (2011)
63. H. Wang, J. Kim, S. Yokota, K. Edamura; A flexible electro-conjugate fluid micropump with three-dimensional triangular-prism-slit electrode pair, Proc.

64. J. Kim, T. Yoshimoto, S. Yokota, K. Edamura: Focus-tunable ECF microlens by MEMS technology, Proc. of ICFPM2011, Beijing, pp.738/741, (2011)
65. J. Kim, S. Yokota, K. Edamura: ECF-jet Micro-generator with Multiple Needle-Hole Electrode Pairs, Proc. of ICMDT2011, pp.235/236, (2011)
66. M. Ishida, Y. Tanaka, S. Yokota, K. Edamura: Design and Fabrication of Electrodes for High-Powered Micro Pump Using Electro-Conjugate Fluid, Proc. of ICMDT2011, pp.69/70, (2011)
67. Masahiro Ishida, Yutaka Tanaka, Shinichi Yokota, Kazuya Edamura: Design and Fabrication of Electrodes for High-Powered Micro Pump Using Electro-Conjugate Fluid, Proceedings The 4th International Conference on Manufacturing, pp 69-70, 2011/04
68. A. Yamaguchi, K. Takemura, S. Yokota, K. Edamura: A Robot Hand using Electro-conjugate Fluid, Proc. ICRA, IEEE, pp.5923/5928, , (2011)
69. K. Tokida, K. Takemura, S. Yokota, K. Edamura: Robotic Earthworm using Electro-conjugate Fluid, the International Journal of Applied Electromagnetics and Mechanics, Vol. 33, No. 4, pp.1643/1651, (2010)
70. Y. Ogawa, S. Yokota, K. Edamura, K. Takemura: A dual-axis liquid rate micro gyroscope using Electro-Conjugate Fluid, Journal of Advanced Computational Intelligence and Intelligent Informatics, Vol. 14, No. 7, pp. 751/755, (2010)
71. Yutaka Tanaka, Masahiro Ishida, Shinichi Yokota, Kazuya Edamura: Miniaturized and High-Powered Micro Pump Using Electro-Conjugate Fluid, CD-ROM Proceeding of World Automation Congress 2010, TSI Press ISBN# 1-889335-42-8, 2010/09
72. H. Yamamoto, K. Mori, K. Takemura, L. Yeo, J. Friend, S. Yokota, K. Edamura: Numerical Modeling of Electro-Conjugate Fluid Flows, the Journal of Sensors and Actuators, A, Vol.161, pp.152/157, (2010)
73. S. Yokota, F. Yajima, K. Takemura, K. Edamura: ECF-jet driven Micro artificial antagonistic muscle actuators and its integration the Journal of Advanced Robotics, Vol. 24, No. 14, pp.1929/1934, (2010)
74. K. Yoshida, T. Soga, M. Kawachi, K. Edamura, S. Yokota: A Magneto-Rheological Valve-Integrated Cylinder and Its Application, the Journal of Systems and Control Engineering, Part I of the Proceedings of the IMechE, Vol. 224, No. 1, pp. 31/40, (2010)
75. T. Imamura, T. Suzuki, J. Kim, S. Yokota, K. Edamura: Miniaturization of ECF Micro Rate Gyro by using MEMS technology, 14th International Conference on Mechatronics Technology (Proc. Proc of 14th ICMT2010), Osaka, CD-RoM,

B-16, pp.303/308 (2010)

76. H. Wang, J. Kim, S. Yokota, K. Edamura: A high performance ECF-jet generator using improved three-dimensional electrode structures, 14th International Conference on Mechatronics Technology (Proc. Proc of 14th ICMT2010) [Best Paper Award], Osaka, CD-RoM, B-11, pp.142/146 (2010)

**Best Paper Award (ICMT2010, Osaka)**

77. Y. Tanaka, M. Ishida, S. Yokota, K. Edamura: Miniaturized and High-Powered Micro Pump Using Electro-Conjugate Fluid, 13th International Symposium on Robotics and Applications (Proc. ISORA 2010), Kobe, CD-RoM, (2010)
78. A. Yamaguchi, J-W Kim, T. V. X. Nguyen, S. Yokota, K. Edamura: MEMS-based tube-type micropump by using electro-conjugated fluid (ECF), 19th International Conference on Electrical Machines (Proc. ICEM2010), Rome, CD-RoM, (2010)
79. A. Yamaguchi, K. Takemura, S. Yokota, K. Edamura: A robot finger using electro-conjugate fluid, Proc. ICEM2010, Rome, CD-RoM, (2010)
80. K. Mori, H. Yamamoto, K. Takemura, S. Yokota, K. Edamura: Theoretical Modeling and Corroborative Experiments for Electro-conjugate Fluid Flow, Proc. ICEM2010, Rome, CD-RoM, (2010)
81. Y. Ogawa, S. Yokota, K. Edamura, K. Takemura: A dual-axis liquid rate micro gyroscope using Electro-Conjugate Fluid, Proc of 13th ICMT2009, CD-RoM, Cebu, Phillippines, (2009)
82. J. Inoue, S. Yokota, K. Takemura, K. Edamura: Experimental Study on ECF-jet for ECF driven Micro Fingers, Proc of 13th ICMT2009, CD-RoM, Cebu, Phillippines, (2009)
83. J. Kim, T. Suzuki, S. Yokota, K. Edamura: Tube-type micropump by using electro-conjugated fluid (ECF), Proc of 13th ICMT2009, CD-RoM, Cebu, Phillippines, (2009)
84. K. Tokida, K. Takemura, S. Yokota, K. Edamura: Robotic Earthworm using Electro-conjugate Fluid -Confirmation of Fundamental Principle, Proc of 13th ICMT2009, CD-RoM, Cebu, Phillippines, (2009)
85. H. Yamamoto, K. Takemura, S. Yokota, K. Edamura, J. Friend, L. Yeo: Theoretical Modeling of Electro-conjugate Fluid Flow, 13th International Conference on Mechatronics Technology (ICMT 2009), CD-RoM, Cebu City, Philippines, 20-23 October, (2009)



86. S. Yokota, M. Hongo, K. Takemura, K. Edamura, T. Imamura, H. Kumagai: ECF Liquid Rate Gyroscope, 14th International Symposium on Applied Electromagnetics and Mechanics (ISEM2009), Xian, China, pp.625/626, (2009)
87. K. Tokida, K. Takemura, S. Yokota, K. Edamura: Robotic Earthworm using Electro-conjugate Fluid, ISEM09, Xian, pp.633/634, (2009)
88. J. Kim, T. Suzuki, S. Yokota, K. Edamura: Tube-type ECF pump, ICMDT2009, Jeju Island, Korea, June 25-26, (2009)
89. S. Yokota, F. Yajima, K. Takemura, K. Edamura: ECF-jet driven Micro Artificial Muscle Actuators and its Application to an ECF Micro Hand, Proc. of 7th International Conference on Fluid Power Transmission and Control (ICFP2009), pp.33/37, China (2009) {Invited}
90. K. Takemura, T. Imamura, K. Edamura, H. Kumagai, S. Yokota: The Practical Design of a Liquid Rate Gyroscope using Electro-conjugate Fluid, the Journal of Systems and Control Engineering, Part I of the Proceedings of the IMechE, Vol. 223, No. 6, pp. 727/736, (2009)
91. R. Raghavan, J. Qin, L. Yeo, J. Friend, K. Takemura, S. Yokota, K. Edamura: Electrokinetic Actuation of Conductivity Dielectric Liquids, the Journal of Sensors and Actuators, B, Vol.140, issue1, pp.287/294, (2009)
92. K. Takemura, S. Yokota, M. Suzuki, K. Edamura, T. Imamura, H. Kumagai: Micro Liquid Rate GyroScope using Electro-conjugate Fluid, the Journal of Sensors and Actuators, A, Vol.149, issue2, pp.173/179, (2009)
93. K. Takemura, F. Yajima, K. Edamura, S. Yokota: Integration of Micro Artificial Muscle cells using Electro-conjugate Fluid, the Journal of Sensors and Actuators, A, Vol.144, Issue2, pp.348/353, (2008)
94. T. Imamura, S. Yokota, K. Takemura, M. Suzuki, K. Edamura, H. Kumagai: A Liquid Rate Gyroscope using Electro-conjugate Fluid- Practical Design and Characterization -, ISSNIP2008 (Int. Conf. Intelligent Sensors, Sensor Networks and Information Processing), Sydney, Australia, Dec., CD-Rom, (2008)
95. J. Kim, Y. Ogawa, S. Yokota, K. Yoshida, K. Edamura: ECF Microactuator with Needle-Ring Electrodes by MEMS Technology, Proc. ICMT2008, Sudbury, Canada, CD-Rom, (2008)
96. S. Yokota, F. Yajima, K. Takemura, K. Edamura: A cell integrated ECF-jet driven artificial muscle actuator, Proc. ICMT2008, Canada, CD-Rom, (2008)
97. Y. Tanaka, M. Ebisawa, S. Yokota, K. Edamura: Miniaturized and High - Powered

- Micro Pump Using Functional Fluid ECF, Proc. ICMT2008, Sudbury, Canada, CD-Rom, (2008)
98. S. Yokota, K. Takemura, M. Suzuki, K. Edamura, H. Kumagai, T. Imamura: A Liquid Rate Gyroscope using Electro-conjugate Fluid- Practical Design and Characterization -, IROS2008, Nice, France, (2008)
  99. K. Takemura, Y. Hong, K. Edamura, S. Yokota: Earthworm type Robot driven by Electro-conjugate Fluid, Proc. of RoManSy 2008, Tokyo, July, 6-10, pp. 85-92, (2008)
  100. Yutaka Tanaka, Masafumi Ebisawa, Shinichi Yokota, Kazuya Edamura: Miniaturized and High-Powered Micro Pump Using Functional Fluid ECF, CD-ROM Proceedings of The 12th International Conference on Mechatronics Technology (ICMT 2008), 2008/07
  101. R. Raghavan, J. Qin, L. Yeo, J. Friend, K. Takemura, S. Yokota, K. Edamura: Electrokinetic Actuation of Low Conductivity Dielectric Liquids, Proceedings of the Sixth International ASME Conference on Nanochannels, Microchannels and Minichannels, ICNMM2008, Darmstadt, Germany, June, 23-25, (2008)
  102. S. Yokota, K. Yoshida, W. Seo, K. Koizumi, J. Kim, K. Edamura: Forced Liquid Cooling System Using Thin Planar ECF Pump for High Power Electronic Chips, Proc. of ACTUATOR2008, Bremen, Germany, [B-15], pp. 226/229, (2008)
  103. S. Yokota, K. Takemura, M. Suzuki, K. Edamura, H. Kumagai, T. Imamura: Concept of a Liquid Rate Gyroscope using an Electro-conjugate Fluid, Proc. of 2008 IEEE International Conference on Robotics & Automation (ICRA), Pasadena, USA, pp. 317/322, (2008)
  104. K. Takemura, S. Yokota, K. Edamura: ECF Micro Artificial Muscle Actuator and its Application to Micro Robot Arm, Proc. of LDIA2007, CD-ROM, (2007)
  105. K. Takemura, H. Kozuki, K. Edamura, S. Yokota: A Micromotor using Electro-conjugate Fluid - Improvement of motor performance by using saw toothed electrode series -, the Journal of Sensors and Actuators, A, Vol. 140, pp. 131/137, (2007)
  106. K. Takemura, S. Yokota and K. Edamura: Driving Performance and Control of a Micro Artificial Muscle Cell using Electro-Conjugate Fluid, the Journal of Sensors and Actuators A, Vol. 133, No. 2, pp. 493/499, (2007)
  107. S. Yokota, H. Kozuki, K. Takemura, K. Edamura: DP-RE type Micromotors using Electro-Conjugate Fluid, Proc. of 2007 IEEE International Conference on Robotics & Automation (ICRA), Roma, Italy, pp. 1567/1571, (2007)

108. S. Yokota, R. Abe, K. Takemura, K. Edamura : Micro Finger Driven by Electro-conjugate Fluid jet (ECF-jet) and Characteristics Evaluation of a Large Model, the Journal of Sensors and Actuators A, Vol.136, issue.2, pp. 629/637, (2007)
109. Yutaka Tanaka, Satoru Tokiwa, Masafumi Ebisawa, Shinichi Yokota and Kazuya Edamura: Design and Fabrication of Micro Pump Using Functional Fluid, CD-ROM Proceedings of 9th International Symposium on Fluid Control, Measurement and Visualization (FLUCOME07), pp150, 1-11, 2007/09
110. W. Seo, K. Yoshida, S. Yokota, K. Edamura : A high performance planar pump using electro-conjugate fluid with improved electrode patterns Development of a miniature thin-planar pump using electro-conjugate fluid, the *Journal* of Sensors and Actuators A, Vol.134, No. 3, pp. 606/614, (2007)
111. S. Yokota, R. Abe, K. akemura, K. Edamura : A Micro Finger using Electro-conjugate Fluid - Concept and Performance of Large Model -, Proc. of ICMT06, Mexicocity CD-rom, (2006)

**Best Research Paper Award (ICMT2007, Mexicocity)**

112. S. Yokota. H. Kozuki, H. Hayashi, K. Takemura, K. Edamura: Improving Output Power of ECF Micromotors with Triangle Electrodes, Proc. of ICMT06, Mexicocity CD-rom, (2006)
113. S. Yokota, K. Edamura: New Construction of an Electro-Conjugate Fluid-jet Driven Micromotor with Inner Diameter of 2mm, Proc. IMechE, Part I: the Journal of Systems and Control Engineering, Vol. 220, No. 4, pp. 251/256, (2006)

**Donald Julius Groen Prize 2006 (IMechE, London)**

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