

## Papers / Preprints / Awards : (1996~2018)

1. Y. Kuroboshi, K. Takemura, K. Edamura, Efficient electrode configuration for electro-conjugate fluid flow generation with dibutyl decanedioate: Experimental and theoretical investigation, *Sensors & Actuators A*, Vol. 279, 223-228, 2018
2. Y. Kuroboshi, K. Takemura, K. Edamura, Numerical understanding of electro-conjugate fluid flow with dibutyl decanedioate - calculating ion mobility using molecular dynamics simulation, *Sensors & Actuators B*, Vol. 255, pp448-453, 2018
3. P. Zhixiao, Y. Sakurai, T. Okamoto, T. Nakada, K. Edamura, ECF-PUMP Utilizing Tubewith Different Diameter and Mesh Electrode, *Proc. of the 10th JFPS International Symposium on Fluid Power*, (2017. 10)
4. Yoshiki Iijima, Kenjiro Takemura, Kazuya Edamura: Droplet generating device for Droplet-based  $\mu$  TAS using electro-conjugate fluid, *Smart Materials and Structures*, Vol. 26, 054002, 2017.
5. 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.
6. 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)
7. 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)
8. 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*, 富士技術出版株式会社 I J A T 編集部, Vol. 10, No. 4, p. 470-478, Jul. 2016.
9. 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]

10. 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.
11. 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.
12. 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
13. 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
14. 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)**

15. 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]
16. 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
17. 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)
18. 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

19. 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)
20. 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)
21. 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)**

22. 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 p 447-451, 2014/10
23. 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)
24. J. Kim, M. Satoh, S. Yokota, K. Edamura : Micropump-Integrated Eccentric Tube Type Microactuator by Electro-Conjugate Fluid, Proc. ACTUATOR2014, (2014)
25. 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
26. Kyohei Hosoda, Kenjiro Takemura, Koji Fukagata, Shinichi Yokota, Kazuya Edamura : Proc. SPIE, Micro/Nano Materials, Devices, and Systems, SPIE, 8923, 8923Z, 2013/12
27. Y. Sakurai, T. Nakada, K. Edamura, Development of Mesh Type ECF-pump, Proc. of The 12th International Symposium on Fluid Control, Measurement and Visuallization, os5-02-2, 1/8 (2013.11)
28. S. Ueno, K. Takemura, S. Yokota, K. Edamura : An Inchworm Robot using Electro-conjugate Fluid, Proc. The12th International Symposium on Fluid Control, Measurement and Visualization, OS5-02-3, 2013/11
29. 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)

30. S. Ueno, K. Takemura, S. Yokota, K. Edamura : An Inchworm Robot using Electro-conjugate Fluid, The 12th FLUCOME, Nara, OS5-02-3, (2013)
31. 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)
32. H. Gu, J. Kim, S. Yokota, K. Edamura : Study on Output Characteristics of downsized ECF micropump, Proc ICMT2013, Cheju, Korea, (2013)
33. 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)
34. J. Kim, S. Yamashita, S. Yokota, K. Edamura: Micropump-Integrated Balloon Type Microactuators, Proc of ICMDT2013, B5-03, Busan, Korea, (2013)
35. 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)
36. 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
37. 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)
38. 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)
39. 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)
40. 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)
41. 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)
42. 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)
43. 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)

44. 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)
45. 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)
46. 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)
47. 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)**

48. 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)
49. 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)
50. 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)**

51. 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)

52. 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)
53. 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)
54. 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)
55. 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)
56. 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)
57. 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)
58. 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)
59. 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)
60. 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)
61. 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)
62. 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)
63. J. Kim, S. Yokota, K. Edamura: ECF-jet Micro-generator with Multiple Needle-Hole Electrode Pairs, Proc. of ICMDT2011, pp. 235/236, (2011)
64. H. Wang, J. Kim, S. Yokota, K. Edamura: A flexible electro-conjugate fluid micropump with three-dimensional triangular-prism-slit electrode pair, Proc.

65. J. Kim, T. Yoshimoto, S. Yokota, K. Edamura: Focus-tunable ECF microlens by MEMS technology, Proc. of ICFPM2011, Beijing, pp.738/741, (2011)
66. J. Kim, S. Yokota, K. Edamura: ECF-jet Micro-generator with Multiple Needle-Hole Electrode Pairs, Proc. of ICMDT2011, pp.235/236, (2011)
67. 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)
68. 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
69. A. Yamaguchi, K. Takemura, S. Yokota, K. Edamura: A Robot Hand using Electro-conjugate Fluid, Proc. ICRA, IEEE, pp.5923/5928, , (2011)
70. 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)
71. 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)
72. 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
73. 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)
74. 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)
75. 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)
76. 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)

77. 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)**

78. 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)
79. 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)
80. A. Yamaguchi, K. Takemura, S. Yokota, K. Edamura: A robot finger using electro-conjugate fluid, Proc. ICEM2010, Rome, CD-RoM, (2010)
81. 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)
82. 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)
83. 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)
84. 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)
85. 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)
86. 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)



87. 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)
88. K. Tokida, K. Takemura, S. Yokota, K. Edamura: Robotic Earthworm using Electro-conjugate Fluid, ISEM09, Xian, pp.633/634, (2009)
89. J. Kim, T. Suzuki, S. Yokota, K. Edamura: Tube-type ECF pump, ICMDT2009, Jeju Island, Korea, June 25-26, (2009)
90. 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}
91. 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)
92. 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)
93. 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)
94. 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)
95. 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)
96. 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)
97. S. Yokota, F. Yajima, K. Takemura, K. Edamura: A cell integrated ECF-jet driven artificial muscle actuator, Proc. ICMT2008, Canada, CD-Rom, (2008)
98. 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)
99. 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)
  100. 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)
  101. Yutaka Tanaka, Masafumi Ebibisawa, 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
  102. 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)
  103. 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)
  104. 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)
  105. K. Takemura, S. Yokota, K. Edamura: ECF Micro Artificial Muscle Actuator and its Application to Micro Robot Arm, Proc. of LDIA2007, CD-ROM, (2007)
  106. 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)
  107. 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)
  108. 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)

109. 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)
110. 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
111. 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)
112. 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)**

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