

A distributed model of ionomeric polymer metal composite Punning, Andres; Johanson, Urmas; Anton, Mart; Aabloo, Alvo; Kruusmaa, Maarja *Journal of intelligent material systems and structures* 2009 / 14, p. 1711-1724 : ill

A linked manipulator with ion-polymer metal composite (IPMC) joints for soft- and micromanipulation Kruusmaa, Maarja; Hunt, Andres; Punning, Andres; Anton, Mart; Aabloo, Alvo 2008 IEEE International Conference on Robotics and Automation : Pasadena, CA, 19-23 May 2008. Vols. 1-92008 / p. 3588-3593

An advanced finite element model of IPMC Pugal, Deivid; Kasemägi, Heiki; Kruusmaa, Maarja; Aabloo, Alvo *Electroactive Polymer Actuators and Devices (EAPAD)* 2008 2008 / p. 692711

Analysis of instantaneous cardiac EBI signal variability over the heart cycle(s) : non-linear time-scale approach Krivošei, Andrei; Min, Mart; Annus, Paul; Kõiv, Hip; Aabloo, Alvo; Uuetoa, Tiina *EMBEC & NBC 2017 : joint conference of the European Medical and Biological Engineering Conference (EMBEC) and the Nordic-Baltic Conference on Biomedical Engineering and Medical Physics (NBC)*, Tampere, Finland, June 2017 2018 / p. 940-943 : ill [https://doi.org/10.1007/978-981-10-5122-7\\_235](https://doi.org/10.1007/978-981-10-5122-7_235)

Availability and variations of cardiac activity in the case of measuring the bioimpedance of wrist Metshein, Margus; Annus, Paul; Land, Raul; Min, Mart; Aabloo, Alvo 2018 IEEE International Instrumentation and Measurement Technology Conference (I2MTC 2018) : proceedings 2018 / 5 p. : ill <https://doi.org/10.1109/I2MTC.2018.8409684>

Carbon aerogel based electrode material for EAP actuators Kaasik, Friedrich; Torop, Janno; Peikolainen, Anna-Liisa; Koel, Mihkel; Aabloo, Alvo *Proceedings of SPIE* 2011 / p. 79760O-1 - 79760O-8 : ill

Carbon aerogel-cellulose films and fibres with electrical conductivity and antibacterial properties against cyanobacteria Elhi, Fred; Kisand, Veljo; Peikolainen, Anna-Liisa; Koel, Mihkel; Aabloo, Alvo 3rd Seminar on Aerogels : Synthesis-Properties-Applications : 22-23 September 2016, Mines ParisTech - PSL Research University, Sophia Antipolis (France) : proceedings 2016 / p. 180

Carbon xerogel from 5-methylresorcinol-formaldehyde gel : the controllability of structural properties Peikolainen, Anna-Liisa; Uibu, Mai; Kozlova, Jekaterina; Mändar, Hugo; Tamm, Aile; Aabloo, Alvo *Carbon trends* 2021 / art. 100037, 11 p. : ill <https://doi.org/10.1016/j.cartre.2021.100037>

Challenges and perspectives in control of ionic polymer-metal composite (IPMC) actuators: A survey Aabloo, Alvo; Belikov, Juri; Kaparin, Vadim; Kotta, Ülle *IEEE Access* 2021 / p. 121059-121073 <https://doi.org/10.1109/ACCESS.2020.3007020>

Design of a semiautonomous biomimetic underwater vehicle for environmental monitoring Listak, Madis; Martin, G.; Pugal, David; Aabloo, Alvo; Kruusmaa, Maarja *Proceedings of the 2005 IEEE International Symposium on Computational Intelligence in Robotics and Automation : CIRA 2005* : Espoo, Finland, 2005 2005 / ? p

Dynamical variation of the impedance of IPMC Kruusamäe, Karl; Punning, Andres; Kruusmaa, Maarja; Aabloo, Alvo *Proceedings of SPIE* 2009 / *Electroactive Polymer Actuators and Devices (EAPAD)* 2009, p. 72870V-1 - 72870V-9 : ill

Electroactive polymer actuators with carbon aerogel electrodes Palmre, Viljar; Lust, Enn; Jänes, Alar; Koel, Mihkel; Peikolainen, Anna-Liisa; Torop, Janno; Johanson, Urmas; Aabloo, Alvo *Journal of materials chemistry* 2011 / p. 2577-2583 : ill

Electrochemically driven carbon-based materials as EAPs : fundamentals and device configurations [Online resource] Torop, Janno; Peikolainen, Anna-Liisa; Aabloo, Alvo; Koel, Mihkel; Asaka, Kinji; Baughman, Ray *Electromechanically active polymers : a concise reference* 2016 / p. 1-16 [http://dx.doi.org/10.1007/978-3-319-31767-0\\_18-1](http://dx.doi.org/10.1007/978-3-319-31767-0_18-1)

Electrode reactions in Cu-Pt coated Nafion[r] actuators Johanson, Urmas; Mäeorg, Uno; Brandell, Daniel; Punning, Andres; Torop, Janno; Kruusmaa, Maarja; Aabloo, Alvo *Artificial Muscle Actuators using Electroactive Polymers* 2009 / p. 75-80

Fractional-order modeling and control of ionic polymer-metal composite actuator Tepļakov, Aleksej; Vunder, Veiko; Petlenkov, Eduard; Nakshatharan, S Sunjai; Punning, Andres; Kaparin, Vadim; Belikov, Juri; Aabloo, Alvo *Smart materials and structures* 2019 / 12 p. : ill "[Smart materials](#)"

Ionic liquid-carbon-polymer composite actuator based on carbon aerogel electrodes Kaasik, Friedrich; Must, Indrek; Torop, Janno; Peikolainen, Anna-Liisa; Aabloo, Alvo *SustainChem* 2011 : International Conference on Materials and Technologies for Green Chemistry jointly with Workshop of COST Action CM0903 (UBIOCHEM-II) : September 5-9, 2011, Tallinn, Estonia : abstract book and program 2011 / p. 112 : ill

Linear modeling of elongated bending EAP actuator at large deformations Must, Indrek; Anton, Mart; Kruusmaa, Maarja; Aabloo, Alvo *Proceedings of SPIE* 2009 / *Electroactive Polymer Actuators and Devices (EAPAD)* 2009, p. 728723-1 - 728723-12 : ill

Microprinted carbon aerogel electrodes for sensors and actuators Põldsalu, Inga; Peikolainen, Anna-Liisa; Greco, Francesco; Kreek, Kristiina; Aabloo, Alvo *TÜ ja TTÜ doktorikool "Funktsionaalsed materjalid ja tehnoloogiad"* : 04.-05. märts 2014, Tartu 2014 / [1] p. : ill

Modeling and experimental analysis of the mass loading effect on micro-ionic polymer actuators using step response

identificationDadras, Iman; Ghenna, Sofiane; Grondel, Sébastien; Cattan, Éric; Raik, Jaan; Aabloo, Alvo; Banerji, SaoniJournal of Microelectromechanical Systems2021 / p. 243–252 : ill<https://doi.org/10.1109/JMEMS.2021.3060897>

Nanoporous carbon-based electrodes for high strain ionomeric bending actuatorsPalmre, Viljar; Brandell, Daniel; Mäeorg, Uno; Torop, Janno; Volobujeva, Olga; Punning, Andres; Johanson, Urmas; Kruusmaa, Maarja; Aabloo, AlvoSmart materials & structures2009 / 9, [7] p. : ill

Preparation of fine carbon aerogel powderPeikolainen, Anna-Liisa; Koel, Mihkel; Aabloo, AlvoThe 63rd Annual Meeting of International Society of Electrochemistry : 19.-24.08.2012, Praha2012

Sol-gel derived carbon microspheres by continuous ultrasonic spray pyrolysisPeikolainen, Anna-Liisa; Uibu, Mai; Aabloo, Alvo31st Annual Conference of the European Society for Biomaterials (ESB 2021)2021[https://eventclass.org/contxt\\_esb2021/scientific/online-program/session?s=AERO+PS01](https://eventclass.org/contxt_esb2021/scientific/online-program/session?s=AERO+PS01)

Task-oriented design of an underwater vehicle for environmental monitoring in the Baltic SeaListak, Madis; Martin, G.; Pugal, David; Aabloo, Alvo; Kruusmaa, MaarjaProc. of the IWUR2005 International Workshop on Underwater Robotics for Sustainable Management of Marine Ecosystems and Environmental Monitoring : Genoa, Italy, 20052005 / ? p

Towards a biomimetic EAP robotAnton, Mart; Punning, Andres; Aabloo, Alvo; Listak, Madis; Kruusmaa, MaarjaProceedings of TAROS 2004 : Towards Autonomous Systems2004 / p. ?

Variation of cardiac and respiratory waveform on human thorax in the case of inductive couplingMetshein, Margus; Annus, Paul; Land, Raul; Krivošei, Andrei; Ojarand, Jaan; Aabloo, Alvo; Min, MartEMBEC & NBC 2017 : joint conference of the European Medical and Biological Engineering Conference (EMBEC) and the Nordic-Baltic Conference on Biomedical Engineering and Medical Physics (NBC), Tampere, Finland, June 20172018 / p. 671-674 : ill[https://doi.org/10.1007/978-981-10-5122-7\\_168](https://doi.org/10.1007/978-981-10-5122-7_168)

Wearable solutions for monitoring cardiorespiratory activity = Kehal kantavad vahendid kardiorespiatoorse aktiivsuse jälgimiseksMetshein, Margus2018<https://digi.lib.ttu.ee/i/?9961>