

**Analyse of control and diagnostics problems of trams and development of new systems and methods**  
**Rosin, Argo** 2nd International Symposium "Topical Problems of Education in the Field of Electrical and Power Engineering" : Kuressaare, Estonia, January 17-22, 2005 2005 / p. 86-92 : ill

**Analysis of modelling electric transportation networks**

**Mägi, Marek** 4th International Symposium Topical Problems of Education in the Field of Electrical and Power Engineering. Doctoral School of Energy and Geotechnology : Kuressaare, Estonia, January 15-20, 2007 2007 / p. 73-77 : ill

**Auxiliary voltage converter for Tallinn trams: stages of development**

**Vinnikov, Dmitri** Symposium "Topical Problems of Education in the Field of Electrical and Power Engineering" : Kuressaare, Estonia, January 19-24, 2004 2004 / p. 62-65 : ill

**Comparison of possible ac drive control methods for kt4 tram**

**Boiko, Vitali; Laugis, Juhani** 3rd International Scientific Workshop "Compatibility in Power Electronics" (CPE 2003) : Gdansk-Zielona Gora, Poland, 28-30 May, 2003 2003 / p. 55-57

**Comparison of possible drive control methods for electrical rail vehicle**

**Boiko, Vitali** The 4th Research Symposium of Young Scientists : Actual Problems of Electrical Drives and Industry Automation : Tallinn, Estonia, May 17-21, 2003 2003 / p. 83-87 : ill

**Control methods of the dual-motor AC traction drives**

**Boiko, Vitali** 3rd International Symposium "Topical Problems of Education in the Field of Electrical and Power Engineering" : Doctoral School of Energy and Geotechnology : Kuressaare, Estonia, January 16-21, 2006 2006 / p. 177-179 : ill

**Control, supervision and operation diagnostics of light rail electric transport**

**Rosin, Argo; Lehtla, Tõnu** 2005 [https://www.ester.ee/record=b2073559\\*est](https://www.ester.ee/record=b2073559*est)

**Data communication with InTouch application over Windows DDE**

**Möller, Taavi; Rosin, Argo** The 4th Research Symposium of Young Scientists : Actual Problems of Electrical Drives and Industry Automation : Tallinn, Estonia, May 17-21, 2003 2003 / p. 75-76 : ill

**Design and development of the middle-frequency isolation transformer for the high-voltage DC/DC converter [Electronic resource]**

**Vinnikov, Dmitri; Lehtla, Tõnu; Strzelecki, Ryszard; Galkin, Ilja** The 4th International Scientific Conference of The Military Technical College [Korby El-Kobbah, Cairo, Egypt] : 27-29 May 2008. Proceedings of the 6th ICEENG Conference : 27-29 May, 2008 2008 / p. EE045 [CD-ROM] [https://iceeng.journals.ekb.eg/article\\_34344\\_6860ebd9ad2e69cac2e12bfef8d5546c.pdf](https://iceeng.journals.ekb.eg/article_34344_6860ebd9ad2e69cac2e12bfef8d5546c.pdf)

**Development of auxiliary power supply for tram**

**Vinnikov, Dmitri; Lehtla, Madis** BEC 2002 : proceedings of the 8th Biennial Baltic Electronics Conference : October 6-9, 2002, Tallinn, Estonia 2002 / p. 389-390 : ill

**Development of control and diagnostics system for Tallinn trams**

**Rosin, Argo; Pettai, Elmo; Lehtla, Tõnu** BEC 2004 : proceedings of the 9th Biennial Baltic Electronics Conference : October 3-6, 2004, Tallinn, Estonia 2004 / p. 327-330 : ill

**Development of software for position based control**

**Möller, Taavi** 2nd International Symposium "Topical Problems of Education in the Field of Electrical and Power Engineering" : Kuressaare, Estonia, January 17-22, 2005 2005 / p. 84-85 : ill

**Doktoritöö trammi arvutipõhise juhtimise, seire ja diagnostika alal : [väitekirja kaitseks Argo Rosin]**

**Lahtmets, Rain** Elektrala 2005 / lk. 32

**Elektrisäästlikust trammist tulevikurobotiteeni : [TTÜ elektriajamite ja jõuelektronika instituudi ajaloost : 45. aastapäevale pühendatud sümpoosioni ettekannetest]**

Mente et Manu 2001 / 4. sept., lk. 1, 2 : portr [https://www.ester.ee/record=b1242496\\*est](https://www.ester.ee/record=b1242496*est)

**Energy flows and losses of an electric tram**

**Joller, Jüri** PEDC 2001 : Power Electronics Devices Compatibility : 2nd Conference : 3-5 September 2001, Zielona Gora, Poland 2001 / p. 104-110 : ill

**Esimene energiasäästliku veoajamiga tramm Tallinnas : [projekteeritud ja valmistatud TTÜ elektriajamite ja jõuelektronika instituudis]**

Heinvere, Uno Elektrala 2000 / 4, lk. 23 [https://artiklid.elnet.ee/record=b1004795\\*est](https://artiklid.elnet.ee/record=b1004795*est)

**Influence of specific requirements on the design of auxiliary power supply for a light rail vehicle**

**Vinnikov, Dmitri; Lehtla, Tõnu** 2nd International Symposium "Topical Problems of Education in the Field of Electrical and Power Engineering" : Kuressaare, Estonia, January 17-22, 2005 2005 / p. 93-97 : ill

#### **Intelligent control and diagnostics system for Tallinn trams**

**Rosin, Argo; Lehtla, Madis**; Möller, Taavi EPE-PEMC 2004 : 11th International Power Electronics and Motion Control Conference : 2-4 September 2004, Riga, Latvia : proceedings. Vol. 6 of 7, Mechatronics, industrial drive systems, power electronics and drives in transport, EMC and design of PE systems 2004 / p. 6-185 - 6-188 : ill

#### **Kas tallinlane vajab tuiskavat kürtrammgi?**

Villemi, Ene-Mall Ärielu 1999 / 3, lk. 83-85 [https://artiklid.elnet.ee/record=b2022954\\*est](https://artiklid.elnet.ee/record=b2022954*est)

#### **Kergrööbassöidukite ajamid ja juhtimine**

**Laugis, Juhani; Lehtla, Tõnu; Joller, Jüri; Rosin, Argo; Vinnikov, Dmitri; Lehtla, Madis** 2008  
[http://www.ester.ee/record=b2394445\\*est](http://www.ester.ee/record=b2394445*est)

#### **3. liinile sõidab nutikas tramm : trammipark ja tehnikaülikool ehitasid vanast trammist paraarvutiga sõiduki : [Argo Rosin räägib rekonstruktsioonitunnistust trammist]**

Peensoo, Piret; **Rosin, Argo** Eesti Päevaleht 2004 / 10. märts, Tallinn, lk. 1 : fot <https://epl.delfi.ee/artikel/50978611/3-liinile-soidab-nutikas-tramm>

#### **Kui tramm Eestimaaile tuli**

Mägi, Vahur Horisont 1989 / lk. 27-29 : fotod [https://www.ester.ee/record=b1347160\\*est](https://www.ester.ee/record=b1347160*est) <https://www.digar.ee/arhiiv/et/periode/69840>

#### **Kümnend, mil transpordist saab liikuvus [Võrguväljaanne]**

Roose, Antti postimees.ee 2021 ["Kümnend, mil transpordist saab liikuvus"](#)

#### **Maintenance information system for vehicles**

**Jalakas, Tanel** 2nd International Symposium "Topical Problems of Education in the Field of Electrical and Power Engineering" : Kuressaare, Estonia, January 17-22, 2005 2005 / p. 80-81 : ill

#### **Microprocessor control systems of light rail vehicle traction drives**

**Lehtla, Madis** 2006 [https://www.ester.ee/record=b2170586\\*est](https://www.ester.ee/record=b2170586*est)

#### **Millist ühistransporti eelistada? Tihedas transpordis sobib elektrisöiduk**

Villemi, Ene-Mall Ärielu 2000 / 5, lk. 92-93 [https://artiklid.elnet.ee/record=b1991755\\*est](https://artiklid.elnet.ee/record=b1991755*est)

#### **Modernisation of tram traction drive**

**Arukivi, Andres; Joller, Jüri** Actual Problems of Electrical Drives and Industry Automation : the research symposium of young scientists : Tallinn, Estonia, May 31 - June 5, 1999 1999 / p. 56-58: ill

#### **Modernisation of trams in Estonia**

**Laugis, Juhani; Lehtla, Tõnu; Pettai, Elmo; Joller, Jüri; Rosin, Argo; Lehtla, Madis; Vinnikov, Dmitri** The 6-th International Conference on Unconventional Electromechanical and Electrical Systems : UEES'04. Vol. 2 of 3 2004 / p. 561-564

#### **Nutikas tramm : [TTÜ teadlaste osalusel rekonstruktsioonitunnistust trammist]**

**Rosin, Argo** Elektrala 2004 / 2, lk. 16-18 : ill

#### **Operation and diagnostics of the tram traction drive**

**Lehtla, Madis; Joller, Jüri; Laugis, Juhani** 3rd International Scientific Workshop "Compatibility in Power Electronics" (CPE 2003) : Gdańsk-Zielona Gora, Poland, 28-30 May, 2003 2003 / p. 61-63

#### **Optimal supercapacitor energy storage system sizing for traction substations**

Sirmelis, Ugis; **Zakis, Janis**; Grigants, Linards 2015 IEEE 5th International Conference on Power Engineering, Energy and Electrical Drives (POWERENG) : proceedings : May 11-13, 2015, Riga, Latvia 2015 / p. 592-595 : ill  
<http://dx.doi.org/10.1109/PowerEng.2015.7266383>

#### **Power analyse of a tram system with energy storage devices**

**Joller, Jüri; Lehtla, Madis** BEC 2002 : proceedings of the 8th Biennial Baltic Electronics Conference : October 6-9, 2002, Tallinn, Estonia 2002 / p. 395-396

#### **Power measurements of trams and trolleybuses in traffic conditions in Tallinn**

**Arukivi, Andres; Mälter, Meelis; Joller, Jüri; Laugis, Juhani** BEC'98 : the 6th Biennial Conference on Electronics and Microsystems Technology, October 7-9, 1998, Tallinn, Estonia : proceedings 1998 / p. 377-380: ill

#### **Power measurements of trams in Tallinn's traffic conditions**

**Joller, Jüri; Arukivi, Andres; Mälter, Meelis; Laugis, Juhani** 43. Internationales Wissenschaftliches Kolloquium, 21.-24.09.1998.

Band 4, Elektroenergiesysteme und elektrische Geräte, Diagnostik, Hochspannungstechnik und elektrische Isoliertechnik, Energiewandlung : Vortragsreihen 1998 / p. 622-627: ill

**Pärnu maantee viadukt ei pruugi uusi Hispaania tramme kanda : [kommentaar TTÜ sillaehituse õppetooli juhatajalt professor Siim Idnurmelt]**

Nergi, Ann-Marii Eesti Päevaleht 2011 / lk. 6

**Research and development of energy saving traction drives for trams**

Joller, Jüri 2001 [https://www.ester.ee/record=b1507469\\*est](https://www.ester.ee/record=b1507469*est)

**Research and development of voltage converter for trams**

Vinnikov, Dmitri; Lehtla, Madis; Joller, Jüri; Laugis, Juhan Power and Electrical Engineering International Scientific Conference 2002 / ? p

**Research of energy flows and losses in an electric tram**

Joller, Jüri Actual Problems of Electrical Drives and Industry Automation : the 3rd Research Symposium of Young Scientists : Tallinn, Estonia, May 19-26, 2001 2001 / p. 71-73 : ill

**Research of trams traction drives**

Joller, Jüri Baltic electrical engineering review 1998 / 1, p. 17-20: ill

**Research, design and implementation of auxiliary power supplies for the light rail vehicles**

Vinnikov, Dmitri; Lehtla, Tõnu 2005 [https://www.ester.ee/record=b2097496\\*est](https://www.ester.ee/record=b2097496*est)

**Säästutramm: Keskerakond viib ustavale Lasnamäele trammiliini : [TTÜ teadlaste poolt pakutud trammühenduse variandist Lasnamäele]**

Leitmaa, Danni Eesti Päevaleht 2008 / 24. apr., lk. 8 <https://epl.delfi.ee/artikel/51127353/saastutramm-keskerakond-viib-ustavale-lasnamaele-trammiliini>

**Taibukas tramm läks liinile : [9. märtsil 2004 esitlesid TTÜ ja Tallinna Trammi- ja Trollibussikoondise AS trammipark uut trammi]**

Mente et Manu 2004 / 30. märts, lk. 7 : fot [https://www.ester.ee/record=b1242496\\*est](https://www.ester.ee/record=b1242496*est)

**Tallinna Tehnikaülikooli ja Tallinna Trammipargi eestvõtmisel esitleti uut intelligentset trammi**

Studioosus 2004 / Märts, lk. 3

**Tallinnas sõitev tramm nr 99 näitab teed tulevikku : [Tõnu Lehtla kommenteerib TTÜ teadlaste loodud trammi]**

Ilustrumm, Kai; Lehtla, Tõnu Linnaleht : TTÜ 2004 / 3. dets., lk. 5 : fot

**Teadlane vastab : miks pole Tallinnas metrood või kiirtramm? [Võrguväljaanne]**

Antov, Dago Eesti Teaduste Akadeemia : Youtube kanal 2020 / video [Teadlane vastab: miks pole Tallinnas metrood või kiirtramm?](#)

**Traction and control of light rail vehicles**

Laugis, Juhan; Lehtla, Tõnu; Joller, Jüri; Rosin, Argo; Vinnikov, Dmitri; Lehtla, Madis 2008 [http://www.ester.ee/record=b2394449\\*est](http://www.ester.ee/record=b2394449*est)

**Tram traction drives and comparison of their control methods**

Joller, Jüri; Lehtla, Madis; Lehtla, Tõnu; Laugis, Juhan The 7th Biennial Conference on Electronics and Microsystem Technology "Baltic Electronics Conference" : BEC 2000 : October 8 - 11, 2000, Tallinn, Estonia : conference proceedings 2000 / p. 203-204 : ill

**Tramm nimega iha : [Eesti esimese energiasäästliku trammi veoajami rekonstrueerisid TTÜ elektriajamite ja jõuelektronika instituudi teadlased]**

Reinde, Urmi Mente et Manu 2000 / 4. sept., lk. 4 : fot [https://www.ester.ee/record=b1242496\\*est](https://www.ester.ee/record=b1242496*est)

**Tramm, troll või buss?**

Villemi, Ene-Mall; Haavik, Veiko Eesti Päevaleht 2000 / 15. nov., lk. 9A [https://artiklid.elnet.ee/record=b1653557\\*est](https://artiklid.elnet.ee/record=b1653557*est)

**Trammi ristsetest ja trammiliiklusest Tallinnas : [Tallinna Linnatranspordi AS poolt korraldatud uutele trammidele nimepaneku konkursist]**

Simson, Taavi Studioosus 2015 / lk. 7 [https://www.ester.ee/record=b1558644\\*est](https://www.ester.ee/record=b1558644*est)

**Trammi tee läbi ülikooli : [TTÜ elektriajamite ja jõuelektronika instituudi ja Tallinna Trammi- ja Trollibussikoondise koostööst]**

Joller, Jüri Elektriala 2000 / 5, lk. 5-7 : ill [https://artiklid.elnet.ee/record=b1005205\\*est](https://artiklid.elnet.ee/record=b1005205*est)

**Trammide energiasäästlike veoajamite uurimine ja väljatöötamine = Research and development of energy saving traction drives for trams**  
Joller, Jüri 2001 [https://www.esther.ee/record=b1618260\\*est](https://www.esther.ee/record=b1618260*est)

**Trammide seisukorras**  
Laugis, Juhani Postimees 1998 / 27. nov., Tallinn, lk. 2

**Trammihuvilised**  
Olander, Aare Öhtuleht 1987 / lk. [?] [https://www.esther.ee/record=b1072244\\*est](https://www.esther.ee/record=b1072244*est)

**Trammiparki ootab uuendamine : [TTÜ teadurid ja üliõpilased projekteerivad linna jaoks senisest mugavamat ja turvalisemat trammi : projekti vedava Juhani Laugise kommentaariga]**  
Neudorf, Raigo; **Laugis, Juhani** Eesti Päevaleht 2002 / 12. dets., Areng ja Tehnoloogia, lk. 4 : fot

**TTÜ teadurid nuputavad trammile paremat mootorit : [TTÜ elektriajamite ja jõuelektronika instituudi teadurite (juht prof. Juhan Laugis) projektist]**  
Peensoo, Piret Eesti Päevaleht 2004 / lk. 9 : fot <https://epl.delfi.ee/artikkel/50996821/ttu-teadurid-nuputavad-trammile-paremat-mootorit>

**Uude sajandisse väiksema energiakuluga : [TTÜ elektriajamite ja jõuelektronikainstituudi rekonstrueeritud tramm]**  
**Laugis, Juhani; Joller, Jüri; Heinvere, Uno; Rebane, Aare Sõitja 2000 / okt., lk. 20-21** [https://artiklid.elnet.ee/record=b1005878\\*est](https://artiklid.elnet.ee/record=b1005878*est)

**Väike täpsustus Tallinna trammi kroonikasse**  
Risthein, Endel Elektriala 2003 / 5, lk. 29 [https://artiklid.elnet.ee/record=b1014079\\*est](https://artiklid.elnet.ee/record=b1014079*est)

**Ühistranspordi kaitseks : Tallinn ei saa hakkama trammide ja trollideta**  
Joller, Jüri Postimees 2000 / 16. nov., lk. 21 [https://artiklid.elnet.ee/record=b1681115\\*est](https://artiklid.elnet.ee/record=b1681115*est)

**Ümberehitatud trammid 40 säastlikumad : [Tallinna Trammi- ja Trollibussikoondise ja Tallinna Tehnikaülikooli koostööst]**  
Ehitaja 2004 / 9, lk. 71 : ill

**Об опыте Института электропривода и силовой электроники ТТУ в области модернизации электроподвижного состава Таллиннского трамвайного парка**  
Vinnikov, Dmitri; Boiko, Vitali; Lehtla, Madis; Rosin, Argo; **Laugis, Juhani** Технічна електродинаміка 2004 / 3, с. 52-55 : ил