

Akadeemik Nikolai Alumäe - 70

Aben, Hillar; **Engelbrecht, Jüri** Õhtuleht 1985 / lk. [?] : foto (portree) https://www.ester.ee/record=b1072244*est

Alternative equations of magnetophotoelasticity and aproximate solution of the inverse problem

Ainola, Leo; Aben, Hillar Journal of the Optical Society of America A, Optics image science and vision 2002 / 9, p. 1886-1893

Ambiguity of the fringe order in integrated photoelasticity

Aben, Hillar; **Anton, Johan**; Josepson, J. Proceedings 3rd International Workshop on Automatic Processing of Fringe Patterns FRINGE'97 1997 / p. 309-318

Application of the integrated photoelasticity to determination of residuel stresses in glass

Aben, Hillar; **Ainola, Leo**; **Anton, Johan** Advances of Methods of Experimental Mechanics 2003 / p. 24-39

Automatic measurement of residual stress in glass articles of complicated shape

Aben, Hillar; **Anton, Johan**; Errapart, Andrei Verre 2003 / p. 44-49 : ill

Complete residual stress measurement in axisymmetric glass articles

Aben, Hillar; **Ainola, Leo**; **Anton, Johan** Proceedings of the 18th International Congress on Glass, San Francisco, 1998. B6 1998 / p. 46-50

Complete residual stress measurement in axisymmetric glass articles

Aben, Hillar; **Ainola, Leo**; **Anton, Johan** Experimental mechanics 1998 / p. 1343-1346

Determination des contraintes dans les preforms optiques a saut d'indice

Aben, Hillar; **Ainola, Leo**; **Anton, Johan**; Errapart, Andrei Colloque "Photomecanique 2001" 2001 / p. 71-78

Discrete algorithm of integrated photoelasticity for axisymmetric problems

Anton, Johan; Aben, Hillar; **Ainola, Leo** International Conference on Advanced Technology in Experimental Mechanics : The Second Asian Conference on Experimental Mechanics, Nagoya, 2003 2003 / [6] p

Duality in optical theory of twisted birefrigent media

Ainola, Leo; Aben, Hillar Journal of the Optical Society of America A, Optics image science and vision 1999 / 10, p. 2545-2549
<https://opg.optica.org/josaa/abstract.cfm?URI=josaa-16-10-2545>

Eksperimentaalmehaanika : loengukonspekt

Aben, Hillar; Josepson, Jüri; **Tärno, Ülo** 1995 https://www.ester.ee/record=b5385767*est

Et klaas ei puruneks : [intervjuu Hillar Abeniga]

Aben, Hillar; Veskimäe, Rein Horisont 2009 / lk. 16-21 : fot https://artiklid.elnet.ee/record=b1477689*est

Et klaas ei puruneks : [intervjuu Hillar Abeniga]

Aben, Hillar Teadusmõte Kübermeetika Instituudis 2010 / lk. 91-99 : portr

Et klaas ei puruneks : [intervjuu Hillar Abeniga]

Aben, Hillar Põline partituur : intervjuud akadeemikutega 2011 / lk. 50-61 . portr

Generalized sum rule for thermal and residual stresses in axisymmetric glass articles

Aben, Hillar; **Ainola, Leo** Proceedings of the 3rd International Congress on Industrial and Applied Mathematics, Hamburg, 1995 1996 / 5, p. 3-4

Half-fringe phase-stepping with separation of the principal stress directions

Aben, Hillar; **Ainola, Leo**; **Anton, Johan** Proceedings of the Estonian Academy of Sciences. Engineering 1999 / 3, p. 198-211: ill
https://artiklid.elnet.ee/record=b1001721*est

Hybrid mechanics for axisymmetric thermoelasticity problems

Ainola, Leo; Aben, Hillar Journal of thermal stresses 2000 / 7, p. 685-698

Hybrid stress analysis with integrated photoelasticity

Ainola, Leo; Aben, Hillar IUTAM Symposium on Advanced Optical Methods and Applications in Solid Mechanics 2000 / p. 342-348

Integraalne fotoelastsusmeetod klaastoodete kvaliteedi kontrollimiseks

Aben, Hillar; **Ainola, Leo**; **Anton, Johan**; Errapart, Andrei Teadusmõte Eestis : tehnikateadused 2002 / lk. 9-13 : ill

Integraalse fotoelastsusmeetodi teooria, mõõtmistehnoloogia ja aparatuuri väljatöötamine ja rakendamine jääkpingete

mõõtmiseks klaasitööstuses : kommentaar Eesti Vabariigi teaduse aastapreemia pälvinud tööde tsükli

Aben, Hillar; Ainola, Leo; Anton, Johan; Errapart, Andrei Tallinna Tehnikaülikooli aastaraamat 2009 2010 / lk. 183-187 : ill
https://www.ester.ee/record=b1212786*est

Integrated photoelasticity as a tool quality control in glass industry

Aben, Hillar; Ainola, Leo; Anton, Johan VDI (Verein Deutscher Ingenieure) Berichte 1999 / p. 233-238

Integrated photoelasticity for nondestructive residual stress measurement in glass

Ainola, Leo; Aben, Hillar; Anton, Johan Optics and lasers in engineering 2000 / 1, p. 49-64

Integrated photoelasticity for quality control in glass industry

Aben, Hillar; Ainola, Leo; Anton, Johan 17th Danubia-Adria Symposium on Experimental Mechanics in Solid Mechanics : Prague, October 11-14, 2000 2000 / [4] p

Integrated photoelasticity in case of weak birefringence

Aben, Hillar; Idnurm, Siim; Puro, Alfred Eesti Teaduste Akadeemia Toimetised. Füüsika. Matemaatika 1990 / 3, lk. 268-275: ill

Interference blots and fringe dislocations in optics of twisted birefringent media

Aben, Hillar; Ainola, Leo Journal of the Optical Society of America A, Optics image science and vision 1998 / 9, p. 2404-2411

Interference blots in integrated fringe patterns

Aben, Hillar; Ainola, Leo Advanced optical method and applications in solid mechanics. Vol. 1. Mo-P2 1998 / p. 1-8

Interference blots in integrated fringe patterns

Ainola, Leo; Aben, Hillar IUTAM Symposium on Advanced Optical Methods and Applications in Solid Mechanics 2000 / p. 33-41
https://link.springer.com/chapter/10.1007/0-306-46948-0_4

Isochromatic fringes in photoelasticity

Ainola, Leo; Aben, Hillar Journal of the Optical Society of America A, Optics image science and vision 2000 / 4, p. 750-755

2009. a teaduspreemia innovaatilise tooteni viinud väljapaistva teadus- ja arendustöö "Integraalse fotoelastsusmeetodi teooria, mõõtmistehnoloogia ja aparatuuri väljatöötamine ja rakendamine jääkpingete mõõtmisel klaasitööstuses" eest : [Hillar Aben (kollektiivi juht), Leo Ainola, Andrei Errapart, Johan Anton]

Aben, Hillar; Ainola, Leo; Errapart, Andrei; Anton, Johan Teadusmõtte Küberneetika Instituudis 2010 / lk. 131-147 : ill

Kolme mehe kõnelused : [Küberneetika Instituudi teadlased Boris Tamm, Nikolai Alumäe ja Hillar Aben]

Veskimäe, Rein; Tamm, Boris, inform.; Alumäe, Nikolai; Aben, Hillar Põline partituur : Eesti teadlased horisondil 2007 / lk. 125-130 : portr

Kolme mehe kõnelused : [vestlusringis Nikolai Alumäe, Boris Tamm ja Hillar Aben]

Veskimäe, Rein; Alumäe, Nikolai; Tamm, Boris, inform.; Aben, Hillar Teadusmõtte Küberneetika Instituudis 2010 / lk. 49-54 : fot

Linnapea juhhib, ülejäänud arvavad : [teaduspublikatsioonidest]

Mallene, Ülo; Aben, Hillar Pealinn 1997 / 30. mai, lk. 2

Measuring the 2D residual surface stress mapping in tempered glass under the cooling jets : the influence of process parameters on the stress homogeneity and isotropy

Chen, Y.; Lohegnes, Dominique; Defontaine, R.; Anton, Johan; Aben, Hillar; Langlais, R. Strain: an international journal for experimental mechanics 2013 / p. 60-67 : ill <https://doi.org/10.1111/str.12013> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Meenutusi akadeemik Maddisonist

Aben, Hillar Vaateid mehaanikale Eestis : 1918-2018 2019 / lk. 101 https://www.ester.ee/record=b5190016*est

Meenutusi akadeemik Maddisonist

Aben, Hillar Mente et Manu 2015 / lk. 16 : fot https://artiklid.elnet.ee/record=b2714602*est

Meestest, kes uurivad koorikuid

Aben, Hillar Horisont 1971 / lk. 2-10 https://www.ester.ee/record=b1072243*est <http://www.digar.ee/id/nlib-digar:291256>

Mehaanikauuringud Eestis

Aben, Hillar; Engelbrecht, Jüri; Metsaveer, Jaan Eesti teadlaste kongress, 11.-15. augustini 1996. a. Tallinnas : ettekannete kokkuvõtteid 1996 / lk. 240 https://www.ester.ee/record=b1052731*est

Mis on fotoelastsus?

Aben, Hillar Vaateid mehaanikale Eestis : 1918-2018 2019 / lk. 145-149 https://www.ester.ee/record=b5190016*est

Modern photoelasticity for residual stress measurement in glass articles of complicated shape

Aben, Hillar; **Anton, Johan**; Puro, A. Fundamentals of glass science and technology 1997

Nelja mehe kõnelused : [vestlusringis TTÜ Küberneetika Instituudi 50. sünnipäeval direktorid Hillar Aben, Jaan Penjam, Ülo Jaaksoo, Andrus Salupere]

Aben, Hillar; Penjam, Jaan; Jaaksoo, Ülo; Salupere, Andrus; **Veskimäe, Rein** Horisont 2010 / 5, lk. 14-21 : fot
https://artiklid.elnet.ee/record=b2155686*est

A new approach to edge stress measurement in tempered glass panels

Aben, Hillar; Lochegnies, Dominique; Chen, Y.; **Anton, Johan**; Paemurru, Mart; **Õis, Marella** Experimental mechanics 2015 / p. 483-486 : ill <https://doi.org/10.1007/s11340-014-9950-7> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

A new method for tempering stress measurement in glass panels

Aben, Hillar; **Anton, Johan**; Paemurru, Mart; **Õis, Marella** Estonian journal of engineering 2013 / p. 292-297 : ill
<https://doi.org/10.3176/eng.2013.4.04> [Article at Scopus](#)

A new relationship for the experimental-analytical solution of the axisymmetric thermoelasticity problem : short communication

Ainola, Leo; Aben, Hillar ZAMM : Zeitschrift für Angewante Mathematik und Mechanik 2004 / 3, p. 211-215
<https://www.osti.gov/etdeweb/biblio/20629002>

Nonaxisymmetric residual stress distribution in axisymmetric glass articles

Aben, Hillar; Anton, Johan; Josepson, Jüri Glass science and technology = Glastechnische Berichte 1996 / p. 75-81 : ill

On hybrid thermomechanics for multilayered cylinders

Ainola, Leo; Aben, Hillar Journal of thermal stresses 2004 / p. 195-207 : ill
<https://www.tandfonline.com/doi/full/10.1080/01495730490264303>

On non-destructive residual stress measurement in glass panels

Aben, Hillar; **Anton, Johan**; **Errapart, Andrei**; Hödemann, Siim; Kikas, Jaak; Klaassen, Helina; Lamp, Marko Estonian journal of engineering 2010 / 2, p. 150-156 : ill

On real and imaginary algorithms of optical tensor field tomography

Aben, Hillar; **Errapart, Andrei**; **Ainola, Leo** Proceedings of the Estonian Academy of Sciences. Physics. Mathematics 2006 / 2, p. 112-127

On the extraordinary strength of Prince Rupert's drops

Aben, Hillar; **Anton, Johan**; **Õis, Marella**; Viswanathan, K.; Chandrasekar, S.; Chaudhri, M. M. Applied physics letters 2016 / p. 231903-1 - 231903-4 : ill <https://doi.org/10.1063/1.4971339> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

On the fracture mechanics of prince Rupert's Drops

Aben, Hillar; **Anton, Johan**; Peterson, Pearu; **Õis, Marella** Proceedings of the First International Conference on Theoretical, Applied and Experimental Mechanics : ICTAEM 2018 : conference proceedings 2019 / p. 158-160 https://doi.org/10.1007/978-3-319-91989-8_36

On the inhomogeneity of residual stresses in tempered glass panels

Anton, Johan; **Errapart, Andrei**; Paemurru, Mart; Lochegnies, Dominique; Hödemann, Siim; **Aben, Hillar** Estonian journal of engineering 2012 / p. 3-11 : ill

On the optical theory of photoelastic tomography

Ainola, Leo; Aben, Hillar Journal of the Optical Society of America A, Optics image science and vision 2004 / 6, p. 1093-1101

On the role of T.J.Seebeck in the discovery of the photoelastic effect in glass

Aben, Hillar Proceedings of the Estonian Academy of Sciences. Engineering 2007 / 4, p. 283-294 : ill

Optical tomography of the laser's Gaussian electric field

Aben, Hillar; **Ainola, Leo** Optics & laser technology 2001 / p. 29-30 : ill

Photoelastic residual stress measurement in glass articles as a problem of hybrid mechanics

Aben, Hillar; **Ainola, Leo**; Puro, A. Proceedings of the 17th Symposium on Experimental Mechanics of Solids, Jachranka, Poland, 1996 1996 / p. 1-10

Photoelastic tomography for residual stress measurement in glass

Aben, Hillar; Errapart, Andrei; **Ainola, Leo; Anton, Johan** Optical metrology in production engineering 2004 / p. 1-11

Photoelastic tomography in linear and non-linear approximation = Fotoelastsustomograafia lineaarses ja mittelineaarses lähenduses

Errapart, Andrei 2012 <https://digi.lib.ttu.ee/i/?721>

Photoelastic tomography in linear approximation

Aben, Hillar; **Ainola, Leo; Anton, Johan**; Errapart, Andrei International Conference on Advanced Technology in Experimental Mechanics : The Second Asian Conference on Experimental Mechanics, Nagoya, 2003 2003 / [6] p. : ill
https://www.researchgate.net/publication/317676395_OS01W0036_Photoelastic_tomography_in_linear_approximation

Photoelastic tomography in linear approximation [Electronic resource]

Errapart, Andrei; **Aben, Hillar; Ainola, Leo** Proceedings of the 2004 SEM X International Congress & Exposition on Experimental and Applied Mechanics 2004 / [8] p. [CD-ROM]

Photoelastic tomography with linear and non-linear algorithms

Aben, Hillar; Errapart, Andrei Experimental mechanics 2012 / p. 1179-1193 : ill

Principal formulas of integrated photoelasticity in terms of characteristic parameters

Ainola, Leo; Aben, Hillar Journal of Optical Society of America 2005 / 6, p. 1181-1186

Prints Ruperti pisarate müsteeriumi lahendamine : ühe teadusprojekti lugu

Öis, Marella; Anton, Johan; Aben, Hillar Horisont 2017 / lk. 32-35 : fot http://www.ester.ee/record=b1072243*est
https://artiklid.elnet.ee/record=b2819551*est

Proceedings of the Estonian Academy of Sciences. Engineering = Eesti Teaduste Akadeemia toimetised. Tehnikateadused. Special issue on biomedical engineering

2004 http://www.ester.ee/record=b1072102*est

Residual stress measurement in glass articles of complicated shape using integrated photoelasticity

Aben, Hillar; **Ainola, Leo; Anton, Johan** Proceedings of the International Conference on Material Engineering, Gallipoli-Lecce, 1996. 1 1996 / p. 291-299

Residual stress measurement in glass articles of complicated shape using integrated photoelasticity

Aben, Hillar; **Anton, Johan**; Puro, A. Fifth International Conference on Residual Stress : ICRS-5 : proceedings : Linköping, Sweden, 1998. 2 1998 / p. 834-839

Sum rules for photoelastic residual stress measurement in axisymmetric glass articles

Aben, Hillar; **Ainola, Leo; Anton, Johan** Proceedings of the International Conference an Advanced Technology in Experimental Mechanics'99 : July 21 through 24, 1999, Japan. Vol. 2 1999 / p. 629-634

Teaduspreemia innovaatilise tooteni viinud väljapaistva teadus- ja arendustöö "Integraalse fotoelastsusmeetodi teooria, mõõtmistehnoloogia ja aparatuuri väljatöötamine ja rakendamine jääkpingete mõõtmisel klaasitööstuses" eest : Hillar Aben (kollektiivi juht), Leo Ainola, Andrei Errapart, Johan Anton

Aben, Hillar; Ainola, Leo; Errapart, Andrei; Anton, Johan Eesti Vabariigi teaduspreemiad 2009 / lk. 40-57 : ill., fot

Technology of integrated photoelasticity for residual stress measurement in glass articles of axisymmetric shape = Integraalse fotoelastsuse tehnoloogia jääkpingete määramiseks telgsümmeetrilistes klaasobjektides

Anton, Johan 2008 http://www.ester.ee/record=b2394498*est

Tee teoreetilisest polarisatsioonoptikast klaasitööstuseni. Fotoelastsus. Pinged läbipaistvates materjalides. Polariskoobid

Aben, Hillar; Anton, Johan Keeruka maailma võlu 2015 / lk. 83-87 : ill https://www.ester.ee/record=b4488344*est

Theory of magnetophotoelasticity with multiple reflections

Ainola, Leo; Aben, Hillar Journal of optics A : pure and applied optics 2004 / 1, p. 51-56 : ill

Transformation equations in polarization optics of inhomogeneous birefringent media

Ainola, Leo; Aben, Hillar Journal of the Optical Society of America A, Optics image science and vision 2001 / 9, p. 2164-2170 : ill
<https://pubmed.ncbi.nlm.nih.gov/11551050/>

Transformation equation in three-dimensional photoelasticity

Ainola, Leo; Aben, Hillar Journal of the Optical Society of America A, Optics image science and vision 2006 / 3, p. 741-746

Ühest Thomas Johann Seebecki laineid lõõnud avastusest optikas

Aben, Hillar Akadeemia 2008 / lk. 2240-2256, 2331 : il https://artiklid.elnet.ee/record=b1998918*est
https://www.ester.ee/record=b1071914*est

Üldkogu aastakoosolek 23. aprillil 2014 : [ka akadeemik Tarmo Soomere ja peasekretär Leo Mõtuse ettekanded ning akadeemikute Dimitri Kaljo ja Hillar Abeni sõnavõttud]

Soomere, Tarmo; Mõtus, Leo; Kaljo, Dimitri; Aben, Hillar Eesti Teaduste Akadeemia aastaraamat = Annales academiae scientiarum Estonicae 2014 2015 / lk. 56-86

Влияние многократных отражений на точность определения характеристических направлений

Aben, Hillar; Josepson, Jüri; Idnurm, Siim; Josepson, J Proceedings of the eighth All-Union conference on photoelasticity. 2 : Tallinn, September, 25-28, 1979 = Материалы VIII Всесоюзной конференции по методу фотоупругости 1979 / с. 47-49 : ил
https://www.ester.ee/record=b1266648*est

Интегральная фотоупругость кубических монокристаллов

Aben, Hillar; Brosman, Edvard; Kaplan, M. Proceedings of the eighth All-Union conference on photoelasticity. 4 : Tallinn, September, 25-28, 1979 = Материалы VIII Всесоюзной конференции по методу фотоупругости 1979 / с. 14-16 : ил
https://www.ester.ee/record=b1266656*est

Метод неточной иммерсии в интегральной фотоупругости

Aben, Hillar; Brosman, Edvard; Saar, A. Proceedings of the eighth All-Union conference on photoelasticity. 2 : Tallinn, September, 25-28, 1979 = Материалы VIII Всесоюзной конференции по методу фотоупругости 1979 / с. 12-15 : ил
https://www.ester.ee/record=b1266648*est

Метод характеристических направлений в фотоупругости : автореферат ... доктора технических наук

Aben, Hillar 1966 https://www.ester.ee/record=b1513386*est

Применение интегральной фотоупругости для определения остаточных напряжений в стекле

Aben, Hillar; **Ainola, Leo; Anton, Johan** Проблемы машиностроения и надежности машин 2003 / с. 37-44

Развитие метода рассеянного света для определения напряжений в кубических монокристаллах : диссертация ... кандидата физико-математических наук : 01.02.04 - механика деформируемого твердого тела

Josepson, Jüri 1988 http://www.ester.ee/record=b2473378*est

Развитие метода рассеянного света для определения напряжения в кубических монокристаллах : автореферат ... кандидата физико-математических наук (01.02.04)

Josepson, Jüri 1989 http://www.ester.ee/record=b1258793*est