

Dr. Öğr. Üyesi DOOYOUNG HAH

Kişisel Bilgiler

E-posta: dooyoung.hah@agu.edu.tr

Web: <https://avesis.agu.edu.tr/dooyoung,hah>

Uluslararası Araştırmacı ID'leri

ScholarID: gs_lib_6305649341147211348

ORCID: 0000-0002-1290-0597

Publons / Web Of Science ResearcherID: A-7587-2009

ScopusID: 6701711129

Yoksis Araştırmacı ID: 216418

Eğitim Bilgileri

Doktora, Korea Advanced Institute Of Science And Technology, College Of Engineering, Department Of Electrical Engineering And Computer Science, Güney Kore 1996 - 2000

Yüksek Lisans, Korea Advanced Institute Of Science And Technology, College Of Engineering, Department Of Electrical Engineering, Güney Kore 1994 - 1996

Lisans, Korea Advanced Institute Of Science And Technology, College Of Engineering, Department Of Electrical Engineering, Güney Kore 1990 - 1994

Yabancı Diller

İngilizce, C1 İleri

Korece, C1 İleri

Yaptığı Tezler

Doktora, A low voltage RF MEMS switch, Korea Advanced Institute Of Science And Technology, Engineering, Electrical Engineering, 2000

Yüksek Lisans, Optical coupler sensor with movable waveguide, Korea Advanced Institute Of Science And Technology, Engineering, Electrical Engineering, 1995

Araştırma Alanları

Elektrik-Elektronik Mühendisliği, Elektronik, Dönüştürücüler ve Algılama Aygıtları, Elektronik Devreler, Mikrodalga Devreleri, Nanoteknoloji, Optik ve Fotonik, Pasif Devre Elemanları, Anahtarlar ve Konnektörler, Enerji, Yenilenebilir Enerji, MEMS, Optik Malzeme ve Aygıtlar, Yarı İletken Malzeme ve Aygıtlar, Mühendislik ve Teknoloji

Akademik Unvanlar / Görevler

Dr.Öğr.Üyesi, Abdullah Gül Üniversitesi, Mühendislik Fakültesi, Elektrik-Elektronik Mühendisliği, 2018 - Devam Ediyor

Yrd.Doç.Dr., Abdullah Gül Üniversitesi, Mühendislik Fakültesi, Elektrik-Elektronik Mühendisliği, 2014 - 2018

Yrd.Doç.Dr., Louisiana State University and Agricultural and Mechanical College, College Of Engineering, Electrical And Computer Engineering, 2005 - 2012

Araştırma Görevlisi Dr., University of California, Los Angeles, School Of Engineering And Applied Science, Electrical Engineering, 2004 - 2005

Diğer, Electronics And Telecommunications Research Institute, Human Information Research, Microsystems, 2002 - 2004

Araştırma Görevlisi Dr., University of California, Los Angeles, School Of Engineering And Applied Science, Electrical Engineering, 2000 - 2001

Araştırma Görevlisi Dr., Korea Advanced Institute Of Science And Technology, Engineering, Electrical Engineering, 2000 - 2000

Araştırma Görevlisi, Korea Advanced Institute Of Science And Technology, Engineering, Electrical Engineering, 1994 - 2000

Verdiği Dersler

AGUways II, Lisans, 2021 - 2022

ELECTRONICS I , Lisans, 2021 - 2022, 2020 - 2021, 2018 - 2019, 2017 - 2018, 2016 - 2017

Electronics II, Lisans, 2022 - 2023, 2021 - 2022, 2020 - 2021, 2016 - 2017

NANO-AND MICRO-SCALE SYSTEM DESIGN CAPSULE , Lisans, 2022 - 2023

Life at AGU, Lisans, 2022 - 2023

Sensor System Design Capsule, Lisans, 2022 - 2023, 2021 - 2022, 2020 - 2021

ELECTRONICS I LAB. , Lisans, 2021 - 2022, 2020 - 2021, 2018 - 2019, 2017 - 2018, 2016 - 2017

ELECTRIC CIRCUITS I , Lisans, 2021 - 2022, 2020 - 2021

Electronics II Laboratory, Lisans, 2021 - 2022, 2020 - 2021, 2016 - 2017

ELECTRIC CIRCUITS I LABORATORY , Lisans, 2021 - 2022, 2020 - 2021

Digital Design Laboratory, Lisans, 2020 - 2021, 2019 - 2020, 2018 - 2019, 2017 - 2018, 2016 - 2017, 2015 - 2016

Digital Design, Lisans, 2020 - 2021, 2019 - 2020, 2018 - 2019, 2017 - 2018, 2016 - 2017, 2015 - 2016

Semiconductor Process and Device Fabrication, Lisans, 2020 - 2021, 2018 - 2019, 2017 - 2018

AGUways, Lisans, 2019 - 2020, 2018 - 2019, 2017 - 2018

Yönetilen Tezler

İçöz K., Hah D., Respiration monitoring using a flexible paper-based capacitive sensor, Yüksek Lisans, İ.SOLAK(Öğrenci), 2022

HAH D., Foldable substrates for micro-ultrasonic transducers, Yüksek Lisans, K.Balasubramanian(Öğrenci), 2011

HAH D., Surface-enhanced Raman spectroscopy substrates based on nanoporous silicon and pattern transfer, Yüksek Lisans, P.Rao(Öğrenci), 2011

HAH D., Back-end processing of scanning mirrors with scratch drive actuators, Yüksek Lisans, P.Pai(Öğrenci), 2011

HAH D., Two-dimensional microscanners with T-shaped hinges and piezoelectric actuators, Yüksek Lisans, W.Song(Öğrenci), 2009

HAH D., A study on buckled-beam actuators for RF MEMS applications, Yüksek Lisans, S.Park(Öğrenci), 2007

SCI, SSCI ve AHCI İndekslerine Giren Dergilerde Yayınlanan Makaleler

I. Electret vibration energy harvesters with symmetrically configured curved-beam hinges

HAH D.

Microsystem Technologies, cilt.30, sa.3, ss.331-341, 2024 (SCI-Expanded)

II. Hemispherical-shell-shaped organic photovoltaic cells for absorption enhancement and improved angular coverage

- HAH D.
Journal of Photonics for Energy, cilt.14, sa.1, 2024 (SCI-Expanded)
- III. **Analysis of electret-based vibration energy harvesting devices with curved-beam hinges**
HAH D.
Journal of Intelligent Material Systems and Structures, cilt.34, sa.14, ss.1702-1712, 2023 (SCI-Expanded)
- IV. **Respiration monitoring using a paper-based wearable humidity sensor, a step forward to clinical tests**
Solak İ., Gençer S., Yıldırım B., Öznur E., HAH D., İÇÖZ K.
Sensors and Actuators A: Physical, cilt.355, 2023 (SCI-Expanded)
- V. **RF MEMS variable attenuators with improved dB-linearity**
HAH D.
Microsystem Technologies, cilt.29, sa.3, ss.311-320, 2023 (SCI-Expanded)
- VI. **Shell-shaped active layers for omnidirectional organic photovoltaic cells**
HAH D.
Journal of Photonics for Energy, cilt.12, sa.4, 2022 (SCI-Expanded)
- VII. **AIN Piezoelectric Quad-Actuators for 2D Optical Micro Scanning**
HAH D.
INTEGRATED FERROELECTRICS, cilt.225, sa.1, ss.376-383, 2022 (SCI-Expanded)
- VIII. **Analysis of optical gyroscopes with vertically stacked ring resonators**
HAH D.
TURKISH JOURNAL OF ELECTRICAL ENGINEERING AND COMPUTER SCIENCES, cilt.29, sa.3, ss.1554-1564, 2021 (SCI-Expanded)
- IX. **Absorption enhancement by semi-cylindrical-shell-shaped structures for an organic solar cell application**
HAH D.
APPLIED OPTICS, cilt.59, sa.28, ss.8645-8652, 2020 (SCI-Expanded)
- X. **Linear variable optical attenuators with shaped-finger comb-drive actuators**
HAH D.
APPLIED OPTICS, cilt.59, sa.2, ss.277-284, 2020 (SCI-Expanded)
- XI. **Analytical design of MEMS variable capacitors based on shaped-finger comb-drives**
Hah D.
Microsystem Technologies, 2019 (SCI-Expanded)
- XII. **All-polymer ultrasonic transducer design for an intravascular ultrasonography application**
HAH D.
TURKISH JOURNAL OF ELECTRICAL ENGINEERING AND COMPUTER SCIENCES, cilt.27, sa.4, ss.2444-2455, 2019 (SCI-Expanded)
- XIII. **C-band optical filters with micromechanical tuning**
Hah D.
MICROSYSTEM TECHNOLOGIES-MICRO-AND NANOSYSTEMS-INFORMATION STORAGE AND PROCESSING SYSTEMS, cilt.24, ss.551-560, 2018 (SCI-Expanded)
- XIV. **A design method of comb-drive actuators for linear tuning characteristics in mechanically tunable optical filters**
Hah D.
Microsystem Technologies, cilt.23, ss.3835-3842, 2017 (SCI-Expanded)
- XV. **Clinical probe utilizing surface enhanced Raman scattering**
Kim J., HAH D., Daniels-Race T., Feldman M.
JOURNAL OF VACUUM SCIENCE & TECHNOLOGY B, cilt.32, sa.6, 2014 (SCI-Expanded)
- XVI. **Note: Folded optical system for narrow forward looking probe**
Hou H., Hah D., Kim J., Feldman M.
REVIEW OF SCIENTIFIC INSTRUMENTS, cilt.85, sa.2, 2014 (SCI-Expanded)
- XVII. **Nanorough gold for enhanced Raman scattering**

- Kim J., Kang K., Sarkar A., Malempati P., Hah D., Daniels-Race T., Feldman M.
JOURNAL OF VACUUM SCIENCE & TECHNOLOGY B, cilt.31, sa.6, 2013 (SCI-Expanded)
- XVIII. **Electrophoretic Deposition of Carbon Nanotubes on Silicon Substrates**
Sarkar A., Hah D.
JOURNAL OF ELECTRONIC MATERIALS, cilt.41, sa.11, ss.3130-3138, 2012 (SCI-Expanded)
- XIX. **Combined soil moisture meter and penetrometer**
Feldman M., Hah D., Hanifa K., Zhang Z.
Geotechnical Testing Journal, cilt.35, sa.3, ss.437-440, 2012 (SCI-Expanded)
- XX. **Mechanically tunable optical filters with a microring resonator**
Hah D., Bordelon J., Zhang D.
APPLIED OPTICS, cilt.50, sa.22, ss.4320-4327, 2011 (SCI-Expanded)
- XXI. **Analysis of resonant optical gyroscopes with two input/output waveguides**
Hah D., Zhang D.
OPTICS EXPRESS, cilt.18, sa.17, ss.18200-18205, 2010 (SCI-Expanded)
- XXII. **Experimental characterization of two-axis MEMS scanners with hidden radial vertical combdrive actuators and cross-bar spring structures**
Tsai J., Hsieh T., Liao C., Chiou S., Hah D., Wu M. C.
JOURNAL OF MICROMECHANICS AND MICROENGINEERING, cilt.19, sa.4, 2009 (SCI-Expanded)
- XXIII. **Pre-shaped buckled-beam actuators: Theory and experiments**
Park S., Hah D.
SENSORS AND ACTUATORS A-PHYSICAL, cilt.148, sa.1, ss.186-192, 2008 (SCI-Expanded)
- XXIV. **Two-axis MEMS scanners with radial vertical combdrive actuators - design, theoretical analysis, and fabrication**
Tsai J., Chiou S., Hsieh T., Sun C., Hah D., Wu M. C.
JOURNAL OF OPTICS A-PURE AND APPLIED OPTICS, cilt.10, sa.4, 2008 (SCI-Expanded)
- XXV. **1 x N-2 wavelength-selective switch with two cross-scanning one-axis analog micromirror arrays in a 4-f optical system**
Tsai J., Huang S., Hah D., Wu M.
JOURNAL OF LIGHTWAVE TECHNOLOGY, cilt.24, sa.2, ss.897-903, 2006 (SCI-Expanded)
- XXVI. **MEMS-actuated photonic crystal switches**
Lee M., Hah D., Lau E., Toshiyoshi H., Wu M.
IEEE PHOTONICS TECHNOLOGY LETTERS, cilt.18, ss.358-360, 2006 (SCI-Expanded)
- XXVII. **Surface- and bulk-micromachined two-dimensional scanner driven by angular vertical comb actuators**
Piyawattanametha W., Patterson P., Hah D., Toshiyoshi H., Wu M.
JOURNAL OF MICROELECTROMECHANICAL SYSTEMS, cilt.14, sa.6, ss.1329-1338, 2005 (SCI-Expanded)
- XXVIII. **A self-aligned vertical comb-drive actuator on an SOI wafer for a 2D scanning micromirror**
Hah D., Choi C., Kim C., Jun C.
JOURNAL OF MICROMECHANICS AND MICROENGINEERING, cilt.14, sa.8, ss.1148-1156, 2004 (SCI-Expanded)
- XXIX. **Angular vertical comb-driven tunable capacitor with high-tuning capabilities**
Nguyen H., Hah D., Patterson P., Chao R., Piyawattanametha W., Lau E., Wu M.
JOURNAL OF MICROELECTROMECHANICAL SYSTEMS, cilt.13, sa.3, ss.406-413, 2004 (SCI-Expanded)
- XXX. **Theory and experiments of angular vertical comb-drive actuators for scanning micromirrors**
Hah D., Patterson P., Nguyen H., Toshiyoshi H., Wu M.
IEEE JOURNAL OF SELECTED TOPICS IN QUANTUM ELECTRONICS, cilt.10, sa.3, ss.505-513, 2004 (SCI-Expanded)
- XXXI. **Open-loop operation of MEMS-based 1 X N wavelength-selective switch with long-term stability and repeatability**
Tsai J., Huang S., Hah D., Toshiyoshi H., Wu M.
IEEE PHOTONICS TECHNOLOGY LETTERS, cilt.16, sa.4, ss.1041-1043, 2004 (SCI-Expanded)
- XXXII. **Low-voltage, large-scan angle MEMS analog micromirror arrays with hidden vertical comb-drive actuators**

Hah D., Huang S., Tsai J., Toshiyoshi H., Wu M.

JOURNAL OF MICROELECTROMECHANICAL SYSTEMS, cilt.13, sa.2, ss.279-289, 2004 (SCI-Expanded)

XXXIII. A low voltage actuated microelectromechanical switch for RF application

Hah D., Yoon E., Hong S.

JAPANESE JOURNAL OF APPLIED PHYSICS PART 1-REGULAR PAPERS SHORT NOTES & REVIEW PAPERS, cilt.40, ss.2721-2724, 2001 (SCI-Expanded)

XXXIV. A low-voltage actuated micromachined microwave switch using torsion springs and leverage

Hah D., Yoon E., Hong S.

IEEE TRANSACTIONS ON MICROWAVE THEORY AND TECHNIQUES, cilt.48, sa.12, ss.2540-2545, 2000 (SCI-Expanded)

XXXV. An optomechanical pressure sensor using multimode interference couplers with polymer waveguides on a thin p(+)-Si membrane

Hah D., Yoon E., Hong S.

SENSORS AND ACTUATORS A-PHYSICAL, cilt.79, sa.3, ss.204-210, 2000 (SCI-Expanded)

XXXVI. An optomechanical pressure sensor using multimode interference couplers

Hah D., Yoon E., Hong S.

JAPANESE JOURNAL OF APPLIED PHYSICS PART 1-REGULAR PAPERS SHORT NOTES & REVIEW PAPERS, cilt.38, ss.2664-2668, 1999 (SCI-Expanded)

Diğer Dergilerde Yayınlanan Makaleler

I. Flexible and Ecofriendly Keypad Based on Paper and Pencil

Er S. F., Kalabey N., HAH D.

IEEE Sensors Letters, cilt.7, sa.11, 2023 (ESCI)

Hakemli Kongre / Sempozyum Bildiri Kitaplarında Yer Alan Yayınlar

I. Effects of Curved-Beam Heights to Harvested Energy in a Blanaced Comb-Drive Configuration

HAH D.

Symposium on Design, Test, Integration and Packaging of MEMS and MOEMS, Paris, Fransa, 25 - 27 Ağustos 2021

II. Quasi-Static Operation of 2-Axis-Tilt Microscanners with AlN Piezoelectric Quad-Actuators

HAH D.

Symposium on Design, Test, Integration and Packaging of MEMS and MOEMS, Paris, Fransa, 25 - 27 Ağustos 2021

III. Planar MEMS Variable Optical Attenuators (VOAs) with Linear Attenuation-Voltage Characteristics

HAH D.

2019 Symposium on Design, Test, Integration and Packaging of MEMS and MOEMS, DTIP 2019, Paris, Fransa, 12 - 15 Mayıs 2019

IV. Analytical design of linear variable capacitors with shaped-finger comb-drive actuators

HAH D.

20th Symposium on Design, Test, Integration and Packaging of MEMS and MOEMS, DTIP 2018, Roma, İtalya, 22 - 25 Mayıs 2018, ss.1-5

V. Design of capacitive micromachined ultrasonic transducers (CMUTs) on a flexible substrate for intravascular ultrasonography (IVUS) applications

HAH D., Je C. H., Lee S.

19th Symposium on Design, Test, Integration and Packaging of MEMS/MOEMS, DTIP 2017, Bordeaux, Fransa, 29 Mayıs - 01 Haziran 2017

VI. An FEM study of die attach packaging effect on nanomechanical Si optical filters

Seok S., HAH D.

19th Symposium on Design, Test, Integration and Packaging of MEMS/MOEMS, DTIP 2017, Bordeaux, Fransa, 29

Mayıs - 01 Haziran 2017

- VII. **Design of wide-band tunable optical filters with cascaded microring resonators and shaped-finger comb-drive actuators**
HAH D.
18th Symposium on Design, Test, Integration and Packaging of MEMS/MOEMS, DTIP 2016, Budapest, Macaristan, 30 Mayıs - 02 Haziran 2016
- VIII. **Design of mechanically tunable optical filters with microring resonators**
HAH D., Bordelon J.
17th Symposium on Design, Test, Integration and Packaging of MEMS/MOEMS, DTIP 2015, Montpellier, Fransa, 27 - 30 Nisan 2015
- IX. **Performance Improvement of a Two-Axis Radial-Vertical-Combdrive Scanner by Using a Symmetric Spring Design**
Hsieh T., Chang Y., Chiou S., Tsai J., Hah D., Wu M. C.
IEEE/LEOS International Conference on Optical MEMS and Nanophotonics, Freiburg, Almanya, 11 - 14 Ağustos 2008, ss.108-109
- X. **A two-axis MEMS scanner driven by radial vertical combdrive actuators**
Chiou S., Hsieh T., Tsai J., Sun C., Hah D., Wu M. C.
IEEE/LEOS International Conference on Optical MEMS and Nanophotonics, Hualian, Tayvan, 12 - 16 Ağustos 2007, ss.83-84
- XI. **Silicon-based on-chip micromirrors for DWDM wavelength-selective crossconnects**
Chi C., Hou C., Lee C., HAH D., Wu M. C.
IEEE/LEOS International Conference on Optical MEMS and Their Applications Conference, 2006, Big Sky, MT, Amerika Birleşik Devletleri, 21 - 24 Ağustos 2006, ss.130-131
- XII. **Integrated 1x4 wavelength-selective switch with on-chip MEMS micromirrors**
Chi C., Tsai J., Lee M. M., HAH D., Wu M. C.
Conference on Lasers and Electro-Optics, CLEO 2006, Long Beach, CA, Amerika Birleşik Devletleri, 21 Mayıs 2006
- XIII. **Silicon-based monolithic 4x4 wavelength-selective cross connect with on-chip micromirrors**
Chi C., Tsai J., Hah D., Mathai S., Lee M. M., Wu M. C.
Conference on Optical Fiber Communications/National Fiber Optic Engineers Conference, California, Amerika Birleşik Devletleri, 5 - 10 Mart 2006, ss.91-92
- XIV. **Solid-immersion micromirror with enhanced angular deflection for silicon-based planar lightwave circuits**
Chi C., Tsai J., Hah D., Jeong K., Wu M.
10th IEEE/LEOS International Conference on Optical MEMS and Their Applications, Oulu, Finlandiya, 1 - 04 Ağustos 2005, ss.131-132
- XV. **A large port-count 1x32 wavelength-selective switch using a large scan-angle, high fill-factor, two-axis analog micromirror array**
Tsai J., Fan L., Chi C., HAH D., Wu M. C.
30th European Conference on Optical Communication, Stockholm, İsveç, 5 - 09 Eylül 2004, ss.1-2
- XVI. **A high fill-factor, large scan-angle, two-axis analog micromirror array driven by leverage mechanism**
Tsai J., Fan L., HAH D., Wu M. C.
International Conference on Optical MEMS and Their Applications, Takamatsu, Japonya, 22 - 26 Ağustos 2004, ss.30-31
- XVII. **Scanning micromirrors: An overview**
Patterson P., Hah D., Fujino M., Piyawattanametha W., Wu M.
Conference on Optomechatronic Micro/Nano Components, Devices and Systems, Pennsylvania, Amerika Birleşik Devletleri, 27 - 28 Ekim 2004, cilt.5604, ss.195-207
- XVIII. **A Surface and Bulk Micromachined Angular Vertical Combdrive for Scanning Micromirrors**
Piyawattanametha W., Patterson P., Wu M., HAH D., Toshiyoshi H.
Optical Fiber Communication Conference (OFC), Atlanta, Amerika Birleşik Devletleri, cilt.86, ss.251-252
- XIX. **Wavelength-selective 1xN2 switches with two-dimensional input/output fiber arrays**

- Tsai J., Huang S., HAH D., Wu M. C.
CLEO 2003, Baltimore, Amerika Birleşik Devletleri, 1 - 06 Haziran 2003, ss.772-774
- XX. **MOEM scanners for optical networks**
HAH D., Choi C., Jun C., Kim Y., Patterson P., Toshiyoshi H., Wu M. C.
The 9th KIEE MEMS symposium, Seoul, Güney Kore, 06 Şubat 2003, ss.13-19
- XXI. **Nano-electro-mechanical photonic crystal switches**
Lee M., HAH D., Lau E., Toshiyoshi H., Wu M. C.
6th International Symposium on Contemporary Photonics Technology (CPT 2003), Tokyo, Japonya, 15 - 17 Ocak 2003, ss.135-138
- XXII. **1xN(2) wavelength-selective switch with telescope-magnified 2D input/output fiber collimator array**
Tsai J., Huang S., Hah D., Wu M.
IEEE/LEOS International Conference on Optical MEMS, Hawaii, Amerika Birleşik Devletleri, 18 - 21 Ağustos 2003, ss.45-46
- XXIII. **A self-aligned vertical comb-drive actuator using surface micromachining for scanning micromirrors**
Hah D., Choi C., Jun C., Kim Y.
IEEE/LEOS International Conference on Optical MEMS, Hawaii, Amerika Birleşik Devletleri, 18 - 21 Ağustos 2003, ss.151-152
- XXIV. **A 2D scanner by surface and bulk micromachined angular vertical comb actuators**
Piyawattanametha W., Patterson P., Hah D., Toshiyoshi H., Wu M.
IEEE/LEOS International Conference on Optical MEMS, Hawaii, Amerika Birleşik Devletleri, 18 - 21 Ağustos 2003, ss.93-94
- XXV. **Wavelength-selective 1xN2 switches with two-dimensional input/output fiber arrays**
Tsai J., Huang S., HAH D., Wu M. C.
Conference on Lasers and Electro-Optics (CLEO); Postconference Digest, Baltimore, MD, Amerika Birleşik Devletleri, 1 - 06 Haziran 2003, cilt.88, ss.775-777
- XXVI. **Analog micromirror arrays with orthogonal scanning directions for wavelength-selective 1XN(2) switches**
Tsai J., Huang S., Hah D., Wu M.
12th International Conference on Solid-State Sensors, Actuators and Microsystems (TRANSDUCERS 03), Massachusetts, Amerika Birleşik Devletleri, 8 - 12 Haziran 2003, ss.1776-1779
- XXVII. **MEMS photonic devices and their applications**
Wu M., HAH D., Huang S., Tsai J.
7th Optoelectronics and communications conference (OECC 2002), Yokohama, Japonya, 8 - 12 Temmuz 2002, ss.38-39
- XXVIII. **A novel tunable MEMS capacitor based on angled vertical comb drive actuators**
Nguyen H., HAH D., Patterson P., Chao R., Piyawattanametha W., Wu M. C.
Hilton Head 2002 Solid-State Sensor & Actuator Workshop, Hilton Head Island, Amerika Birleşik Devletleri, 3 - 06 Haziran 2002, ss.277-280
- XXIX. **Low voltage MEMS micromirror arrays with hidden vertical comb-drive actuators**
HAH D., Huang S., Nguyen H., Chang H., Tsai J., Toshiyoshi H., Wu M. C.
Hilton Head 2002 Solid-State Sensor & Actuator Workshop, Hilton Head Island, Amerika Birleşik Devletleri, 3 - 06 Haziran 2002, ss.11-14
- XXX. **Design of electrostatic actuators for MOEMS applications**
Hah D., Toshiyoshi H., Wu M.
Conference on Design, Test, Integration, and Packaging of MEMS/MOEMS 2002, Cannes, Fransa, 6 - 08 Mayıs 2002, cilt.4755, ss.200-207
- XXXI. **Open-loop operation of MEMS WDM routers with analog micromirror array**
Huang S., Tsai J., Hah D., Toshiyoshi H., Wu M.
IEEE/LEOS International Conference on Optical MEMS, LUGANO, İsviçre, 20 - 23 Ağustos 2002, ss.179-180
- XXXII. **Microelectromechanical scanning devices for optical networking applications**
Wu M. C., HAH D., Patterson P. R., Toshiyoshi H.

2002 IEEE International Solid-State Circuits Conference, San Francisco, CA, Amerika Birleşik Devletleri, 3 - 07 Şubat 2002, ss.288

XXXIII. Advanced MEMS for photonics

Wu M., Patterson P., HAH D., Lee M., Huang S., Tsai J.

60th Device Research Conference, DRC 2002, California, Amerika Birleşik Devletleri, 24 - 26 Haziran 2002, cilt.2002-January, ss.13-16

XXXIV. Recent advances in optical MEMS devices and systems

Patterson P., Hah D., Lee M., Tsai J., Wu M.

Conference on Photonic Devices and Algorithms for Computing IV, Washington, Amerika Birleşik Devletleri, 8 - 09 Temmuz 2002, cilt.4788, ss.1-8

XXXV. MOEMS electrostatic scanning micromirrors design and fabrication

Patterson P., Hah D., Su G., Toshiyoshi H., Wu M.

1st International Symposium on Integrated Electronics, Pennsylvania, Amerika Birleşik Devletleri, 12 - 17 Mayıs 2002, cilt.2002, ss.369-380

XXXVI. A Low Voltage, Large Scan Angle MEMS Micromirror Array with Hidden Vertical Comb-Drive Actuators for WDM Routers

HAH D., Huang S., Nguyen H., Chang H., Wu M. C., Toshiyoshi H.

Optical Fiber Communication Conference, OFC 2002, California, Amerika Birleşik Devletleri, 17 Mart 2002, ss.92-93

XXXVII. MEMS WDM routers using analog micromirror arrays

Wu M., Tsai J., Huang S., Hah D.

15th Annual Meeting of the IEEE-Lasers-and-Electro-Optics-Society, Glasgow, İngiltere, 10 - 14 Kasım 2002, ss.582-583

XXXVIII. A scanning micromirror with angular comb drive actuation

Patterson P., Hah D., Nguyen H., Toshiyoshi H., Chao R., Wu M.

15th IEEE International Conference on Micro Electro Mechanical Systems (MEMS 2002), Nevada, Amerika Birleşik Devletleri, 20 - 24 Ocak 2002, ss.544-547

XXXIX. Integration of a honeycomb micromirror with a surface micromachined 2D scanner for improved performance

Patterson P., Su G., HAH D., Wu M. C.

AVS 48th International Symposium, San Francisco, Amerika Birleşik Devletleri, 29 Ekim - 02 Kasım 2001, ss.1

XL. An angular vertical comb drive actuator for scanning micromirrors

Patterson P., HAH D., Chang H., Toshiyoshi H., Wu M. C.

International Conference on Optical MEMS and Their Applications, Okinawa, Japonya, 25 - 28 Eylül 2001, ss.25-26

XLII. Low voltage actuated RF MEMS switches using push-pull operation

HAH D., Yoon E., Hong S.

International Conference on Solid State Devices and Materials, Sendai, Japonya, 28 - 31 Ağustos 2000, ss.392-393

XLII. Surface micromachined microwave switch with push-pull configuration

HAH D., Yoon E., Hong S.

The 2nd Korean MEMS Conference, Daejeon, Güney Kore, 07 Nisan 2000, ss.263-268

XLIII. A low voltage actuated micromachined microwave switch using torsion springs and leverage

Hah D., Yoon E., Hong S.

IEEE MTT-S International Microwave Symposium (IMS2000), Massachusetts, Amerika Birleşik Devletleri, 11 - 16 Haziran 2000, ss.157-160

XLIV. Optomechanical pressure sensors using multi-mode interference couplers on thin p+-Si membranes

HAH D., Yoon E., Hong S.

The 6th Korean Conference on Semiconductor, Seoul, Güney Kore, 01 Şubat 1999, ss.175-176

XLV. Optical coupler sensor with movable waveguide

HAH D., Hong S., Kwon Y.

The 3rd Korean Conference on Semiconductor, Jeongju, Güney Kore, 5 - 06 Şubat 1996, ss.457-458

Desteklenen Projeler

HAH D., Yükseköğretim Kurumları Destekli Proje, Theoretical study on optical filters with nanoelectromechanical tuning, 2016 - 2018

HAH D., Diğer Uluslararası Fon Programları, Optical probe for microscopic cancer identification in minute structures, 2009 - 2013

HAH D., Diğer Uluslararası Fon Programları, Carbon nanotube reinforced metal matrix composites for microelectromechanical systems (MEMS) applications, 2011 - 2012

HAH D., Diğer Uluslararası Fon Programları, Compact MEMS-based optical probe modules for optical coherence tomography (OCT) application, 2006 - 2011

HAH D., Diğer Uluslararası Fon Programları, Room temperature deposition of carbon nanotube film, 2010 - 2010

HAH D., Diğer Uluslararası Fon Programları, Micro glow discharge devices, 2009 - 2010

HAH D., Diğer Uluslararası Fon Programları, Enhancement of nanoscale surface characterization capabilities for multi-disciplinary researches, 2007 - 2010

HAH D., Diğer Uluslararası Fon Programları, Combined soil moisture meter and dynamic cone penetrometer (DCP), 2007 - 2008

HAH D., Diğer Uluslararası Fon Programları, Low-voltage, laterally-driven RF microelectromechanical (MEM) switches fabricated by single-mask process, 2006 - 2007

Metrikler

Yayın: 83

Atf (WoS): 945

Atf (Scopus): 1134

H-İndeks (WoS): 16

H-İndeks (Scopus): 17