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Publicații 15 Observație: [Pandelescu](#) este numele de familie înainte de căsătorie

1 carte

- B1 M.D. Pirzada, and R.M. Beiu (eds.)
Proceedings of the Third Annual Mechanical Engineering Graduate Symposium
 School of Mechanical and Materials Engineering, Washington State University
 Pullman, WA, USA, Apr. 2003

7 articole de jurnal (1 ISI and 6 BDI)

- J1 R.M. Pandelescu
 Fiber Optics Communication Systems
Journal of the Military Technical Academy, 7 pp., 1999 BDI
- J2 A.J. Foust, R.M. Beiu, and D.M. Rector
 Optimized Birefringence Changes During Isolated Nerve Activation
Applied Optics, vol. 44, no. 11, pp. 2008-2012, Apr. 2005 IF=1.637 ISI
<http://dx.doi.org/10.1364/AO.44.002008>
- J3 C.D. Stănescu, and R.M. Beiu
 Connecting Optical Fibers
Annals of the University of Oradea
Fascicle of Management and Technological Engineering
 vol. 15, no. 5, pp. 621-624, 2006 BDI
 doi: 10.15660/AUOFMTE.2006.282
http://www.imtuoradea.ro/auo.fmte/files-2006/MECATRONICA_files/Constantin%20Stanescu%201.pdf
- J4 R.M. Beiu, and C.D. Stănescu
 On Optical Power Budgets for Fiber Optics
Annals of the University of Oradea
Fascicle of Management and Technological Engineering
 vol. 15, no. 5, pp. 723-728, 2006 BDI
 doi: 10.15660/AUOFMTE.2006.300
http://www.imtuoradea.ro/auo.fmte/files-2006/MECATRONICA_files/Roxana-Marina%20Beiu%201.doc.pdf
- J5 R.M. Beiu, and C.D. Stănescu
 Mathematical and Technological Approaches for Designing
 On-Chip Interconnect Concave Micromirrors
UPB Scientific Bulletin, Series C, vol. 69, no. 1, pp. 11-22, Jan. 2007 BDI
http://www.scientificbulletin.upb.ro/rev_docs_arhiva/full45828.pdf
- J6 R.M. Beiu, and C.D. Stănescu
 Optical Fiber Photonic Embedded Sensor
Annals of the University of Oradea
Fascicle of Management and Technological Engineering
 vol. 16, no. 6, pp. 1089-1095, 2006 BDI
 doi: 10.15660/AUOFMTE.2007.658
http://www.imtuoradea.ro/auo.fmte/files-2007/MECATRONICA_files/Roxana_Mariana_Beiu_1.pdf
- J7 R.M. Beiu, C.D. Stănescu, and A. Cârstoiu
 On 3D Photonic Crystal: A Brief Evaluation of
 Their Main Characteristics for Various Topologies
UPB Scientific Bulletin, Series C, vol. 70, no. 2, pp. 41-52, 2008 BDI
http://www.scientificbulletin.upb.ro/rev_docs_arhiva/full83596.pdf

8 Conferințe (7 ISI and 1 BDI)

- C1 R.M. Beiu, C.D. Stănescu, and A. Cârstoiu
On 3D Photonic Crystals
International Conference on Material Science and Engineering BraMat'07 BDI
Brașov, Romania, 22-24 Feb. 2007, pp. 135-140
<http://www2.unitbv.ro/LinkClick.aspx?fileticket=ELsGNJr65Ts%3D&tabid=8330&language=en-US>
- C2 R.M. Beiu, C.D. Stănescu, and V. Beiu
Highly Sensitive Nano-Photonic Embedded Sensor
IEEE International Conference on Nanotechnology IEEE-NANO'07 ISI
Hong Kong, China, 2-5 Aug. 2007, pp. 737-741
<http://dx.doi.org/10.1109/NANO.2007.4601293>
<http://ieeexplore.ieee.org/xpl/articleDetails.jsp?amumber=4601293>
- C3 R.M. Beiu, C.D. Stănescu, and V. Beiu
Unique In-Fiber Photonic Crystal Sensor
IEEE International Midwest Symposium on Circuits and Systems MWSCAS'07 ISI
Montréal, Canada, 5-8 Aug. 2007, pp. 116-119
<http://dx.doi.org/10.1109/MWSCAS.2007.4488550>
<http://ieeexplore.ieee.org/xpl/articleDetails.jsp?amumber=4488550>
- C4 R.M. Beiu, C.D. Stănescu, and V. Beiu
A Novel Microstructured Fiber Optic Sensor for Small Deformations
SPIE International Symposium on Optomechatronic Technology ISOT'07 ISI
Lausanne, Switzerland, 8-10 Oct. 2007, art. 6716OD (8 pp.)
<http://dx.doi.org/10.1117/12.754190>
<http://spie.org/Publications/Proceedings/Paper/10.1117/12.754190>
- C5 R.M. Beiu, and V. Beiu
Fiber Optic Mechanical Sensor Based on a Triangular-lattice Photonic Crystal
IEEE PhotonicsGlobal@Singapore IPGC'08 ISI
Singapore, 08-11 Dec. 2008, p. 183-186
<http://dx.doi.org/10.1109/IPGC.2008.4781347>
<http://ieeexplore.ieee.org/xpl/articleDetails.jsp?amumber=4781347>
- C6 R.M. Beiu, and V. Beiu
Pico Sensors for All Seasons - When Light Performs its Marvels
IEEE International Conference on Innovations in Information Technology IIT'08 ISI
Al Ain, UAE, 16-18 Dec. 2008, pp. 116-120
<http://dx.doi.org/10.1109/INNOVATIONS.2008.4781727>
<http://ieeexplore.ieee.org/xpl/articleDetails.jsp?amumber=4781727>
- C7 R.M. Beiu, C. Mnerie, and V.-F. Duma,
Analysis of Curved Micro-mirrors for On Chip Communication
SPIE Advanced Topics in Optoelectronics, Microelectronics, and Nanotechnologies ATOM-N'16 ISI
Constanta, Romania, Proc. of SPIE, vol. 10010, pp. 100101Y(1-8), 2016.
<http://dx.doi.org/10.1117/12.2246019>
- C8 R.M. Beiu, V.-F. Duma, and V. Beiu
Transverse 2D Photonic Crystal Inside a Fiber Optic For Picometer-scale Measurements
International Conference on Numerical Simulation of Optoelectronic Devices NUSOD'17, Copenhagen, Denmark, 24-28 Jul. 2017.

Alte Conferințe 8

- O1 A. Vasile, and R.M. Pandelescu
Using Atypical Solutions for Modifying Optical Systems Parameters
Scientific Research Conference, Bucharest, Romania, 7 pp., 1995
- O2 A. Vasile, and R.M. Pandelescu
Performance Survey of Night Vision Devices
Scientific Research Conference, Bucharest, Romania, 10 pp., 1996
- O3 M. Varga, and R.M. Pandelescu
Using Fiber Optics for Transferring Images
Scientific Research Conference, Bucharest, Romania, 11 pp., 1997
- O4 A. Vasile, and R.M. Pandelescu
Infrared Detection Applied to Thermovision
Scientific Research Conference, Bucharest, Romania, 10 pp., 1998
- O5 R.M. Pandelescu, A. Vâsc, and C. Vasile
On Using Photographic and Video Equipment in Surveillance Activities

- Scientific Research Conference, Bucharest, Romania, 12 pp., 1999
- O6 R.M. Beiu
High-Resolution Curved Micromirrors for On-Chip Interconnects
The Third Annual Mechanical Engineering Graduate Symposium
Washington State University, Pullman, WA, USA, 5 Mar. 2003
- O7 R.M. Beiu, C.D. Richards, R.F. Richards, M.D. Fueller, D.F. Bahr, and D.M. Rector
A Flexible 64 Channel Electrode Array for Chronic Local Field Potential Recording and Mapping
Neuroscience'03, New Orleans, LA, USA, 25-30 Oct. 2003
- O8 R.M. Beiu
Embedded Sensor Enabled by Photonic Crystals
ISREIE 2016, Arad, jud. Arad, Romania, 8-10 Dec. 2016

Citări <http://scholar.google.com/citations?user=gzmO7wEAAAAJ&hl=en>

J2 (ISI) A.J. Foust, R.M. Beiu, and D.M. Rector
Optimized Birefringence Changes During Isolated Nerve Activation
Applied Optics, vol. 44, no. 11, pp. 2008-2012, Apr. 2005 IF=1.637 ISI

15 citări:

- 1) M.D. McCluskey, J.J. Sable, A.J. Foust, G. Gratton, and D.M. Rector
Recording invertebrate nerve activation with modulated light changes
Applied Optics, vol. 46, no. 10, pp. 1866-1871, Apr. 2007 IF = 3.352
<http://dx.doi.org/10.1364/AO.46.001866>
<https://www.osapublishing.org/ao/abstract.cfm?uri=ao-46-10-1866>
- 2) A.J. Foust ; J.L. Schei ; M.J. Rojas ; D.M. Rector
In Vitro and in Vivo Noise Analysis for Optical Neural Recording
Journal of Biomedical Optics, vol. 13, no. 4, pp. 044038, July 2008 IF = 2.97
<http://dx.doi.org/10.1117/1.2952295>
<http://biomedicaloptics.spiedigitallibrary.org/article.aspx?articleid=1102755>
- 3) J.L. Schei, M.D. McCluskey, A.J. Foust, X.-C. Yao, and D.M. Rector
Action Potential Propagation Imaged with High Temporal Resolution
Near-infrared Video Microscopy and Polarized Light
NeuroImage. vol. 40, no. 3, pp. 1034–1043, Apr. 2008 IF = 5.694
<http://dx.doi.org/10.1016/j.neuroimage.2007.12.055>
<http://www.sciencedirect.com/science/article/pii/S1053811907011664>
- 4) F.A. Wininger, J.L. Schei, and D.M. Rector
Complete Optical Neurophysiology: Toward Optical Stimulation and
Recording of Neural Tissue
Applied Optics, vol. 48, no. 10, pp. D218-D224, Apr. 2009 IF = 1.410
<http://dx.doi.org/10.1364/AO.48.00D218>
<https://www.osapublishing.org/ao/abstract.cfm?uri=ao-48-10-D218>
- 5) R.-W. Lu, Q.-X. Zhang, and X.-C. Yao
Circular polarization intrinsic optical signal recording of
stimulus-evoked neural activity
Optics Letters, vol. 36, no.10, pp. 1866-1868, Mar. 2011 IF = 3.352
<http://dx.doi.org/10.1364/OL.36.001866>
<https://www.osapublishing.org/ol/abstract.cfm?uri=ol-36-10-1866>
- 6) A.J. Foust, and D.M. Rector
Optically Teasing Apart Neural Swelling and Depolarization
Neuroscience, vol. 145, no. 3, pp. 887-899, Mar. 2007 IF = 3.352
<http://dx.doi.org/10.1016/j.neuroscience.2006.12.068>
<http://www.sciencedirect.com/science/article/pii/S0306452206017544>
- 7) X. Yao ; B. Wang
Intrinsic Optical Signal Imaging of Retinal Physiology: A Review
Journal of Biomedical Optics, vol. 20, no. 9, pp. 090901, Sep 2015 IF = 2.859
<http://dx.doi.org/10.1117/1.JBO.20.9.090901>
<http://biomedicaloptics.spiedigitallibrary.org/article.aspx?articleid=2448290>
- 8) A.J. Foust and D.M. Rector
Optically Teasing Apart Neural Swelling and Depolarization
Biomedical Topical Meeting 2006, Fort Lauderdale, Florida United States, 19 March 2006
<http://dx.doi.org/10.1364/BIO.2006.MD7>
<https://www.osapublishing.org/abstract.cfm?uri=BIO-2006-MD7>
- 9) M.D. McCluskey, J.J. Sable, A.J. Foust, G. Gratton, and D.M. Rector
Action Potentials in Invertebrate Nerves Studied by Modulated Light Changes
Biomedical Topical Meeting 2006, Fort Lauderdale, Florida United States, 19 March 2006
<http://dx.doi.org/10.1364/BIO.2006.ME15>
<https://www.osapublishing.org/abstract.cfm?uri=BIO-2006-ME15>

- 10) J.L. Schei, A.J. Foust, M.J. Rojas, J.A. Navas, and D.M. Rector
 Evoked Optical Response under Wake, Sleep and Anesthetized States
 Biomedical Optics 2008, St. Petersburg, Florida United States, 16–19 March 2008
<http://dx.doi.org/10.1364/BIOMED.2008.BME5>
<https://www.osapublishing.org/abstract.cfm?uri=BIOMED-2008-BME5>
- 11) J.L. Schei, D.M. Rector
 Fast Optical Neurophysiology
 Imaging the Brain with Optical Methods, Chapter 10, pp. 223-243, Aug. 2009
http://dx.doi.org/10.1007/978-1-4419-0452-2_10
http://link.springer.com/chapter/10.1007/978-1-4419-0452-2_10
- 12) K.. Schoener, L. Cervia, and I.J. Bigio
 Novel Cooled Sliding Chamber Elucidates Origins of
 Action Potential Modulated Birefringence
 Biomedical Optics and 3-D Imaging 2010, Miami, FL, USA, 11-14 Apr. 2010
<http://dx.doi.org/10.1364/BIOMED.2010.BTuD80>
<https://www.osapublishing.org/abstract.cfm?uri=BIOMED-2010-BTuD80>
- 13) A.J Foust
 Teasing Apart Optical Correlates of Neuronal Excitation
 PhD Thesis, Department of Veterinary and Comparative Anatomy,
 College of Veterinary Medicine, Washington State University, USA, 2006
<https://research.wsulibs.wsu.edu/xmlui/handle/2376/2459>
- 14) K.J. Schoener
 Non-invasive, High-Resolution Spatiotemporal Mapping of Neuronal Activity through
 Field-induced Changes in Birefringence
 PhD Thesis, College of Engineering, Boston University, Boston, USA, 2010
<http://gradworks.umi.com/34/06/3406004.html>
- 15) J.L. Schei
 Optical Imaging of Neural and Hemodynamic Brain Activity
 PhD Thesis, Department of Physics and Astronomy, Washington State University, USA, May 2011
<https://research.wsulibs.wsu.edu/xmlui/handle/2376/2854>

C5 (ISI) R.M. Beiu, and V. Beiu

Fiber Optic Mechanical Sensor Based on a Triangular-lattice Photonic Crystal
 IEEE PhotonicsGlobal@Singapore IPGC'08 ISI
 Singapore, 08-11 Dec. 2008, pp. 183-186
<http://dx.doi.org/10.1109/IPGC.2008.4781347>
<http://ieeexplore.ieee.org/xpl/articleDetails.jsp?arnumber=4781347>

3 citări:

- 1) Y. Zhao, Y.-N. Zhang, and Q. Wang
 Research Advances of Photonic Crystal Gas and Liquid Sensors
Sensors & Actuators B: Chemical, vol. 160, no. 1, pp. 1288-1297, Dec. 2011 IF = 3.898
<http://dx.doi.org/10.1016/j.snb.2011.09.064>
<http://www.sciencedirect.com/science/article/pii/S0925400511008665>
- 2) G. Korotcenkov
 Photonic Crystals
Handbook of Gas Sensor Materials, Springer, New York, pp. 111-119, 2014 BDI
 10.1007/978-1-4614-7388-6_6
http://link.springer.com/chapter/10.1007/978-1-4614-7388-6_6
- 3) Y. Wang, D. Chen n, G. Zhang, J. Wang, and S. Tao
 A Super Narrow Band Filter Based on Silicon 2D Photonic Crystal
 Resonator and Reflectors
Optical Communications, vol. 363, pp. 13-20, 15 Mar. 2011 IF = 1.449
<http://dx.doi.org/10.1016/j.optcom.2015.10.070>
<http://www.sciencedirect.com/science/article/pii/S0030401815302558>

J3 (BDI) C.D. Stănescu, and R.M. Beiu

Connecting Optical Fibers
Annals of the University of Oradea
Fascicle of Management and Technological Engineering
 vol. 15, no. 5, pp. 621-624, 2006
 doi: 10.15660/AUOFMTE.2006.282
http://www.imtuoradea.ro/auo.frnte/files-2006/MECATRONICA_files/Constantin%20Stanescu%201.pdf

1 citare:

- 1) I. Artundo, A. Tymecki, E. Ortego, and B. Ortega
Cost Forecasting of Passive Components for Optical Fiber Network Deployments
Optical Fiber Technology, vol. 17, no. 3, pp. 218-226, May 2011 IF = 1.554
<http://dx.doi.org/10.1016/j.yofte.2011.02.001>
<http://www.sciencedirect.com/science/article/pii/S1068520011000198>

J4 (BDI) R.M. Beiu, and C.D. Stănescu
On Optical Power Budgets for Fiber Optics
Annals of the University of Oradea
Fascicle of Management and Technological Engineering
vol. 15, no. 5, pp. 723-728, 2006
doi: 10.15660/AUOFMTE.2006.300
http://www.imtuoradea.ro/auo.fmte/files-2006/MECATRONICA_files/Roxana-Marina%20Beiu%201.doc.pdf

1 citare:

- 1) U. Farooq, S. Bashir, T. Tasneem, A.Saboor, and A. Rauf
Migration from Copper to Fiber Access Network using
Passive Optical Network for Green and Dry Field Areas of Pakistan
International Journal of Soft Computing and Engineering (IJSCE)
vol. 5, no. 4, pp. 887-899, Sept. 2015
<http://arxiv.org/abs/1509.05958> BDI

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