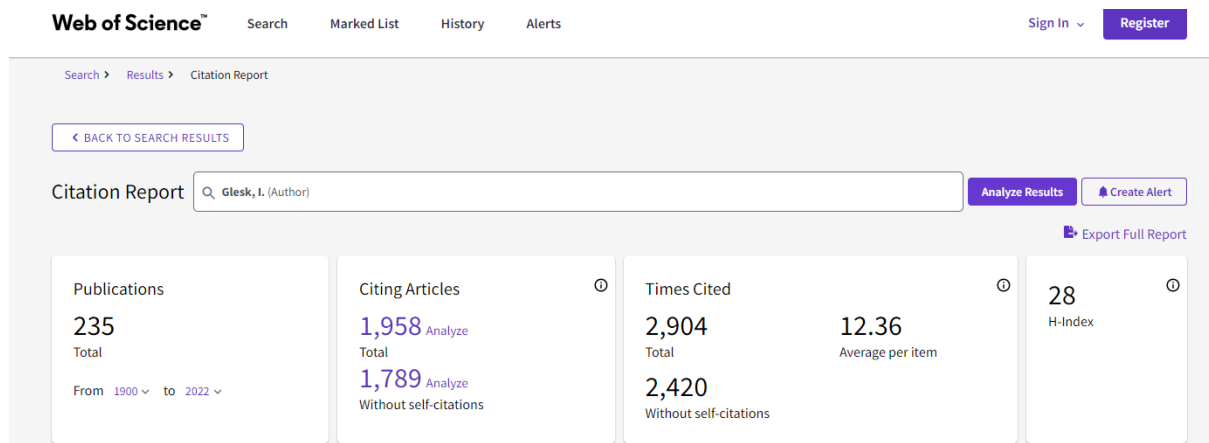


## Rozsah publikačnej činnosti a zoznam najvýznamnejších publikovaných prác, projektov, umeleckých diel, citácií a ohlasov:

### Najcitovanejšie práce podľa WoS k 5.12.2021:

235 Publications		Citations: highest first		< 1 of 5 >		Citations						
						< Back			Forward >		Average per year	Total
						2018	2019	2020	2021	2022		
1	<a href="#">SOKOLOFF, JP; PRUCNAL, PB; (...); KANE, M</a> Jul 1993   <a href="#">IEEE PHOTONICS TECHNOLOGY LETTERS</a> 5 (7) , pp.787-790	3	5	2	3	0	16.34	474				
2	All-optical data format conversion between RZ and NRZ based on a Mach-Zehnder interferometric wavelength converter <a href="#">Xu, L; Wang, BC; (...); Prucnal, PR</a> Feb 2003   <a href="#">IEEE PHOTONICS TECHNOLOGY LETTERS</a> 15 (2) , pp.308-310	2	3	1	0	0	6.16	117				
3	DEMONSTRATION OF ALL-OPTICAL DEMULTIPLEXING OF TDM DATA AT 250 GBIT/S <a href="#">GLESK, J; SOKOLOFF, JP and PRUCNAL, PR</a> Feb 17 1994   <a href="#">ELECTRONICS LETTERS</a> 30 (4) , pp.339-341	0	0	1	1	0	3.82	107				
4	ALL-OPTICAL ADDRESS RECOGNITION AND SELF-ROUTING IN A 250GBIT/S PACKET-SWITCHED NETWORK <a href="#">GLESK, J; SOLOKOFF, JP and PRUCNAL, PR</a> Aug 4 1994   <a href="#">ELECTRONICS LETTERS</a> 30 (16) , pp.1322-1323	0	0	0	0	0	3.61	101				
5	Comparison of Sagnac and Mach-Zehnder ultrafast all-optical interferometric switches based on a semiconductor resonant optical nonlinearity <a href="#">Kang, KI; Chang, TG; (...); Prucnal, PR</a> Jan 20 1996   <a href="#">APPLIED OPTICS</a> 35 (3) , pp.417-426	1	2	1	1	0	3.19	83				
6	Subwavelength grating filtering devices <a href="#">Wang, JJ; Glesk, J and Chen, LR</a> Jun 30 2014   <a href="#">OPTICS EXPRESS</a> 22 (13) , pp.15335-15345	10	7	8	9	0	8.88	71				
7	Observation of temporal vector soliton propagation and collision in birefringent fiber <a href="#">Rand, D; Glesk, J; (...); Prucnal, PR</a> Feb 2 2007   <a href="#">PHYSICAL REVIEW LETTERS</a> 98 (5)	4	2	5	6	0	4.6	69				
8	A novel fast optical switch based on two cascaded Terahertz Optical Asymmetric Demultiplexers (TOAD) <a href="#">Wang, BC; Baby, V; (...); Prucnal, PR</a> Jan 14 2002   <a href="#">OPTICS EXPRESS</a> 10 (1) , pp.15-23	1	0	0	1	0	3.1	62				
9	PERFORMANCE OF A 50 GBIT/S OPTICAL-TIME DOMAIN MULTIPLEXED SYSTEM USING A TERAHERTZ OPTICAL ASYMMETRIC DEMULTIPLEXER SOKOLOFF, JP; GLESK, J; (...); BONCEK, RK	1	1	0	0	0	2.18	61				
10	ASYMMETRIC OPTICAL LOOP MIRROR - ANALYSIS OF AN ALL-OPTICAL SWITCH <a href="#">KANE, MG; GLESK, J; (...); PRUCNAL, PR</a> Oct 10 1994   <a href="#">APPLIED OPTICS</a> 33 (29) , pp.6833-6842	0	0	1	0	0	1.86	52				
11	Experimental demonstration and scalability analysis of a four-node 102-Gchip/s fast frequency-hopping time-spreading optical CDMA network <a href="#">Baby, V; Glesk, J; (...); Prucnal, PR</a> Jan 2005   <a href="#">IEEE PHOTONICS TECHNOLOGY LETTERS</a> 17 (1) , pp.253-255	0	0	1	0	0	3	51				
12	New generation of devices for all-optical communications <a href="#">Glesk, J; Runser, RJ and Prucnal, PR</a> Apr 2001   <a href="#">ACTA PHYSICA SLOVACA</a> 51 (2) , pp.151-162	0	0	0	1	0	2.38	50				
13	Unbalanced TOAD for optical data and clock separation in self-locked transparent OTDM networks <a href="#">Deng, KI; Glesk, J; (...); Prucnal, PR</a> Jun 1997   <a href="#">IEEE PHOTONICS TECHNOLOGY LETTERS</a> 9 (6) , pp.830-832	0	0	0	0	0	1.96	49				
14	Tuning machine learning models for prediction of building energy loads <a href="#">Seyedzadeh, S; Rahimian, FP; (...); Glesk, J</a> May 2019   <a href="#">SUSTAINABLE CITIES AND SOCIETY</a> 47	0	2	16	27	1	15.33	46				
15	Subwavelength grating enabled on-chip ultra-compact optical true time delay line <a href="#">Wang, JJ; Ashrafi, B; (...); Chen, LR</a> Jul 26 2016   <a href="#">SCIENTIFIC REPORTS</a> 6	10	3	12	9	0	7.67	46				

## H-index



### Celkový zoznam publikácií:

#### Pozvané prednášky

27. "From IT to ICE or back to the beginning," University of Žilina, Liptovský Mikuláš, Slovakia July 2017.
26. "From IT to ICE, the resulting challenges and the search for solutions" McGill University, Montreal, Canada, 2 May 2017.
25. "Advancements towards all-optical signal processing in light of current IT challenges" Roma Tre Rome Italy, 7 Dec 2016.
24. "OCDMA as Data MUX Technique for Optical Broadband," Given at Slavkov, Czech Republic, 16 June 2015.
23. "Towards Data Security in Communication Networks," Given at Slavkov, Czech Republic, 15 June 2015.
22. "Can photonic networking help data centres," Given at University of West Bohemia, Pilsen, 30 April 2014, Czech Republic.
21. "Applications of advanced photonic devices," Given at Boskovice, 17 Oct. 2013, Czech Republic.
20. "Towards Green High Capacity Optical Networks," Given at Boskovice, 16 Oct. 2013, Czech Republic.
19. "Advancements in telecommunications and future perspectives," Given at University of Žilina, April 2013, Slovak Republic.
18. "Applications of Advanced Photonic Devices," Given at CIP /Huawei, Ipswich, UK, 4 May 2012, UK.
17. "Ultra-fast all optical signal processing for advanced data communication," Given at Université Paris-Sud, Paris, 16 Dec 2011, France.
16. "Improving scalability and data security with Optical CDMA," Given at Canadian National Research Council, Ottawa, September 2010, Canada.
15. "The Internet revolution - its impact and challenges," Given at GRPe Scholars Day, Ross Priory, 30 Sept 2009, Scotland, UK
14. "Ultrafast all-optical data processing are we ready for it?" Given at Canadian National Research Council, Ottawa, May 2009, Canada.
13. "What Comes Next in Data Communications," Given at Nanyang Technological University, 12 Dec. 2008, Singapore.
12. "Design of an Avionics Platform for Lockheed-Martin Based on Incoherent Optical CDMA," Given at The 2006 IEEE Sarnoff Symposium, Princeton, NJ, March 27-28, 2006.
11. "From Smoke Signals to All-Optical Communications," Given at University of Žilina, Žilina, Slovakia, Oct. 24, 2005.
10. "NJ Center for Ultra-Fast Broadband Communications Networks," Given at Workshop on University-Industry Collaboration, Princeton, NJ, September 17, 2003.
9. "Applications of Lasers for Testing and Optical Communication," Given at Comenius University, Bratislava, Slovak Republic, October 2002.

8. "The Physics of Optical Switching," Given at Stevens Institute of Technology, Hoboken NJ, USA, February 2002.
7. "From Smoke Signals to Terabit Optical Communication Networks," Given at the Mathematics and Physics Faculty, Comenius University, Bratislava, Slovak Republic, January 2002.
6. "Current Technologies for Optical Communications," Given at the Institute of Physics, Slovak Academy of Sciences, Bratislava, Slovak Republic, December 1999.
5. "New Generation of Devices for Ultrafast Optical Networks Based on Nonlinear Effects," Given at the Slovak Academy of Sciences, Bratislava, Slovak Republic, December 1997.
4. "Key Milestones in the Historical Development of Optical Communications," Given at the Institute of New Media and Communications, Seoul National University, Seoul, Korea, November 1996
3. "Optical Communication Systems and their Future," Given at the Mathematics and Physics Faculty, Comenius University, Bratislava, Slovak Republic, January 1996.
2. "Ultrafast All-Optical Demultiplexers for Optical Networks," Given at the Slovak Academy of the Sciences, Bratislava, Slovak Republic, June 1995.
1. "TOAD - All-Optical Demultiplexer," Given at Siemens Corporate Research, Inc., Princeton, NJ, USA, November 1993.

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18. Md S. Ahmed, I. Glesk, "Application of Semiconductor Optical Amplifier (SOA) in Managing Chirp of Optical Code Division Multiple Access (OCDMA) Code Carriers in Temperature Affected Fibre Link," In *Applications of Semiconductor Optical Amplifiers*, Kyriakos E. Zoiros (Ed.) pp. 156, MDPI, Switzerland (2018).
17. M. Masood, M. M. Fouad, I. Glesk, "Pareto Based Bat Algorithm for Multi Objectives Multiple Constraints Optimization in GMPLS Networks," In: Hassanien A., Tolba M., Elhoseny M., Mostafa M. (eds).. [https://doi.org/10.1007/978-3-319-74690-6\\_4](https://doi.org/10.1007/978-3-319-74690-6_4)
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- 146 J. Dubovan, J. Litvik, D. Benedikovic, J. Mullerova, I. Glesk, A. Veselovsky, M. Dado, "Impact of Wind Gust on High-Speed Characteristics of Polarization Mode Dispersion in Optical Power Ground Wire Cables," *Sensors* 2020, **20** (24), 7110; <https://doi.org/10.3390/s20247110>, doi:10.3390/s20247110.
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- 142 A. K. Umair, A. H. Bermello, M. J. Strain, I. Glesk, A. V. Velasco, "Design of an Athermal Interferometer Based on Tailored Subwavelength Metamaterials for On-Chip Microspectrometry," *IEEE Photonics Journal*, **11** (6), pp. 1-11 (2019). DOI: 10.1109/JPHOT.2019.a943774 .
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- 140 F. P. Rahimian, S. Seyedzadeh, I. Glesk, "OCDMA-Based Sensor Network for Monitoring Construction Sites Affected by Vibrations," *Journal of Information Technology in Construction*, Vol. 14, pp. 299-317 (2019). <http://www.itcon.org/2019/16> .

- 139 C.-W. Chang, G.-C. Yang, I. Glesk, W. C. Kwong, "On the Performance of the Effects of Temperature Variation in Ultrafast Incoherent Fiber-Optic CDMA Systems with SOA-Based Tunable Dispersion Compensator," *IEEE Photonics Journal*, **11**(3), pp. 1-10 (June 2019). DOI: 10.1109/JPHOT.2019.2917818.
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- 134 Md. S. Ahmed and I. Glesk, "Application of Semiconductor Optical Amplifier (SOA) in Managing Chirp of Optical Code Division Multiple Access (OCDMA) Code Carriers in Temperature Affected Fibre Link," *Appl. Sci.*, **8** (5), 715 (2018). doi: <https://doi.org/10.3390/app8050715>.
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- 115 A. Davidson, I. Glesk and A. Buis, "The rising role of photonics in today's data centres," *Rev. Cub. Fis.*, **33** (1E), pp. E17-E25 (2016).
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