

# Listă de lucrări

## A. Teză de doctorat:

1. **Alexandru Frunză**, "Global compensation of system linear impairments for high-speed coherent optical communications", 2022

## B. Îndrumar de laborator:

1. **Alexandru Frunză** și Cristian Rîncu, "ÎNDRUMAR DE LABORATOR PENTRU REȚELE ȘI PROTOCOALE DE COMUNICAȚII I", *Editura Academiei Tehnice Militare "Ferdinand I"*, 2022

## C. Articole în reviste internaționale:

1. **Alexandru Frunză**, Vincent Choqueuse, Pascal Morel și Stéphane Azou, "A Parametric Network for the Global Compensation of Physical Layer Linear Impairments in Coherent Optical Communications", *IEEE Open Journal of the Communications Society*, vol. 3 (Aug. 2022), pp. 1428–1444, doi: <https://doi.org/10.1109/OJCOMS.2022.3201130>
2. **Alexandru Frunză**, Vincent Choqueuse, Pascal Morel, and Stéphane Azou, "Global estimation and compensation of linear effects in coherent optical systems based on nonlinear least squares", *IEEE Systems Journal* vol. 16 (Sept. 2021), pp. 3794–3804, doi: <https://doi.org/10.1109/JSYST.2021.3111777>
3. **Alexandru Frunză**, Vincent Choqueuse, Pascal Morel, Alexandru Serbănescu, and Stéphane Azou, "An Experimental Demonstration of Joint Linear Impairments Compensation in Coherent Optical Systems Using a Parametric Network", *Journal of Military Technology*, vol. 5, nr. 2 (Dec. 2022)
4. **Alexandru Frunză**, Vincent Choqueuse, Pascal Morel, and Stéphane Azou, "Robust Estimation of the Channel Parameters in Presence of Transmitter and Receiver IQ Impairments", *Journal of Military Technology*, vol. 5, nr. 2 (Dec. 2022)

## D. Articole în conferințe internaționale:

1. Vincent Choqueuse, **Alexandru Frunză**, Adel Belouchrani, Stéphane Azou, and Pascal Morel, "ParamNet: A Multi-Layer Parametric Network for Joint Channel Estimation and Symbol Detection", 30th European Signal Processing Conference (EUSIPCO), Belgrade, Serbia, 2022, pp. 1–5, url: <https://eurasip.org/Proceedings/Eusipco/Eusipco2022/pdfs/0001616.pdf>



2. **Alexandru Frunză**, Vincent Choqueuse, Pascal Morel, Alexandru Serbănescu, and Stéphane Azou, "A Comparative Study on Global Compensation Techniques for Coherent Optical Communications", 2022 14<sup>th</sup> International Conference on Communications (COMM), IEEE, Bucharest, Romania, 2022, pp. 1-6, doi: <https://doi.org/10.1109/COMM54429.2022.9817216>
3. **Alexandru Frunză**, Jacqueline E Sime, Vincent Choqueuse, Pascal Morel, and Stéphane Azou, "Joint Estimation and Compensation of Transmitter IQ Imbalance and Laser Phase Noise in Coherent Optical Systems", 2021 IEEE Photonics Conference (IPC), IEEE, Vancouver, BC, Canada, 2021, pp. 1-2, doi: <https://doi.org/10.1109/IPC48725.2021.9593089>
4. Marian Ceaparu, Ștefan. Toma and **Alexandru Frunză**, "Character Level Keywor Spotting in VoIP Networks," 2019 27th Telecommunications Forum (TELFOR), Belgrade, Serbia, 2019, pp. 1-4, doi: <https://doi.org/10.1109/TELFOR48224.2019.8971171>
5. Andrei Jîțaru, Cristian Rîncu and **Alexandru Frunză**, "Evaluation of Carrier Supporting Carrier Networks for Various Types of Services," 2018 International Conference on Communications (COMM), Bucharest, Romania, 2018, pp. 297-300, doi: <https://doi.org/10.1109/ICComm.2018.8484768>
6. **Alexandru Frunză**, Cristian Rîncu and Andrei Jîțaru, "Remote Network Monitoring Using SDN Based Solutions," 2018 International Conference on Communications (COMM), Bucharest, Romania, 2018, pp. 301-304, doi: <https://doi.org/10.1109/ICComm.2018.8484771>

## E. Alte lucrări

1. Vincent Choqueuse, **Alexandru Frunză**, Stéphane Azou, and Pascal Morel, "PhyCOM: A Multi-Layer Parametric Network for Joint Linear Impairments Compensation and Symbol Detection", in: arXiv preprint arXiv:2203.00266 (Mar. 2022), pp. 1-20, doi: <https://doi.org/10.48550/arXiv.2203.00266>

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