

LISTA DE LUCRĂRI ȘTIINȚIFICE
a cadrului didactic ȘUȚAN NICOLETA ANCA

A. Teza de doctorat

1. Cercetări privind capacitatea de multiplicare *in vitro* și stabilitatea genetică a unor hibrizi intergenerici *Fragaria* x *Potentilla*, Domeniul Biologie, Universitatea Babeș-Bolyai, Cluj-Napoca (04.01.2011)

B. Cărți și capitole în cărți

B.1. Capitole în volume la edituri internaționale de prestigiu

1. Șuțan N.A., Popescu A., 2011. Lucrări practice de genetică. Pitesti University Press., ISBN 978-606-560-211-6.
2. Șuțan N.A., Popescu A., 2011. Methods for *in vitro* culture of ornamental strawberry. Pitesti University Press. ISBN 978-606-560-211-3.
3. Soare L.C., Șuțan N.A., 2018. Current Trends in Pteridophyte Extracts: From Plant to Nanoparticles. In: Fernández H. (eds) Current Advances in Fern Research. Springer, Cham, pp 329-357 DOI10.1007/978-3-319-75103-0_16, https://doi.org/10.1007/978-3-319-75103-0_16, Online ISBN 978-3-319-75103-0, Print ISBN 978-3-319-75102-3, Publisher: Springer Nature, Date: Jan 1, 2018.
4. Heikal Y. M., Șuțan N.A., 2021. Mechanisms of Genotoxicity and Oxidative Stress Induced by Engineered Nanoparticles in Plants. In: Khan Z., Ansari MY.K., Shahwar D. (Eds), *Induced Genotoxicity and Oxidative Stress in Plants* Springer, Singapore. DOI: 10.1007/978-981-16-2074-4, eBook ISBN 978-981-16-2074-4, Hardcover ISBN: 978-981-16-2073-7, pp. 151-197.
5. Drăghiceanu O.A., Soare L.C., Șuțan A.N., Fierascu I., Fierascu R.C., Dobrescu C.M., 2021. The use of *Triticum* test in the evaluation of the materials' phytotoxicity, In: Fierăscu I., Fierăscu R., Soare L.C. (Eds), Development of plant extracts and innovative phytosynthesized nanostructures mixtures with phytotherapeutic applications, in order to reduce biocenotic stress in horticultural crops, pp.87-116, Ruse Press. ISBN 978-619-91466-2-0
6. Șuțan A.N., Șuțan C., Fierăscu I., Fierăscu R.C., Drăghiceanu O.A., Soare L.C., 2021. Applications of the *Allium* test in the evaluation of cytogenotoxicity, In: Fierăscu I., Fierăscu R., Soare L.C. (Eds), Development of plant extracts and innovative phytosynthesized nanostructures mixtures with phytotherapeutic applications, in order to reduce biocenotic stress in horticultural crops. pp.141-170, Ruse Press. ISBN 978-619-91466-2-0.
7. Șuțan N.A., Popescu A., 2023. Genome editing by different site-specific nucleases and their applications in improving horticultural crops. In: Khan, Z., Shahwar, D., & Heikal, Y. (Eds.), Genome Editing and Global Food Security: Molecular Engineering Technologies for Sustainable Agriculture (1st ed.). Routledge, <https://doi.org/10.4324/9781003382102>, eBook ISBN 9781003382102, 34 pages
8. Vîlcoci D.Ș., Șuțan N.A., Drăghiceanu O.A., Soare L.C., Cîrstea G., 2023. Nanoformulation Synthesis and Mechanisms of Interactions with Biological Systems. In:

Khan Z., Șuțan N.A. (Eds.), Nanoformulations for Sustainable Agriculture and Environmental Risk Mitigation, CABI, pp. 18-35, ISBN: 978-1-80062-307-1, <https://doi.org/10.1079/9781800623095.0002>

9. Ponopal, C., Șuțan, N.A., Bărbuceanu, D., Păunescu, A., Stegăruș, D., Soare, L. (2024). Freshwater Toxicity Tests and Experimental Environment Procedures. In: Atamanalp, M., Alak, G., Uçar, A., Parlak, V. (eds) Aquatic Toxicology in Freshwater. Springer Water. Springer, Cham. https://doi.org/10.1007/978-3-031-56669-1_4 (TC_1_2024_DSN)

*Autor corespondent

B.4. Editor/redactor/coordonator cărți la alte edituri internaționale

1. Khan Z., Șutan N.A., 2023. Nanoformulations for Sustainable Agriculture and Environmental Risk Mitigation, CABI, ISBN: 978-1-80062-307-1, 240 pages.

C. Articole publicate în reviste cotate ISI și BDI

C.1. Articole publicate în reviste cotate ISI

1. Șuțan N.A., Popescu A., Isac V. (2010): *In vitro* culture medium and explant type effect on callogenesis and shoot regeneration in two genotypes of ornamental strawberry. Romanian Biotechnological Letters, 15(2):12-18, Supplement: 12-18.
2. Șuțan N.A., Fierăscu I., Fierăscu R.C., Manolescu D.S., Soare C.L., 2016. Comparative analytical characterization and *in vitro* cytogenotoxic activity evaluation of *Asplenium scolopendrium* L. leaves and rhizome extracts prior to and after Ag nanoparticles phytosynthesis. Industrial Crops and Products, 83: 379-386 DOI: 10.1016/j.indcrop.2016.01.011
3. Mutlu E., Demir T., Yanik T., Șuțan N.A., 2016. Determination of environmentally relevant water quality parameters in Serefiye Dam-Turkey. Fresenius Environmental Bulletin, 25(12a): 5812-5818.
4. Fierăscu I., Milen I.G., Ortan A., Fierăscu R.C., Avramescu S.M., Ionescu D., Șuțan A., Brînzan A., Ditu L.M., 2017. Phyto-mediated metallic nanoarchitectures *via Melissa officinalis* L.: synthesis, characterization and biological properties. Scientific Reports, 7: 12428, DOI:10.1038/s41598-017-12804-7
5. Fierăscu R.C., Georgiev M.I., Fierăscu I., Ungureanu C., Avramescu S.M., Ortan A., Georgescu M.I., Șutan N.A., Zănfirescu A., Dinu-Pirvu C.E., Velescu B.S., Anuta V., 2017. Mitodepressive, antioxidant, antifungal and anti-inflammatory effects of wild-growing Romanian native *Arctium lappa* L. (Asteraceae) and *Veronica persica* Poiret (Plantaginaceae). Food and Chemical Toxicology, 111: 44–52.
6. Fierăscu I., Ungureanu C., Avramescu S.M., Cimpeanu C., Georgescu M.I., Fierăscu R. C., Ortan A., Șutan A.N., Anuta V., Zănfirescu A., Dinu-Pirvu C.E., Velescu B.S., 2018. Genoprotective, antioxidant, antifungal and anti-inflammatory evaluation of hydroalcoholic extract of wild-growing *Juniperus communis* L. (Cupressaceae) native to Romanian southern sub-Carpathian hills. BMC Complementary and Alternative Medicine, 18:3, DOI 10.1186/s12906-017-2066-8
7. Șuțan N.A., Uță G., Bărbuceanu D., 2018. Oxidative stress and cytogenetic effects in root tip cells of *Allium cepa* L. induced by alcoholic extracts of *Leptinotarsa decemlineata* (Say). Caryologia, 1-9, DOI: 10.1080/00087114.2018.1486117
8. Șutan N.A., Manolescu D.S., Fierăscu I., Neblea A.M., Șutan C., Ducu C., Soare L. C., Negrea D., Avramescu S.M., Fierăscu R.C., 2018. Phytosynthesis of gold and silver nanoparticles enhance *in vitro* antioxidant and mitostimulatory activity of *Aconitum toxicum* Reichenb. rhizomes alcoholic extracts. Materials Science & Engineering C 93: 746–758. DOI: 10.1016/j.msec.2018.08.042
9. Rusea I., Popescu A., Isac V., Șutan A.N., Hoza D., 2018. Adventitious shoot regeneration from petiole explants in black chokeberry (*Aronia melanocarpa*). Scientific Papers-Series B-Horticulture, 62: 83-91.
10. Bonciu E., Firbas P., Fontanetti C.S., Wusheng J., Karaismailoğlu M.C., Liu D., Menicucci F., Pesnya D.S., Popescu A., Romanovsky A.V., Schiff S., Ślusarczyk J., de Souza C.P., Srivastava A., Șutan A., Papini

- A., 2018. An evaluation for the standardization of the *Allium cepa* test as cytotoxicity and genotoxicity assay. *Caryologia*, 71(3): 191–209, DOI: 10.1080/00087114.2018.1503496
11. **Sutan A.N.**, Vilcoci D.S., Fierascu I., Neblea A.M., Sutan C., Ducu C., Soare L.C., Negrea D., Avramescu S.M., Fierascu R.C., 2019. Influence of the phytosynthesis of noble metal nanoparticles on the cytotoxic and genotoxic effects of *Aconitum toxicum* Reichenb. leaves alcoholic extract. *Journal of Cluster Science*, 30: 647–660. DOI: 10.1007/s10876-019-01524-9; WOS:000468527400013; ISSN 1040-7278, eISSN 1572-8862
12. Rusea I., Popescu A., Isac V., **Sutan A.N.**, Hoza D., 2019. High efficiency shoot multiplication from in vitro cultured meristems of *Aronia melanocarpa* cv. Nero. *Scientific Papers-Series B-Horticulture*, 63 (1): 65-74. WOS:000489993900009, ISSN 2285-5653; eISSN 2286-1580.
13. **Șuțan N.A.**, Fierăscu I., Fierăscu R., Deliu I., Soare L.C., 2019. Phytochemical analysis and *in vitro* assessment of *Polystichum setiferum* extracts for their cytotoxic and antimicrobial activities. *Caryologia*, 72(2): 53-61. DOI: 10.13128/caryologia-255; WOS:000516775100007; ISSN 0008-7114; eISSN 2165-5391.
14. Fierascu R.C., Fierascu I., Lungulescu E.M., Nicula N., Somoghi R., Dițu L.M., Ungureanu C., **Sutan A.N.**, Draghiceanu O.A., Paunescu A., Soare L.C., 2020. Phytosynthesis and radiation-assisted methods for obtaining metal nanoparticles. *Journal of Materials Science*, 55(5): 1915–1932. DOI: 10.1007/s10853-019-03713-3; WOS:000501006500003; ISSN 0022-2461; eISSN 1573-4803.
15. **Șuțan N.A.**, Matei A.N., Oprea E., Tecuceanu V., Tătaru L.D., Moga S.G., Manolescu D.S., Topală C.M., 2020. Chemical composition, antioxidant and cytogenotoxic effects of *Ligularia sibirica* (L.) Cass. roots and rhizomes extracts. *Caryologia*, 73(1): 83-92. DOI: 10.13128/caryologia-116; WOS:000556004400009; ISSN 0008-7114; eISSN 2165-5391.
16. Heikal Y.M., **Șuțan N.A.**, Rizwan M., Elsayed A., 2020. Green synthesized silver nanoparticles induced cytogenotoxic and genotoxic changes in *Allium cepa* L. varies with nanoparticles doses and duration of exposure. *Chemosphere*, 243: 125430. DOI: 10.1016/j.chemosphere.2019.125430; WOS:000512221100115; ISSN 0045-6535; eISSN 1879-1298.
17. Valu M.V., Soare L.C., **Sutan N.A.**, Ducu C., Moga S., Hritcu L., Boiangiu R.S., Carradori S., 2020. Optimization of ultrasonic extraction to obtain erinacine a and polyphenols with antioxidant activity from the fungal biomass of *Hericium erinaceus*. *Foods*, 9(12): 1889. DOI: 10.3390/foods9121889. WOS:000602079200001; eISSN 2304-8158.
18. Fierascu I., Ditu L.M., **Sutan A.N.**, Drăghiceanu O.A., Fierascu R.C., Avramescu S.M., Lungulescu E.M., Nicula N., Soare L.C., 2021. Influence of gamma irradiation on the biological properties of *Asplenium scolopendrium* L. hydroalcoholic extracts. *Radiation Physics and Chemistry*, 181: 109175. DOI: 10.1016/j.radphyschem.2020.109175. WOS:000618757400001. ISSN 0969-806X; eISSN 1879-0895.
19. Popescu, D.I.; Lengyel, E.; Apostolescu, F.G.; Soare, L.C.; Botoran, O.R.; **Șuțan, N.A.***, 2022. Volatile compounds and antioxidant and antifungal activity of bud and needle extracts from three populations of *Pinus mugo* Turra growing in Romania. *Horticulturae*, 8: 952. DOI: 10.3390/horticulturae8100952; WOS:000875118700001; eISSN 2311-7524.
20. Bonciu E., Paraschivu M., **Șuțan N.A.**, Olaru A.L., 2022. Cytotoxicity of Sunset Yellow and Brilliant Blue food dyes in a plant test system. *Caryologia*, 75(2): 143-149. DOI: 10.36253/caryologia-1579. WOS:000919222600008; ISSN 0008-7114; eISSN 2165-5391
21. Uță G., Manolescu D., **Șuțan A.**, Ducu C., Din A., Moga S., Negrea D., Biță A., Bejenaru L., Bejenaru C., Avram S., 2022. Biogenic synthesis of noble metal nanoparticles using *Melissa officinalis*

- L. and *Salvia officinalis* L. extracts and evaluation of their biosafety potential. *Caryologia*, 75(3): 65-83. DOI: 10.36253/caryologia-1774; WOS:000969216800007; ISSN 0008-7114; eISSN 2165-5391
22. Popescu (Stegăruș) D.I., Botoran O.R., Cristea R., Mihăescu C., **Șuțan N.A.**, 2023. Effects of geographical area and harvest times on chemical composition and antibacterial activity of *Juniperus communis* L. pseudo-fruits extracts: A statistical approach. *Horticulturae*, 9(3): 325. DOI: 10.3390/horticulturae9030325; WOS:000958909800001; eISSN 2311-7524.
23. Apostolescu G.F., Popescu (Stegăruș) D.I., Botoran O., Sandru D., **Șuțan N.A.***, Neamtu J., 2023. Chemical and Antioxidant Profile of Hydroalcoholic Extracts of *Stachys Officinalis* L., *Stachys Palustris* L., *Stachys Sylvatica* L. from Romania. *Acta Chimica Slovenica*, 70: 231–239. DOI: 10.17344/acsi.2023.8046; WOS:001020833100007; ISSN 1318-0207; eISSN 1580-3155.
24. Mareș C., Udrea A.-M., **Șuțan N.A.***, Avram S., 2023. Bioinformatics tools for the analysis of active compounds identified in Ranunculaceae species. *Pharmaceuticals*, 16(6), 842. DOI:10.3390/ph16060842; WOS:001017754500001; eISSN 1424-8247.
25. Ponépal C.M., Soare L.C., Draghiceanu O.A., Mihaescu C.F., **Șuțan N.A.**, Tântu M.M., Paunescu A., 2023. Evaluation of the Morphological, physiological and biochemical effects induced by Coragen 20 SC in some non-target species. *Toxics*, 11(7): 618. DOI: 10.3390/toxics11070618; WOS:001038907400001; eISSN 2305-6304.
26. Kara A., Akkose A., Gelen S.U., Uçar A., Parlak V., Kocaman E.M., Atamanalp M., **Șuțan N.A.**, Albadrani G.M., Al -Ghadi M.Q., Abdel-Daim M.M., Alak G., 2024. A solution for fillet quality: Slaughter age's effect on protein mechanism and oxidation. *Heliyon*, DOI: 10.1016/j.heliyon.2024.e31146
27. Turkez H., Alak G., Ozgeris F.B., Cilingir Yeltekin A., Ucar A., Parlak V., **Șuțan N.A.**, Atamanalp M., 2024. Borax attenuates oxidative stress, inflammation, and apoptosis by modulating Nrf2/ROS balance in acrylamide-induced neurotoxicity in rainbow trout. *Drug and Chemical Toxicology*, 1–10. DOI: 10.1080/01480545.2024.2370916
28. Mitoi E.M., Aldea F., Helepciuc F.E., Ciocan A.-G., Frum A., Popescu D.I., Luțu O.A., **Șuțan N.A.**, Soare L.C., 2024. The production of useful phenol compounds with antioxidant potential in gametophytes and sporophytes from *in vitro* cultures in four ornamental ferns species. *Horticulturae*, 10, 799. DOI: 10.3390/horticulturae10080799
29. **Șuțan N.A.**, Paunescu A., Topala, C., Dobrescu C., Ponépal M.C., Popescu (Stegăruș) D.I., Soare L.C., Tamaian R., 2024. Aconitine in synergistic, additive and antagonistic approaches. *Toxins*, 16, 460. DOI: 10.3390/toxins16110460
30. Niculescu V.C., Sandru D., Botoran O.R., **Sutan N.A.**, Popescu D.I., 2024. Red wines from consecrated wine-growing area: Aromas evolution under indigenous and commercial yeasts. *Appl. Sci.*, 14, 10239. DOI: 10.3390/app142210239
31. Dumitrache (Păunescu) A., **Ionescu (Șuțan) N.A.**, Țîntu M.M., Ponépal M.C., Soare L.C., Țîntu A.C., Atamanalp M., Baniță I.M., Pisoschi C.G., 2025. Evaluating the Discriminative Performance of Noninvasive Biomarkers in Chronic Hepatitis B/C, Alcoholic Cirrhosis, and Nonalcoholic Cirrhosis: A Comparative Analysis. *Diagnostics*, 15, 1575. <https://doi.org/10.3390/diagnostics15131575>
32. Popescu, D.I.; Năsturel, A.-M.; Niculescu, V.-C.; Oprită, C.M.; **Șuțan, N.A.**, 2025. Pesticide Surveillance in Fruits and Vegetables from Romanian Supply: A Data-Driven Approach. *Journal of Xenobiotics*, 15, 104. <https://doi.org/10.3390/jox15040104>

C.2. Articole în reviste și volumele unor manifestări științifice indexate în alte baze de date internaționale

1. **Șuțan N.A.**, Popescu A., Mihăescu C., Soare L.C., Marinescu M.V., 2014. Evaluation of cytotoxic and gentoxic potential of the fungicide Ridomil in *Allium cepa* L. Analele Științifice ale Universității „Al. I. Cuza” Iași s. II a. Biologie vegetală, 60(1):5-12.
2. **Șuțan N.A.**, Mihăescu C., Popescu A., Cioran R., 2015. Preliminary results regarding the sensitivity of *Tulipa gesneriana* L. meristematic root cells to fungicide Folpan. Current Trends in Natural Sciences 4(7): 113-117, ISSN 2284-9521.
3. Din A., Vîlcoci D.Ș., Ducu C., **Șuțan A.N.**, Sumedrea D.I., Biță A., Bejenaru L.E., Moga S., Mogoșanu G.D., 2020. Influence of the extraction parameters of antocianes from the fruits of *Aronia melanocarpa* (Michx.) Elliott in the extraction assisted with ultrasound. Preliminary results. Current Trends in Natural Sciences, 9(17):296-300, <https://doi.org/10.47068/ctns.2020.v9i17.037> [Index Copernicus, SCPIO, DOAJ, Crossref, CAB Abstracts, EBSCO Essentials, EuroPub]
4. Soare L.C., Fierăscu I., Fierăscu R.C., Dobrescu C.M., **Șuțan A.N.**, Drăghiceanu O.A., 2020. The toxicity of extracts with bimetallic nanoparticles on ferns spores germination. Current Trends in Natural Sciences, 9(18):133-138. <https://doi.org/10.47068/ctns.2020.v9i18.018>. [Index Copernicus, SCPIO, DOAJ, Crossref, CAB Abstracts, EBSCO Essentials, EuroPub]
5. **Șuțan N.A.**, Soare L.C., Mutlu E., Dobre R., Yanik T., Șuțan C., 2020. Water quality assessment through cytogenotoxic parameters – a case study of Karaçomak River, Turkey. Current Trends in Natural Sciences, 9(17):23-30. <https://doi.org/10.47068/ctns.2020.v9i17.003>; <https://natsci.upit.ro/media/2000/003sutan-et-al.pdf> [Index Copernicus, SCPIO, DOAJ, Crossref, CAB Abstracts, EBSCO Essentials, EuroPub]
6. Drăghiceanu O.A., Dobrescu C.M., **Șuțan A.N.**, Soare L.C. 2022. The effect of spores extracts with green synthesized bimetallic nanoparticles on *Cucumis sativus* L. Studii și Cercetări. Biologie 31/1:51-56 Universitatea”Vasile Alecsandri” din Bacău, <https://pubs.ub.ro/?pg=revues&rev=scsb&num=202201&vol=31&aid=5434> [Master Journal List ISI Thomson Reuters, PROQUEST LLC, EBSCO, Index Copernicus, SCPIOPlatform]
7. Soare L.C., **Șuțan A.N.**, Dobrescu C.M., Drăghiceanu O.A. 2022. The allelopathic potential of *Erigeron annuus* (L.) Desf. subsp. annuus extracts on crop species. Studii și Cercetări, Biologie 31/1: 39-43 Universitatea”Vasile Alecsandri” din Bacău, <https://pubs.ub.ro/?pg=revues&rev=scsb&num=202201&vol=31&aid=5432> [Master Journal List ISI Thomson Reuters, PROQUEST LLC, EBSCO, Index Copernicus, SCPIOPlatform]
8. **Șuțan N.A.**, Bărbuceanu M., Barbuceanu D., Deliu I., 2024. Cytogenotoxic and antimicrobial effects of *Nezara viridula* (L.) (Hemiptera: Heteroptera: Pentatomidae) alcoholic extracts. Caryologia, 76(4): 39–49. <https://doi.org/10.36253/caryologia-2389>
9. Luțu O.A., Soare L.C., Fierăscu I., Fierăscu R.-C., Dobrescu C.M., Păunescu A., Ponopal C.M., Topală C.M., Vîjan L.E., Deliu I., Negrea A.D., Vîlcoci D.Ș., Cîrstea G., Aldea F., Honțaru S.O., **Șuțan, A.N.** (2024). Phytotoxicity, cytogenotoxicity and antimicrobial potential of extracts with gold-silver bimetallic nanoparticles obtained from pteridophyte spores. *Caryologia*, 77(1): 65–82. <https://doi.org/10.36253/caryologia-2424>

**D. Lucrări publicate în ultimii 10 ani în reviste și volume de conferințe cu referenți
(neindexate)**

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Selecție cu maximum 20 lucrări în volume de conferințe

1. Mutlu E., Kutlu B., Demir T., Yanik T., **Șuțan N.A.**, 2014. The evaluation of water quality of Bezdilli River (Hafik-Sivas). International Conference on Environmental Science and technology – Side (ICOEST 2014-Side), Digital Proceeding of the ICOEST '2014 - SIDE, 39-51, Side, Turkey. ISSN 2147-3781.
2. Mutlu E., Özdemir R.C., Yanik T., **Șuțan N.A.**, Sönmez A.Y., 2014. Evaluation of the water quality of Yildiz Lagoon (Sivas). Second International Symposium on Environment and Morality, 24-26 Oct. 2014, Adiyaman University, Adiyaman – Turkey, 1311-1320. <http://www.isem2014.com/>.
3. **Șuțan N.A.**, Yanik T., Popa E., 2015. Comparative genotoxicity of two fungicide formulations in meristematic root cells of *Narcissus pseudonarcissus* cv. 'Samantha'. Full Paper Proceeding GIMAR-2015, 1: 216-225, ISBN: 978-969-9948-09-1 www.globalilluminators.org.
4. **Șuțan N.A.**, Mayasari S., Popescu A., Toma A.M., Deliu I., 2015. Evaluation of genotoxic and antimicrobial effects induced by fungicide Dithane M-45. International Conference "Molecular Biology - Current Aspects and Prospects", Cluj-Napoca, 6–8 November 2015; *Studia Universitatis Babeș – Bolyai, Biologia*, Special Issue Vol. 60(LX):5-18 (TC_5_2015_DSN)
5. **Șuțan N.A.**, E. Mutlu, T. Yanik, R. Dobre, 2016. A short report regarding the physicochemical properties of surface water quality in Karaçomak stream, Turkey. AIP Conf. Proc, 1726, International Conference on Advances in Natural and Applied Sciences, 21-23.04.2016, Antalya, Turkey <http://dx.doi.org/10.1063/1.4945845>.

E. Brevete obținute în întreaga activitate

1. Soare L.C, Fierăscu I., Fierăscu R.C., Ungureanu C., Călinescu M.F., Dobrescu C.M., **Șuțan N.A**
Procedeu de obținere a unei compoziții cu efect antifungic pentru combaterea tulpinilor fitopatogene care afectează culturile de măr. OSIM Nr. 134424/30.04.2024

Data: 8.11.2025

Cadrul didactic Conf. univ. dr. Șuțan Nicoleta Anca

Semnătura