LISTĂ DE LUCRĂRI

Candidat: Dr. ing. Jerca Valentin-Victor

A. Teza de doctorat.

În anul 2010 am susținut teza de doctorat la Facultatea de Chimie Aplicată și Știința Materialelor, Universitatea Politehnica din București, cu titlu "Macromonomeri pentru stabilizarea sistemelor disperse de polimerizare", conducător științific Prof. Dr. Ing. Dan Sorin Vasilescu (diplomă nr. 225 din data 14.06.2011, emisă în baza Ordinului Ministrului Educației, Cercetării, Tineretului și Sportului nr.4387 din 06.06.2011).

B. CĂRȚI ȘI CAPITOLE DE CARTE.

B1. Jerca FA, **Jerca VV**, Stancu I-C. Development and Characterization of Photoresponsive Polymers. In: Van Hoorick J, Ottevaere H, Thienpont H, Dubruel P, Van Vlierberghe S (eds). *Polymer and Photonic Materials Towards Biomedical Breakthroughs*. Springer International Publishing: Cham, 2018, pp 3-47

B2. Maji S, **Jerca VV**, Jerca FA, Hoogenboom R. Smart polymeric gels. In: Pal K, Banerjee I (eds). *Polymeric Gels: Characterization, Properties and Biomedical Applications*. Elsevier, 2018, pp 179-230.

B3. Banu ND, Jerca FA, **Jerca VV**. Biosensors. In: Pal K, Banerjee I, Sarkar P, Bit A, Kim D, Anis A*, et al.* (eds). *Food, Medical, and Environmental Applications of Polysaccharides*. Elsevier, 2021, pp 381-400.

B4. Jerca FA, Stancu IC, **Jerca VV**, Giol ED. Hydrogels - Blood Interactions. In: Noh I, Wang X, Van Vlierberghe S (eds). *Injectable Hydrogels for 3D Bioprinting.* The Royal Society of Chemistry, 2021, pp 361-382.

C. LUCRĂRI ȘTIINȚIFICE PUBLICATE ÎN REVISTE ISI CU FACTOR DE IMPACT.

C1. **Jerca VV***, Jerca FA. Poly(2-Isopropenyl-2-Oxazoline) Taking the Leap From Functional Polymer to Smart Adaptive Materials. *Materials Chemistry Frontiers* 2026, **10**(15): 2447-2457.

C2. Olaret E, Ghibu E, Selaru A, Dinescu S, Vasile BS, **Jerca VV**, Stancu IC, Jerca FA. Electrospinning and Cross-Linking of Gelatin-Poly(2-Isopropenyl-2-Oxazoline) Nanofibers: A Route to Stable Hybrid Biomaterials. *Macromolecular Rapid Communications* 2026, **47**(14): e00576.

C3. Leonties AR, Baran A, Ionita G, Precupas A, Sanda G, Ciutu ML, Bucur AG, **Jerca VV**, Aricov L. Supramolecular Interactions and Adsorption Behavior of β-Cyclodextrin-Functionalized Polyacrylates Toward Rhodamine B. *Surfaces and Interfaces* 2026, **80**: 108334.

C4.Tucureanu C, Ghibu E, Tofan V, Giol ED, Mitran R, Jerca FA, **Jerca VV***. Assessing Protein Antifouling Performance and Hemocompatibility of Poly (2-Isopropenyl-2-Oxazoline) Based Hydrogels. *Applied Materials Today* 2025, **48**: 103031.

C5. Ghibu E, Vuluga DM, Stan R, Jerca FA, **Jerca VV***. Poly(2-Isopropenyl-2-Oxazoline) Hydrogels as Multipurpose Drug Delivery Systems: Tailoring Molecular Interactions for Controlled Loading and Release. *European Polymer Journal* 2025, **242**: 114407.

C6. Jung P, **Jerca VV**, Hoogenboom R, Frey H. Living Anionic Polymerization of 2-Isopropenyl-2-Oxazoline in Continuous Flow: From Efficient Synthesis to Hydroxyl End-Functionalized Polymers. *European Polymer Journal* 2025, **234**: 114011.

C7. **Jerca VV***. In Memoriam Acad. Prof. Dr. Eng. Bogdan Simionescu (1948-2024). *Polymer Chemistry* 2025, **16**(7): 772-773.

C8. **Jerca VV***. Acad. Prof. Dr. Eng. Bogdan Simionescu (1948-2024). *European Polymer Journal* 2025, **223**: 113679.

C9. Ghibu E, Banu ND, Vuluga DM, Stan R, Jerca FA, **Jerca VV**. Thermal Properties of Poly(2-Isopropenyl-2-Oxazoline) Crosslinked Networks. *University Politehnica of Bucharest Scientific Bulletin Series B-Chemistry and Materials Science* 2025, **87**(3): 73-84.

C10. Monnery BD, **Jerca VV**, Hoogenboom R, Swift T. Polymer Conformation Determination by NMR Spectroscopy: Comparative Diffusion Ordered ^{1}H-NMR Spectroscopy of Poly(2-Ethyl-2-Oxazoline)s and Poly(ethylene glycol) in D_2O. *Polymer Chemistry* 2024, **15**(30): 3077-3085.

C11. Yu P, Sedlačík T, Parmentier L, Jerca FA, **Jerca VV**, Van Vlierberghe S, Leiske MN, Hoogenboom R. Degradable Cell-Adhesive Hybrid Hydrogels by Cross-linking of Gelatin with Poly(2-Isopropenyl-2-Oxazoline). *Biomacromolecules* 2024, **25**(8): 5332-5342.

C12. Ghibu E, Vasile V, Caras I, Giol ED, Banu ND, Vuluga DM, Stan R, **Jerca VV***, Jerca FA. Poly(2-Isopropenyl-2-Oxazoline) Hydrogels with Biodegradable Junction Points for Drug-Delivery Applications. *Chemistry of Materials* 2024, **36**(15): 7459-7475.

C13. Stinga G, Baran A, Iovescu A, Maxim ME, **Jerca VV**. A Highly Selective Multifunctional Naphthalene-Labeled Polymer Sensor for Cu^{2+} and Fe^{3+} Ions in Aqueous Medium. *Journal of Molecular Liquids* 2024, **406**: 125074.

C14. Xu X, Maji S, **Jerca VV**, Sedlacik T, Hoogenboom R. Self-Healing and Shape-Memory Multiphase Thermoplastic Elastomers Based on Electrostatic Assembly of Oppositely Charged Diblock Copolymer Assemblies. *ACS Applied Polymer Materials* 2024, **6**(3):1611-1621.

C15. Verjans J, Sedlačík T, **Jerca VV**, Bernhard Y, Van Guyse JFR, Hoogenboom R. Poly(N-allyl acrylamide) as a Reactive Platform toward Functional Hydrogels. *ACS Macro Letters* 2023, **12**(1): 79-85.

C16. Saravanan S, Babu A, Merckx R, Zhong Z, Anandan M, Nutalapati V, De Geest BG, Hoogenboom R, **Jerca VV***, Maji S. Design of Fluorescent Polymeric Thermometers Based on Anthrapyrazolone Functionalized Oligo(ethylene glycol) Methacrylates, *Materials Chemistry Frontiers* 2023, **7**(9): 1875-1885.

C17. Merckx R, Becelaere J, Schoolaert E, Frateur O, Leiske MN, Peeters D, Jerca FA, **Jerca VV***, De Clerck K, Hoogenboom R. Poly(2-Isoproprenyl-2-Oxazoline)-Based Reactive Hydrophilic Cross-linked Nanofiber Networks as the Basis for Colorimetric Continuous Meat Freshness Monitoring Sensors. *Chemistry of Materials* 2023, **35**(17): 7079-7093.

C18. Jerca FA, Muntean C, Remaut K, **Jerca VV**, Raemdonck K, Hoogenboom R. Cationic Amino-Acid Functionalized Polymethacrylamide Vectors for siRNA Transfection Based on Modification of Poly(2-Isopropenyl-2-Oxazoline). *Journal of Controlled Release*. 2023 **364**: 687-699.

C19. Arraez FJ, Xu XW, Edeleva M, Van Steenberge PHM, Marien YW, **Jerca VV**, Hoogenboom R, D'hooge DR. Differences and Similarities Between Mono-, Bi- or Tetrafunctional Initiated Cationic Ring-Opening Polymerization of 2-Oxazolines. *Polymer Chemistry* 2022, **13**(7): 861-876.

C20. Xu X, **Jerca VV**, Hoogenboom R. Self-Healing Hydrogels by Metal Complexation of 2,6-Bis(1,2,3-triazol-4yl)pyridine Functionalized Tetra-Arm Star Poly(ethylene glycol). *Macromolecular Chemistry and Physics.* 2023 **224**(3): 2200330.

C21. Vergaelen M, Monnery B, **Jerca VV**, Hoogenboom R. Detailed Understanding of Solvent Effects for the Cationic Ring-Opening Polymerization of 2-Ethyl-2-Oxazoline. *Macromolecules* 2023, **56**(4): 1534-1546.

C22. Băran A, Aricov L, Stîngă G, Iovescu A, Leontieş A-R, **Jerca VV**. The Effect of $C_{12}E_6$ Nonionic Surfactant on the Solubilization of Eosin Y in Unmodified and Hydrophobically Modified Poly(acrylic acid) Solutions. *Journal of Molecular Liquids* 2022, **346**: 117103.

C23. Jerca FA, **Jerca VV***, Hoogenboom, R. Advances and Opportunities in the Exciting World of Azobenzenes. *Nature Reviews Chemistry* 2022, **6**(1): 51-69.

C24. Jerca FA, **Jerca VV**, Hoogenboom R. In Vitro Assessment of the Hydrolytic Stability of Poly(2-Isopropenyl-2-Oxazoline). *Biomacromolecules* 2021, **22**(12): 5020-5032.

C25. Xu XW, Seiffert AK, Lenaerts R, Ryskulova K, Jana, S, Van Hecke K, **Jerca VV**, Hoogenboom R. [2 x 2] Metallo-supramolecular Grids Based on 4,6-bis((1H-1,2,3-triazol-4-yl)-pyridin-2-yl)-2-phenylpyrimidine Ligands: From discrete [2 x 2] Grid Structures to Star-Shaped Supramolecular Polymeric Architectures. *Dalton Transactions* 2021, **50**(25): 8746-8751.

C26. Xu XW, **Jerca VV**, Hoogenboom R. Bioinspired Double Network Hydrogels: from Covalent Double Network Hydrogels via Hybrid Double Network Hydrogels to Physical Double Network Hydrogels. *Materials Horizons* 2021, **8**(4): 1173-1188.

C27. Xu XW, **Jerca VV**, Hoogenboom R. Bio-inspired Hydrogels as Multi-task Anti-icing Hydrogel Coatings. *Chem* 2020, **6**(4): 820-822.

C28. Xu XW, **Jerca VV**, Hoogenboom R. Structural Diversification of Pillar[n]arene Macrocycles. *Angewandte Chemie-International Edition* 2020, **59**(16): 6314-6316.

C29. Xu XW, Jerca FA, Van Hecke K**, Jerca VV***, Hoogenboom R. High Compression Strength Single Network Hydrogels with Pillar[5]arene Junction Points. *Materials Horizons* 2020, **7**(2): 566-573.

C30. Merckx R, Swift T, Rees R, Van Guyse JFR, Schoolaert E, De Clerck K, Ottevaere H, Thienpont H, **Jerca VV***, Hoogenboom, R. Forster Resonance Energy Transfer in Fluorophore Labeled Poly(2-ethyl-2-oxazoline)s. *Journal of Materials Chemistry C* 2020, **8**(40): 14125-14137.

C31. Mitran RA, Lincu D, Ionita S, Deaconu M, **Jerca VV**, Mocioiu OC, Berger D, Matei C. High Temperature Shape Stabilized Phase Change Materials Obtained Using Mesoporous Silica and NaCl - NaBr - Na_2MoO_4 salt eutectic. *Solar Energy Materials and Solar Cells* 2020, **218**: 110760.

C32. Xu XW, Jerca FA, **Jerca VV***, Hoogenboom R. Self-Healing and Moldable Poly(2-Isopropenyl-2-Oxazoline) Supramolecular Hydrogels Based on a Transient Metal Coordination Network. *Macromolecules* 2020, **53**(15): 6566-6575.

C33. Van Den Broeck E, Verbraeken B, Dedecker K, Cnudde P, Vanduyfhuys L, Verstraelen T, Van Hecke K, **Jerca VV**, Catak S, Hoogenboom R, Van Speybroeck V. Cation-pi Interactions Accelerate the Living Cationic Ring-Opening Polymerization of Unsaturated 2-Alkyl-2-oxazolines. *Macromolecules* 2020, **53**(10): 3832-3846.

C34. Maji S, **Jerca VV**, Hoogenboom R. Dual pH and Thermoresponsive Alternating Polyampholytes in Alcohol/Water Solvent Mixtures. *Polymer Chemistry* 2020, **11**(12): 2205-2211.

C35. Xu XW, **Jerca VV**, Hoogenboom R. Self-Healing Metallo-Supramolecular Hydrogel Based on Specific Ni^{2+} Coordination Interactions of Poly(ethylene glycol) with Bistriazole Pyridine Ligands in the Main Chain. *Macromolecular Rapid Communications* 2020, **41**(4): 1900457.

C36. Xu XW, Van Guyse OFR, **Jerca VV**, Hoogenboom R. Metal Ion Selective Self-Assembly of a Ligand Functionalized Polymer into [1+1] Macrocyclic and Supramolecular Polymer Structures via Metal-Ligand Coordination. *Macromolecular Rapid Communications* 2020, **41**(1): 1900305.

C37. Ceglowski M, **Jerca VV**, Jerca FA, Hoogenboom R. Reduction-Responsive Molecularly Imprinted Poly(2-isopropenyl-2-oxazoline) for Controlled Release of Anticancer Agents. *Pharmaceutics* 2020, **12**(6): 506.

C38. Iordache TV, Banu ND, Giol ED, Vuluga DM, Jerca FA, **Jerca VV***. Factorial Design Optimization of Polystyrene Microspheres Obtained by Aqueous Dispersion Polymerization in the Presence of Poly(2-Ethyl-2-Oxazoline) Reactive Stabilizer. *Polymer International* 2020, **69**(11): 1122-1129.

C39. Van Guyse JFR, Cools P, Egghe T, Asadian M, Vergaelen M, Rigole P, Yan WQ, Benetti EM, **Jerca VV**, Declercq H, Coenye T, Morent R, Hoogenboom R, De Geyter N. Influence of the Aliphatic Side Chain on the Near Atmospheric Pressure Plasma Polymerization of 2-Alkyl-2-oxazolines for Biomedical Applications. *ACS Applied Materials & Interfaces* 2019, **11**(34): 31356-31366.

C40. Arraez FJ, Xu XW, Van Steenberge PHM, **Jerca VV**, Hoogenboom R, D'Hooge DR. Macropropagation Rate Coefficients and Branching Levels in Cationic Ring-Opening Polymerization of 2-Ethyl-2-oxazoline through Prediction of Size Exclusion Chromatography Data. *Macromolecules* 2019, **52**(11): 4067-4078.

C41. Xu XW, Jerca FA, **Jerca VV***, Hoogenboom R. Covalent Poly(2-Isopropenyl-2-Oxazoline) Hydrogels with Ultrahigh Mechanical Strength and Toughness through Secondary Terpyridine Metal-Coordination Crosslinks. *Advanced Functional Materials* 2019, **29**(48): 1904886.

C42. Jerca FA, **Jerca VV***, Hoogenboom R. Well-Defined Thermoresponsive Polymethacrylamide Copolymers with Ester Pendent Groups through One-Pot Statistical Postpolymerization Modification of Poly(2-Isopropenyl-2-Oxazoline) with Multiple Carboxylic Acids. *Journal of Polymer Science Part A-Polymer Chemistry* 2019, **57**(3): 360-366.

C43. **Jerca VV***, Hoogenboom R. Photocontrol in Complex Polymeric Materials: Fact or Illusion? *Angewandte Chemie-International Edition* 2018, **57**(27): 7945-7947.

C44. Monnery BD, **Jerca VV**, Sedlacek O, Verbraeken B, Cavill R, Hoogenboom R. Defined High Molar Mass Poly(2-Oxazoline)s. *Angewandte Chemie-International Edition* 2018, **57**(47): 15400-15404.

C45. Glassner M, Verbraeken B, **Jerca VV**, Van Hecke K, Tsanaktsidis J, Hoogenboom R. Poly(2-oxazoline)s with Pendant Cubane Groups. *Polymer Chemistry* 2018, **9**(39): 4840-4847.

C46. Jerca FA, **Jerca VV**, Anghelache AM, Vuluga DM, Hoogenboom R. Poly(2-Isopropenyl-2-Oxazoline) as a Versatile Platform Towards Thermoresponsive Copolymers. *Polymer Chemistry* 2018, **9**(25): 3473-3478.

C47. Jerca FA, Anghelache AM, Ghibu E, Cecoltan S, Stancu IC, Trusca R, Vasile E, Teodorescu M, Vuluga DM, Hoogenboom R, **Jerca VV*.** Poly(2-isopropenyl-2-oxazoline) Hydrogels for Biomedical Applications. *Chemistry of Materials* 2018, **30**(21): 7938-7949.

C48. Jerca FA, **Jerca VV**, Hoogenboom R. Photoresponsive Polymers on the Move. *Chem* 2017, **3**(4): 533-536.

C49. Jerca FA, **Jerca VV***. Photoresponsive Polymers: Quo Vadis. *European Polymer Journal* 2017, **88**: 257-258.

C50. **Jerca VV**, Lava K, Verbraeken B, Hoogenboom R. Poly(2-Cycloalkyl-2-Oxazoline)s: High Melting Temperature Polymers Solely Based on Debye and Keesom van der Waals Interactions. *Polymer Chemistry* 2016, **7**(6): 1309-1322.

C51. Aricov L, Baran A, Simion EL, Gifu IC, Anghel DF, **Jerca VV***,* Vuluga, DM. New Insights into the Self-Assembling of Some Hydrophobically Modified Polyacrylates in Aqueous Solution. *Colloid and Polymer Science* 2016, **294**(4): 667-679.

C52. Spiridon MC, Iliopoulos K, Jerca FA, **Jerca VV**, Vuluga DM, Vasilescu DS, Gindre D, Sahraoui B. Novel Pendant Azobenzene/Polymer Systems for Second Harmonic Generation and Optical Data Storage. *Dyes and Pigments* 2015, **114**: 24-32.

C53. **Jerca VV**, Jerca FA, Rau I, Manea AM, Vuluga DM, Kajzar F. Advances in Understanding the Photoresponsive Behavior of Azobenzenes Substituted with Strong Electron Withdrawing Groups. *Optical Materials* 2015, **48**: 160-164.

C54. Jerca FA**, Jerca VV***, Anghel DF, Stinga G, Marton G, Vasilescu DS, Vuluga DM. Novel Aspects Regarding the Photochemistry of Azo-Derivatives Substituted with Strong Acceptor Groups. *Journal of Physical Chemistry C* 2015, **119**(19): 10538-10549.

C55. Spiridon MC, Jerca FA, **Jerca VV**, Vasilescu DS, Vuluga DM. 2-Oxazoline Based Photo-responsive Azo-Polymers. Synthesis, Characterization and Isomerization Kinetics. *European Polymer Journal* 2013, **49**(2): 452-463.

C56. Jerca FA, **Jerca VV**, Kajzar F, Manea AM, Rau I, Vuluga DM. Simultaneous Two and Three Photon Resonant Enhancement of Third-Order NLO Susceptibility in an Azo-Dye Functionalized Polymer Film. *Physical Chemistry Chemical Physics* 2013, **15**(19): 7060-7063.

C57. **Jerca VV***, Nicolescu FA, Trusca R, Vasile E, Baran A, Anghel DF*,* Vasilescu DS, Vuluga DM. Oxazoline-Functional Polymer Particles Graft with Azo-Dye. *Reactive & Functional Polymers* 2011, **71**(4): 373-379.

C58. **Jerca VV**, Nicolescu FA, Vasilescu DS, Vuluga DM. Synthesis of a New Oxazoline Macromonomer for Dispersion Polymerization. *Polymer Bulletin* 2011, **66**(6): 785-796.

C59. Nicolescu FA, **Jerca VV**, Dancus I, Petris A, Nicolescu TV, Rau IB, Vlad VI, Vasilescu DS, Vuluga DM. Synthesis and Characterization of Side-Chain Maleimide-Styrene Copolymers with new Pendant Azobenzene Moieties. *Journal of Polymer Research* 2011, **18**(5): 1009-1016.

C60. Jerca FA, **Jerca VV**, Spiridon MC, Vuluga DM, Vasilescu DS, Stanga G, Anghel DF. Polymer Architectures Containing Azobenzene Type Molecules in Side-Chains Solvatochromic Behaviour. *Materiale Plastice* 2011, **48**(4): 273-278.

C61. Stanciu ND, **Jerca VV**, Vuluga DM, Stanescu P, Ficai A, Teodorescu M. Synthesis and Characterization of Composites from Layered Silicates and Homo- and Copolymers of 2-Hydroxyethyl Methacrylate and *p*-Chloromethyl Styrene Obtained by In Situ Radical (Co)polymerization. *Molecular Crystals and Liquid Crystals* 2010, **521**: 204-213.

C62. **Jerca VV***, Nicolescu FA, Vuluga DM, Andronescu C, Iovu H, Vasilescu DS. Dispersion Polymerization of Styrene in the Presence of 2-ethyl-2-oxazoline Macromonomer. *Materiale Plastice* 2010, **47**(2): 141-145.

C63. **Jerca VV***, Nicolescu FA, Baran A, Anghel DF, Vasilescu DS, Vuluga DM. Synthesis and Characterization of Side-Chain Oxazoline-Methyl Methacrylate Copolymers Bearing Azo-Dye. *Reactive & Functional Polymers* 2010, **70**(10): 827-835.

C64. Nicolescu FA, **Jerca VV**, Vuluga DM, Vasilescu DS. Synthesis and Characterization of Side-Chain Poly(Methacrylate)s Bearing New Azo-Moieties. *Polymer Bulletin* 2010, **65**(9): 905-916.

C65. Dancus I, Vlad VI, Petris A, Frunza S, Beica T, Zgura I, Nicolescu FA, **Jerca VV**, Vuluga DM. Low Power Laser Induced Optical Nonlinearities in Organic Molecules. *Romanian Reports in Physics* 2010, **62**(3): 567-580.

C66. Nicolescu FA**, Jerca VV**, Stancu IC, Vasilescu DS, Vuluga DM. New Organic-Inorganic Hybrids with Azo-dye Content. *Designed Monomers and Polymers* 2010, **13**(5): 437-444.

C67. Nicolescu FA, **Jerca VV**, Draghici C, Vuluga DM, Vasilescu DS. Synthesis and Characterization of Novel Azobenzene Methacrylate Monomers. *Designed Monomers and Polymers* 2009, **12**(6): 553-563.

C68. Nicolescu AF, **Jerca VV**, Albu AM, Vuluga DM, Draghici C. Synthesis and Copolymerization Study of New Polyimide Precursors with Potential Application in Optical and Photonic Field. *Molecular Crystals and Liquid Crystals* 2008, **486**: 1080-1091.

C69. **Jerca VV***, Nicolescu AF, Albu AM, Vuluga DM. Polymer Architectures Based on Oxazoline Monomers. *Molecular Crystals and Liquid Crystals* 2008, **483**: 78-88.

D. LUCRĂRI ȘTIINȚIFICE PUBLICATE ÎN PROCEEDINGS.

D1. **Jerca VV***, Jerca FA, Rau I, Kajzar F, Vasilescu DS, Vuluga DM. Photoresponsive Behavior of Azobenzene Hybrid Materials. In: Kobayashi N, Ouchen F, Rau I (eds). *Nanobiosystems: Processing, Characterization, and Applications VIII*, vol. 9557, 2015.

D2. **Jerca VV***, Jerca FA, Rau I, Kajzar F, Vasilescu DS, Vuluga DM. Investigations of Molecular Nonlinear Optical Polarizabilities of Azobenzenes Substituted with Strong Acceptor Groups. In: Kobayashi N, Ouchen F, Rau I (eds). *Nanobiosystems: Processing, Characterization, and Applications VII*, vol. 9171, 2014.

D3. Spiridon MC, Jerca FA, **Jerca VV**, Vuluga DM, Vasilescu DS. New Side-Chain Azo-Polymers for Optical Applications: Synthesis and Characterization. In: Zamboni R, Kajzar F, Szep AA (eds). *Optical Materials and Biomaterials in Security and Defence Systems Technology IX*, vol. 8545, 2012.

D4. Dancus I, Vlad VI, Petris A, Nicolescu FA, **Jerca VV**, Vuluga DM. Large Optical Nonlinearities in Copolymers with New Pendant Azobenzene Moieties. In: Jaworski M, Marciniak M (eds). *13th International Conference on Transparent Optical Networks (ICTON)*. Th.A2.6, 2011.

D5. Nicolescu FA, **Jerca VV**, Dancus I, Petris A, Vlad VI, Vasilescu DS, Vuluga, DM. Side-Chain Polymers Bearing Azo-Moieties for Nonlinear Optics. In: Lewis C, Burgess D, Zamboni R, Kajzar F, Heckman EM (eds). *Optics and Photonics for Counterterrorism and Crime Fighting VI and Optical Materials in Defence Systems Technology VII*, vol. 7838, 2010.

D6. **Jerca VV***, Nicolescu FA, Vasilescu DS, Vuluga DM. Dispersion Polymerization of an Azo-Monomer and Methyl Methacrylate in the Presence of Oxazoline Macromonomer. In: Lewis C, Burgess D, Zamboni R, Kajzar F, Heckman EM (eds). *Optics and Photonics for Counterterrorism and Crime Fighting VI and Optical Materials in Defence Systems Technology VII*, vol. 7838, 2010.

F. BREVETE

F1. Jerca FA, **Jerca VV**, Banu ND, Ghibu E. *Soluții Polimerice pentru Decontaminarea Chimică și Radiochimică și Procedeu de obținere al acestora.* nr. A2021/ 00130 (cerere de brevet).

F2. Jerca FA, **Jerca VV**, Ghibu E, Banu ND. *Hidrogeluri Polimerice Fotosensibile și degradabile pe bază de Poli(2-Izopropenil-2-Oxazolină) și Agenți Terapeutici și Procedeu de obținere al acestora*. nr. A2022/ 00386 (cerere de brevet).

F3. Jerca FA, **Jerca VV**, Ghibu E, Banu ND, Giol DE, Caras I, Țucureanu C, Tofan CV, Salageanu A, Vasile V, Palade B. *Conjugate Polimerice pe bază de Poli(2-Izopropenil-2-Oxazolină) și Doxorubicină pentru Imuno-Chimio-Terapia Cancerului și Procedeu de Obținere al Acestora.* nr. A2022/00632 (cerere de brevet).

F4. Jerca FA, **Jerca VV**, Banu ND, Molența MA. *Procedeu de Obținere al Unor Monomeri Funcționali pe bază de 2-Izopropenil-2-Oxazolină Folosiți în Dezvoltarea de Materiale Polimerice Inteligente.* nr. A2022/00774 (cerere de brevet).

F5. Jerca FA, Muntean C, Remaut K, **Jerca VV**, Raemdonck K, Hoogenboom R. *Amino-acid Functionalized Polymers for siRNA Transfection.* nr. 23176178.4-1107 EPO filled 2023 (cerere de brevet).

F6. Olăreț E, **Jerca VV**, Stancu IC, Jerca FA, *Pansamente Nețesute din Nanofibre Biohibride de Poli(2-Izopropenil-2-Oxazolină) Funcționalizată și Gelatină Metacrilamidată Obținute prin Tehnica de Electrofilare cu Rol în Tratamentul Rănilor și Procedeu de Obținere al Acestora*. nr. A2024/ 00498 (cerere de brevet).

G. GRANTURI/PROIECTE CÂŞTIGATE PRIN COMPETIŢIE ÎN CALITATE DE DIRECTOR SAU RESPONSABIL

G1. PN-IV-PRO-CoEx-2024 no.9CoEx/2026 *"Platformă Multidisciplinară Integrată pentru Descoperirea Accelerată și Inovativă de Medicamente"* THERAFAST, 2026-2030; 6400000 lei; **responsabil de partener**.

G2. PN-III-P2-2.1-PED-2021-2544 no.603PED/2022 *"Hidrogeluri pe bază de Polioxazolină – Vehicule Pluripotente de Antimicrobieni pentru Tratamentul Local al Osteomielitei"* POLYAMOS, 2022-2024; 598000 lei; **director de proiect**.

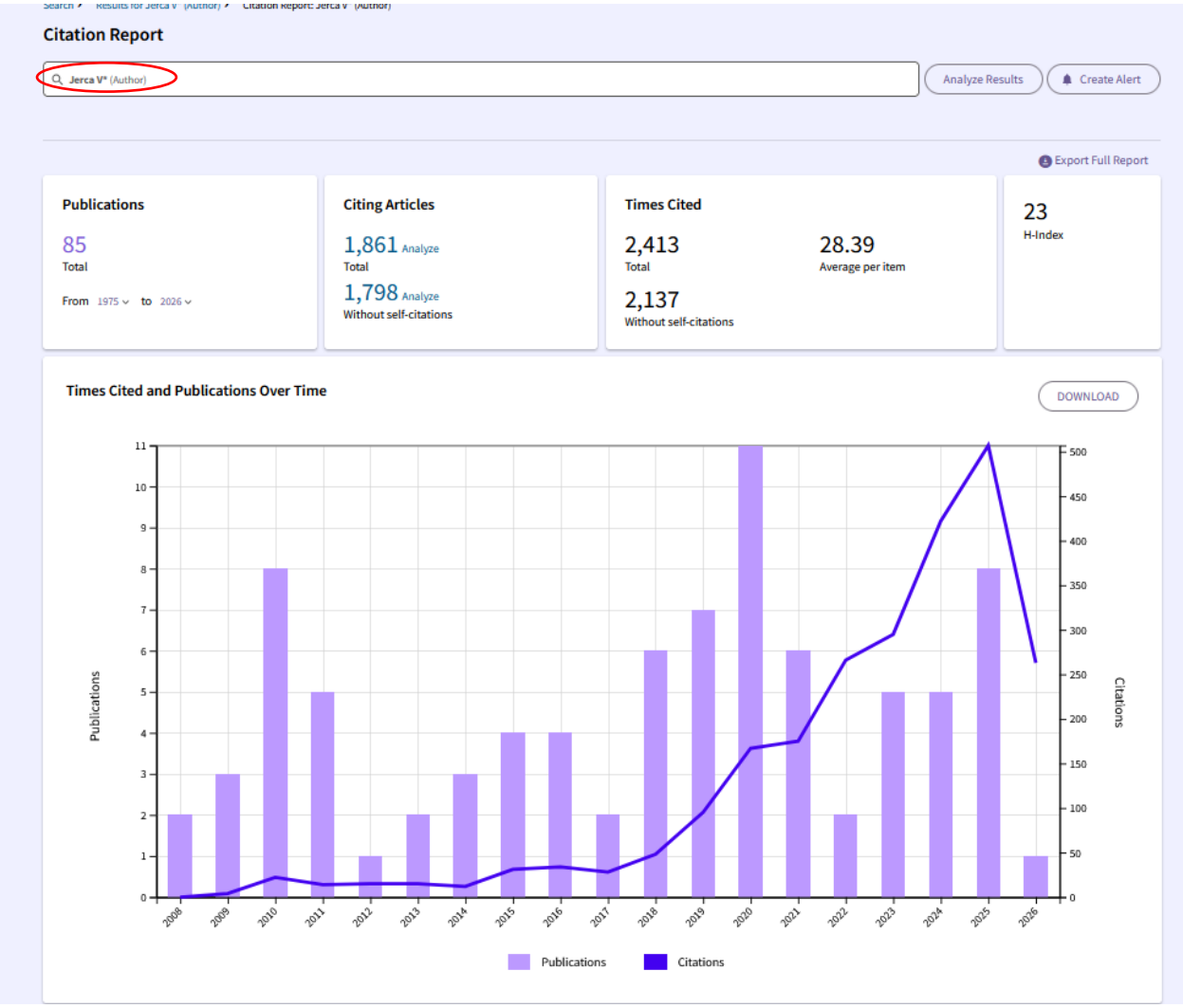
G3. PN-III-P1-1.1-TE-2019-1696 *"Dezvoltarea de Micele Fotosensibile pe bază de Poli(2-Oxazoline) ca Platforma Teranostică pentru Îmbunătățirea Eliberării de Medicament în Terapia Cancerului"* RESPOXA, 2021-2022; 431900 lei; **director de proiect**.

G4. PN-III-P2-2.1-PED-2019-0745 *"Noi Conjugate pe bază de Polioxazolină pentru Terapia Imuno-Chimică a Cancerului"* POXADOX, 2020-2022; 600000 lei; **director de proiect**.

G5. *"Azo-polimeri fotosensibili pentru optica neliniară"* finanțat de Ministerul fondurilor Europene prin intermediul proiectului POSDRU/159/1.5/S/132395, 2014-2015; **director de proiect**.

G4. BD-9, *"Macromonomeri pentru stabilizarea sistemelor disperse de polimerizare"* 2008-2010; 56000 lei; **director de proiect**.

H. CITĂRI CONFORM ISI WEB OF KNOWLEDGE



Data: 03.09.2026 **Jerca Valentin-Victor**