CURRICULUM VITAE

Prenume si nume:
IOAN BOTIZ

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EDUCATIE SI DIPLOME:

- **12/2016:** ***Abilitare*** in fizica (teza de abilitare cu titlul "*Ordering of conjugated polymers - a versatile approach to alter materials properties*" a fost sustinuta in 07/2016); titlul aferent a fost acordat prin ordinul de ministru nr. 5963 din 08/12/2016).
- **12/2016:** ***Cercetator Scientific I***, acordat prin ordinul de ministru nr. 5919 din 06/12/2016.
- **2004-2007:** ***Doctor in Fizica***, de la Universitatea Haute-Alsace (in cadrul Chemical Institute for Surfaces and Interfaces - French National Foundation for Science-Mulhouse, France); teza de doctorat intitulata "*Processes of Ordered Structure Formation in Polypeptide Thin Film Solutions*" a fost sustinuta in 12/2007.
- **2003-2004:** ***Master*** in Metode Atomice si Nucleare in Studiul Mediului de la Universitatea Babes-Bolyai, Cluj-Napoca, Romania; Diszertatia cu titlul "*Characterization of Polymeric Materials by Unilateral Mobile NMR*" disertatie a fost sustinuta in 09/2004.
- **1999-2003:** ***Licenta*** in Matematica-Fizica, de la Universitatea Babes-Bolyai, Cluj-Napoca, Romania, a fost obtinuta in 06/2003.

POZITII CURENTE:

- **01/01/2017-prezent: Conferentiar** in cadrul Departamentului de Fizica Stării Condensate și a Tehnologiilor Avansate al Facultatii de Fizica (Universitatea Babes-Bolyai, Cluj-Napoca, Romania).
- **01/01/2017-prezent: Cercetator Stiintific I** la Institutul de Cercetari Interdisciplinare in Bio-Nano-Stiinte din cadrul Universitatii Babes-Bolyai (Cluj-Napoca, Romania).

POZITII DE CERCETARE PRECEDENTE:

- **10/2022-27/02/2025: Lector** in cadrul Departamentului de Fizica Stării Condensate și a Tehnologiilor Avansate al Facultatii de Fizica (Universitatea Babes-Bolyai, Cluj-Napoca, Romania).
- **04/2016-12/2016: Cercetator Stiintific II** la Institutul de Cercetari Interdisciplinare in Bio-Nano-Stiinte din cadrul Universitatii Babes-Bolyai (Cluj-Napoca, Romania).
- **11/2015-03/2016: Project Manager** la Institutul de Cercetari Interdisciplinare in Bio-Nano-Stiinte din cadrul Universitatii Babes-Bolyai (Cluj-Napoca, Romania).
- **08/2016-08/2019: Project Manager** si **Science & Communications Manager** al INFORM Horizon 2020 Marie-Curie Training Network (Departmentul de Materiale al Imperial College London (UK).
- **2015-2016: Cadru didactic invitat** la Departmentul de Chimie si Inginerie Chimica al Facultatii de Chimie in cadrul Universitatii Babes-Bolyai (Cluj-Napoca, Romania).

- **02/2014-07/2016: Cercetator asociat** in cadrul Departamentului de Materiale al Imperial College London (UK).
- **04/2014-10/2015: Asistent cercetare** la Institutul de Cercetari Interdisciplinare in Bio-Nano-Stiinte din cadrul Universitatii Babes-Bolyai (Cluj-Napoca, Romania).
- **10/2010-10/2013: Postdoctorat de Excelenta de tip FRIAS** la *Institutul pentru Studii Avansate* (din cadrul Universitatii din Freiburg, Germania). Aici am lucrat impreuna cu Prof. Dr. Natalie Stingelin de la Colegiul Imperial din Londra (Londra, Marea Britanie) la ordonarea si structurarea diferitelor materiale polimerice conjugate care au potential in dezvoltarea dispozitivelor energetice organice sau hibride.
- **02/2008-09/2010: Postdoctorant** la Centrul de Nanomateriale, *Laboratorul National Argonne* (IL, SUA). Aici am lucrat cu Dr. Seth Darling la structurarea materialelor fotovoltaice si fabricarea celulelor solare.
- **09/2004-12/2007: Marie Curie Early Stage Researcher** la Institutul de Chimie a Suprafetelor si Interfetelor (CNRS) din Mulhouse (Franta) unde am lucrat cu Prof. Dr. Günter Reiter la ordonarea si auto-asamblarea polimerilor de tip amfifilic.
- **02/2004-07/2004: Student Erasmus** la Institutul Tehnic de Chimie Macromoleculara - RWTH din Aachen (Germania) unde am lucrat cu Prof. Dr. h.c. Bernhard Blümich.

ALTE STAGII DE CERCETARE REALIZATE IN ECHIPE INTERNATIONALE:

- **04/2013** - Departmentul de Chimie, Materiale, Inginerie Chimica "G. Natta", Politehnica din Milano, Milano (Italia)
- **03/2012** - Centrul pentru Stiinta Moleculara si Nano, Univ. Texas in Austin (Texas, USA)
- **03/2011** - Departmentul pentru Stiinta si Ingineria Materialelor, Universitatea Tsing Hua (Taiwan)
- **12/2010** - Departmentul de Materiale, Colegiul Imperial din Londra, Londra (Marea Britanie)
- **09/2009** - Centrul Materialelor Functionale, Laboratorul National Brookhaven, Upton (NY, SUA)
- **11/2004** - Institutul Max Planck pentru Coloizi si Interfete din Potsdam (Germania)

PREMII NATIONALE/INTERNATIONALE SI BURSE/GRANTURI DE EXCELENTA:

Dr. Ioan Botiz a castigat un ***grant postdoctoral de Excelenta de tip FRIAS*** la Institutul pentru Studii Avansate (din cadrul Universitatii din Freiburg, Germania) intre anii 2010-2013. Deasemenea el a castigat in urma unui concurs o bursa de tip ***Marie Curie ESR*** (POLYAMPHI-MRTN, CNRS-ICSI, Franta; 2004-2007). In 2004, Dr. Ioan Botiz a obtinut o ***bursa Erasmus*** de la Universitatea Babes-Bolyai (Romania) in colaborare cu Institutul de Chimie Tehnica si Macromoleculara RWTH din Aachen (Germania).

ACTIVITATI DE COORDONARE DOCTORATE SI POSTDOCTORATE:

Botiz a coordonat sau coordoneaza in prezent 7 teze de doctorat (R. Tarcan – teza sustinuta in 2024, I. Babutan – teza sustinuta in 2025, R. Tudureanu, B. Andone, M. Pop, A. Bustihan, R. Llanos Izcano) si un postdoctorat (T. Simon, 2020-2021).

ACTIVITATI PEDAGOGICE:

- **2026-prezent:** Predarea cursului "***Fizica Filmelor Subtiri***" (1/2; curs+seminar/laborator 2h+1h/saptamana - master Fizica Corpului Solid anul 1 si 2), Departamentului de Fizica Stării Condensate și a Tehnologiilor Avansate al Facultatii de Fizica (Universitatea Babes-Bolyai, Cluj-Napoca, Romania).
- **2023-prezent:** Predarea cursului si laboratorului/seminarului **"*Fizica si Tehnologia Polimerilor***" (2h+2h/saptamana, Semestrul 1; nivel licenta, sectia Fizica Tehnologica anul 4), in cadrul Facultatii de Fizica, Universitatea Babes-Bolyai, Romania.
- **2023-prezent:** Predarea cursului "***Bazele Fizicii Teoretice***" (curs+seminar 3h+2h/saptamana, Semestrul 1, nivelul licenta, toate sectiile anului 2) in cadrul Facultatii de Fizica, Universitatea Babes-Bolyai, Romania.
- **2023-prezent:** Predarea disciplinelor **"*Fizica experimentala 2***" si **" *Fizica experimentala 3***" (2h/saptamana, Semestrul 2; master Fizica Corpului Solid anul 1 si 2), Departamentului de Fizica Stării Condensate și a Tehnologiilor Avansate al Facultatii de Fizica (Universitatea Babes-Bolyai, Cluj-Napoca, Romania).
- **2018-prezent** Predarea cursului "***Nanostructuri şi sisteme macromoleculare***" (33% din curs+seminar, Semestrul 1, nivel doctorat) in cadrul Scolii Doctorale de Fizica, Universitatea Babes-Bolyai, Romania.
- **2015/2016:** Predarea cursului **"*Structura Chimica***" (curs+laborator 2h+1h/saptamana, Semestrul 1, nivelul licenta, anul 1 Chimie si Inginerie Chimica si anul 4, Stiinţa si Ingineria Materialelor Oxidice si Nanomateriale, in cadrul Departmentului de Chimie si Inginerie Chimica al Facultatii de Chimie, Universitatea Babes-Bolyai (Cluj-Napoca, Romania).
- **2015/2016:** Predarea cursului **"*Medicina Moleculara si Celulara*"** (curs+laborator 2h+1h/saptamana, Semestrul 1, nivelul masterat anul 1, Chimie Clinica) in cadrul Departmentului de Chimie si Inginerie Chimica al Facultatii de Chimie, Universitatea Babes-Bolyai (Cluj-Napoca, Romania).
- **2014-2016:** Predarea laboratorului „***Polimeri Fotoluminiscenti***" (2h/saptamana; nivel master) in cadrul Facultatii de Fizica, Universitatea Babes-Bolyai (Romania).
- **2011/2012:** Predarea tutorialelor „***Fizica experimentala I***" (2h/ saptamana; nivel licenta) la Institutul de Fizica din cadrul Universitatii din Freiburg (Germania).

MEMBRU IN ORGANIZATII/CONSILII UNIVERSITARE/STIITIFICE:

- Membru in *Comitetul Editorial* al ***Polymers*** (2021-prezent)
- Membru in *Consiliul de Evaluare* al ***Nanomaterials*** (2020-prezent)
- Membru al ***Scolii Doctorale de Fizica*** din cadrul Facultatii de Fizica, Universitatea Babes-Bolyai (2017-prezent)
- Membru in ***Consiliul Stiintific*** al Institutului de Cercetari Interdisciplinare in Bio-Nano-Stiinte, Romania (2015-prezent)
- Membru al ***Consiliului CNM de Evaluare Proiecte***, Laboratorul National Argonne, SUA (2013-2017).

AFILIERI LA SOCIETATI STIINTIFICE:

Societatea Americana de Chimie (**2009**); Societatea Cercetarii Materialelor (**2009**, **2016**); Asociatia Nationala a Postdoctorantilor din SUA (**2008-2010**); Actiunea ERA-COST P12 Structurarea Polimerilor, grupurile WG1 si WG2 (**2006-2007**); POLYAMPHI Marie Curie RTN (**2004-2007**).

DIRECTOR/MANAGER/MEMBRU IN PROIECTE DE CERCETARE MAJORE:

- **2019-2021:** ***Director al proiectului*** METAL PN-III-P2-2.1-PED-2019-3995 "*Enhancement of Nanostructured Thermal Interface Materials using Carbon Allotropes*", Universitatea Babes-Bolyai, Romania (**~145.000 €**; publicatii: *Journal of Applied Polymer Science* **139**, e53238/2022, *International Journal of Molecular Sciences* **23**, 7731/2022, *Nanomaterials* **12**, 1084/2022, *Polymers* **13***,* 445/2021, *Polymers* **13***,* 1552/2021, *Macromolecules* **54***,* 5304/2021), *Synthetic Metals* **269***,* 116576/2020)
- **2015-2017:** ***Director al proiectului*** UEFISCDI PN-II-RU-TE-2014-4-0013-UBB (Romania; valoare proiect ~**125.000 €**; publicatii: *Journal of Materials Chemistry C* **8**, 1198/2020, *Thin Solid Films* **697**, 137780/2020, *Nanomaterials* **9**, 1757/2019, *Journal of Materials Chemistry C* **5**, 2513/2017, *Applied Surface Science* ***363***, 613/2016)
- **2016-2019:** ***MANAGER (****si* ***Manager de Comunicare si Stiinta)*** al proiectului INFORM Horizon 2020 Marie-Curie Training Network "*Interfaces in Optoelectronic Thin Film Multilayer Devices*", Imperial College London/UK (**~3.870.919 €**, proiect castigat de Prof. N. Stingelin; publicatii: *Materials Horizons* **8***,* 2230/2021
- **2021-2023:** Membru in proiectul PN-III-P1-1.1-TE-2021-0388 "*Hibrizi nanoBG-rGO-polimerici inteligenți, multifuncționali, injectabili, cu cost redus, proiectați pentru ingineria țesuturilor în stomatologie*", (450.000 RON; publicatii: *Journal of Materials Chemistry C*. DOI: https://doi.org/10.1039/D2TC03971K, 2022), UBB (Romania)
- **2019-2021:** Membru in proiectul PN-III-P1-1.1-PD-2016-1898 "*Design of hybrid nanoplatforms based on conjugated polymers and gold nanoparticles for plasmon-enhanced photodynamic therapy*", (55.410 EUR, publicatii: *Journal of Molecular Structure* **1243***,* 130931/2021) UBB (Romania)
- **2018-2019:** Membru in proiectul PN-III-P4-ID-PCCF-2016-0142 "*New Targeted Optical Imaging NanoProbes for Near-Infrared Real-Time Image-Guided Surgery of Ovarian Cancer*", (1.770.830 Euro) UBB (Romania)
- **2018-2019:** Membru in proiectul PN-III-P1-1.2-PCCDI2017-0010 "*Emerging molecular technologies based on micro and nano-structured systems with biomedical applications*", UBB (Romania)
- **2015-2017:** Membru in proiectul PN-II-RU-TE-2014-4-2639, "*Nano-Gap Arrays Fabricated on Large Areas as Plasmonic Platforms for Controlling Light Emission Processes*" (550.000 RON), UBB (Romania)
- **2014-2016:** Membru in proiectul PNII-ID-PCCE-2011-2-0069 "*Carbon Quantum Dots: Exploring a New Concept for Next Generation Optoelectronic Devices*", (4.792.694 RON) UBB (Romania)
- **2016:** Membru in proiectul COAT H2020-EU.1.1./ERC-2015-PoC "*Anti-reflection coatings from solution-processable, high-refractive index inorganic/organic hybrid materials*", Imperial College London/UK
- **2014-2015:** Membru in proiectul PASMOMA "*Patterning Strategies for Integration of Multifunctional Organic Materials"* within the "*EPSRC Centre for Innovative Manufacturing*

in Large-Area Electronics", Imperial College London/UK (publicatii: *Materials Horizons* **8***,* 2230/2021)

- **2014-2015:** Membru in proiectul OASIS FP7-IDEAS-ERC "*Organic/inorganic hybrids for solution-processable photonic structures*", Imperial College London/UK
- **2008-2010:** Membru in proiectul LDRD/Departmentul de Energie (SUA; publicatii: *Journal of Physical Chemistry C* **115**, 9260/2011, *Macromolecules* **44**, 530/2011, *Langmuir* **26**, 8756/2010, *Materials Today* **13**, 42/2010, *Macromolecules* **42**, 8211/2009)
- **2006-2007**: Membru in proiectul ERA-COST P12 Structurarea Polimerilor (Franta)
- **2004-2007:** Membru in proiectul POLYAMPHI Marie Curie RTN (Franta, publicatii: *Physical Review E* **79**, 041802/2009, *European Physical Journal E* **27**, 63/2008, *Soft Matter* **4**, 993/2008)

PUBLICATII:

Botiz este (co)-autor a ***83*** de publicatii (inclusiv 2 carti si cateva capitole de carte), din care ***64*** sunt **ISI**, cu ***41/Q1*** si 17/Q2. Indexul Hirsch este ***27***; cu peste ***2100*** citari WOS, excluzand auto-citarile.

1. **I. Botiz***, L. Máthé, I. Grosu, C.-V. Tiușan. Book: Mecanica analitică și fundamentele fizicii teoretice. Presa Universitară Clujeană, Cluj-Napoca, ISBN 978-606-37-3113-6 (2026).

2. M.-P. Marieta, **I. Botiz**, A. Vulpoi. Modifier-induced structural evolution in CTAB-assisted SiO_2–CaO–CeO_2 sol–gel systems. *Materials Chemistry and Physics* **366**, 132969 (2026).

3. **I. Botiz***, L. Máthé, I. Grosu. Book: Probleme de bază ale mecanicii analitice. Presa Universitară Clujeană, Cluj-Napoca, ISBN 978-606-37-2994-2 (2026).

4. A. Bustihan, **I. Botiz***. Recent Advances in Additively Manufactured Polymeric Structures for Mechanical Energy Absorption. *Polymers* **18**, 1019 (2026).

5. O. Todor-Boer, B.-I. Stefan, L. Máthé, T. Blaga, **I. Botiz***. Processing-Dependent Morphology and Photoluminescence Quenching in Donor–Acceptor PBDTTTPD:PNDI(2HD)2T Thin Films. *Coatings* **16**, 417 (2026). This paper has been selected as an ***Editor's Choice Paper***.

6. O. Todor-Boer, B.-I. Stefan, L. Máthé, C. Varaticeanu, **I. Botiz***. Controlling the Morphology of Organic Donor–Acceptor Films for Enhanced Optoelectronic Properties. *Thin Solid Films* **839**, 140907 (2026).

7. R. Hirian, R. Dudric, R. Bortnic, F. Popa, L. Barbu-Tudoran, T. Radu, F. Nekvapil, **I. Botiz**, R. Ciceo-Lucacel. Magnetocaloric Effect of Composite Magnetic Filaments for 3D Printing. *Magnetochemistry* **12**, 35 (2026).

8. A. Vulpoi, **I. Botiz***. Mesoporous Bioactive Glasses: A Review on Structure-Directing-Based Synthesis, Characterization, and Biomedical Applications. *Materials* **19**, 876 (2026).

9. A. Bustihan, R. Hirian, **I. Botiz***. Reusable 3D-Printed Thermoplastic Polyurethane Honeycombs for Mechanical Energy Absorption. *Polymers* **17**, 3035 (2025).

10. C. Pintilii, M. Baia, E. Alexa, K. Magyari, **I. Botiz**, M. Muresan-Pop, L. Barbu-Tudoran, C. Nicula, A. Peter, Z. Szakács, A. Mihaly Cozmuta, L. Mihaly Cozmuta. Comparative study on

starch and protein secondary structures in brown, red, and black rice influenced by microwave treatment. *Food Chemistry: X* **32**, 103224 (2025).

11. M. Pop, **I. Botiz***. Carrier Mobility, Electrical Conductivity, and Photovoltaic Properties of Ordered Nanostructures Assembled from Semiconducting Polymers. *Materials* **18**, 4580 (2025). This paper has been selected as an ***Editor's Choice Paper***.

12. M. Pop, O. Todor-Boer, **I. Botiz***. Visualization of Single Polymer Chains with Atomic Force Microscopy: A Review. *Polymers* **17**, 1397 (2025).

13. A. Bustihan, **I. Botiz**, R. Branco, R. F. Martins. Enhancing mechanical energy absorption of honeycomb and triply periodic minimal surface (TPMS) lattice structures produced by fused deposition modelling in reusable polymers. *Polymers* **17**, 1111 (2025).

14. R. G. Hategan, A. Aldea, R. D. Miclea, R. Hirian, **I. Botiz**, R. Dudric, L. Rasabathina, O. Hellwig, G. Salvan, D. Zahn, R. Tetean, C. Tiusan. Magnetic, electronic structure and micromagnetic properties of ferrimagnetic DyCo3 as platform for ferrimagnetic skyrmions. *Nanomaterials* **15**, 606 (2025). This paper has been selected as an ***Editor's Choice Paper***.

15. I. Babutan, L. I. Atanase, **I. Botiz***. Self-assembly of lamellar/micellar block copolymers induced through their rich exposure to various solvent vapors: an AFM study. *Materials* **18**, 1759 (2025).

16. Y. Cotoarbă, O. Todor-Boer, **I. Botiz***. Crystals of non-fullerene acceptors generated by rich exposure to solvent vapors. *Crystal Growth & Design* **25**, 2337 (2025).

17. R. Tarcan, I. M. Handrea-Dragan, **I. Botiz***. Synthesis of concentrated aqueous dispersions of reduced graphene oxide. *Journal of Optoelectronics & Advanced Materials* **26**, 413 (2024).

18. O. Todor-Boer, C. Farcau, **I. Botiz***. Large Enhancement of Photoluminescence Obtained in Thin Polyfluorene Films of Optimized Microstructure. *Polymers* **16**, 2278 (2024).

19. M. Băbuţan, **I. Botiz***. Morphological Characteristics of Biopolymer Thin Films Swollen-Rich in Solvent Vapors. *Biomimetics* **9**, 396 (2024).

20. L. Senila, **I. Botiz**, C. Roman, D. Simedru, M. Dan, I. Kacso, M. Senila, O. Todor-Boer. Processing of Thin Films Based on Cellulose Nanocrystals and Biodegradable Polymers by Space-Confined Solvent Vapor Annealing and Morphological Characteristics. *Materials* **17**, 1685 (2024).

21. I. Botiz*. Single Crystals of Established Semiconducting Polymers. *Polymers* **16**, 761 (2024).

22. B.-A. Andone, M. Handrea-Dragan, **I. Botiz**, S. Boca. State-of-the-art and future perspectives in infertility diagnosis: conventional versus nanotechnology-based assays. *Nanomedicine-Nanotechnology, Biology and Medicine* **54**, 102709 (2023).

23. B.-A. Andone Rotaru, M. Girlovanu, A. Vulpoi, **I. Botiz**, S. Boca. P-018 Structural and biocompatibility analysis of gold nanoparticle integrated polymeric scaffolds for infertility diagnosis. *Human Reproduction* **38**, dead093.385 (2023).

24. I. Petrovai, O. Todor-Boer, A. Vulpoi, L. David, **I. Botiz***. Generation of Hybrid Lead Halide $CH_3NH_3PbI_{3-x}Cl_x$ Perovskite Crystals via Convective Self-Assembly. *Coatings* **13**, 1130 (2023).

25. I. Babutan, O. Todor-Boer, L. I. Atanase, A. Vulpoi, **I. Botiz***. Crystallization of Poly(ethylene oxide)-Based Triblock Copolymers in Films Swollen-Rich in Solvent Vapors. *Coatings* **13**, 918 (2023).

26. L. Máthé, Z. Kovács-Krausz, **I. Botiz**, I. Grosu, K. El Anouz, A. El Allati, L. P. Zârbo. Phonon-Assisted Tunneling through Quantum Dot Systems Connected to Majorana Bound States. *Nanomaterials* **13**, 1616 (2023).

27. I. Babutan, O. Todor-Boer, L. I. Atanase, A. Vulpoi, **I. Botiz***. Self-Assembly of Block Copolymers in Thin Films Swollen-Rich in Solvent Vapors. *Polymers* **15**, 1900 (2023).

28. I. Petrovai, O. Todor-Boer, L. David, **I. Botiz***. Growth of Hybrid Perovskite Crystals from $CH_3NH_3PbI_{3-x}Cl_x$ Solutions Subjected to Constant Solvent Evaporation Rates. *Materials* **16**, 2625 (2023).

29. I. Babutan, O. Todor-Boer, L. I. Atanase, A. Vulpoi, S. Simon, **I. Botiz***. Self-assembly of block copolymers on surfaces exposed to space-confined solvent vapor annealing. *Polymer* **273**, 125881 (2023).

30. **I. Botiz***. Prominent processing techniques to manipulate semiconducting polymer microstructure. *Journal of Materials Chemistry C* **11**, 364 (2023).

31. I. Petrovai, O. Todor-Boer, L. David, **I. Botiz***. Enhancing the Photoluminescence of Polyfluorene-Based Thin Films via Illumination. *Studia Universitatis Babes-Bolyai Physica* **67**, 79-90 (2022).

32. R. Tarcan, M. Handrea-Dragan, C.-I. Leordean, R. C. Cioban, G.-Z. Kiss, D. Zaharie-Butucel, C. Farcau, A. Vulpoi, S. Simon, **I. Botiz***. Development of polymethylmethacrylate/reduced graphene oxide composite films as thermal interface materials. *Journal of Applied Polymer Science* **139**, e53238 (2022).

33. I. M. Handrea-Dragan, **I. Botiz**, A.-S. Tatar, S. Boca. Patterning at the micro/nano-scale: polymeric scaffolds for medical diagnostic and cell-surface interaction applications. *Colloids and Surfaces B: Biointerfaces* **218**, 112730 (2022).

34. R. Tudureanu, I. M. Handrea-Dragan, S. Boca, **I. Botiz***. Insight and recent advances into the role of topography on the cell differentiation and proliferation on biopolymeric surfaces. *International Journal of Molecular Sciences* **23**, 7731 (2022).

35. I. M. Handrea-Dragan, A. Vulpoi, C. Farcau, **I. Botiz***. Spheres-In-Grating Assemblies with Altered Photoluminescence and Wetting Properties. *Nanomaterials* **12**, 1084 (2022).

36. A. Stefancu, O. M. Biro, O. Todor-Boer, **I. Botiz**, E. Cortés, N. Leopold. Halide-Metal complexes at plasmonic interfaces create new decay pathways for plasmons and excited molecules. *ACS Photonics* **9**, 895 (2022).

37. T. Nagy-Simon, O. Diaconu, M. Focsan, A. Vulpoi, **I. Botiz**, A.-M. Craciun. Pluronic stabilized conjugated polymer nanoparticles for NIR fluorescence imaging and dual phototherapy applications. *Journal of Molecular Structure* **1243***,* 130931 (2021).

38. S. Chen, B. Haehnle, X. Van der Laan, A. J. C. Kuehne, **I. Botiz**, P. N. Stavrinou, N. Stingelin. Understanding Hierarchical Spheres-in-grating Assembly for Bio-Inspired Colouration. *Materials Horizons* **8***,* 2230 (2021).

39. **I. Botiz***, M. M. Durbin, N. Stingelin. Providing a Window into the Phase Behavior of Semiconducting Polymers. *Macromolecules* **54***,* 5304 (2021).

40. I. Babutan, A.-D. Lucaci, **I. Botiz***. Antimicrobial Polymeric Structures Assembled on Surfaces. *Polymers* **13***,* 1552 (2021).

41. I. M. Handrea-Dragan, **I. Botiz***. Multifunctional Structured Platforms: From Patterning of Polymer-Based Films to Their Subsequent Filling with Various Nanomaterials. *Polymers* **13***,* 445 (2021).

42. R. Tarcan, M. Handrea-Dragan, O. Todor-Boer, I. Petrovai, C. Farcau, M. Rusu, A. Vulpoi, M. Todea, S. Astilean, **I. Botiz***. A new, fast and facile synthesis method for reduced graphene oxide in *N,N*-dimethylformamide. *Synthetic Metals* **269***,* 116576 (2020).

43. O. Todor-Boer, I. Petrovai, R. Tarcan, L. David, S. Astilean, **I. Botiz***. Control of microstructure in polymer: Fullerene active films by convective self-assembly. *Thin Solid Films* **697**, 137780 (2020).

44. R. Tarcan, O. Todor-Boer, I. Petrovai, C. Leordean, S. Astilean, **I. Botiz***. Reduced graphene oxide today. *Journal of Materials Chemistry C* **8**, 1198 (2020). This paper was included to the online collection *highlighting* ***the most popular articles*** published in *Journal of Materials Chemistry C* in 2020. This paper was flagged by WoS as ***highly cited and placed in the top 1%*** of the academic field of Materials Science in 2020.

45. M. Potara, A. Campu, D. Maniu, M. Focsan, **I. Botiz**, S. Astilean. Book chapter *Advanced nanostructures for microbial contaminants detection by means of spectroscopic methods* in Advanced Nanostructures for Environmental Health, Elsevier, Eds. L. Baia, Z. Pap, K. Hernadi, M. Baia, ISBN: 9780128158821, p. 347 (2020).

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PARTICIPARE CONFERINTE:

Botiz a participat la peste 120 de conferinte, workshop-uri si seminarii internationale, cu peste 60 de postere si 40 de prezentari orale in Europa, USA, Asia, Africa si Australia.

Botiz a (co-)organizat, de asemenea, numeroase conferințe, școli de vară/iarnă și workshopuri internaționale, printre care:

- un simpozion în cadrul 34th International Materials Research Congress (IMRC 2026), organizat de Sociedad Mexicana de Materiales și Materials Research Society (MRS), desfășurat în perioada 16–20 august 2026, la Cancún, Mexic
- conferința finală INFORM „Interfaces in Organic and Hybrid Thin-Film Optoelectronics” (5–7 martie 2019, Valencia, Spania)
- școala de vară INFORM „Flexible Electronics – Visions and Future Perspectives” (4–9 noiembrie 2018, Paphos, Cipru)
- „Hands-on Tutorial on Excitations in Solids 2018” (31 iulie–9.08 2018, Berlin, Germania)
- școala de iarnă INFORM „Organic Photovoltaics from Lab to the Field: Materials, Device Performance & Long-Term Stability” (4–8 martie 2018, campusul Sede Boqer al Universității Ben-Gurion, Israel)
- workshopul „Scale-Up from Lab to Industry” (10–13.12 2017, Holst Centre, Eindhoven, Olanda)
- workshopul „Spectroscopic Methods for Disentangling Photophysical Processes in Organic Electronics” (10–13 septembrie 2017, University of Oxford, Marea Britanie)
- workshopul INFORM „Multi-layer Manufacturing: Film Formation Phenomena, Deposition Techniques and Characterization” (9–13 ianuarie 2017, Bergün, Elveția)
- workshopul „Introduction to Multilayers Devices” (26–28 septembrie 2016, Imperial College London, Marea Britanie).

Botiz a participat, de asemenea, la numeroase activități de diseminare și popularizare a științei adresate publicului nespecialist, printre care Junior Summer University, organizată de UBB în 2024 și 2025 la Cluj-Napoca; Imperial Festival (27–29 aprilie 2018, Londra, Marea Britanie); Oxford INFORM Storyboard (4 septembrie 2017, Oxford, Marea Britanie); festivalul anual „Lange Nacht der Wissenschaften”/„Long Night of Sciences” (24 iunie 2017, Berlin, Germania); precum și INFORM Dissemination Training (18–19 mai 2017, Bayreuth, Germania).