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Sexul F | Data nașterii | Naționalitatea română

LOCUL DE MUNCA

Profesor /Universitate Politehnica din București, Departamentul Chimie Anorganică, Chimie-Fizică și Electrochimie

EXPERIENȚA PROFESIONALĂ

octombrie 2013 - în prezent

- Profesor, Universitatea Națională de Știință și Tehnologie POLITEHNICA București, Facultatea de Inginerie chimică și Biotehnologii, Departamentul Chimie anorganică, Chimie-fizică și Electrochimie; activitate didactică în domeniul chimiei anorganice și de cercetare în domeniul inginerie chimică, nanomaterialelor și inginerie medicală

octombrie 2005 - sept. 2013

- Conferențiar, Universitatea POLITEHNICA din București, Facultatea de Chimie Aplicată și Știința Materialelor, Catedra Chimie anorganică, activitate didactică în domeniul chimiei anorganice și de cercetare în domeniul inginerie chimică, nanomaterialelor și inginerie medicală

octombrie 1999 - sept. 2005

- Șef de lucrări, Universitatea POLITEHNICA din București, Facultatea de Chimie Industrială, Catedra Chimie anorganică activitate didactică – laboratoare de Chimie anorganică și Chimia Metalelor tranziționale, activitate de cercetare științifică în domeniul materialelor oxidice perovskitice

octombrie 1995 - sept. 1999

- Asistent, Universitatea POLITEHNICA din București, Facultatea de Chimie Industrială, Catedra Chimie anorganică, activitate didactică – laboratoare de Chimie anorganică și Chimia Metalelor tranziționale, activitate de cercetare științifică în domeniul materialelor oxidice perovskitice

dec. 1992 - sept 1995

- Asistent cercetare, Academia Română, Institut de Chimie-Fizică "Ilie Murgulescu" din București, Laboratorul Chimia suprafeței și cataliză, București, activitate de cercetare științifică în domeniul catalizei heterogene.

oct 1991 – noiembrie 1992

- Cecetător documentarist, Chiminform Data, București

Activități și responsabilități principale

- Activitate didactică – cursuri predate: Chemistry II, Chimie anorganică, Chimie anorganică II, Inorganic Chemistry I, Inorganic Chemistry II, Activitatea catalitică a substanțelor anorganice, Complemente de chimie anorganică, Nanostructurare și biomimetism (anul I I master SCIVEC) Seminarii: Chimie anorganica, Inorganic Chemistry I și II; Laboratoare: Chimie anorganica I si II, Chmia metalelor tranziționale, Inorganic Chemistry, Strategii de sinteza anorganice, Nanostructurare și biomimetism

noiembrie 2005 - aprilie 2007

- stagiul postdoctoral - Institut de Ciencia de Materials de Barcelona (ICMAB-CSIC), Spania

martie 2003 - sept. 2003

- stagiul postdoctoral - cercetător asociat CNRS, Institute de Recherche sur catalyse, Villeurbane, Franța

februarie. 2000 - mai 2000

- stagiul doctoral - Delft University of Technology, Laboratory for Inorganic Chemistry, Olanda

dec.1996 – aug. 1997

- stagiul doctoral - Politecnico di Torino, Dip. di Scienza dei Materiali ed Ingegneria Chimica, Italia Program TEMPUS – JEP-7147 / 96

EDUCAȚIE ȘI FORMARE

martie 1995 – decembrie 2000

- Doctorat, Universitatea POLITEHNICA din București, Facultatea de Chimie Industrială, Catedra Chimie anorganică, conducător științific - Prof. Dr. chim. Ioana Jitaru
- Doctor în inginerie chimică / doctor mai 2001 Chimie anorganică / Sinteza unor materiale oxidice prin metode neconvenționale Caracterizarea materialelor oxidice

sept. 1986 – iunie1991

- Institutul Politehnic București, Facultatea de Chimie Industrială, specializarea Tehnologie Chimică Organică. Diplomă de inginer – iunie 1991

Chimie anorganică, Chimie organică, Chimie-fizică, Electrochimie, Chimie analitică, Analiză instrumentală, Tehnologie chimică organică, Chimia produselor farmaceutice, Fenomene de transfer, Reactoare chimice etc.

COMPETENTE PERSONALE

- Sinteza de materiale anorganice prin metode neconvenționale: coprecipitare, combustie, sol-gel, metoda hidrotermală
- Obținerea și caracterizarea unor materiale hibride organice-anorganice utilizarea acestora drept transportori în sisteme cu eliberare controlată de medicamente
- Depuneri de metale pe diferite suporturi
- Caracterizarea materialelor prin spectroscopie FT-IR, analiză termică, difracție de raze X, microscopie electronică etc.
- Chimia defectelor. Studiul oxozilor anorganici prin măsurători de conductivitate electrică. Experiența în acest domeniu a fost dobândită în stagiul doctoral din Olanda.
- Cataliză eterogenă – stagiul postdoctoral în Franța, la Institute de Recherche sur catalyse
- Materiale hibride de tip polimer conductor-metal nobil - stagiul postdoctoral în Spania la ICMAB

Limba(i) maternă(e) română

Alte limbi străine cunoscute

	INTELEGERE		VORBIRE		SCRIERE
	Ascultare	Citire	Participare la conversație	Discurs oral	
engleză	C1/2	C1/2	C1/2	C1/2	C1/2
franceză	B1/2	B1/2	B1/2I	B1/2	B1/2

Niveluri: A1/2: Utilizator elementar - B1/2: Utilizator independent - C1/2: Utilizator experimentat
 Cadrul european comun de referință pentru limbi străine

Competențe de comunicare

Competențe foarte bune de comunicare

- 29 ani de predare
- de peste 10 ani lider de grup de cercetare

Competențe organizaționale/manageriale

- Membru în comitetul de organizare a conferinței RICCCE XI, sept. 1999, București, RICCCE XIV 2005, București, RICCCE XVI și XVII – Sinaia 2009 și 2011, membru
- Aptitudini în coordonarea și organizarea unui laborator de cercetare din Departamentul Chimie anorganică, Chimie-fizică și Electrochimie.
- Președintele secțiunii de Chimie anorganică a concursului C.D. Nenițescu 2011-2021
- Coordonarea mai multor proiecte de cercetare în calitate de director

Competențe dobândite la locul de muncă

- didactice – de predare a diferite cursuri, susținere de seminarii
- de înființare și coordonare a activității unui grup propriu de cercetare
- de dotare cu echipamente de investigare a unui laborator de materiale anorganice funcționale
- de supervizare a activității de cercetare a doctoranzilor și studenților din ciclul de licență sau master
- coordonarea unor proiecte de cercetare complexe

Competențe informatice

- Microsoft, Origin, software-uri dedicate achiziționării și prelucrării datelor de analiza fizico-chimica (difracție de raze X, spectroscopie UV-vis, FTIR, analiza termică, porozimetrie, cromatografie etc.),
- o bună cunoaștere a instrumentelor Microsoft Office™
- utilizare platforme e-learning

INFORMATII SUPLIMENTARE

- Membru în organizații științifice: Societatea de Chimie și Societatea Română de Ceramica și Materiale Oxidice, CEROM
- Membru în comitetul științific al jurnalelor ISI, Materials and UPB Scientific Bulletin-Series B
- Member in Scientific Committee of international conferences: European Conference on Materials and Technologies for Sustainable Growth, Bled, Slovenia, 2013, RICCCE 18 –Sinaia, sept. 2013, RICCCE 19, Sibiu 2015
- Referent științific la jurnale ISI Nature Commun., Micropor. Mesopor. Mater., Chem. Eng. J., Colloids and Surfaces A: Physicochemical and Engineering Aspects, J. Alloys Comp., Materials Science and Engineering B, Rev. Roum., Rom. J. Mater., J. Nanopart. Res., Current Drug Targets, Ind. Eng. Chemistry Research, Mat. Phys. Chem., ACS Omega etc.
-

Publicații	Autor (AAK-6858-2020 – Web of Science) a 130 lucrări publicate în reviste indexate ISI (54 ca autor principal din care 28 în cuartila Q1), 6 brevete naționale , 10 cărți, 7 conferințe invitate, 4 capitole de carte în edituri prestigioase, Elsevier, Willey, Nova Publisher Indice Hirsch =27 (Web of Science); număr total de citări ≈ 2400 (fără autocitări – baza de date Scopus)
Capitol de carte	C. Matei, D. Berger , E. Ruse și alții, Suport de curs pentru programele Privim către viitor-e-chimie, Basic IT skills, TIC chimie, Inovare în predarea și învățarea chimiei, vol. I, Chimie anorganică, chimie analitică – cap. 3 (36 pag – cap. 3.) București Politehnica Press, 2012 (ISBN 978-606-515-403-2) RA Mitran, M Deaconu, C Matei, D Berger , Mesoporous Silica as Carrier for Drug-Delivery Systems, Nanocarriers for Drug Delivery: Nanoscience And Nanotechnology In Drug Delivery Edited by: Mohapatra, SS; Ranjan, S; Dasgupta, N; Mishra, RK; Thomas, S, Elsevier, 2019, 351-374, DOI: 10.1016/B978-0-12-814033-8.00011,
Proiecte (selecție)	UEFISCDI-PCE nr. 117/2022 - <i>Designul unor materiale compozite pe bază de matrici mezoporoase prin explorarea efectului de nanoconstrangere (COMCONF)</i> - director UEFISCDI-PED nr. 576/2022 - <i>Sisteme medicale avansate pentru captarea de protoni cu bor pentru terapia cu protoni îmbunătățită (AMSBPCEPT)</i> - director UEFISCDI-PED nr. 525/2020 - <i>Nanoplatfor for natural and synthetic compounds with synergistic cytotoxic effect (CYTOSIN)</i> - director UEFISCDI, Complex Project, PCCDI no. 85/2018, <i>Complex valorisation of Black Sea bioresources by development and application of novel and emergent biotechnologies (INOBIOMAR)</i> -Component Project no. 2, Technologies of bioactive substances encapsulation for valorisation of bioresources from Black Sea coast region for biomedicine -responsabil științific UEFISCDI, PCCA nr. 131/2012, <i>Sisteme cu eliberare controlată de medicamente pe bază de matrici anorganice mezoporoase</i> , acronim MESODRUG – director, iulie 2012 – dec. 2016; finanțare pentru UPB 6.800.000 lei PNII-Capacități, proiect bilateral Romania-Slovenia nr. 533/2012, Nanostructuri metal-oxid pentru tratamentul apelor reziduale, acronim MONWAT, 2012-2013, director PNII-Capacități, proiect bilateral Romania-Franța, Materiale nanocomposite pentru denitrificarea efluentilor aposi, (MADECEAU) nr. 483/17.03.2011; 2011-2012 director PNCDI II Parteneriate în domenii prioritare, Contract no. 32-116, Arhitecturi de materiale avansate cu aplicatii in tratamentul apelor poluate, acronim AMAP, responsabil UPB, 2008-2011. PNCDI II Parteneriate în domenii prioritare Contract no. 71-030, Materiale ceramice avansate componente ale pilelor de combustie de temperatura intermediara (acronim MATSOFC) - responsabil UPB; 2007-2010.
Conferințe invitate	D. Berger et al., Exploration of the nanoconfinement effect into mesopores of silica-type materials for biomedical applications, IBWAP 2023, Constanța, România D. Berger et al., Targeted irinotecan delivery systems containing fucoidan coated mesoporous silica nanoparticles, RICCCE 22, Sinaia, Romania, sept. 2022 (keynote) D. Berger et al. Structural and textural properties of mesoporous materials as carriers for biologically-active molecules, 6th edition of the workshop, Advanced optical and X-ray characterization techniques of multifunctional materials, Bucharest, sept. 2014 D. Berger et al. Mesoporous materials. Synthesis, characterization and properties, RICCCE18, Sinaia, Romania, sept. 2013 (keynote) D. Berger et al., Noble metal nanoparticles with controlled morphology, RICCCE17, Sinaia, sept. 2011 (keynote) D. Berger, Soft chemistry synthesis of inorganic nanoparticles-based materials with controlled morphology, Laboratoire de Physique des Solides UMR-8502, CNRS, Orsay, France, 17 sept 2010 (invited seminar).
Seminarii	D. Berger, Soft chemistry synthesis of inorganic nanoparticles-based materials with controlled morphology, Laboratoire de Physique des Solides UMR-8502, CNRS, Orsay, France, 17 sept 2010 (invited seminar).
Distincții	<i>Atestat de abilitare</i> - în urma susținerii tezei de abilitare, <i>Contribuții la sinteza prin metode neconvenționale, în soluție a unor nanomateriale anorganice</i> – sept. 2013; OM nr. 5633 MD/11.12.2013 Premiul Academiei Române “Petru Spacu” în 2017 pentru grupul de lucrări din domeniul - Physico-chemical processes due to nanoconfinement in mesoporous materials Gold medal, Inventica 2017, Iasi, June 2017 for the Romanian patent, Procedure for deposition of ceramic oxide layers, inventors: C. Matei, D. Berger, S. Stoleriu RO 127660/30.09.2015, BOPI nr. 9/2015 Gold medal, Inventica 2017, Iași, June 2017 for the Romanian patent, D. Berger, S. Nastase, C. Matei, Procedure for obtaining of mesostructured aluminosilicates in the presence of n-butylidethanolamine, RO 130218/30.01.2017, BOPI nr. 1/2017
mai 2015- nov 2020 din iun 2020.	Membru în Consiliul Școlii doctorale a Facultății Chimie Aplicată și Știința Materialelor Membru în comisia CNATDCU Nr. 8, Inginerie Chimică, Inginerie Medicală, Știința Materialelor

ANEXE

Listă de lucrări - Anexă



Prof. dr. ing. Daniela-Cristina BERGER

Universitatea Națională de Știință și Tehnologie Politehnică București

Facultatea de Inginerie Chimică și Biotehnologii

Departamentul Chimie Anorganică, Chimie-fizică și Electrochimie

LISTĂ de LUCRĂRI

<https://orcid.org/0000-0002-7829-7540>

- **Teză de doctorat**

D. Berger, *Sinteza și proprietățile unor oxizi ai lantanoidelor cu metale de tip d*, conducător științific Prof. Dr. Ioana Jitaru.

- **Teză de abilitare**

D. Berger, *Contribuții la sinteza prin metode neconvenționale în soluție a unor nanomateriale anorganice* – sept 2013.

Lucrări în jurnale ISI

1. Abduraman A., Brezoiu A.M., Tatia R., Iorgu A.I., Deaconu M., Mitran R.A., Matei C., **Berger D.***, Mesoporous Titania Nanoparticles for a High-end Valorization of Vitis Vinifera Grape Marc Extracts, *Inorganics* 2024, 12, 263. <https://doi.org/10.3390/inorganics12100263>, IF = 3.1 (Q2).
2. S. Ioniță, R.-C. Popescu, I. N. Irimescu, M. Deaconu, N. Tarbă, C. Matei, M. Mihailescu, D.-I. Savu, **D. Berger***, Role of mesoporous silica functionalized with boronic acid derivative in targeted delivery of doxorubicin and co-delivery of doxorubicin and resveratrol, *Microporous and Mesoporous Materials*, volume 375, July 2024, 113176, doi.org/10.1016/j.micromeso.2024.113176
3. Deaconu, M.; Abduraman, A.; Brezoiu, A.-M.; Sedky, N.K.; Ionitã, S.; **Matei, C.***; Ziko, L.; **Berger, D.*** Anti-Inflammatory, Antidiabetic, and Antioxidant Properties of Extracts Prepared from Pinot Noir Grape Marc, Free and Incorporated in Porous Silica-Based Supports. *Molecules* 2024, 29, 3122. <https://doi.org/10.3390/molecules29133122>
4. M. Deaconu, A.-M. Prelipcean, A.-M. Brezoiu, R.-A. Mitran, A.-M. Seciu-Grama, C. Matei, **D. Berger***, Design of scaffolds based on zinc-modified marine collagen and bilberry leaves extract-loaded silica nanoparticles as wound dressings, *Int. J. Nanomedicine*, 2024:19 7673–7689, IF=6.6
5. Brezoiu, AM; Deaconu, M.; Mitran, RA.; Prelipcean, AM ; Matei, C; **Berger, D.***, Optimisation of Polyphenols Extraction from Wild Bilberry Leaves-Antimicrobial Properties and Stability Studies, *Molecules* 23 (2023) 5795, eISSN 1420-3049, DOI10.3390/molecules28155795, WOS:001046268200001
6. Dumbrava, A*; Matei, C.; Diacon, A.; Moscalu, F; **Berger, D.*** Novel ZnO-biochar nanocomposites obtained by hydrothermal method in extracts of *Ulva lactuca* collected from Black Sea, *Ceramics International* 49 (2023), 10003-10013, ISSN 0272-8842, DOI10.1016/j.ceramint.2022.11.178, WOS:000944615100001
7. Deaconu, M., ; Prelipcean, AM; Brezoiu, AM ; Mitran, RA ; Isopencu, G ; Matei, C ; **Berger, D***, Novel Collagen-Polyphenols-Loaded Silica Composites for Topical Application, *Pharmaceutics* 15 (2023), 312, eISSN 1999-4923, DOI10.3390/pharmaceutics15020312, WOS:000940774300001
8. D. Lincu, S. Ioniță, B. Trică, D.C Culita, C. Matei, **D. Berger***, **R.-A. Mitran***, Bismuth-mesoporous silica-based phase change materials for thermal energy storage, *Applied Materials Today* 29 (2023) 101663, DOI10.1016/j.apmt.2022.101663, ISSN 2352-9407, WOS:000883883700004.
9. Miclea, LC, Mihailescu, M., Tarba, N., Brezoiu, AM, Sandu, AM, Mitran, RA, Berger, D., Matei, C., Moisescu, MG, Savopol, T. Evaluation of intracellular distribution of folate functionalized silica nanoparticles using fluorescence and hyperspectral enhanced dark field microscopy, *Nanoscale* 14 (2022), 12744-12756, DOI10.1039/d2nr01821g, WOS:000843636500001, IF=8.307.
10. A.M. Brezoiu, A.M. Prelipcean, D. Lincu, M. Deaconu; E. Vasile, R. Tatia, A.M. Seciu-Grama, C. Matei, **D. Berger***, Nanoplatforms for irinotecan delivery based on mesoporous silica modified with a natural

polysaccharide, *Materials* 2022, 15(19), 7003; <https://doi.org/10.3390/ma15197003>, WOS:000719484000001.

11. R.A. Mitran, D. Lincu, D. Berger, C. Matei, FDU-12 cubic mesoporous silica as matrix for phase change materials using bismuth or stearic acid, *Journal of Thermal Analysis and Calorimetry* 2022, DOI10.1007/s10973-022-11588-x, WOS:000852366300001, IF= 4.755.
12. Lincu, D., Ionita, S., Mocioiu, O.C., Berger, D., Matei, C. Mitran, R.A., Aluminum doping of mesoporous silica as a promising strategy for increasing the energy storage of shape stabilized phase change materials containing molten NaNO₃: KNO₃ eutectic mixture, *J. Energy Storage* 49 (2022) Article Number104188, 10.1016/j.est.2022.104188, WOS:000780267700001, IF=8.907
13. S. Ioniță, D. Lincu, R.-A. Mitran, L. Ziko, N.K Sedky, M. Deaconu, A.-M. Brezoiu, C. Matei, **D. Berger***, Resveratrol Encapsulation and Release from Pristine and Functionalized Mesoporous Silica Carriers, *Pharmaceutics* 14 (2022) 203.
14. C.-G. Chisega-Negrilă, A. Diacon, I. Călinescu, M. Vinătoru, D. Berger, C. Matei, G. Vasilevici, On the ultrasound-assisted preparation of Cu/SiO₂ system as a selective catalyst for the conversion of biobutanol to butanal, *Chemical Papers* 76(3) (2022),1443-1455, <https://doi.org/10.1007/s11696-021-01945-9>.
15. A. Gaspar-Pintiliescu, E. D. Anton, A. Iosageanu, D. Berger, C. Matei, R.-A. Mitran, T. Negreanu-Pirjol, O. Craciunescu, L. Moldovan, Enhanced Wound Healing Activity of Undenatured Type I Collagen Isolated from Discarded Skin of Black Sea Gilthead Bream (*Sparus aurata*) Conditioned as 3D Porous Dressing, *Chemistry & Biodiversity* 18(8) (2021), e2100293
16. A. Diacon, E. Rusen, F. Rizea, A. Ghebur, D. Berger, R. Șomoghi, A. Matei, P. Palade, O. Tutunaru, One-pot strategy for obtaining magnetic PMMA particles through ATRP using Fe (CO) 5 as co-initiator, *European Polymer Journal* 152 (2021) 110446.
17. L. M. Stefan, A. Iosageanu, D. Ilie, A.-M. Stanciuc, C. Matei, D. Berger, O. Craciunescu, Extracellular matrix biomimetic polymeric membranes enriched with silver nanoparticles for wound healing, *Biomedical Materials* 16 (3) (2021), 035010.
18. G. Dobrescu, F. Papa, R. State, M. Raciulete, D. Berger, I. Balint, N.I. Ionescu, Modified Catalysts and Their Fractal Properties, *Catalysts* 11 (2021) 1518.
19. M. Prundeanu, A.-M. Brezoiu, M. Deaconu, G. Gradisteanu Pircalabioru, D. Lincu, C. Matei, D. Berger, Mesoporous Silica and Titania-Based Materials for Stability Enhancement of Polyphenols, *Materials* 14 (2021) 6457.
20. M. Prundeanu, A.M. Brezoiu, M. Deaconu, D. Berger, Chemical Profiling of Polyphenols from *Salvia officinalis* and *Thymus serpyllum* Extracts during a Three-Stage Extraction Process, *UPB Sci. Bull. Ser. B* 83, 1-16.
21. RA Mitran, S Ioniță, D Lincu, D Berger, C Matei, A review of composite phase change materials based on porous silica nanomaterials for latent heat storage applications, *Molecules* 26 (2021) 241.
22. R.-A. Mitran, D. Lincu, L. Buhălțeanu, D. Berger, C. Matei, Shape-stabilized phase change materials using molten NaNO₃-KNO₃ eutectic and mesoporous silica matrices, *Solar Energy Materials and Solar Cells* 215 (2020) 110644.
23. R.-A. Mitran, D. Lincu, S. Ioniță, M. Deaconu, V.V. Jerca, O.C. Mocioiu, D. Berger, C. Matei, High temperature shape-stabilized phase change materials obtained using mesoporous silica and NaCl-NaBr-Na₂MoO₄ salt eutectic, *Solar Energy Materials and Solar Cells*, 218 (2020) 110760.
24. V. Buda, A.-M. Brezoiu, **D. Berger***, I. Zinuca Pavel, D. Muntean, D. Minda, C.A. Dehelean, C. Soica, Z. Diaconeasa, R. Folescu, C. Danciu, Biological Evaluation of Black Chokeberry Extract Free and Embedded in Two Mesoporous Silica-Type Matrices, *Pharmaceutics* 2020, 12, 838; doi:10.3390/pharmaceutics12090838 (23 pages)
25. A.-M. Brezoiu, L. Bajenaru, **D. Berger***, R.-A. Mitran, M. Deaconu, D. Lincu, A. Stoica Guzun, C. Matei, M. G. Moiescu, T. Negreanu-Pirjol, Effect of Nanoconfinement of Polyphenolic Extract from Grape Pomace into Functionalized Mesoporous Silica on Its Biocompatibility and Radical Scavenging Activity, *Antioxidants* 2020, 9, 696 (24 pages) doi:10.3390/antiox9080696.
26. A.-M. Brezoiu, D. Lincu, M. Deaconu, R.-A. Mitran, **D. Berger**, C. Matei, Enhanced Stability of Polyphenolic Extracts from Grape Pomace Achieved by Embedding Into mesoporous Silica-Type Matrices, *U.P.B. Sci. Bull., Series B*, 82(3), 2020, 3-20.
27. M. Deaconu, A.-M. Brezoiu, R.-A. Mitran, I. Nicu, B. Manolescu, C. Matei, **D. Berger***, Exploiting the zwitterionic properties of lomefloxacin to tailor its delivery from functionalized MCM-41 silica, *Microporous and Mesoporous Materials* 305 (2020) 110323, doi.org/10.1016/j.micromeso.2020.110323
28. A.-M. Brezoiu, M. Prundeanu, D. Berger, M. Deaconu, C. Matei, O. Oprea, E. Vasile, T. Negreanu-Pîrjol, D. Muntean, C. Danciu, Properties of *salvia officinalis* L. and *thymus serpyllum* L. extracts free and

- embedded into mesopores of silica and titania nanomaterials, *Nanomaterials* **2020**, 10, 820 (21 pages); doi:10.3390/nano10050820.
29. R.D. Pavaloiu, F. Sha'at, C. Bubueanu, M. Deaconu, G. Neagu, M. Sha'at, M. Anastasescu, M. Mihailescu, C. Matei, G. Nechifor, **D. Berger***, Polyphenolic Extract from *Sambucus ebulus* L. Leaves Free and Loaded into Lipid Vesicles, *Nanomaterials* 10(1) (2020) article number: 56, DOI: 10.3390/nano10010056 WOS:000516825600056.
 30. P. Palade, C. Comanescu, A. Kuncser, D. Berger, C. Matei, N. Iacob, V. Kuncser, Mesoporous Cobalt Ferrite Nanosystems Obtained by Surfactant-Assisted Hydrothermal Method: Tuning Morpho-structural and Magnetic Properties via pH-Variation, *Nanomaterials* 10 (2020) 476; doi:10.3390/nano10030476.
 31. Sha'at, F., Pavaloiu, R.-D., Hlevca, C., Sha'at, M., Berger, D., Nechifor, G., In vitro release kinetics of poorly water-soluble cardiovascular drugs from PEG-nanoparticles, *UPB Scientific Bulletin, Series B: Chemistry and Materials*, 82 (2020) 103-112
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