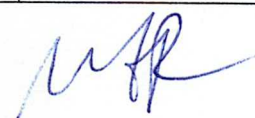


## Lista de lucrări – Raul-Augustin Mitran

### 1. Articole ISI (FI=factor impact; AP=autor principal; AC=autor corespondență)

Nr	Art	FI	AP	AC	Domeniu conform UEFISCDI
1	R.A. Mitran, C. Draghici, S. Tomas, " New 6-Azaauracil Derivatives", Rev Chim-Bucharest, 2010, 61, 12, 1147 – 1149	0.693	DA	DA	CHEMISTRY, MULTIDISCIPLINARY
2	R.A. Mitran, D. Mihaiescu, S. Tomas, "Gas Chromatography-Mass Spectrometry Studies of Several Allyl-substituted 6-Azaauracil Derivatives", Rev Chim-Bucharest, 2011, 62, 10, 964 - 967	0.599	DA	DA	CHEMISTRY, MULTIDISCIPLINARY
3	S. Nastase, L. Bajenaru, C. Matei, R.A. Mitran, D. Berger, "Ordered mesoporous silica and aluminosilicate-type matrix for amikacin delivery systems", Microporous & Mesoporous Materials, 2013, 182, 32 -39	3.209			CHEMISTRY, PHYSICAL
4	R.A. Mitran, D. Berger, L. Bajenaru, S. Nastase, C. Andronescu, C. Matei, "Azobenzene functionalized mesoporous AIMCM-41-type support for drug release applications", Central European Journal of Chemistry, 2014, 12 (7), 788-795	1.329	DA		CHEMISTRY, MULTIDISCIPLINARY
5	D Berger, L Bajenaru, S Nastase, RA Mitran, C Munteanu, C Matei, "Influence of structural, textural and surface properties of mesostructured silica and aluminosilicate carriers on aminoglycoside uptake and in vitro delivery", Microporous & Mesoporous Materials, 2015, 206, 150-160	3.349			CHEMISTRY, PHYSICAL
6	R.A. Mitran, S. Nastase, C. Matei, D. Berger, "Tailoring the dissolution rate enhancement of aminoglutethimide by functionalization of MCM-41silica: a hydrogen bonding propensity approach", RSC Advances, 2015, 5, 2592-2601	3.289	DA		CHEMISTRY, MULTIDISCIPLINARY
7	M. Baibarac, I. Smaranda, M. Scocioreanu, R. A. Mitran, M. Enculescu, M. Galatanu and I. Baltog, " Exciton-phonon interaction in PbI2 revealed by Raman and photoluminescence studies using excitation light overlapping the fundamental absorption edge", Materials Research Bulletin, 2015, 70, 762-772	2.435			MATERIALS SCIENCE, MULTIDISCIPLINARY
8	R. A. Mitran, D. Berger, C. Munteanu, C. Matei, "Evaluation of Different Mesoporous Silica Supports for Energy Storage in Shape-Stabilized Phase Change Materials with Dual Thermal Response", The Journal of Physical Chemistry C, 2015, 119 (27), 15177-15184	4.509	DA		CHEMISTRY, PHYSICAL
9	D. Berger; S. Nastase; R. A. Mitran; M. Petrescu; E. Vasile; C. Matei; T. Negreanu-Pirjol, Mesostructured silica and aluminosilicate carriers for oxytetracycline delivery systems, International Journal of Pharmaceutics, 2016, 510, 524–531	3.649			PHARMACOLOGY & PHARMACY
10	S. A. Gârea, A. I. Mihai, E. Vasile, C. Nistor, A. Sârbu, R.A. Mitran, Synthesis of new porous clay heterostructures: The influence of co-surfactant type, Materials Chemistry and Physics, 2016, 179, 17-26	2.084			MATERIALS SCIENCE, MULTIDISCIPLINARY



11	R.A. Mitran, M.C. Radulescu, L. Buhalteanu, L.C. Tanase, D.G. Dumitrescu, C. Matei, Formation of pure-phase W2C nanoparticles through carbothermal reduction in the presence of Pd(0) nanoparticles, Journal of Alloys and Compounds, 2016, 682, 679-685	3.313	DA	DA	CHEMISTRY, PHYSICAL
12	M. Petrescu, R.A. Mitran, C. Matei, D. Berger, Mesoporous Silica-Ceria composites as Carriers for Drug Delivery Systems, Revue Roumaine de Chimie, 2016, 61(6-7), 557-563	0.246			CHEMISTRY, MULTIDISCIPLINARY
13	R.A. Mitran, D. Georgescu, N. Stanica, C. Matei, D. Berger, Coating magnetite nanoparticles with mesostructured silica shell of different pore size and geometry, Romanian Journal of Materials 2016, 46 (4), 437-443	0.56	DA		MATERIALS SCIENCE, MULTIDISCIPLINARY
14	R.A. Mitran, C. Matei, D. Berger, Correlation of Mesoporous Silica Structural and Morphological Features with Theoretical Three-Parameter Model for Drug Release Kinetics, Journal of Physical Chemistry C, 2016, 120 (51), 29202–29209	4.123	DA		CHEMISTRY, PHYSICAL
15	A. Nilă, M. Baibarac, A. Matea, R.A. Mitran, I. Baltog, Exciton–Phonon Interactions in the Cs3Bi2I9 Crystal Structure Revealed by Raman Spectroscopic Studies. Physica Status Solidi (b), 2017, 254 (4), 1552805	1.729			PHYSICS, CONDENSED MATTER
16	O. I. Covaci, R. A. Mitran, L. Buhalteanu, D. Dumitrescu, S. Sova, C. M. Manta, Bringing new life into old drugs. A case study on nifuroxazide polymorphism, CrystEngComm, 2017, 19, 3584-359	3.304			CHEMISTRY, MULTIDISCIPLINARY
17	R. A. Mitran, D. Berger, J. Pandele-Cusu, C. Matei, Effect of aluminum incorporation into mesoporous aluminosilicate framework on drug release kinetics, Journal of Nanomaterials, 2017, 2017, Article ID 9864396	2.207	DA		MATERIALS SCIENCE, MULTIDISCIPLINARY
18	D. Georgescu, A.M. Brezoiu, R.A. Mitran, D. Berger, C. Matei, B. Negreanu-Pirjol, Mesostructured silica–titania composites for improved oxytetracycline delivery systems, Comptes Rendus Chimie, 2017, 20(11-12), 1017-1025	1.877			CHEMISTRY, MULTIDISCIPLINARY
19	R.A. Mitran, D. Berger, C. Matei, Improving thermal properties of shape-stabilized phase change materials containing lauric acid and mesocellular foam silica by assessing thermodynamic properties of the non-melting layer. Thermochimica Acta 2018, 660, 70-76	2.251	DA		CHEMISTRY, PHYSICAL
20	R.-A. Mitran, C. Matei, D. Berger, L. Băjenaru, M.G. Moisescu, Controlling drug release from mesoporous silica through an amorphous, nanoconfined 1-tetradecanol layer, European Journal of Pharmaceutics and Biopharmaceutics, 2018, 127, 318-325	4.708	DA		PHARMACOLOGY & PHARMACY
21	M. Deaconu, I. Nicu, R. Tincu, A.-M. Brezoiu, R.-A. Mitran, E. Vasile, C. Matei, D. Berger, Tailored doxycycline delivery from MCM-41-type silica carriers, Chemical Papers, 2018, 72, 1869–1880	1.246			CHEMISTRY, MULTIDISCIPLINARY
22	R.A. Mitran, D. Berger, C. Matei, Phase Change Materials Based on Mesoporous Silica, Current Organic Chemistry, 22(27), 2018, 2644-2663 DOI: 10.2174/1385272822666180827125651	1.933	DA	DA	CHEMISTRY, ORGANIC

23	M. Petrescu, R.A. Mitran, C. Matei, M. Radulescu, D. Berger, Silica-Alginate Composites for Intestinal Ketoprofen Delivery, Revista de Chimie, 69 (12), 2018, 3416 - 3422	1.755			CHEMISTRY, MULTIDISCIPLINARY
24	AM Brezoiu, M Deaconu, I Nicu, E Vasile, RA Mitran, C Matei, D Berger, Heteroatom modified MCM-41-silica carriers for Lomefloxacin delivery systems, Microporous and Mesoporous Materials, 2019, 275, 214-222	4.551			CHEMISTRY, PHYSICAL
25	M. Deaconu, L. Pintilie, E. Vasile, R.A. Mitran, G.G. Pircalabioru, C. Matei, M.C. Chifiriuc, D. Berger, Norfloxacin delivery systems based on MCM-type silica carriers designed for the treatment of severe infections, Materials Chemistry and Physics, 238 (2019) 121886. DOI: 10.1016/j.matchemphys.2019.121886	3.408			MATERIALS SCIENCE, MULTIDISCIPLINARY
26	R.-A. Mitran, S. Petrescu, S. Șomăcescu, O.C. Mocioiu, L. Buhălțeanu, D. Berger, C. Matei, Nanocomposite phase change materials based on NaCl–CaCl <sub>2</sub> and mesoporous silica, J Therm Anal Calorim, 138(4), 2019, 2555-2563. DOI: 10.1007/s10973-019-08489-x	2.471	DA	DA	CHEMISTRY, PHYSICAL
27	C. Matei, L. Buhălțeanu, D. Berger, R.-A. Mitran, Functionalized mesoporous silica as matrix for shape-stabilized phase change materials, International Journal of Heat and Mass Transfer, 144 (2019) 118699.	4.947	DA	DA	THERMODYNAMICS
28	R.-A. Mitran, D. Lincu, L. Buhălțeanu, D. Berger, C. Matei, Shape-stabilized phase change materials using molten NaNO <sub>3</sub> – KNO <sub>3</sub> eutectic and mesoporous silica matrices, Solar Energy Materials and Solar Cells, 215 (2020) 110644.	7.267	DA	DA	MATERIALS SCIENCE, MULTIDISCIPLINARY
29	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.	5.455			CHEMISTRY, PHYSICAL
30	R.-A. Mitran, D.C. Culita, I. Atkinson, Thermal stability enhancement of mesoporous SBA-15 silica through nanoconfinement of ceria nanoparticles, Microporous and Mesoporous Materials, (2020) 110484.	5.455	DA	DA	CHEMISTRY, PHYSICAL
31	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, 9 (2020) 696.	6.312			CHEMISTRY, MEDICINAL
32	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 – Na <sub>2</sub> MoO <sub>4</sub> salt eutectic, Solar Energy Materials and Solar Cells, 218 (2020) 110760.	7.267	DA	DA	MATERIALS SCIENCE, MULTIDISCIPLINARY
33	R.-A. 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.	4.411	DA	DA	CHEMISTRY, MULTIDISCIPLINARY
34	E. Rusen, A. Mocanu, R. Șomoghi, D.C. Culiță, R.A. Mitran, A.	4.539			CHEMISTRY,

	Dinescu, A. Matei, A. Diacon, Mechanism of polymer particles formation during the soap-free emulsion terpolymerization of styrene-acrylic acid-N-(isopropyl acrylamide) for photonic crystals fabrication, Colloids and Surfaces A: Physicochemical and Engineering Aspects, 614 (2021) 126158.				PHYSICAL
35	Sandu, T., Mitran, RA., Sârbu, A. et al. Two- component polymer beads with magnetic features as efficient means for active principles binding. J Polym Res 28, 277 (2021).	3.097			POLYMER SCIENCE
36	A.I. Voicu, S.A. Gârea, A. Ghebur, C.L. Nistor, A. Sârbu, E. Vasile, R. Mitran, H. Iovu, New nanocarriers based on Porous Clay Heterostructures (PCH) designed for methotrexate delivery, Microporous and Mesoporous Materials, 328 (2021) 111434.	5.455			CHEMISTRY, PHYSICAL
37	E. Constantin, P. Varasteanu, I. Mihalache, G. Craciun, R.-A. Mitran, M. Popescu, A. Boldeiu, M. Simion, SPR detection of protein enhanced by seedless synthesized gold nanorods, Biophysical Chemistry, 279 (2021) 106691.	2.352			CHEMISTRY, PHYSICAL
38	O.-C. Mocioiu, I. Atkinson, A.-M. Mocioiu, S. Neagu, R. Ruginescu, R.-A. Mitran, M. Enache, Effect of ZnO on Properties of Gels for Heritage Objects Conservation, Gels, 7 (2021) 251.	4.702			-
39	M.-R. Buga, A.A. Spinu-Zaulet, C.G. Ungureanu, R.-A. Mitran, E. Vasile, M. Florea, F. Neatu, Carbon-Coated SiO <sub>2</sub> Composites as Promising Anode Material for Li-Ion Batteries, Molecules, 26 (2021) 4531	4.412			CHEMISTRY, MULTIDISCIPLINARY
40	A. Gaspar-Pintilieșcu, 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 ( <i>Sparus aurata</i> ) Conditioned as 3D Porous Dressing, Chemistry & Biodiversity, 18 (2021) e2100293.	2.408			CHEMISTRY, MULTIDISCIPLINARY
41	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.	6.321	DA	DA	PHARMACOLOGY & PHARMACY
42	I. Atkinson, A.M. Seciu-Grama, S. Petrescu, D. Culita, O.C. Mocioiu, M. Voicescu, R.-A. Mitran, D. Lincu, A.-M. Prelipcean, O. Craciunescu, Cerium-Containing Mesoporous Bioactive Glasses (MBGs)-Derived Scaffolds with Drug Delivery Capability for Potential Tissue Engineering Applications, Pharmaceutics, 14 (2022) 1169.	6.321			PHARMACOLOGY & PHARMACY
43	D. Lincu, S. Ioniță, O.C. Mocioiu, D. Berger, C. Matei, R.A. Mitran, Aluminum doping of mesoporous silica as a promising strategy for increasing the energy storage of shape stabilized phase change materials containing molten NaNO <sub>3</sub> : KNO <sub>3</sub> eutectic mixture, Journal of Energy Storage, 49 (2022) 104188.	6.583	DA	DA	ENERGY & FUELS
44	A.-M. Prelipcean, A. Iosageanu, A. Gaspar-Pintilieșcu, L. Moldovan, O. Craciunescu, T. Negreanu-Pirjol, B. Negreanu-Pirjol, R.-A. Mitran, M. Marin, U. D'Amora, Marine and Agro-Industrial By-Products Valorization Intended for Topical Formulations in Wound Healing Applications, Materials, 15	3.623			MATERIALS SCIENCE, MULTIDISCIPLINARY

## 2. Capitle de carte

1. **R.A. Mitran**, M. Deaconu, C. Matei, D. Berger, "Mesoporous Silica as Carrier for Drug-Delivery Systems" in "Nanocarriers for Drug Delivery", editors S.S. Mohapatra, S. Ranjan, N. Dasgupta, R.K. Mishra, S. Thomas, Elsevier B.V., The Netherlands, p. 351-374, 2019, ISBN: 978-0-12-814033-8

2. **R.A. Mitran**, D. Berger, C. Matei, "Recent Advances in Hybrid Azobenzene-Silica Materials" in "Azobenzene: Aspects, Applications and Research", editor Linda E. Watson, Nova Science Publishers, USA, p. 29-52, 2017, ISBN 978-1-53610-673-2

## 3. Brevete și cereri de brevet

### International:

1.CO-Crystals, M.M. Pop, P.V. Bulieris, I. Pongratz, V. Fruth-Oprisan, R.A. Mitran, US 2021/0032210 A1/ 04.02 2021; WO 2019/197366 A1 / 17.10.2019; EP 3774751 A1 / 17.02.2021

### National:

1. D.F. Lincu, **R.A. Mitran**, "Materiale nanocomposite metal-oxid mezoporos pentru stocarea energiei termice la temperature ridicate" ("Nanocomposite metal-oxide materials for high temperature thermal energy storage"), 135118 A0, 30.07.2021.

2. T. Negreanu-Pîrjol, B.-Ș. Negreanu-Pîrjol, A. M. Ranca, V. Artem, D. C. Berger, L. Moldovan, D.-M. Roșioru, A. Gaspar-Pintiliescu, **R.A. Mitran**, V. Coroiu, C. Matei, F. N. Roncea, M. M. Bratu, A.-C. Lepădatu, G. M. Paraschiv, I. Moise, C. L. Erimia, M. Vasile, "Compozite biostimulatoare-regeneratoare pe bază de bioresurse reziduale cu potențial de fertilizare" ("Biostimulating-regenerating composition based on residual bioresources with fertilization potential"), 134968 A0, 28.05.2021

3. T. Negreanu-Pîrjol, B.-Ș. Negreanu-Pîrjol, F. N. Roncea, D. C. Berger, L. Moldovan, D.-M. Roșioru, A. Gaspar-Pintiliescu, **R.A. Mitran**, A. M. Ranca, L. M. Ștefan, A.-M. Stanciu, C. Matei, V. Artem, M. M. Bratu, A.-C. Lepădatu, C. L. Erimia, M. Vasile, "Preparate dermato-cosmetice topice de tip geluri bioadezive cu efect de regenerare a țesutului dermic" ("Topical dermato-cosmetic preparations of bioadhesive gels type with dermal tissue regeneration effect"), 134938 A0, 28.05.2021

4. **R.A. Mitran**, "Materiale nanocompozite pentru stocarea energiei termice la temperaturi ridicate, ce conțin silice mezoporoasă și săruri anorganice" ("Nanocomposite materials for high temperature thermal energy storage containing mesoporous silica and inorganic salts"), 133504, 30.07.2019

5. **R.A. Mitran**, "Material compozit nanostructurat, procedeu de sinteza directa pentru materiale compozite ce contin nanoparticule de paladiu (0) si nanoparticule de semicarbura de tungsten pe suport de carbon, si utilizarea acestora" ("Nanostructured composite material, direct synthesis method for a material containing palladium (0) nanoparticles with tungsten semicarbide nanoparticles on carbon support and use thereof"), 130155, 30.04.2015, Romania

6. **R.A. Mitran**, M.C. Radulescu, L. Buhalteanu, D.G. Dumitrescu, C.M. Manta, "Anod pentru electrooxidarea compusilor organici lichizi cu molecula mica C1 – C2 si procedeu pentru obtinerea acestuia" ("Anode for Electro-Oxidizing Liquid Organic Compounds with Small C1-C2 Molecule and Process for Obtaining the Same"), 130632, 30.10.2015, Romania

7. L. Buhalteanu, O.I. Covaci, D.G. Dumitrescu, C.M. Manta, **R.A. Mitran**, M.C. Radulescu "Materiale nanostructurate mono și polimetalice cu formula generala  $Mn_1xMn_2yMa_{100-x-y}$ , procedeu de obținere a acestora și utilizarea lor ca și catalizatori pentru electro-oxidarea combustibililor organici cu moleculă mica" ("Mono and polymetallic nanostructured materials having the general formula  $Mn_1xMn_2yMa_{100-x-y}$ , synthesis method thereof and use as catalysts for the electro-oxidation of small-molecule organic fuels"), 130845, 29.01.2016, Romania

8. **R.A. Mitran**, "Materiale compozite nanostructurate, procedee de sinteza directa pentru materiale compozite ce conțin semicarbură de tungsten și staniu depuse pe carbon sau semicarbură de tungsten depuse pe carbon, și utilizarea acestora" ("Nanostructured composite materials, direct synthesis method for composite materials containing tungsten semicarbide and tin on carbon or tungsten semicarbide on carbon and use thereof"), 131632, 30.01.2017, Romania

9. C.M. Manta, **R.A. Mitran**, O.I. Covaci, L. Buhalteanu, "Noi forme cristaline ale 4-Hidroxi-N'-[(5-nitrofură-2-il)metilen]benzohidrazidă, procedee de preparare și utilizari ale acestora și compoziții farmaceutice care le conțin" ("New crystalline forms of 4-hydroxy-n'[(5-nitrofură-2-yl)methylene]benzohydrazide, preparation processes and uses thereof and pharmaceutical compositions comprising the same"), 131219, 30.06.2016, Romania

10. D. Berger, C. Matei, **R.A. Mitran**, "Materiale compozite ce conține silice mezoporoasă, substanță biologic activă și un agent de control al eliberării, procedeu de obținere și aplicații ale acestora ca sisteme de eliberare controlată" ("Composite materials containing mesoporous silica, a biologically active substance and a release control agent, synthesis thereof and applications as controlled release systems"), 131769, 28.04.2017, Romania

#### 4. Prezentări invitate/"keynote" la conferințe internaționale

- **R.A. Mitran**, Thermal Energy Storage Nanomaterials Based on Mesoporous Silica Matrices, 23rd International Conference "New Cryogenic and Isotope Technologies for Energy and Environment" EnergEn 2021 , Băile Govora, Romania, 27-29 October 2021.

Data: 09.06.2022

