

## Lista activităților de cercetare științifică

### Doctorand Ana-Lavinia Matricala (căs. Vasiliu)

#### Articole ISI

1. Microcapsules of calcium carbonate and pH-sensitive polymers; **A.L. Vasiliu**, M. Mihai, B.C. Simionescu; *Revue Roumaine de Chimie* 62(4-5), 333-338, **2017** (F.I. = 0,278)
2. CaCO<sub>3</sub>/Ion exchanger composites as sorbents for dyes; M. Mihai, F. Doroftei, **A.-L. Vasiliu**, I. Bunia; *Revue Roumaine de Chimie* 62(6-7), 499-504, **2017** (F.I. = 0,278)
3. Auto-template microcapsules of CaCO<sub>3</sub>/pectin and nonstoichiometric complexes as sustained tetracycline hydrochloride delivery carriers; M. Mihai, S. Racovita, **A.-L. Vasiliu**, F. Doroftei, C. Barbu-Mic, S. Schwarz, C. Steinbach, F. Simon; *ACS Applied Materials & Interfaces* 9 (42), 37264–37278, **2017** (F.I. = 9,229)
4. Complex calcium carbonate/polymer microparticles as carriers for aminoglycoside antibiotics; S. Racovita, **A. L. Vasiliu**, A. Bele, D. Schwarz, C. Steinbach, R. Boldt, S. Schwarz, M. Mihai; *RSC Advances* 8, 23274-23283, **2018** (F.I. = 3,361)
5. Multifunctional CaCO<sub>3</sub>/polyelectrolyte sorbents for heavy metal ions decontamination of synthetic waters; M.-M. Zaharia, F. Bucatariu, F. Doroftei, D.-F. Loghin, **A.-L. Vasiliu**, M. Mihai; *Colloids and Surfaces A: Physicochemical and Engineering Aspects* 613, Article 126084/1-12, **2021** (F.I. = 4,539)
6. In situ CaCO<sub>3</sub> mineralization controlled by carbonate source within chitosan-based cryogels; **A.-L. Vasiliu**, M. V. Dinu, M. M. Zaharia, D. Peptanariu, M. Mihai; *Materials Chemistry and Physics*, 272 (1), 125025, 2021 (F.I. = 4,094)
7. Design of multifunctional composite materials based on acrylic ion exchangers and CaCO<sub>3</sub> as sorbents for small organic molecules; M.-M. Zaharia, **A.-L. Vasiliu**, M.-A. Trofin, D. Pamfil, F. Bucatariu, S. Racovita, M. Mihai; *Reactive and Functional Polymers* 166, 104997, **2021** (F.I. = 3,975)

8. Hydrophobic composites designed by a nonwoven material and polymer controlled  $\text{CaCO}_3$  crystal growth for biomedical application; **A.-L. Vasiliu**, M.M. Zaharia, M.M. Bazarghideanu, I. Rosca, D. Peptanariu, M. Mihai; ACS, 2021 (trimisă la publicat)

### Capitol de carte

1. G. Barjoveanu, C. Teodosiu, M. Mihai, I. Morosanu, D. Fighir, **A.-L. Vasiliu**, F. Bucatariu, Capitol 11. Life cycle assessment for eco-design in product development, în Assessing the sustainability progress: frameworks, tools and case studies (publicată sub contract Elsevier no. 846739), ISB N: 606798 (data estimata a publicarii: Aprilie **2022**)

### Articole publicate în extenso în volumele unor manifestări științifice internaționale

1. Auto-templating composite microcapsules based on  $\text{CaCO}_3$  and pectins; M. Mihai, **A.-L. Vasiliu**, S. Schwarz; ICCE-25, 25<sup>th</sup> Annual International Conference on Composites and Nano Engineering, 16 - 22 Iulie, 2017, Roma, Italia

### Comunicări orale la manifestări științifice internaționale

1. Ion exchanger/ $\text{CaCO}_3$  composites as sorbents for ionic molecules; M. Mihai, F. Doroftei, **L. Vasiliu**, I. Bunia; *The 6<sup>th</sup> International Conference Ecological & Environmental Chemistry*, 2-3 Martie, 2017, Chișinău, Republica Moldova
2. Auto-templating composite microcapsules based on  $\text{CaCO}_3$  and pectins; M. Mihai, **A.-L. Vasiliu**, S. Schwarz; *25<sup>th</sup> Annual International Conference on Composites and Nano Engineering, ICCE-25*, 16 – 22 Iulie, 2017, Roma, Italia
3. Microcapsules based on calcium carbonate and pH-sensitive polymers as drug delivery systems; M. Mihai, **A.-L. Vasiliu**, F. Doroftei, C. Barbu-Mic, S. Racovita; *20<sup>th</sup> International Conference on Composite Structures*, 4-7 Septembrie, 2017, Paris, Franța
4. Composite materials designed by bioinspired crystal growth and polymeric additives; M. Mihai, **A.-L. Vasiliu**, F. Doroftei, S. Racovita; *20<sup>th</sup> International Conference on Composite Structures*, 4-7 Septembrie, 2017, Paris, Franța

5. Synthesis and characterization of ion exchange resins based on acrylic copolymers with high affinity to different heavy metal ions; M.-M. Zaharia, F. Bucatariu, L.-M. Petrila, **A.-L. Vasiliu**, M. Mihai; *Materials, Methods & Technologies International Conference*, 19-22 August, 2021, Burgas, Bulgaria
6. Hydrophobic biocompatible CaCO<sub>3</sub>/cellulose material with potential application in wound dressing; A.-L. Vasiliu, M.-M. Zaharia, M.M. Bazarghideanu, I. Rosca, D. Peptanariu, M. Mihai; *MACRO Iasi*, 7-9 Octombrie, 2021, Iasi, Romania
7. Ion exchangers/CaCO<sub>3</sub> composites as sorbents for small organic molecules; A.-L. Vasiliu, M.M. Zaharia, M.-A. Trofin, F. Bucatariu, S. Racovita, M. Mihai; *Macro Youth*, 19 Noiembrie, 2021, Iasi, Romania

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