



## Dr. Simona Morariu

senior scientist II

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### Research topics

- Polymer/clay nanostructured hybrid materials - formulation and characterization
- Physical or chemical polymer hydrogels for biomedical applications - synthesis and characterization
- Clay aqueous dispersions - investigation of the interparticle interactions
- Rheology of complex fluids (including polymer/clay hybrid materials)

### Profile address:

Research ID: H-1737-2016 (<https://publons.com/researcher/H-1737-2016>)

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### Scientific activity

- 118 (**81 in ISI indexed journals**) scientific papers;
- **9 book chapters**
- 19 national contracts (project manager at 5) and 7 international contracts
- over 100 national and international scientific events
- visibility of published papers: **898 citations** (without self-citation) and **Hirsch-index= 21**

### Relevant publications

1. Simona Morariu, Maria Bercea, Luiza-Madalina Gradinaru, Irina Rosca, Mihaela Avadanei, Versatile poly(vinyl alcohol)/clay physical hydrogels with tailorable structure as potential candidates for wound healing applications, *Mat. Sci. Eng. C-Mater.*, 109, 110395-1-11 (2020)
2. Simona Morariu, Maria Bercea, Cristina-Eliza Brunchi, Influence of Laponite RD on the properties of poly(vinyl alcohol) hydrogels, *Journal of Applied Polymer Science*, 135(35), 46661-1-11 (2018)
3. Simona Morariu, Maria Bercea, Mirela Teodorescu, Mihaela Avadanei, Tailoring the properties of poly(vinyl alcohol) /poly(vinylpyrrolidone) hydrogels for biomedical applications, *European Polymer Journal*, 84, 313-325 (2016)
4. Simona Morariu, Maria Bercea, Cristina-Eliza Brunchi, Effect of cryogenic treatment on the rheological properties of chitosan/poly(vinyl alcohol) hydrogels, *Industrial & Engineering Chemistry Research*, 54(45), 11475-11482 (2015)
5. Simona Morariu, Maria Bercea, Liviu Sacarescu, Tailoring of clay/poly(ethylene oxide) hydrogel properties by chitosan incorporation, *Industrial & Engineering Chemistry Research*, 53(35), 13690-13698 (2014)
6. Simona Morariu, Maria Bercea, Effect of temperature and aging time on the rheological behavior of aqueous poly(ethylene glycol) - Laponite RD dispersions, *Journal of Physical Chemistry, B* 116(1), 48-54 (2012)
7. Simona Morariu, John Eckelt, Bernhard A. Wolf, Dextran-based polycations: Thermodynamic interaction with water as compared with unsubstituted dextran, 1- Volumetric properties and light scattering, *Macromolecular Chemistry and Physics*, 212(17), 1925-1931 (2011)
8. Simona Morariu, Cristina-Eliza Brunchi, Maria Cazacu, Maria Bercea, The behavior of poly(dimethylsiloxane-co-diphenylsiloxane)s in good and theta solvents, *Journal of Chemical and Engineering Data*, 56(4), 1468-1475 (2011)
9. Simona Morariu, Maria Bercea, Effect of addition of polymer on the rheology and electrokinetic features of Laponite RD aqueous dispersions, *Journal of Chemical and Engineering Data*, 54(1), 54-59 (2009)