

## Dr. Codrin Tugui

### List of publications

1. Stiubianu, G.; Bele, A.; Tugui, C.; Musteata, V. New dielectric elastomers with improved properties for energy harvesting and actuation, *Proc. SPIE, 9258, Advanced Topics in Optoelectronics, Microelectronics, and Nanotechnologies VII*, **2015**, 925808.
2. Iacob, M.; Stiubianu, G.; Tugui, C.; Cazacu, M. Goethite nanorods as cheap and effective filler for siloxane nanocomposite elastomers, *RSC Adv.*, **2015**, 5, 45439-45446 (IF = 3.049)
3. Iacob, M.; Tugui, C.; Sirbu, D.; Stiubianu, G.; Cazacu, M. Superparamagnetic amorphous iron oxide nanowires self-assembled into ordered layered structures, *RSC Adv.*, **2015**, 5, 62563-62570 (IF = 3.049).
4. Tugui, C.; Stiubianu, G.; Iacob, M.; Ursu, C.; Bele, A.; Vlad, S.; Cazacu, M. Bimodal silicone interpenetrating networks sequentially built as electroactive dielectric elastomers, *J. Mater. Chem. C*, **2015**, 3, 8963-8969 (IF = 6.641).
5. Stiubianu, G.; Dumitriu, A.-M.-C.; Varganici, C.-D.; Tugui, C.; Iacob, M.; Bele, A.; Cazacu, M. Changes induced in the properties of dielectric silicone elastomers by the incorporation of transition metal complexes, *High Perform. Polym.*, **2016**, 0954008315610393 (IF = 1.584).
6. Tugui, C.; Cazacu, M.; Sacarescu, L.; Bele, A.; Stiubianu, G.; Ursu, C.; Racles, C. Full silicone interpenetrating bi-networks with different organic groups attached to the silicon atoms, *Polymer*, **2015**, 77, 312-322 (IF = 3.771).
7. Bele, A.; Stiubianu, G.; Vlad, S.; Tugui, C.; Varganici, C.-D.; Matricala, A.-L.; Cazacu, M. Aging behavior of the silicone dielectric elastomers in simulated marine environment, *RSC Adv.*, **2016**, 6(11), 8941-8955 (IF = 3.049).
8. Stiubianu, G.; Soroceanu, A.; Varganici, C.-D.; Tugui, C.; Cazacu, M. Dielectric elastomers based on silicones filled with transitional metal complexes, *Composites Part B* **2016**, 93, 236-243 (IF = 6.864).
9. Iacob, M.; Racles, C.; Tugui, C.; Stiubianu, G.; Bele, A.; Sacarescu, L.; Timpu, D.; Cazacu, M. From iron coordination compounds to metal oxide nanoparticles, *Beilstein J. Nanotechnol.* **2016**, 7(1), 2074-2087 (IF = 2.27).
10. Bele, A.; Tugui, C.; Sacarescu, L.; Iacob, M.; Stiubianu, G.; Dascalu, M.; Racles, C.; Cazacu, M. Ceramic nanotubes-based elastomer composites for applications in electromechanical transducers, *Mater. Des.* **2018**, 120-131 (IF = 5.77).
11. Bele, A.; Tugui, C.; Asandulesa, M.; Ionita, D.; Vasiliu, L.; Stiubianu, G.; Iacob, M.; Racles C.; Cazacu, M. Conductive stretchable composites properly engineered to develop highly compliant electrodes for dielectric elastomer actuators, *Smart Mater. Struct.* **2018**, 27, 105005 (IF = 3.543).
12. Tugui, C.; Stiubianu, G. T.; Serbulea, M. S.; Cazacu, M. Silicone dielectric elastomers optimized by crosslinking pattern—a simple approach to high-performance actuators, *Polym. Chem.* **2020**, 11, 3271-3284 (IF = 5.582).

13. Cazacu, M.; Racles, C.; Zaltariov, M. F.; Dascalu, M.; Bele, A.; Tugui, C.; Bargan, A.; Stiubianu, G. From Amorphous Silicones to Si-Containing Highly Ordered Polymers: Some Romanian Contributions in the field, *Polymers*, **2021**, 13, 1605 (IF = 4.329).
14. Dascalu, M.; Iacob, M.; Tugui, C.; Bele, A.; Stiubianu, G. T.; Racles, C.; Cazacu, M. Octakis (phenyl)-T8-silsesquioxane-IFilled silicone elastomers with enhanced electromechanical capability, *J. Appl. Polym. Sci.*, **2021**, 138, 50161 (IF = 3.125).
15. Iacob, M.; Tiron, V.; Stiubianu, G. T.; Dascalu, M.; Hernandez, L.; Varganici, C.-D.; Tugui, C.; Cazacu, M. Bentonite as an active natural filler for silicone leading to piezoelectric-like response material, *J. Mater. Res. Technol.*, **2022**, 17, 79-94 (IF = 5.039).
16. Bele, A.; Dascalu, M.; Tugui, C.; Stiubianu, G.-T.; Varganici, C. D.; Racles, C.; Cazacu, M.; Skov A. L. Soft silicone elastomers exhibiting large actuation strains, *J. Appl. Polym. Sci.*, **2022**, 139, 52261 (IF = 3.125).
17. Ciubotaru, B.-I.; Zaltariov, M. F.; Tugui, C.; Stoleru, I.-E.; Peptanariu, D.; Stiubianu, G. T.; Vornicu, N.; Cazacu, M. Silicones with different crosslinking patterns: assessment from the perspective of their suitability for biomaterials, *Surf. Interfaces*, **2022**, 7, 102168 (IF = 1.607).
18. Stiubianu, G. T.; Bele, A.; Grigoras, M.; Tugui, C.; Ciubotaru, B.-I.; Zaltariov, M. F.; Borza, F.; Bujoreanu, L.-G.; Cazacu, C. Scalable Silicone Composites for Thermal Management in Flexible Stretchable Electronics, *Batteries*, **2022**, 8, 95 (IF = 4.14).
19. Stiubianu, G. T.; Bele, A.; Bargan, A.; Potolinca, V. O.; Asandulesa, M.; Tugui, C.; Tiron, V.; Hamciuc, C.; Dascalu, M.; Cazacu, M. All-Polymer Piezo-Composites for Scalable Energy Harvesting and Sensing Devices, *Molecules*, **2022**, 27, 8524 (IF = 4.93).
20. Cazacu, M.; Dascalu, M.; Stiubianu, G. T.; Bele, A.; Tugui, C.; Racles, C. From passive to emerging smart silicones, *Rev. Chem. Eng.*, **2023**, 39, 941-1003 (IF = 4.7).