Carmen Racles

Published articles (ISI)

Last 5 years: 1-23 (within the group: all except [12])

1.	M. Dascalu, A.C. Stoica, A. Bele, L. Yu, D. Ionita, A.L. Vasiliu, A. Ladegaard Skov, **C. Racles**, M. Cazacu, Fully carboxy-functionalized polyhedral silsesquioxanes as polar fillers to enhance the performance of dielectric silicone elastomers, **Polymer** 289 (2023) 126492; https://doi.org/10.1016/j.polymer.2023.126492
2.	C. Racles, A.L. Vasiliu, Tuning of Morphology and Surface Properties of Porous Silicones by Chemical Modification, **Appl. Sci.** 2023, 13, 10899. https://doi.org/ 10.3390/app131910899
3.	**C. Racles**, Molecular and silica-supported metal complexes as new catalysts for hydrosilylation, **Rev. Roum. Chim.,** 2023, *68*(5–6), 233–240. DOI: 10.33224/rrch.2023.68.5-6.06
4.	M. Cazacu, M. Dascalu, G.T. Stiubianu, A. Bele, C. Tugui, **C. Racles**, From passive to emerging smart silicones, **Rev Chem Eng** 39(6), 2023, 941-1003, https://doi.org/10.1515/revce-2021-0089
5.	M. Dascalu, A.C. Stoica, A. Bele, A.M. Macsim, A. Bargan, C.D. Varganici, G.T. Stiubianu, **C. Racles,** S. Shova, M. Cazacu, Octakis(carboxyalkyl-thioethyl)silsesquioxanes and derived metal complexes: synthesis, characterization and catalytic activity assessments. **Journal of Inorganic and Organometallic Polymers and Materials**, 32, 3955–3970 (2022). https://doi.org/10.1007/s10904-022-02408-8
6.	**C. Racles**, A. Bele, A.L. Vasiliu, L. Sacarescu. Emulsion Gels as Precursors for Porous Silicones and All-Polymer Composites—A Proof of Concept Based on Siloxane Stabilizers. **Gels** 2022, 8, 377. https://doi.org/10.3390/gels8060377 (17 pp)
7.	**C. Racles**, M.F. Zaltariov, D. Peptanariu, T. Vasiliu, M. Cazacu, Functionalized Mesoporous Silica as Doxorubicin Carriers and Cytotoxicity Boosters. **Nanomaterials** 2022, 12, 1823. https://doi.org/10.3390/nano12111823 (26 pp)
8.	A. Bele, M. Dascalu, C. Tugui, G.-T. Stiubianu, C.-D. Varganici, **C. Racles**, M. Cazacu, A. Ladegaard Skov, Soft silicone elastomers exhibiting large actuation strains, **J Appl Polym Sci**. 2022;e52261; https://doi.org/10.1002/app.52261
9.	**C. Racles**, M.-F. Zaltariov, M. Silion, M. Avadanei, A.-M. Macsim, A. Nicolescu, Synthesis, characterization and some metal complexes of bis(isocyanide)disiloxane, showing catalytic activity – **Applied Organometallic Chemistry** 36(3), 2022, e6543 DOI: 10.1002/aoc.6543
10.	A.C. Stoica, M. Damoc, M.F. Zaltariov, **C. Racles**, M. Cazacu, Two-dimensional coordination polymers containing permethylated motifs - promising candidates for 2D emerging materials. Structural, behavioral and functional particularities, **Reactive and Functional Polymers** 168 (2021) 105039; https://doi.org/10.1016/j.reactfunctpolym.2021.105039
11.	M. Cazacu, **C. Racles**, M.F. Zaltariov, M. Dascalu, A. Bele, C. Tugui, A. Bargan, G. Stiubianu, From Amorphous Silicones to Si-Containing Highly Ordered Polymers: Some Romanian Contributions in the Field; **Polymers** 13(10), 2021, Article Number 1605. DOI: 10.3390/polym13101605
12.	V. Cozma, I. Rosca, L. Radulescu, C. Martu, V. Nastasa, C.D. Varganici, E.L.Ursu, F.

	Doroftei, M. Pinteala, **C. Racles**; Antibacterial Polysiloxane Polymers and Coatings for Cochlear Implants, **Molecules**, 26(16), 2021, Article Number 4892. DOI: 10.3390/molecules26164892
13.	**C. Racles**, M.-F. Zaltariov, A. Coroaba, M. Silion, C. Diac, A. Dascalu, M. Iacob, M. Cazacu ; New heterogeneous catalysts containing platinum group metals recovered from a spent catalytic converter, **Applied Organometallic Chemistry** 35(12) 2021, e6417 DOI: 10.1002/aoc.6417
14.	**C. Racles**, M. Asandulesa, V. Tiron, C. Tugui, N. Vornicu, B.-I. Ciubotaru, M. Miˇcuˇsík, M. Omastova, A.-L. Vasiliu, C. Ciomaga; Elastic composites with PDMS matrix and polysulfone-supported silver nanoparticles as filler, **Polymer** 217 (2021) 123480, https://doi.org/10.1016/j.polymer.2021.123480
15.	M. Dascalu, M. Iacob, C. Tugui, A. Bele, G.T. Stiubianu, **C. Racles,** M. Cazacu, Octakis(phenyl)-T8-silsesquioxane-filled silicone elastomers with enhanced electromechanical capability, **Journal of Applied Polymer Science** 138(14), 2021, Article Number: e50161; DOI: 10.1002/app.50161
16.	**C. Racles**, C. Ursu, M. Dascalu, M. Asandulesa, V. Tiron, A. Bele, C. Tugui, S. Teodoroff-Onesim; Multi-stimuli responsive free-standing films of DR1- grafted silicones, **Chemical Engineering Journal** 401, 126087 (2020). https://doi.org/10.1016/j.cej.2020.126087
17.	**C. Racles**, M.F. Zaltariov, M. Damoc, A.M. Macsim, M. Iacob, L. Sacarescu Three Reactions, One Catalyst: A Multi - Purpose Platinum(IV) Complex and its Silica - Supported Homologue for Environmentally Friendly Processes, **Appl Organometal Chem**. 34(3) 2020; e5422 (15pp). https://doi.org/10.1002/aoc.5422
18.	G.O. Turcan-Trofin, M. Asandulesa, M. Balan-Porcarasu, C.D. Varganici, V. Tiron, **C. Racles**, M. Cazacu Linear and cyclic siloxanes functionalized with polar groups by thiol-ene addition: Synthesis, characterization and exploring some material behaviour, **Journal of Molecular Liquids**, Volume 282(15) 2019, 187-196, Doi: 10.1016/j.molliq.2019.03.005
19.	G.O. Turcan-Trofin, M.F. Zaltariov, M. Lacob, V. Tiron, F. Branza, **C. Racles**, M. Cazacu, Copper complexes with spherical morphology generated in one step by amphiphilic ligands: *in situ* view of the self-assembling, characterization, catalytic activity, **Colloids and Surfaces A: Physicochemical and Engineering Aspects**, 580, 2019, 123756, doi: 10.1016/j.colsurfa.2019.123756
20.	M. Iacob, **C. Racles**, M. Dascalu, C. Tugui, V. Lozan, M. Cazacu, Nanomaterials Developed by Processing Iron Coordination Compounds for Biomedical Application **Journal of Nanomaterials** 2019, Article ID 2592974, 14 pages https://doi.org/10.1155/2019/2592974
21.	**C. Racles**, M. Cazacu, M. Zaltariov, M. Iacob, M. Butnaru Siloxane-based compounds with tailored surface properties for health and environment. **Phosphorus, Sulfur, and Silicon and the Related Elements**, 194(10), (2019), 972-977, doi: 10.1080/10426507.2019.1630405 (Proceedings of the 2018 International Conference on Phosphorus, Boron and Silicon, PBSi 2018)
22.	**C. Racles**, M.F. Zaltariov, M. Silion, A.M. Macsim, V. Cozan V Photo-oxidative degradation of doxorubicin with siloxane MOFs by exposure to daylight. **Environmental Science and Pollution Research** 26(19), (2019), 19684–19696, doi: 10.1007/s11356-

	019-05288-7
23.	L Pricop, ME Fortună, D Popovici, M Asandulesa, **C Racles**, MF Zaltariov, N. Marangoci, M. Savin, V. Harabagiu, Nickel Complexes of Guanidine Functionalized Trisiloxane, **Journal of Inorganic and Organometallic Polymers and Materials**, 2019, 29(6), 2024-2034.
24.	A. Bele, C. Tugui. M. Asandulesa, D. Ionita, L. Vasiliu, G. Stiubianu, M. **Iacob, C. Racles,** M. Cazacu, Conductive stretchable composites properly engineered to develop highly compliant electrodes for dielectric elastomer actuators, **Smart Materials and Structures**, 27 (10), Article Number: 105005, 2018 DOI: 10.1088/1361-665X/aad977
25.	M. Asandulesa, V. E. Musteata, A. Bele, M. Dascalu, S. Bronnikov, **C. Racles,** Molecular dynamics of polysiloxane polar-nonpolar co-networks and blends studied by dielectric relaxation spectroscopy, **Polymer** 149 (2018) 73-84
26.	**C. Racles**, M. Silion, L. Sacarescu, Multi-tasking pyridyl-functionalized siloxanes, **Colloids and Surfaces A: Physicochemical and Engineering Aspects** Volume 547, 20 June 2018, Pages 102-110
27.	A. Bele, C. Tugui, L. Sacarescu, M. Iacob, G. Stiubianu, M. Dascalu, **C. Racles**, M. Cazacu, Ceramic nanotubes-based elastomer composites for applications in electromechanical transducers, **Materials and Design** 141 (2018) 120–131
28.	M.F. Zaltariov, A. Bele, L. Vasiliu, L. Gradinaru, N. Vornicu, **C. Racles,** M. Cazacu, Assessment of chemicals released in the marine environment by dielectric elastomers useful as active elements in wave energy harvesters, **Journal of Hazardous Materials** 341 (2018), 390-403
29.	M. Iacob, C. Tugui, V. Tiron, A. Bele, S. Vlad, T. Vasiliu, M. Cazacu, A.L. Vasiliu, **C. Racles**, Iron oxide nanoparticles as dielectric and piezoelectric enhancers for silicone elastomers, **Smart Materials and Structures**, 26(10) 2017, Article Number: 105046
30.	**C. Racles**, M. Dascalu, A. Bele, V. Tiron, M. Asandulesa, C. Tugui, A.L. Vasiliu, M. Cazacu, All-silicone elastic composites with counter-intuitive piezoelectric response, designed for electromechanical applications, **J. Mater. Chem. C**, 2017, **5**, 6997-7010, doi: 10.1039/C7TC02201H
31.	**C. Racles**, M.F. Zaltariov, M. Iacob, M. Silion, M. Avadanei, A. Bargan Siloxane-based metal–organic frameworks with remarkable catalytic activity in mild environmental photodegradation of azo dyes, **Applied Catalysis B: Environmental**, 205, 78-92, 2017, doi:10.1016/j.apcatb.2016.12.034
32.	M. Iacob, **C. Racles**, C. Tugui, G. Stiubianu, A. Bele, L. Sacarescu, D. Timpu, M. Cazacu, From iron coordination compounds to metal oxide nanoparticles **Beilstein J. Nanotechnol.** 2016, *7*, 2074–2087. doi:10.3762/bjnano.7.198
33.	**C. Racles**, M. Ignat, A. Bele, M. Dascalu, D. Lipcinski, M. Cazacu, Silicone-based elastic composites able to generate energy on micromechanical impulse, **Smart Mater Struct**., 25(8), 2016, 085024; **DOI** 10.1088/0964-1726/25/8/085024
34.	A. Bele, M. Dascalu, C. Tugui, M. Iacob, **C. Racles**, L. Sacarescu, M. Cazacu: Dielectric silicone elastomers filled with in situ generated polar silsesquioxanes: preparation, characterization and evaluation of electromechanical performance **Materials and Design**, 106, 2016, 454–462
35.	**C. Racles**, V. Cozan, A. Bele, M. Dascalu "Polar silicones: structure-dielectric properties relationship": **Designed Monomers and Polymers**, 19(6) 2016, 496-507,

	DOI:10.1080/15685551.2016.1169381
36.	**C. Racles**, V. E. Musteata, A. Bele, M. Alexandru, C. Tugui, A. Matricala, Highly stretchable composites from PDMS and polyazomethine fine particles", **RSC Adv.,** 2015, 5, 102599–102609 DOI: 10.1039/C5RA12297J
37.	M. Dascalu, V. E. Musteata, L. Vacareanu, **C. Racles**, M. Cazacu, Synthesis and characterization of metal-containing poly(siloxane-urethane) crosslinked structures derived from siloxane diols and ferrocene diisocyanate **RSC Advances,** 2015,**5**, 99193-99200, DOI: 10.1039/c5ra15290a
38.	M. Dascalu, M. Balan, S. Shova, **C. Racles**, M. Cazacu, Design and synthesis of the first ferrocenylsiloxane urea: structure and properties, **Polyhedron**, *Volume 102*, *14 December 2015*, *Pages 583-592*, doi:10.1016/j.poly.2015.11.013
39.	G. Stiubianu, A. Bele, M. Cazacu, **C. Racles**, Stelian Vlad, Mircea Ignat, Dielectric silicone elastomers with mixed ceramic nanoparticles, **Materials Research Bulletin** (2015) 67-74
40.	C. Tugui, M. Cazacu, L. Sacarescu, A. Bele, G. Stiubianu, C. Ursu, **C. Racles**, Full silicone interpenetrating bi-networks with different organic groups attached to the silicon atoms, **Polymer** 77 (2015) 312-322
41.	S.J. Dünki, M. Tress, F. Kremer, S.Y. Ko, F. A. Nüesch, C.D. Varganici, **C. Racles**, D.M. Opris, Fine-tuning of the dielectric properties of polysiloxanes by chemical modification **RSC Adv.,** 2015, 5, 50054-50062 ;**DOI:** 10.1039/C5RA07412F
42.	**C. Racles**, A. Bele, M. Dascalu, V. E. Musteata, C. D. Varganici, D. Ionita, S. Vlad, M. Cazacu, S. J. D¨unki and D. M. Opris, Polar–nonpolar interconnected elastic networks with increased permittivity and high breakdown fields for dielectric elastomer transducers, **RSC Adv.,** 2015, 5, 58428- 58438.
43.	**C. Racles**, V. Cozan, New siloxane copolymers with pendant azomethine mesogenic units, **Rev. Roum. Chim.,** 2014, *59*(6-7), 465-472
44.	A. Soroceanu, M. Cazacu, **C. Racles**, I. Stoica, Supramolecular aggregation in organic solvents of discrete copper complexes formed with organo-siloxane ligands, **Soft Materials** , 2015, 13, 93–105 DOI: 10.1080/1539445X.2015.1009551
45.	A. Bele, M. Cazacu, **C. Racles**, D. M. Opris, G. Stiubianu, D. Ovezea, M. Ignat, Tuning the electromechanical properties of silicones by crosslinking agent**, *Adv. Eng. Mater*** – 17(9), 2015, 1302–1312.
46.	M.-F. Zaltariov, M. Cazacu, **C. Racles**, V. Musteata, A. Vlad, A. Airinei, Metallopolymers based on a polyazomethine ligand containing oxadiazole rigid and tetramethyldisiloxane flexible units, **J. Appl. Polym. Sci.** 2015, 132(11) Article Number: 41631 ; DOI: 10.1002/APP.41631
47.	**C. Racles**, M. Silion, M. Iacob: Lanthanum complex of a multifunctional water-soluble siloxane compound – synthesis, surface activity and applications for nanoparticles stabilization, **Colloids and Surfaces A: Physicochem. Eng. Aspects,** 2014, 462, 9–17. http://dx.doi.org/doi:10.1016/j.colsurfa.2014.08.016
48.	**C. Racles**, M. Alexandru, A. Bele, V. E. Musteata, M. Cazacu, D. M. Opris: Chemical modification of polysiloxanes with polar pendant groups by co-hydrosilylation **RSC Adv.,** 2014, 4, 37620-37628
49.	M. Cazacu, M. Ignat, **C. Racles**, M. Cristea, V. Musteata, D. Ovezea, D. Lipcinski: Well-

	defined silicone–titania composites with good performances in actuation and energy harvesting, **Journal of Composite Materials** 2014, Vol. 48(13) 1533–1545.
50.	M.F. Zaltariov, A. Vlad, M. Cazacu, S. Shova, M. Balan, **C. Racles**: A Novel siloxane-containing dicarboxylic acid, 1,3-bis(p-carboxyphenylene-ester-methylene)tetramethyldisiloxane, and its derivatives: ester macrocycle and supramolecular structure with a copper complex, **Tetrahedron** 70 (2014) 2661-2668**.**
51.	**C. Racles**, M. Iacob, M. Butnaru, L. Sacarescu, M. Cazacu: Aqueous dispersion of metal oxide nanoparticles, using siloxane surfactants, **Colloids and Surfaces A: Physicochem. Eng. Aspects** –448 (2014), 160-168.
52.	M. Iacob, M. Cazacu, **C. Racles**, M. Ignat, V. Cozan, L. Sacarescu, D. Timpu, M. Kajnakova, M. Botko, A. Feher, C. Turta: Iron–chromium oxide nanoparticles self assembling into smectic mesophases, **RSC Adv**., 2014, 4, 6293-6299.
53.	**C. Racles**, M. Mares, L. Sacarescu A polysiloxane surfactant dissolves a poorly soluble drug (nystatin) in water, http://dx.doi.org/doi:10.1016/j.colsurfa.2013.11.010 **Colloids and Surfaces A: Physicochem. Eng. Aspects** –443 (2014) 233– 239
54.	A. C. T. Kuate, M. Alexandru, M. Freytag, **C. Racles**, M. Cazacu, P. G. Jones, M. Tamm Siloxane-bridged [n]Troticenophanes: Syntheses, Structures and Ring-Opening Reactions **Journal of Organometallic Chemistry** 751 (2014) 628-637
55.	M. Cazacu, **C. Racles**, M.F. Zaltariov, A.M. C. Dumitriu, M. Ignat, D. Ovezea, G. Stiubianu Electroactive composites based on polydimethylsiloxane and some new metal complexes, **Smart Mater. Struct.** 2013, 22 104008 (8pp) doi:10.1088/0964-1726/22/10/104008
56.	**C. Racles**, M. Cazacu, B. Fischer, D. M. Opris, Synthesis and characterization of silicones containing cyanopropyl groups and their use in dielectric elastomer actuators, **Smart Mater. Struct.** 2013, 22 104004
57.	M.F. Zaltariov, M. Cazacu, N. Vornicu, S. Shova, **C. Racles**, M. Balan, C. Turta A new diamine containing disiloxane moiety and some derived Schiff bases: synthesis, structural characterization and antimicrobial activity, **Supramolecular Chemistry** 2013; Vol. 25, No. 8, 490–502 http://dx.doi.org/ 10.1080 /10610278.2013.794947
58.	**C. Racles**, S. Shova, M. Cazacu, D. Timpu New highly ordered hydrophobic siloxane-based coordination polymers, **Polymer** 54 (2013) 6096-6104
59.	**C. Racles**, A. Nistor, Maria Cazacu, A silica-silver nanocomposite obtained by sol-gel method in the presence of silver nanoparticles **Cent. Eur. J. Chem**. 2013, 11 (10), 1689-1698. doi: 10.2478/s11532-013-0294-4
60.	**C. Racles**, Polydimethylsiloxane–Indomethacin Blends and Nanoparticles **AAPS PharmSciTech** 2013, 14(3):968-76; doi: 10.1208/s12249-013-9989-2
61.	**C. Racles**, M. Cristea, F. Doroftei, M. Alexandru All-polymer composites from two incompatible polymers, **Soft Materials**, 2013, 11 (4), 421-429.
62.	**C. Racles**, M. Silion, A. Arvinte, M. Iacob, M. Cazacu Synthesis and Characterization of Poly(siloxane-azomethine) Iron(III) Coordination Compounds, **Designed Monomers and Polymers**, 2013,16(5), 425-435, doi:10.1080/15685551. 2012.747161
63.	**C. Racles**, M. Cazacu, C. Turta Metal-complexing ability of tromethamol-modified siloxane surfactants, **Environmental Engineering and Management Journal** 2012, 9(11), 1547-1554.

64.	E. Bartolomé, P. J. Alonso, A. Arauzo, J. Luzón, J. Bartolomé, **C. Racles**, C. Turta Magnetic properties of the seven-coordina-ted nanoporous framework material $Co(bpy)_{1.5}(NO_3)_2$ (bpy=4,4'- bipyridine), **Dalton Transaction**, 2012, 41 (34) :10382-9
65.	**C. Racles**, M. Silion, N. Stanica, M. Cazacu, C. Turta, New siloxane-containing iron(III) carboxylate clusters, **J. Organomet. Chem**. 2012,711 43-51 doi:10.1016/j.jorgan chem.2012.03.024
66.	M. Iftime, **C. Racles**, V. Cozan, M. Bruma, A. L. Rusanov, Association phenomena of poly(arylene ether sulfone)s in dimethylformamide, **J. Macromol. Sci. Part B Phys.** 2012, 51(8), 1668-1680. doi: 10.1080/00222348.2012.657134
67.	**C. Racles**, V. Cozan Synthesis of glucose-modified siloxanes by a simplified procedure, **Soft Materials**, 2012, 10(4), 413-425; doi: 10.1080/1539445X.2010.523752
68.	**C. Racles**, I. Stoica, F. Doroftei, V. Cozan A simple method for the preparation of colloidal polymer-supported silver nanoparticles, **J Nanopart Res**, 2011, 13:6971–6980; doi: 10.1007/s11051-011-0608-4
69.	R. Furtuna, S. Curteanu, **C. Racles**: NSGA-II-RJG applied to multi-objective optimization of polymeric nanoparticles synthesis with silicone surfactants **Cent. Eur. J. Chem.** 2011, 9(6), 1080-1095, doi: 10.2478/s11532-011-0096-5
70.	G. Stiubianu, **C. Racles,** A. Nistor, M. Cazacu, B.C Simionescu, Cellulose Modification By Crosslinking With Siloxane Diacids Cellulose Chemistry And Technology 45 (3-4) 2011, 157-162 (14th International Symposium On Cellulose Chemistry And Technology, Mar-Apr 2011, Iasi, Romania)
71.	**C. Racles**, M. Alexandru, A. Nistor, M. Cazacu Surface properties of siloxane-based surfactants Containing tromethamol units, **Rev. Roum. Chim.,** 2011, 56(10-11), 941-946.
72.	M. Alexandru, M. Cazacu, **C. Racles**, C. Grigoras Amphiphile Polydimethylsiloxane-Based Networks Reinforced With in Situ Generated Silica, **Polym. Eng. Sci.** 2011, 51(1), 78-86 doi: 10.1002/pen.21781
73.	A. Nistor, G. Stiubianu, **C. Racles**, M. Cazacu Evaluation of the water sorption capacity of some polymeric materials by dynamic vapour sorption, **Mat. Plast.** 2011, 48(1), 33-37.
74.	M. Alexandru, **C. Racles**, M. Cazacu, A.Nistor, A.M. Macsim, Polysiloxanes modified with aromatic diamines interconnecting with silica network, **Journal of Composite Materials 2010,** 45(6) 621–630
75.	M. Cazacu, **C. Racles**, A. Airinei, A. Vlad, I. Stoica Silicone composites containing stabilized silver clusters or nanoparticles **Polym. Adv. Technol.** 2010, 21 1–8.
76.	**C. Racles** Siloxane-based surfactants containing tromethamol units, **Soft Materials** 2010, 8(3) 1–11.
77.	G. Stiubianu, **C. Racles**, M. Cazacu, B. C. Simionescu: Silicone-modified cellulose. Crosslinking of the cellulose acetate with poly[dimethyl(methyl-H)siloxane] by Pt-catalyzed dehydrogenative coupling **J. Mater. Sci.** 2010, 45 (15) 4141-4150 doi: 10.1007/s10853-010-4503-7
78.	**C. Racles**, A. Airinei, I. Stoica, A. Ioanid Silver nanoparticles obtained with a glucose modified siloxane surfactant **J. Nanopart. Res.** 2010 12, 2163–2177.
79.	M. Cazacu, **C. Racles**, A. Vlad, G. Calin, D. Timpu, F.Iacomi New Experimental Insights into Self-Organization of Poly(Ferrocenyl-Amide-Siloxane) **J. Optoelec. Adv. Mat.** 2010, 12(2), 294- 304.

80.	M. Cazacu, **C. Racles**, A. Vlad, M. Antohe, N. Forna Silicone-Based Composite For Relining of Removable Dental Prosthesis **J. Composite Mat.** 2009, 43, 2045 - 2055. doi: 10.1177/0021998309340447
81.	M. Cazacu, A. Vlad, M. Alexandru, P. Budrugeac, **C. Racles**, F. Iacomi Polydimethyldiphenylsiloxanes/silica interconnected networks: preparation and properties evaluation **Polym. Bull.** 2010, 64, 421-434 doi: 10.1007/s00289-009-0147-7
82.	M. Cazacu, **C. Racles**, M. Alexandru, A. Ioanid, A. Vlad Morphology and surface properties of some siloxane-organic copolymers **Polym. Int.** 2009, 58, 697-702.
83.	S. Bronnikov, **C. Racles,** V. Cozan Kinetics of the nematic phase growth across the isotropic-nematic phase transition in polymer-dispersed liquid crystals **Liq. Cryst**. 2009, 36(3), 319 – 328.
84.	**C. Racles**, M. Cazacu, G. Hitruc, T. Hamaide On the feasibility of chemical reactions in the presence of siloxane-based surfactants **Colloid Polym. Sci.** 2009, 287, 461–470.
85.	M. Cazacu, **C. Racles**, A. Airinei, M. Alexandru, A. Vlad Association Phenomena of the Ferrocenylsiloxane Polyamide in Solution, **J. Polym. Sci. Part A: Polym. Chem**. 2009, 47, 5845–5852.
86.	**C. Racles**, M. Alexandru, M. Cazacu, A. Ioanid, T. Hamaide: Obtention des elastomeres silicones en nanoreacteurs siloxane-organiques **Rev. Roum. Chim.** –2009, *54*(7), 583–588
87.	**C. Racles**: Polysiloxanes with Azo-Aromatic Mesogenic Groups; **Rev. Roum. Chim.** – 2009, *54*(7), 589–595
88.	M. Cazacu, M. Ignat, **C. Racles**, A. Vlad, M. Alexandru, G. Zarnescu Polydimethylsiloxane/Silica Composite Incorporating Pyrite Powders for Actuation Elements, **Polym. Int.** 2009, 58, 745–751.
89.	**C. Racles**, M. Cazacu, A. Ioanid, A. Vlad Micellization of a Siloxane-Based Segmented Copolymer in Organic Solvents and its Use as a Tool for Metal Complex Nanoparticles **Macromol. Rapid Commun**. 2008, 29, 1527–1531.
90.	**C. Racles,** M. Cazacu Siloxane-containing liquid-crystalline supramolecular polymers – preparation and study of the thermotropic behavior **J. Appl. Polym. Sci.** 2008, 109, 4000–4009.
91.	S. Bronnikov, A. Nasonov, **C. Racleş**, V. Cozan Kinetics of the isotropic-ordered phase transition in bi-component liquid crystalline mixtures, **Soft Mater.** 2008, 6(3-4), 119-128.
92.	P. Budrugeac, **C. Racles**, V. Cozan, M. Cazacu Thermal and thermo-oxidative stabilities of some poly(siloxane-zomethine)s **J. Thermal Anal. Calorim**. 2008, 92(1), 263–269.
93.	S. Curteanu, **C. Racles**, V. Cozan Prediction of the liquid crystalline property for polyazomethines using modular neural networks **J. Optoelec. Adv. Mat**.2008, 10(12), 3382–3391.
94.	**C. Racles**, V. Cozan. I. Sajo Influence of chemical structure on processing and thermotropic properties of poly(siloxane-azomethine)s **High Perform. Polym**. 2007, 19(5) 541-552.

95.	**C. Racles**, A. Airinei, A. Ioanid, C. Grigoras, M. Cazacu Siloxane-azoaromatic polyesters as potential complex dye systems **Rev. Roum. Chim**. 2007, 52(1–2), 117–125.
96.	A. Vlad, M. Cazacu, M. Marcu, **C. Racles** Chemical insertion of transition metals into some silicone-based polymer structures **Mat. Plast.** 2007, 44(1) 53-55.
97.	S. Bronnikov, **C. Racles**¸ A. Nasonov, M. Cazacu Kinetics of the nematic ordered phase growth during a temperature quench of an isotropic siloxane-azomethine polymer **Liq. Cryst.** 2006, 33(9) 1015–1019.
98.	**C. Racles**, D. Filip, M. Cazacu, V.Cozan, A. Toth, G. Ioanid New Siloxane-Organic Polyesters with Azobenzene Side Chains. Synthesis, Thermotropic Behavior and Surface Properties, **Macromol. Chem. Phys.** 2006, 207, 1599–1609.
99.	**C. Racleş**, T. Hamaide, A. Ioanid, Siloxane surfactants in polymer nanoparticles formulation **Appl. Organomet. Chem.** 2006, 20(4), 235-245.
100.	M. Cazacu, G. Munteanu, **C. Racles**, A. Vlad, M. Marcu New ferrocene-containing structures: Poly(silyl ester)s **J. Organometal. Chem**. 2006, 691 (17) 3700-3707.
101.	M. Cazacu, A. Vlad, M. Marcu, **C. Racleş**, A. Airinei, G. Munteanu New Organometallic Polymers by Polycondensation of Ferrocene and Siloxane Derivatives **Macromolecules** 2006, 39, 3786-3793.
102.	M. Cazacu, A. Ioanid, G. Ioanid, **C. Racles**, A. Vlad Amphiphilic Sorbents Based on Polysiloxanes Crosslinked by an N, N`-Heterocycle **Appl. Organometal. Chem**. 2006, 20 (8), 494-498.
103.	S. Bronnikov, **C. Racles**, V. Cozan, A. Nasonov, S. Sokolov Micro-Domain Structure of the Siloxane-Sulfone Segmented Polyesters: Statistical Investigations **J. Macromol. Sci. Phys. B**44, 21, 2005.
104.	**C. Racles**, M. Cazacu, M. Vasiliu, V. Cozan Structure-LC Properties Relationship in Siloxane-Azomethine Compounds **Polym. Plast. Techn. Eng**. 2005, 44, 1049.
105.	**C. Racles**, T. Hamaide Synthesis and characterization of water soluble saccharide functionalized polysiloxanes and their use as polymer surfactants for the stabilization of polycaprolactone nanoparticles **Macromol. Chem. Phys.** 2005, 206, 1757-1768.
106.	M. Vasiliu, M. Cazacu, M. Marcu, **C. Racleş**, A. Vlad Chelate polymers. IV. Siloxanes functionalized with chelating groups derived from hydroxy-ketones, their metal complexes and some polymers **Appl. Organomet. Chem.** 2005, 19, 614.
107.	M. Cazacu, **C. Racleş**, A. Airinei, A. Vlad, M. Marcu Polimeri degradabili. Siloxani în structuri polimerice degradabile hidrolitic **Mater. Plast.** 2005, 42 (1), 12.
108.	**C. Racles**, A. Ioanid, A. Tóth, M. Cazacu, V. Cozan Morphology and surface properties of siloxane-modified polysulfones **Polymer** 2004, 45 (12) 4275.

109.	M. Cazacu, A. Vlad, **C. Racles**, M. Marcu Incorporation of siloxanes in hydrolytically degradable structures. I. Poly(anhydride)s synthesis **Eur. Polym. J.** 2003, 39, 527.
110.	**C. Racles**, V. Cozan, M. Cazacu, New arylidene-siloxane polyesters **High Perform. Polym.** 2003, 15 (3), 231.
111.	M. Marcu, M. Cazacu, A. Vlad, **C. Racles** Chelate polymers. II. Some novel transition metals complexes with azomethine containing siloxanes and their polyesters **Appl. Organomet. Chem.** 2003, 17, 693.
112.	M. Cazacu, M. Marcu, A. Vlad, A. Toth, **C. Racles** Chelate polymers. III. New polyazomethines of 5,5`-methylene-bis-salicylaldehyde with siloxane diamines and their divalent metal complexes **J. Polym. Sci. Part A: Polym. Chem**. 2003, 41(20), 3169.
113.	**C. Racles**, A. Airinei, V. Cozan, M. Cazacu, I. Sajo New arylidene-siloxane polyethers. Liquid crystalline and photosensitive properties **J. Appl. Polym. Sci.** 2003, 90(11) 3093.
114.	V. Cozan, E. Avram, L. Marin, **C. Racles** Calculation of group contribution of molar glass transition function ($Y_{gPhCH2Cl}$) for 2-chloromethylene-1,4-phenylene units-application to chemical modification reaction of polysulfones **Eur. Polym. J.** 2003, 39, 397.
115.	M. Simionescu, M. Marcu, M. Cazacu, **C. Racles** Poly(siloxaneimide)s 2. Polycondensation of some imidic diacid chlorides with aminoalkylsiloxanes **Eur. Polym. J.** 2002, 38, 229.
116.	M. Cazacu, A. Vlad, M. Simionescu, **C. Racles**, M. Marcu Incorporation of the siloxanes in hydrolytically degradable organic structures. II. Segmented siloxane-imide poly(anhydride)s **J. Macromol. Sci.-Pure Appl. Chem.** 2002, 39(12), 1487.
117.	C. Racles, V. Cozan, M. Cazacu, E. Földes, I. Sajo Poly(azomethine-ester-siloxane)s. Synthesis and thermal behaviour **High Perform. Polym.** 2002, 14(4), 397.
118.	**C. Racles**, V. Cozan Siloxane-Containing Thermotropic Liquid Crystals Based on New Azomethine Dimesogens **High Perform. Polym.** 2002, 14 (2), 169.
119.	A. Vlad, M. Cazacu, M. Marcu, **C. Racles** Synthesis of Poly (dimethyldiphenylsiloxane)-α,ω–diol copolymers by acid-catalyzed polycondensation **Rev. Roum. Chim.** 2001, 46(8), 919.
120.	M. Cazacu, **C. Racles**, A. Vlad, M. Marcu Segmented poly(siloxane-ester-imide)s **Eur. Polym. J.** 2001, 37, 2465.
121.	M. Cazacu, L. Săcărescu, D. Caraiman, M. Marcu, **C. Racles**, A. Vlad Synthesis of Alternating Silnaphthalene-Siloxane Oligomers by Hydrosililation **Rev. Roum. Chim.** 2000, 45 (5), 469.
122.	**C. Racles**, V. Cozan, M. Marcu, M. Cazacu, A. Vlad, New Siloxane-Arylidene Sulfone Segmented Copolymers **Eur. Polym. J.** 2000, 36(9), 1951.

123.	M Cazacu, A. Vlad, M. Marcu, A. Panasenko, **C. Racleş** Synthesis of Dimethyldiphenylmethylvinyl-siloxane Copolymers by Heterogeneous Catalysis **Rev. Roum. Chim.** 2000, 45 (6), 561.
124.	**C. Racleş**, E. Avram, M. Marcu, V. Cozan, M. Cazacu, New siloxane-esther modified polysulfones by phase transfer catalysis **Polymer** 2000, 41, 8205.
125.	M. Cazacu, M. Marcu, A. Vlad, D. Caraiman, **C. Racleş** Synthesis of Functional Telechelic Polydimethylsiloxanes by Ion-Exchangers Catalysis **Eur. Polym J.** 1999, 35, 1629.
126.	M. Simionescu, M. Marcu, M. Cazacu, E. Hamciuc**, C. Racleş**, G. Săcărescu Poly(siloxaneimide)s, 1. Polycondensation of Some Imidic Diacids with Chloroalkylsiloxanes **Rev. Roum. Chim.** 1999, 44 (6), 613.
127.	**C. Racleş**, C. Găină, M. Marcu, M. Cazacu, D. Caraiman, V. Cozan Synthesis and Characterization of New Poly[3,3'- (disiloxane-ester)- 4,4'-(dichloro)-bismaleimides]. **Design. Mon. Polym.** 1999, 2 (3) 247-258.
128.	D. Caraiman, M. Cazacu, M. Marcu, **C. Racleş** Synthesis of Polycarbosilazanes by Using the Hydrosililation Reaction **Rev. Roum. Chim.** 1999, 44(5), 455.
129.	M. Cazacu, M. Marcu, S. Dragan, **C. Matricala (Racles)**, M. Simionescu, M. Holerca Dimethyldiphenylsiloxane Copoly- mers Synthesis by Ion-Exchanger Catalysis **Polymer** 1997, 38(15), 3967.
130.	**C. Racleş**, V. Gaina, M. Marcu, M. Cazacu, M. Simionescu Synthesis and Characterization of new □□□-bis(maleimide-ester) substituted siloxane oligomers **J. Macromol. Sci. - Pure Appl. Chem.** 1997, A34 (9), 1605-1617.
131.	M. Cazacu, M. Marcu, S. Dragan, **C. Matricala (Racles**), Anionic Polymerization of Cyclosiloxanes in Heterogeneous Medium **J. Appl.Polym. Sci.** 1996, 60, 731.