Valentin Victor Jerca

List of Publications by Year
in descending order

50	1,283	361296 20	377752 34
papers	citations	h-index	g-index

50	50	50	1251
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Bioinspired double network hydrogels: from covalent double network hydrogelsviahybrid double network hydrogels to physical double network hydrogels. Materials Horizons, 2021, 8, 1173-1188.	6.4	230
2	Advances and opportunities in the exciting world of azobenzenes. Nature Reviews Chemistry, 2022, 6, 51-69.	13.8	149
3	Novel pendant azobenzene/polymer systems for second harmonic generation and optical data storage. Dyes and Pigments, 2015, 114, 24-32.	2.0	72
4	Defined High Molar Mass Poly(2â€Oxazoline)s. Angewandte Chemie - International Edition, 2018, 57, 15400-15404.	7.2	68
5	Covalent Poly(2â€isopropenylâ€2â€Oxazoline) Hydrogels with Ultrahigh Mechanical Strength and Toughness through Secondary Terpyridine Metalâ€Coordination Crosslinks. Advanced Functional Materials, 2019, 29, 1904886.	7.8	60
6	Structural Diversification of Pillar[n]arene Macrocycles. Angewandte Chemie - International Edition, 2020, 59, 6314-6316.	7.2	41
7	Poly(2-isopropenyl-2-oxazoline) Hydrogels for Biomedical Applications. Chemistry of Materials, 2018, 30, 7938-7949.	3.2	37
8	Poly(2-isopropenyl-2-oxazoline) as a versatile platform towards thermoresponsive copolymers. Polymer Chemistry, 2018, 9, 3473-3478.	1.9	36
9	High compression strength single network hydrogels with pillar[5]arene junction points. Materials Horizons, 2020, 7, 566-573.	6.4	36
10	Simultaneous two and three photon resonant enhancement of third-order NLO susceptibility in an azo-dye functionalized polymer film. Physical Chemistry Chemical Physics, 2013, 15, 7060.	1.3	29
11	Bio-inspired Hydrogels as Multi-task Anti-icing Hydrogel Coatings. CheM, 2020, 6, 820-822.	5.8	29
12	2-Oxazoline based photo-responsive azo-polymers. Synthesis, characterization and isomerization kinetics. European Polymer Journal, 2013, 49, 452-463.	2.6	28
13	Photoresponsive Polymers on the Move. CheM, 2017, 3, 533-536.	5.8	28
14	Oxazoline-functional polymer particles graft with azo-dye. Reactive and Functional Polymers, 2011, 71, 373-379.	2.0	26
15	Advances in understanding the photoresponsive behavior of azobenzenes substituted with strong electron withdrawing groups. Optical Materials, 2015, 48, 160-164.	1.7	26
16	Synthesis and characterization of side-chain oxazolineâ€“methyl methacrylate copolymers bearing azo-dye. Reactive and Functional Polymers, 2010, 70, 827-835.	2.0	25
17	Self-Healing and Moldable Poly(2-isopropenyl-2-oxazoline) Supramolecular Hydrogels Based on a Transient Metal Coordination Network. Macromolecules, 2020, 53, 6566-6575.	2.2	25
18	Selfâ€Healing Metalloâ€Supramolecular Hydrogel Based on Specific Ni²⁺ Coordination Interactions of Poly(ethylene glycol) with Bistriazole Pyridine Ligands in the Main Chain. Macromolecular Rapid Communications, 2020, 41, e1900457.	2.0	25

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19	Synthesis of a new oxazoline macromonomer for dispersion polymerization. Polymer Bulletin, 2011, 66, 785-796.	1.7	21
20	Novel Aspects Regarding the Photochemistry of Azo-Derivatives Substituted with Strong Acceptor Groups. Journal of Physical Chemistry C, 2015, 119, 10538-10549.	1.5	21
21	New insights into the self-assembling of some hydrophobically modified polyacrylates in aqueous solution. Colloid and Polymer Science, 2016, 294, 667-679.	1.0	21
22	Poly(2-cycloalkyl-2-oxazoline)s: high melting temperature polymers solely based on Debye and Keesom van der Waals interactions. Polymer Chemistry, 2016, 7, 1309-1322.	1.9	19
23	Photocontrol in Complex Polymeric Materials: Fact or Illusion?. Angewandte Chemie - International Edition, 2018, 57, 7945-7947.	7.2	18
24	Reduction-Responsive Molecularly Imprinted Poly(2-isopropenyl-2-oxazoline) for Controlled Release of Anticancer Agents. Pharmaceutics, 2020, 12, 506.	2.0	18
25	New Organicâ€“Inorganic Hybrids with Azo-dye Content. Designed Monomers and Polymers, 2010, 13, 437-444.	0.7	17
26	Influence of the Aliphatic Side Chain on the Near Atmospheric Pressure Plasma Polymerization of 2-Alkyl-2-oxazolines for Biomedical Applications. ACS Applied Materials & Interfaces, 2019, 11, 31356-31366.	4.0	17
27	Macropropagation Rate Coefficients and Branching Levels in Cationic Ring-Opening Polymerization of 2-Ethyl-2-oxazoline through Prediction of Size Exclusion Chromatography Data. Macromolecules, 2019, 52, 4067-4078.	2.2	17
28	Synthesis and Characterization of Novel Azobenzene Methacrylate Monomers. Designed Monomers and Polymers, 2009, 12, 553-563.	0.7	15
29	Synthesis and characterization of side-chain maleimide-styrene copolymers with new pendant azobenzene moieties. Journal of Polymer Research, 2011, 18, 1009-1016.	1.2	15
30	Synthesis and characterization of side-chain poly(methacrylate)s bearing new azo-moieties. Polymer Bulletin, 2010, 65, 905-916.	1.7	14
31	Metal Ion Selective Selfâ€Assembly of a Ligand Functionalized Polymer into [1+1] Macrocyclic and Supramolecular Polymer Structures via Metalâ€“Ligand Coordination. Macromolecular Rapid Communications, 2020, 41, e1900305.	2.0	14
32	Poly(2-oxazoline)s with pendant cubane groups. Polymer Chemistry, 2018, 9, 4840-4847.	1.9	12
33	FÃ¶rster resonance energy transfer in fluorophore labeled poly(2-ethyl-2-oxazoline)s. Journal of Materials Chemistry C, 2020, 8, 14125-14137.	2.7	11
34	Dual pH and thermoresponsive alternating polyampholytes in alcohol/water solvent mixtures. Polymer Chemistry, 2020, 11, 2205-2211.	1.9	11
35	Wellâ€Defined Thermoresponsive Polymethacrylamide Copolymers with Ester Pendent Groups through Oneâ€Pot Statistical Postpolymerization Modification of Poly(2â€Isopropenylâ€2â€Oxazoline) with Multiple Carboxylic Acids. Journal of Polymer Science Part A, 2019, 57, 360-366.	2.5	10
36	In Vitro Assessment of the Hydrolytic Stability of Poly(2-isopropenyl-2-oxazoline). Biomacromolecules, 2021, 22, 5020-5032.	2.6	9

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37	Defined High Molar Mass Poly(2â€Oxazoline)s. Angewandte Chemie, 2018, 130, 15626-15630.	1.6	6
38	Development and Characterization of Photoresponsive Polymers. , 2018, , 3-47.		4
39	Cationâ^Ï€ Interactions Accelerate the Living Cationic Ring-Opening Polymerization of Unsaturated 2-Alkyl-2-oxazolines. Macromolecules, 2020, 53, 3832-3846.	2.2	4
40	Strukturelle Diversifizierung von Pillar[n]arenâ€Makrocyclen. Angewandte Chemie, 2020, 132, 6374-6376.	1.6	4
41	Differences and similarities between mono-, bi- or tetrafunctional initiated cationic ring-opening polymerization of 2-oxazolines. Polymer Chemistry, 2022, 13, 861-876.	1.9	3
42	New side-chain azo-polymers for optical applications: synthesis and characterization. Proceedings of SPIE, 2012, , .	0.8	2
43	Photoresponsive polymers: Quo vadis. European Polymer Journal, 2017, 88, 257-258.	2.6	2
44	Smart polymeric gels. , 2018, , 179-230.		2
45	Factorial design optimization of polystyrene microspheres obtained by aqueous dispersion polymerization in the presence of poly(2â€ethylâ€2â€oxazoline) reactive stabilizer. Polymer International, 2020, 69, 1122-1129.	1.6	2
46	[2 Ã— 2] metallo-supramolecular grids based on 4,6-bis((1H-1,2,3-triazol-4-yl)-pyridin-2-yl)-2-phenylpyrimidine ligands: from discrete [2 Ã— 2] grid structures to star-shaped supramolecular polymeric architectures. Dalton Transactions, 2021, 50, 8746-8751.	1.6	2
47	Steuerung komplexer Polymermaterialien mit Licht: Wirklichkeit oder Illusion?. Angewandte Chemie, 2018, 130, 8073-8075.	1.6	1
48	Poly(2-isopropenyl-2-oxazoline) as a Versatile Platform for Multi-Functional Materials. Proceedings (mdpi), 2019, 29, .	0.2	1
49	Investigations of molecular nonlinear optical polarizabilities of azobenzenes substituted with strong acceptor groups. Proceedings of SPIE, 2014, , .	0.8	0
50	Photoresponsive behavior of azobenzene hybrid materials. , 2015, , .		0