Gustavo A Schwartz

List of Publications by Year
in descending order

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54 papers	1,442 citations	279798 23 h-index	330143 37 g-index
54 all docs	54 docs citations	54 times ranked	1267 citing authors

#	Article	IF	Citations
1	Glass Transition and Relaxation Processes in Supercooled Water. Physical Review Letters, 2004, 93, 245702.	7.8	158
2	Dielectric Study of Hydration Water in Silica Nanoparticles. Journal of Physical Chemistry C, 2012, 116, 24340-24349.	3.1	89
3	Water dynamics in n-propylene glycol aqueous solutions. Journal of Chemical Physics, 2006, 124, 194501.	3.0	77
4	Determination of the nanoscale dielectric constant by means of a double pass method using electrostatic force microscopy. Journal of Applied Physics, 2009, 106, .	2.5	73
5	Nanodielectric mapping of a model polystyrene-poly(vinyl acetate) blend by electrostatic force microscopy. Physical Review E, 2010, 81, 010801.	2.1	53
6	Combining configurational entropy and self-concentration to describe the component dynamics in miscible polymer blends. Journal of Chemical Physics, 2005, 123, 144908.	3.0	52
7	Imaging dielectric relaxation in nanostructured polymers by frequency modulation electrostatic force microscopy. Applied Physics Letters, 2010, 96, 213110.	3.3	47
8	From chemical structure to quantitative polymer properties prediction through convolutional neural networks. Polymer, 2020, 193, 122341.	3.8	47
9	Single Component Dynamics in Miscible Poly(vinyl methyl ether)/Polystyrene Blends under Hydrostatic Pressure. Macromolecules, 2007, 40, 3246-3255.	4.8	45
10	Local mechanical and dielectric behavior of the interacting polymer layer in silica nano-particles filled SBR by means of AFM-based methods. Polymer, 2013, 54, 4980-4986.	3.8	42
11	Influence of Water and Filler Content on the Dielectric Response of Silica-Filled Rubber Compounds. Macromolecules, 2013, 46, 2407-2416.	4.8	42
12	Thermal aging of carbon black filled rubber compounds. I. Experimental evidence for bridging flocculation. Polymer, 2003, 44, 7229-7240.	3.8	40
13	Relaxation dynamics of a polymer in a 2D confinement. Journal of Chemical Physics, 2004, 120, 5736-5744.	3.0	38
14	Water diffusion and hydrolysis effect on the structure and dynamics of epoxy-anhydride networks. Polymer Degradation and Stability, 2017, 143, 57-63.	5.8	37
15	Temperature and strain rate dependence of the tensile yield stress of PVC. Journal of Applied Polymer Science, 1996, 61, 109-117.	2.6	36
16	Dielectric Î±- and Î²-Relaxations in Uncured Styrene Butadiene Rubber. Macromolecules, 2002, 35, 4337-4342.	4.8	35
17	Dynamics of propylene glycol and its oligomers confined in clay. European Physical Journal E, 2003, 12, 179-183.	1.6	31
18	Correlation between temperatureâ€“pressure dependence of the Î±-relaxation and configurational entropy for a glass-forming polymer. Journal of Non-Crystalline Solids, 2005, 351, 2616-2621.	3.1	30

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19	Pressureâ˜Temperature Dependence of Polymer Segmental Dynamics. Comparison between the Adamâ˜Gibbs Approach and Density Scalings. Macromolecules, 2006, 39, 3931-3938.	4.8	30
20	Dielectric study of the segmental relaxation of low and high molecular weight polystyrenes under hydrostatic pressure. Journal of Non-Crystalline Solids, 2007, 353, 4298-4302.	3.1	29
21	Stress relaxation of PVC below the yield point. Journal of Polymer Science, Part B: Polymer Physics, 1996, 34, 1257-1267.	2.1	27
22	Broadband nanodielectric spectroscopy by means of amplitude modulation electrostatic force microscopy (AM-EFM). Ultramicroscopy, 2011, 111, 1366-1369.	1.9	25
23	A numerical simulation of the electrical resistivity of carbon black filled rubber. Polymer, 2000, 41, 6589-6595.	3.8	24
24	Confinement effects on the excess wing in the dielectric loss of glass-formers. Europhysics Letters, 2003, 64, 675-681.	2.0	24
25	Describing the component dynamics in miscible polymer blends: Towards a fully predictive model. Journal of Chemical Physics, 2006, 124, 154904.	3.0	23
26	Mapping Chemical Structureâ€“Glass Transition Temperature Relationship through Artificial Intelligence. Macromolecules, 2021, 54, 1811-1817.	4.8	22
27	Nanoscale dielectric properties of insulating thin films: From single point measurements to quantitative images. Ultramicroscopy, 2010, 110, 634-638.	1.9	20
28	Positron annihilation and relaxation dynamics from dielectric spectroscopy and nuclear magnetic resonance: Cisâ€“trans-1,4-poly(butadiene). Journal of Chemical Physics, 2011, 134, 164507.	3.0	19
29	The effect of vulcanization additives on the dielectric response of styrene-butadiene rubber compounds. Polymer, 2019, 172, 205-212.	3.8	19
30	Localizing and quantifying the intra-monomer contributions to the glass transition temperature using artificial neural networks. Polymer, 2020, 203, 122786.	3.8	19
31	Numerical study of the lateral resolution in electrostatic force microscopy for dielectric samples. Nanotechnology, 2011, 22, 285705.	2.6	18
32	On the use of electrostatic force microscopy as a quantitative subsurface characterization technique: A numerical study. Applied Physics Letters, 2011, 99, 023101.	3.3	16
33	Prediction of Rheometric Properties of Compounds by Using Artificial Neural Networks. Rubber Chemistry and Technology, 2001, 74, 116-123.	1.2	15
34	Dielectric spectroscopy at the nanoscale by atomic force microscopy: A simple model linking materials properties and experimental response. Journal of Applied Physics, 2014, 115, .	2.5	15
35	Adam-Gibbs based model to describe the single component dynamics in miscible polymer blends under hydrostatic pressure. Journal of Chemical Physics, 2007, 127, 154907.	3.0	14
36	High pressure dynamics of polymer/plasticizer mixtures. Journal of Chemical Physics, 2009, 131, 044906.	3.0	12

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37	Water dynamics in poly(vinyl pyrrolidone)â€“water solution before and after isothermal crystallization. Journal of Non-Crystalline Solids, 2010, 356, 3037-3041.	3.1	12
38	DETERMINATION OF FILLER STRUCTURE IN SILICA-FILLED SBR COMPOUNDS BY MEANS OF SAXS AND AFM. Rubber Chemistry and Technology, 2015, 88, 690-710.	1.2	11
39	Positron annihilation response and broadband dielectric spectroscopy: Poly(propylene glycol). Journal of Non-Crystalline Solids, 2010, 356, 782-786.	3.1	10
40	AFM based dielectric spectroscopy: Extended frequency range through excitation of cantilever higher eigenmodes. Ultramicroscopy, 2014, 146, 55-61.	1.9	9
41	Tuning molecular dynamics by hydration and confinement: antiplasticizing effect of water in hydrated prilocaine nanoclusters. Physical Chemistry Chemical Physics, 2019, 21, 15576-15583.	2.8	9
42	Dielectric relaxation studies of poly(propylene glycol) confined in vermiculite clay. European Physical Journal E, 2003, 12, 113-116.	1.6	8
43	Fluorinated networks dynamics studied by means of broadband dielectric spectroscopy. Journal of Applied Polymer Science, 2015, 132, .	2.6	7
44	Compatibility studies of polystyrene and poly(vinyl acetate) blends using electrostatic force microscopy. Journal of Polymer Science, Part B: Polymer Physics, 2011, 49, 1332-1338.	2.1	5
45	Extended Adamâ€“Gibbs Approach To Describe the Segmental Dynamics of Cross-Linked Miscible Rubber Blends. Macromolecules, 2018, 51, 1741-1747.	4.8	5
46	Dielectric properties of thin insulating layers measured by Electrostatic Force Microscopy. EPJ Applied Physics, 2010, 50, 10501.	0.7	5
47	Determining concentration depth profiles in fluorinated networks by means of electric force microscopy. Journal of Chemical Physics, 2011, 135, 064704.	3.0	4
48	Complex networks reveal emergent interdisciplinary knowledge in Wikipedia. Humanities and Social Sciences Communications, 2021, 8, .	2.9	4
49	Approaching Polymer Dynamics Combining Artificial Neural Networks and Elastically Collective Nonlinear Langevin Equation. Polymers, 2022, 14, 1573.	4.5	3
50	A Novel Measure Method for High-Speed Tire Vibrations. JVC/Journal of Vibration and Control, 2001, 7, 643-651.	2.6	2
51	Literatura y ciencia. Hacia una integraciÃ³n del conocimiento. Arbor, 2018, 194, 481.	0.3	2
52	An experimental method for studying two-dimensional percolation. American Journal of Physics, 2004, 72, 364-366.	0.7	1
53	Study of relaxation and transport processes by means of AFM based dielectric spectroscopy. , 2014, , .		1
54	Estimating glass transition temperature and related dynamics of molecular glass formers combining artificial neural networks and disordered systems theory. Journal of Non-Crystalline Solids: X, 2022, 15, 100106.	1.2	1