

# Francesco Greco

## List of Publications by Year in descending order

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66  
papers

2,182  
citations

218677

26  
h-index

223800

46  
g-index

67  
all docs

67  
docs citations

67  
times ranked

1221  
citing authors

#	ARTICLE	IF	CITATIONS
1	Brownian simulations of a network of reptating primitive chains. <i>Journal of Chemical Physics</i> , 2001, 115, 4387-4394.	3.0	268
2	Single line particle focusing induced by viscoelasticity of the suspending liquid: theory, experiments and simulations to design a micropipe flow-focuser. <i>Lab on A Chip</i> , 2012, 12, 1638.	6.0	182
3	Entanglement molecular weight and frequency response of sliplink networks. <i>Journal of Chemical Physics</i> , 2003, 119, 6925-6930.	3.0	125
4	Particle alignment in a viscoelastic liquid flowing in a square-shaped microchannel. <i>Lab on A Chip</i> , 2013, 13, 4263.	6.0	98
5	Viscoelastic flow-focusing in microchannels: scaling properties of the particle radial distributions. <i>Lab on A Chip</i> , 2013, 13, 2802.	6.0	88
6	Drop deformation for non-Newtonian fluids in slow flows. <i>Journal of Non-Newtonian Fluid Mechanics</i> , 2002, 107, 111-131.	2.4	83
7	Rotation of a sphere in a viscoelastic liquid subjected to shear flow. Part I: Simulation results. <i>Journal of Rheology</i> , 2008, 52, 1331-1346.	2.6	77
8	Microrheology with Optical Tweezers: Measuring the relative viscosity of solutions "at a glance". <i>Scientific Reports</i> , 2015, 5, 8831.	3.3	71
9	Ellipsoidal drop model for single drop dynamics with non-Newtonian fluids. <i>Journal of Rheology</i> , 2004, 48, 83-100.	2.6	68
10	Rheometry-on-a-chip: measuring the relaxation time of a viscoelastic liquid through particle migration in microchannel flows. <i>Lab on A Chip</i> , 2015, 15, 783-792.	6.0	64
11	Molecular simulations of the long-time behaviour of entangled polymeric liquids by the primitive chain network model. <i>Modelling and Simulation in Materials Science and Engineering</i> , 2004, 12, S91-S100.	2.0	59
12	Quantitative comparison of primitive chain network simulations with literature data of linear viscoelasticity for polymer melts. <i>Journal of Non-Newtonian Fluid Mechanics</i> , 2008, 149, 87-92.	2.4	58
13	Effect of fluid rheology on particle migration in a square-shaped microchannel. <i>Microfluidics and Nanofluidics</i> , 2015, 19, 95-104.	2.2	57
14	Rotation of a sphere in a viscoelastic liquid subjected to shear flow. Part II. Experimental results. <i>Journal of Rheology</i> , 2009, 53, 459-480.	2.6	50
15	Comparison among Slip-Link Simulations of Bidisperse Linear Polymer Melts. <i>Macromolecules</i> , 2008, 41, 8275-8280.	4.8	48
16	Drop shape under slow steady shear flow and during relaxation. Experimental results and comparison with theory. <i>Rheologica Acta</i> , 2001, 40, 176-184.	2.4	47
17	Simple strain measure for entangled polymers. <i>Journal of Rheology</i> , 2000, 44, 845-854.	2.6	45
18	Fluid Viscoelasticity Drives Self-Assembly of Particle Trains in a Straight Microfluidic Channel. <i>Physical Review Applied</i> , 2018, 10, .	3.8	38

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19	Rapid Fickian Yet Non-Gaussian Diffusion after Subdiffusion. <i>Physical Review Letters</i> , 2021, 126, 158003.	7.8	37
20	Possible role of force balance on entanglements. <i>Macromolecular Symposia</i> , 2000, 158, 57-64.	0.7	33
21	Primitive chain network simulations for branched polymers. <i>Rheologica Acta</i> , 2006, 46, 297-303.	2.4	33
22	Rheology of dilute and semidilute noncolloidal hard sphere suspensions. <i>Journal of Rheology</i> , 2008, 52, 1369-1384.	2.6	33
23	Structure of entangled polymer network from primitive chain network simulations. <i>Journal of Chemical Physics</i> , 2010, 132, 134902.	3.0	33
24	Statics, linear, and nonlinear dynamics of entangled polystyrene melts simulated through the primitive chain network model. <i>Journal of Chemical Physics</i> , 2008, 128, 154901.	3.0	32
25	Integral and differential constitutive equations for entangled polymers with simple versions of CCR and force balance on entanglements. <i>Rheologica Acta</i> , 2001, 40, 98-103.	2.4	31
26	Numerical simulations of the competition between the effects of inertia and viscoelasticity on particle migration in Poiseuille flow. <i>Computers and Fluids</i> , 2015, 107, 214-223.	2.5	26
27	Start-up and retraction dynamics of a Newtonian drop in a viscoelastic matrix under simple shear flow. <i>Journal of Non-Newtonian Fluid Mechanics</i> , 2006, 134, 27-32.	2.4	25
28	Fickian Non-Gaussian Diffusion in Glass-Forming Liquids. <i>Physical Review Letters</i> , 2022, 128, 168001.	7.8	23
29	Second-order theory for the deformation of a Newtonian drop in a stationary flow field. <i>Physics of Fluids</i> , 2002, 14, 946-954.	4.0	20
30	Highly entangled polymer primitive chain network simulations based on dynamic tube dilation. <i>Journal of Chemical Physics</i> , 2004, 121, 12650.	3.0	19
31	Entangled polymer orientation and stretch under large step shear deformations in primitive chain network simulations. <i>Rheologica Acta</i> , 2008, 47, 591-599.	2.4	19
32	Primitive chain network model for block copolymers. <i>Journal of Non-Crystalline Solids</i> , 2006, 352, 5001-5007.	3.1	18
33	Stress-relaxation behavior of a physical gel: Evidence of co-occurrence of structural relaxation and water diffusion in ionic alginate gels. <i>European Polymer Journal</i> , 2013, 49, 3929-3936.	5.4	18
34	Mechanical properties of end-crosslinked entangled polymer networks using sliplink Brownian dynamics simulations. <i>Rheologica Acta</i> , 2006, 46, 95-109.	2.4	17
35	Primitive chain network simulations for entangled DNA solutions. <i>Journal of Chemical Physics</i> , 2009, 131, 114906.	3.0	17
36	Primitive Chain Network Simulations on Dielectric Relaxation of Linear Polymers under Shear Flow. <i>Nihon Reorogi Gakkaishi</i> , 2004, 32, 197-202.	1.0	16

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37	Primitive Chain Network Simulations of Damping Functions for Shear, Uniaxial, Biaxial and Planar Deformations. <i>Nihon Reoroji Gakkaishi</i> , 2007, 35, 73-77.	1.0	16
38	Analysis of start-up dynamics of a single drop through an ellipsoidal drop model for non-Newtonian fluids. <i>Journal of Non-Newtonian Fluid Mechanics</i> , 2005, 126, 145-151.	2.4	15
39	Is microrheometry affected by channel deformation?. <i>Biomechanics</i> , 2016, 10, 043501.	2.4	15
40	Influence of wall heterogeneity on nanoscopically confined polymers. <i>Physical Chemistry Chemical Physics</i> , 2019, 21, 772-779.	2.8	15
41	Nonlinear Stress Relaxation of Molten Polymers: An Experimental Verification of a New Theoretical Approach. <i>Macromolecules</i> , 2006, 39, 5931-5938.	4.8	14
42	Numerical simulations of the dynamics of a slippery particle in Newtonian and viscoelastic fluids subjected to shear and Poiseuille flows. <i>Journal of Non-Newtonian Fluid Mechanics</i> , 2016, 228, 46-54.	2.4	13
43	A model-system of Fickian yet non-Gaussian diffusion: light patterns in place of complex matter. <i>Soft Matter</i> , 2022, 18, 351-364.	2.7	13
44	Entangled Polymeric Liquids: A Nonstandard Statistical Thermodynamics of a Subchain between Entanglement Points and a New Calculation of the Strain Measure Tensor. <i>Macromolecules</i> , 2004, 37, 10079-10088.	4.8	12
45	Rheology of a dilute viscoelastic suspension of spheroids in unconfined shear flow. <i>Rheologica Acta</i> , 2015, 54, 915-928.	2.4	11
46	Analysis of linear viscoelastic behaviour of alginate gels: effects of inner relaxation, water diffusion, and syneresis. <i>Soft Matter</i> , 2015, 11, 6045-6054.	2.7	10
47	Tailoring Chitosan/LTA Zeolite Hybrid Aerogels for Anionic and Cationic Dye Adsorption. <i>International Journal of Molecular Sciences</i> , 2021, 22, 5535.	4.1	10
48	Single Drop Dynamics under Shearing Flow in Systems with a Viscoelastic Phase. <i>Macromolecular Symposia</i> , 2005, 228, 31-40.	0.7	8
49	Analysis of the aging effects on the viscoelasticity of alginate gels. <i>Soft Matter</i> , 2016, 12, 8726-8735.	2.7	7
50	Anomalous Aging and Stress Relaxation in Macromolecular Physical Gels: The Case of Strontium Alginate. <i>Macromolecules</i> , 2020, 53, 649-657.	4.8	7
51	Prediction of the effects of constitutive viscoelasticity on stress-diffusion coupling in gels. <i>Journal of Chemical Physics</i> , 2012, 136, 134904.	3.0	6
52	Concentrated suspensions of Brownian beads in water: dynamic heterogeneities through a simple experimental technique. <i>Science China: Physics, Mechanics and Astronomy</i> , 2019, 62, 1.	5.1	6
53	On the inverse quenching technique applied to gelatin solutions. <i>Journal of Rheology</i> , 2021, 65, 1081-1088.	2.6	5
54	Breakdown of the Stokes-Einstein relation in supercooled liquids: A cage-jump perspective. <i>Journal of Chemical Physics</i> , 2021, 155, 114503.	3.0	5

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55	Comparing Microscopic and Macroscopic Dynamics in a Paradigmatic Model of Glass-Forming Molecular Liquid. <i>International Journal of Molecular Sciences</i> , 2022, 23, 3556.	4.1	4
56	Rheo-optical determination of the interfacial tension in a dispersed blend. <i>Macromolecular Symposia</i> , 2003, 198, 53-68.	0.7	3
57	Primitive Chain Network Simulations of Conformational Relaxation for Individual Molecules in the Entangled State. <i>Nihon Reoroji Gakkaishi</i> , 2008, 36, 181-185.	1.0	3
58	Primitive Chain Network Simulations of Conformational Relaxation for Individual Molecules in the Entangled State. II. Retraction from Stretched States.. <i>Nihon Reoroji Gakkaishi</i> , 2009, 37, 65-68.	1.0	3
59	Rheology of a Dilute Suspension of Spheres in a Viscoelastic Fluid Under Large Amplitude Oscillations. <i>Journal of Computational and Theoretical Nanoscience</i> , 2010, 7, 780-786.	0.4	2
60	Multiscale heterogeneous dynamics in two-dimensional glassy colloids. <i>Journal of Chemical Physics</i> , 2022, 156, 164906.	3.0	2
61	New strain measure tensor for entangled polymeric liquids. <i>Journal of Rheology</i> , 2003, 47, 235-246.	2.6	1
62	Primitive Chain Network Model for Entangled Polymer Blends. <i>AIP Conference Proceedings</i> , 2004, , .	0.4	0
63	Primitive Chain Network Simulations for Particle Dispersed Polymers. <i>AIP Conference Proceedings</i> , 2008, , .	0.4	0
64	Rotation of a Sphere in a Viscoelastic Fluid under Flow. <i>AIP Conference Proceedings</i> , 2008, , .	0.4	0
65	Glasses and gels: a crossroad of molecular liquids, polymers and colloids. <i>Journal of Physics Condensed Matter</i> , 2022, 34, 090401.	1.8	0
66	Rheo-Engineered Microfluidics @ UNINA. , 2022, 3, 100024.		0