Eleonora Secchi

List of Publications by Year
in descending order

32 papers	1,508 citations	516710 16 h-index	477307 29 g-index
40 all docs	40 docs citations	40 times ranked	1914 citing authors

#	Article	IF	Citations
1	Massive radius-dependent flow slippage in carbon nanotubes. Nature, 2016, 537, 210-213.	27.8	537
2	Magnetic cilia carpets with programmable metachronal waves. Nature Communications, 2020, 11, 2637.	12.8	172
3	Scaling Behavior for Ionic Transport and its Fluctuations in Individual Carbon Nanotubes. Physical Review Letters, 2016, 116, 154501.	7.8	158
4	Not Just Going with the Flow: The Effects of Fluid Flow on Bacteria and Plankton. Annual Review of Cell and Developmental Biology, 2019, 35, 213-237.	9.4	71
5	The effect of flow on swimming bacteria controls the initial colonization of curved surfaces. Nature Communications, 2020, 11, 2851.	12.8	66
6	Biopolymer gels with â€œphysicalâ€•cross-links: gelation kinetics, aging, heterogeneous dynamics, and macroscopic mechanical properties. Soft Matter, 2013, 9, 3931.	2.7	55
7	Environmental, Microbiological, and Immunological Features of Bacterial Biofilms Associated with Implanted Medical Devices. Clinical Microbiology Reviews, 2022, 35, e0022120.	13.6	43
8	What buoyancy really is. A generalized Archimedes' principle for sedimentation and ultracentrifugation. Soft Matter, 2012, 8, 7112.	2.7	37
9	Ghost Particle Velocimetry: Accurate 3D Flow Visualization Using Standard Lab Equipment. Physical Review Letters, 2013, 111, 048101.	7.8	36
10	Dynamic arrest and aging of biomolecular condensates are modulated by low-complexity domains, RNA and biochemical activity. Nature Communications, 2022, 13, .	12.8	35
11	The structural role of bacterial eDNA in the formation of biofilm streamers. Proceedings of the National Academy of Sciences of the United States of America, 2022, 119, e2113723119.	7.1	30
12	Time-evolution scenarios for short-range depletion gels subjected to the gravitational stress. Soft Matter, 2014, 10, 5296.	2.7	22
13	Encounter rates between bacteria and small sinking particles. New Journal of Physics, 2020, 22, 043016.	2.9	22
14	Formation and acceleration of uniformly filled ellipsoidal electron bunches obtained via space-charge-driven expansion from a cesium-telluride photocathode. Physical Review Special Topics: Accelerators and Beams, 2013, 16, .	1.8	21
15	External and internal gelation of pectin solutions: microscopic dynamics versus macroscopic rheology. Journal of Physics Condensed Matter, 2014, 26, 464106.	1.8	20
16	Mapping the local viscosity of non-Newtonian fluids flowing through disordered porous structures. Scientific Reports, 2020, 10, 11733.	3.3	19
17	The unbearable heaviness of colloids: facts, surprises, and puzzles in sedimentation. Journal of Physics Condensed Matter, 2012, 24, 284109.	1.8	18
18	Intermittent turbulence in flowing bacterial suspensions. Journal of the Royal Society Interface, 2016, 13, 20160175.	3.4	17

#	Article	IF	Citations
19	On the general concept of buoyancy in sedimentation and ultracentrifugation. Physical Biology, 2013, 10, 045005.	1.8	14
20	Competition between growth and shear stress drives intermittency in preferential flow paths in porous medium biofilms. Proceedings of the National Academy of Sciences of the United States of America, 2022, 119, .	7.1	14
21	Polysaccharide-based hydrogels with tunable composition as 3D cell culture systems. International Journal of Artificial Organs, 2018, 41, 213-222.	1.4	13
22	Spatially: resolved heterogeneous dynamics in a strong colloidal gel. Journal of Physics Condensed Matter, 2015, 27, 194120.	1.8	12
23	Equilibrium concentration profiles and sedimentation kinetics of colloidal gels under gravitational stress. Journal of Physics Condensed Matter, 2012, 24, 284103.	1.8	11
24	The role of surface adhesion on the macroscopic wrinkling of biofilms. ELife, 0, 11, .	6.0	11
25	A microfluidic platform for characterizing the structure and rheology of biofilm streamers. Soft Matter, 2022, 18, 3878-3890.	2.7	10
26	The Landauâ€“Squire plume. Journal of Fluid Mechanics, 2017, 826, .	3.4	9
27	Sedimentation equilibrium and the generalized Archimedes' principle. Journal of Chemical Physics, 2013, 138, 114907.	3.0	8
28	Localization in Flow of Non-Newtonian Fluids Through Disordered Porous Media. Frontiers in Physics, 2021, 9, .	2.1	7
29	Sequential capillarity-assisted particle assembly in a microfluidic channel. Lab on A Chip, 2021, 21, 888-895.	6.0	6
30	An interdisciplinary and application-oriented approach to teach microfluidics. Biomicrofluidics, 2021, 15, 014104.	2.4	3
31	Patterning of Microorganisms and Microparticles through Sequential Capillarity-assisted Assembly. Journal of Visualized Experiments, 2021, , .	0.3	0
32	Transport of Pseudomonas aeruginosa in Polymer Solutions. Frontiers in Physics, 0, 10, .	2.1	0