David Seveno

List of Publications by Year in descending order

72 papers	2,060 citations	218677 26 h-index	276875 41 g-index
74 all docs	74 docs citations	74 times ranked	1969 citing authors

#	Article	IF	Citations
1	A Molecular Dynamics Simulation of Capillary Imbibition. Langmuir, 2002, 18, 7971-7976.	3.5	180
2	Carbon and carbon composites for thermoelectric applications. , 2020, 2, 408-436.		141
3	Dynamics of Wetting Revisited. Langmuir, 2009, 25, 13034-13044.	3.5	90
4	Youngâ€™s Equation at the Nanoscale. Physical Review Letters, 2013, 111, 096101.	7.8	80
5	Wettability of a Single Carbon Fiber. Langmuir, 2016, 32, 9697-9705.	3.5	73
6	Wettability and Interfacial Properties of Carbon Fiber and Poly(ether ether ketone) Fiber Hybrid Composite. ACS Applied Materials & Interfaces, 2019, 11, 31520-31531.	8.0	69
7	Experimental Evidence of the Role of Viscosity in the Molecular Kinetic Theory of Dynamic Wetting. Langmuir, 2011, 27, 13015-13021.	3.5	68
8	Synergistically Boosting Thermoelectric Performance of PEDOT:PSS/SWCNT Composites via the Ion-Exchange Effect and Promoting SWCNT Dispersion by the Ionic Liquid. ACS Applied Materials & Interfaces, 2021, 13, 12131-12140.	8.0	65
9	Experimental Investigation of the Link between Static and Dynamic Wetting by Forced Wetting of Nylon Filament. Langmuir, 2007, 23, 10628-10634.	3.5	61
10	The possibility of different time scales in the dynamics of pore imbibition. Journal of Colloid and Interface Science, 2004, 270, 171-179.	9.4	57
11	Superhydrophobic Surfaces from Various Polypropylenes. Langmuir, 2008, 24, 9508-9514.	3.5	50
12	Elastic aerogel thermoelectric generator with vertical temperature-difference architecture and compression-induced power enhancement. Nano Energy, 2021, 90, 106577.	16.0	50
13	Mechanically Robust and Flexible Films of Ionic Liquidâ€Modulated Polymer Thermoelectric Composites. Advanced Functional Materials, 2021, 31, 2104836.	14.9	48
14	Wettability of carbon nanotube fibers. Carbon, 2017, 122, 128-140.	10.3	45
15	Superhydrophobic Aluminum Surfaces by Deposition of Micelles of Fluorinated Block Copolymers. Langmuir, 2010, 26, 2057-2067.	3.5	42
16	Nonreactive spreading at high temperature: Molten metals and oxides on molybdenum. Physical Review E, 2007, 76, 041602.	2.1	41
17	Cellulose-hemicellulose interactions - A nanoscale view. Carbohydrate Polymers, 2021, 270, 118364.	10.2	41
18	Predicting the Wetting Dynamics of a Two-Liquid System. Langmuir, 2011, 27, 14958-14967.	3.5	40

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19	Drop Impact on Soft Surfaces: Beyond the Static Contact Angles. Langmuir, 2010, 26, 4873-4879.	3.5	38
20	Wettability of carbon fibres at micro- and mesoscales. Carbon, 2017, 120, 438-446.	10.3	37
21	A novel method for producing solid polymer microneedles using laser ablated moulds in an injection moulding process. Manufacturing Letters, 2020, 24, 29-32.	2.2	37
22	Spreading Drop Dynamics on Porous Surfaces. Langmuir, 2002, 18, 7496-7502.	3.5	35
23	Wetting and swelling property modifications of elementary flax fibres and their effects on the Liquid Composite Molding process. Composites Part A: Applied Science and Manufacturing, 2017, 97, 31-40.	7.6	34
24	Spreading Dynamics of Molten Polymer Drops on Glass Substrates. Langmuir, 2017, 33, 8447-8454.	3.5	33
25	Liquid Coating of Moving Fiber at the Nanoscale. Langmuir, 2004, 20, 8385-8390.	3.5	32
26	Can We Predict the Spreading of a Two-Liquid System from the Spreading of the Corresponding Liquidâ€“Air Systems?. Langmuir, 2011, 27, 9866-9872.	3.5	30
27	Dynamics of the Rise around a Fiber: Experimental Evidence of the Existence of Several Time Scales. Langmuir, 2005, 21, 9584-9590.	3.5	27
28	Flexible and Foldable Films of SWCNT Thermoelectric Composites and an S-Shape Thermoelectric Generator with a Vertical Temperature Gradient. ACS Applied Materials & Interfaces, 2022, 14, 5973-5982.	8.0	26
29	Optimized synthesis of ambient pressure dried thermal insulating silica aerogel powder from non-ion exchanged water glass. Journal of Non-Crystalline Solids, 2018, 499, 217-226.	3.1	24
30	Unraveling the nano-structure of a glassy CaO-FeO-SiO2 slag by molecular dynamics simulations. Journal of Non-Crystalline Solids, 2020, 528, 119771.	3.1	23
31	Carbon Nanotube Fibers Decorated with MnO2 for Wire-Shaped Supercapacitor. Molecules, 2021, 26, 3479.	3.8	23
32	Possibility of Different Time Scales in the Capillary Rise around a Fiber. Langmuir, 2004, 20, 737-742.	3.5	22
33	Toward improved trade-off between thermoelectric and mechanical performances in polycarbonate/single-walled carbon nanotube composite films. Npj Flexible Electronics, 2020, 4, .	10.7	22
34	Weakening effect of nickel catalyst particles on the mechanical strength of the carbon nanotube/carbon fiber junction. Carbon, 2017, 115, 589-599.	10.3	21
35	Preparation of poly(butylene adipate-co-terephthalate)/ZnSnO3 composites with enhanced antimicrobial activity. Composites Communications, 2020, 22, 100469.	6.3	21
36	Interdiffusion of thermoplastics and epoxy resin precursors: investigations using experimental and molecular dynamics methods. Polymer International, 2012, 61, 1263-1271.	3.1	19

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37	Wetting behaviour of Cu based alloys on spinel substrates in pyrometallurgical context. Materials Science and Technology, 2015, 31, 1925-1933.	1.6	18
38	Wetting Dynamics of Drop Spreading. New Evidence for the Microscopic Validity of the Molecular-Kinetic Theory. Langmuir, 2010, 26, 14642-14647.	3.5	17
39	Predicting the adhesion strength of thermoplastic/glass interfaces from wetting measurements. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2018, 558, 280-290.	4.7	17
40	Tensile behaviour of dislocated/crystalline cellulose fibrils at the nano scale. Carbohydrate Polymers, 2020, 235, 115946.	10.2	16
41	Wetting dynamics of polydimethylsiloxane mixtures on a poly(ethylene terephthalate) fiber. Journal of Colloid and Interface Science, 2018, 525, 243-250.	9.4	15
42	Recrystallization and size distribution of dislocated segments in cellulose microfibrilsâ€”a molecular dynamics perspective. Cellulose, 2021, 28, 6007.	4.9	15
43	Do Nickel and Iron catalyst nanoparticles affect the mechanical strength of carbon nanotubes?. Extreme Mechanics Letters, 2018, 20, 29-37.	4.1	14
44	Wetting dynamics and surface energy components of single carbon fibers. Journal of Colloid and Interface Science, 2019, 557, 349-356.	9.4	14
45	Decoupling the trade-off between thermoelectric and mechanical performances for polymer composites via interfacial regulation. Composites Science and Technology, 2022, 222, 109373.	7.8	14
46	Wetting measurements as a tool to predict the thermoplastic/thermoset rubber compatibility in twoâ€component injection molding. Journal of Applied Polymer Science, 2018, 135, 46046.	2.6	13
47	Capillary rise of polydimethylsiloxane around a poly(ethylene terephthalate) fiber versus viscosity: Existence of a sharp transition in the dynamic wetting behavior. Journal of Colloid and Interface Science, 2019, 536, 499-506.	9.4	13
48	Wettability of carbon nanotube-grafted carbon fibers and their interfacial properties in polypropylene thermoplastic composite. Composites Part A: Applied Science and Manufacturing, 2022, 159, 106993.	7.6	13
49	Inverse rule of mixtures at the nanoscale: Prediction of elastic properties of cellulose nanofibrils. Composites Part A: Applied Science and Manufacturing, 2020, 138, 106046.	7.6	12
50	Multi-phase field simulation of Al<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline" id="d1e1157" altimg="si16.svg"><mml:msub><mml:mrow /><mml:mrow><mml:mn>3</mml:mn></mml:mrow></mml:msub></mml:math>Ni<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline" id="d1e1165" altimg="si17.svg"><mml:msub><mml:mrow /><mml:mrow><mml:mn>2</mml:mn></mml:mrow></mml:msub></mml:math> intermetallic growth at li	6.7	12
51	Comparative study of a cubic, Kelvin and Weaire-Phelan unit cell for the prediction of the thermal conductivity of low density silica aerogels. Microporous and Mesoporous Materials, 2020, 301, 110206.	4.4	11
52	Does Thermal Percolation Exist in Graphene-Reinforced Polymer Composites? A Molecular Dynamics Answer. Journal of Physical Chemistry C, 2021, 125, 1018-1028.	3.1	10
53	Controlling the geometry of laser ablated microneedle cavities in different mould materials and assessing the replication fidelity within polymer injection moulding. Journal of Manufacturing Processes, 2021, 62, 535-545.	5.9	10
54	Producing Hollow Polymer Microneedles Using Laser Ablated Molds in an Injection Molding Process. Journal of Micro and Nano-Manufacturing, 2021, 9, .	0.7	8

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55	Contact line stick-slip motion and meniscus evolution on micrometer-size wavy fibres. Journal of Colloid and Interface Science, 2019, 540, 544-553.	9.4	7
56	Self-Assembly of Hybrid Nanorods for Enhanced Volumetric Performance of Nanoparticles in Li-Ion Batteries. Nano Letters, 2019, 19, 228-234.	9.1	7
57	Effect of coâ€agents on adhesion between peroxide cured ethyleneâ€“propyleneâ€“diene monomer and thermoplastics in twoâ€component injection molding. Journal of Applied Polymer Science, 2020, 137, 48414.	2.6	7
58	Surface tension of aluminum-oxygen system: A molecular dynamics study. Acta Materialia, 2021, 221, 117430.	7.9	7
59	Molecular Dynamics Simulations of Polyamide-6 Composite with Covalently Bonded Graphene Network for Thermal Conductivity Enhancement. ACS Applied Nano Materials, 2021, 4, 10799-10809.	5.0	6
60	Study of the interfacial reactions controlling the spreading of Al on Ni. Applied Surface Science, 2022, 571, 151272.	6.1	6
61	Reactive wetting of polyethylene on ethylene-propylene-diene terpolymer. Colloids and Interface Science Communications, 2021, 40, 100343.	4.1	5
62	Multiscale modeling and maximizing the thermal conductivity of Polyamide-6 reinforced by highly entangled graphene flakes. Composites Part A: Applied Science and Manufacturing, 2021, 151, 106632.	7.6	5
63	Adhesion between ethyleneâ€propyleneâ€diene monomer and thermoplastics in twoâ€component injection molding: Effect of dicumylperoxide as curing agent. Journal of Applied Polymer Science, 2020, 137, 49233.	2.6	4
64	Cellulose Nanocrystals: Tensile Strength and Failure Mechanisms Revealed Using Reactive Molecular Dynamics. Biomacromolecules, 2022, 23, 2243-2254.	5.4	4
65	Predicting the replication fidelity of injection molded solid polymer microneedles. International Polymer Processing, 2022, .	0.5	3
66	First steps in composite materials for schoolchildren: A STEM educational project. Composites Part A: Applied Science and Manufacturing, 2018, 109, 298-302.	7.6	2
67	Numerical mesh generation tool for thermal conductivity simulations of nanoparticle filled inorganic plates. Polymer Engineering and Science, 2018, 58, 568-585.	3.1	2
68	Flexible films of tourmaline thermoelectric composite via acid treatment and embedding single-walled carbon nanotubes. Composites Communications, 2022, 34, 101240.	6.3	2
69	Microfluidics and wetting. , 2003, , 1128-1130.		0
70	Using a Lubrication Test Bench for Testing New Oil Quality Sensors. , 2013, , .		0
71	Thermal modelling of normal distributed nanoparticles through thickness in an inorganic material matrix. AIP Conference Proceedings, 2017, , .	0.4	0
72	Wettability assisted selective deposition of polystyrene nanoparticles on glass fibers. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2018, 555, 440-447.	4.7	0