Sophie Barrau

List of Publications by Year
in descending order

37 papers	2,414 citations	331538 21 h-index	345118 36 g-index
37 all docs	37 docs citations	37 times ranked	3696 citing authors

#	Article	IF	Citations
1	DC and AC Conductivity of Carbon Nanotubesâ˜Polyepoxy Composites. Macromolecules, 2003, 36, 5187-5194.	2.2	557
2	Crystallization Behavior of Carbon Nanotubeâ˜Polylactide Nanocomposites. Macromolecules, 2011, 44, 6496-6502.	2.2	197
3	Effect of Palmitic Acid on the Electrical Conductivity of Carbon Nanotubesâ˜Epoxy Resin Composites. Macromolecules, 2003, 36, 9678-9680.	2.2	176
4	Inverted and transparent polymer solar cells prepared with vacuum-free processing. Solar Energy Materials and Solar Cells, 2009, 93, 497-500.	3.0	148
5	Designing Multiple-Shape Memory Polymers with Miscible Polymer Blends: Evidence and Origins of a Triple-Shape Memory Effect for Miscible PLLA/PMMA Blends. Macromolecules, 2014, 47, 6791-6803.	2.2	147
6	Investigation on polymer anode design for flexible polymer solar cells. Applied Physics Letters, 2008, 92, 233308.	1.5	142
7	High photovoltage achieved in low band gap polymer solar cells by adjusting energy levels of a polymer with the LUMOs of fullerene derivatives. Journal of Materials Chemistry, 2008, 18, 5468.	6.7	137
8	Synthesis, Characterization, and Devices of a Series of Alternating Copolymers for Solar Cells. Chemistry of Materials, 2009, 21, 3491-3502.	3.2	118
9	Self-Assembling of Novel Fullerene-Grafted Donorâ€“Acceptor Rodâ˜Coil Block Copolymers. Macromolecules, 2008, 41, 2701-2710.	2.2	113
10	Glass Transition Temperature Depression at the Percolation Threshold in Carbon Nanotube-Epoxy Resin and Polypyrrole-Epoxy Resin Composites. Macromolecular Rapid Communications, 2005, 26, 390-394.	2.0	87
11	Nanoscale Investigations of Î±- and Î³-Crystal Phases in PVDF-Based Nanocomposites. ACS Applied Materials & Interfaces, 2018, 10, 13092-13099.	4.0	87
12	Novel Brush-Type Copolymers Bearing Thiophene Backbone and Side Chain Quinoline Blocks. Synthesis and Their Use as a Compatibilizer in Thiopheneâ˜Quinoline Polymer Blends. Macromolecules, 2007, 40, 921-927.	2.2	64
13	Nanomorphology of Bulk Heterojunction Organic Solar Cells in 2D and 3D Correlated to Photovoltaic Performance. Macromolecules, 2009, 42, 4646-4650.	2.2	45
14	Integration of amyloid nanowires in organic solar cells. Applied Physics Letters, 2008, 93, 023307.	1.5	44
15	Shape-Memory Behavior of Polylactide/Silica Ionic Hybrids. Macromolecules, 2017, 50, 2896-2905.	2.2	43
16	In situ SAXS/WAXS investigation of the structural evolution of poly(vinylidene fluoride) upon uniaxial stretching. Polymer, 2016, 84, 148-157.	1.8	39
17	Impact of carbon nanotube prelocalization on the ultra-low electrical percolation threshold and on the mechanical behavior of sintered UHMWPE-based nanocomposites. Polymer, 2017, 111, 204-213.	1.8	38
18	Influence of nitrodopamine-functionalized barium titanate content on the piezoelectric response of poly(vinylidene fluoride) based polymer-ceramic composites. Composites Science and Technology, 2017, 147, 16-21.	3.8	38

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19	Spectroscopic detection of carbon nanotube interaction with amphiphilic molecules in epoxy resin composites. Journal of Applied Physics, 2005, 97, 034303.	1.1	26
20	Probing the local piezoelectric behavior in stretched barium titanate/poly(vinylidene fluoride) nanocomposites. Composites Science and Technology, 2020, 186, 107914.	3.8	22
21	On the Nanoscale Mapping of the Mechanical and Piezoelectric Properties of Poly (L-Lactic Acid) Electrospun Nanofibers. Applied Sciences (Switzerland), 2020, 10, 652.	1.3	22
22	Fire retardant solâ€“gel coatings for flexible polyurethane foams. RSC Advances, 2016, 6, 28543-28554.	1.7	19
23	Similarities in the Raman RBM and D bands in double-wall carbon nanotubes. Physical Review B, 2005, 72, .	1.1	13
24	Mechanistic insights on ultra-tough polylactide-based ionic nanocomposites. Composites Science and Technology, 2020, 191, 108075.	3.8	13
25	Solvent-Free Design of Biobased Non-isocyanate Polyurethanes with Ferroelectric Properties. ACS Sustainable Chemistry and Engineering, 2021, 9, 14946-14958.	3.2	11
26	Excited-State Dynamics of Dithienylethenes Functionalized for Self-Supramolecular Assembly. Journal of Physical Chemistry A, 2018, 122, 3572-3582.	1.1	10
27	Thermally reversible crosslinked copolymers: Solution and bulk behavior. Polymer, 2017, 117, 342-353.	1.8	8
28	Thermoelectric properties of bulk multi-walled carbon nanotube - poly(vinylidene fluoride) nanocomposites: Study of the structure/property relationships. Synthetic Metals, 2020, 269, 116525.	2.1	8
29	Synthesis of lead-free (Bi_{0,5}Na_{0,5})TiO₃ thin film by RF magnetron sputtering: Impact of Na on the properties of film. Ferroelectrics, 2020, 556, 79-86.	0.3	8
30	In-situ SAXS/WAXS investigations of ureidopyrimidinone functionalized semi-crystalline poly(ethylene-co-butylene) supramolecular polymers. Polymer, 2021, 228, 123875.	1.8	8
31	Cathodic electropolymerization on the surface of carbon nanotubes. Journal of Electroanalytical Chemistry, 2006, 589, 46-51.	1.9	7
32	Mastering Superior Performance Origins of Ionic Polyurethane/Silica Hybrids. ACS Applied Polymer Materials, 2021, 3, 6684-6693.	2.0	6
33	Formulation of eco-friendly solâ€“gel coatings to flame-retard flexible polyurethane foam. Green Materials, 2020, 8, 139-149.	1.1	5
34	RAFT polymerisation of trifluoroethylene: the importance of understanding reverse additions. Polymer Chemistry, 2021, 12, 2271-2281.	1.9	5
35	Influence of photooxidation on ionic reversible interactions of ionic poly(ether urethane)/silica hybrids. Polymer Degradation and Stability, 2022, 197, 109872.	2.7	2
36	Laser Induced Modifications of Carbon Nanotube Composite Surfaces. Japanese Journal of Applied Physics, 2006, 45, 7776-7779.	0.8	1

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37	Physical properties of CNTs-polyepoxy nanocomposites. Influence of CNTs surface treatments. Revue Internationale De GÃ©nie Ã©lectrique, 2009, 12, 423-431.	0.0	0