Jean FranÃ§ois Feller

List of Publications by Year
in descending order

104	3,965	76196	128067
papers	citations	40 h-index	60 g-index

105	105	105	4376
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Carbon nanotubes/poly(Îµ-caprolactone) composite vapour sensors. Carbon, 2009, 47, 1930-1942.	5.4	157
2	Poly(lactic acid)â€“multi-wall carbon nanotube conductive biopolymer nanocomposite vapour sensors. Sensors and Actuators B: Chemical, 2012, 161, 621-628.	4.0	127
3	Conductive Polymer nano-bioComposites (CPC): Chitosan-carbon nanoparticle a good candidate to design polar vapour sensors. Sensors and Actuators B: Chemical, 2009, 138, 138-147.	4.0	115
4	Graphene quantum resistive sensing skin for the detection of alteration biomarkers. Journal of Materials Chemistry, 2012, 22, 21754.	6.7	115
5	An e-nose made of carbon nanotube based quantum resistive sensors for the detection of eighteen polar/nonpolar VOC biomarkers of lung cancer. Journal of Materials Chemistry B, 2013, 1, 4563.	2.9	115
6	Development of poly(isobutylene-co-isoprene)/reduced graphene oxide nanocomposites for barrier, dielectric and sensingapplications. Materials Letters, 2013, 96, 109-112.	1.3	110
7	Novel e-nose for the discrimination of volatile organic biomarkers with an array of carbon nanotubes (CNT) conductive polymer nanocomposites (CPC) sensors. Sensors and Actuators B: Chemical, 2011, 159, 213-219.	4.0	103
8	Conductive bio-Polymer nano-Composites (CPC): Chitosan-carbon nanotube transducers assembled via spray layer-by-layer for volatile organic compound sensing. Talanta, 2010, 81, 908-915.	2.9	101
9	Graphene Oxide-Assisted Liquid Phase Exfoliation of Graphite into Graphene for Highly Conductive Film and Electromechanical Sensors. ACS Applied Materials & Interfaces, 2016, 8, 16521-16532.	4.0	98
10	Graphene and metal organic frameworks (MOFs) hybridization for tunable chemoresistive sensors for detection of volatile organic compounds (VOCs) biomarkers. Carbon, 2020, 159, 333-344.	5.4	97
11	Conductive polymer composites: comparative study of poly(ester)-short carbon fibres and poly(epoxy)-short carbon fibres mechanical and electrical properties. Materials Letters, 2002, 57, 64-71.	1.3	89
12	Thermoelectric behaviour of melt processed carbon nanotube/graphite/poly(lactic acid) conductive biopolymer nanocomposites (CPC). Materials Letters, 2012, 67, 210-214.	1.3	88
13	Poly(lactic acid)/carbon nanotube nanocomposites with integrated degradation sensing. Polymer, 2013, 54, 6818-6823.	1.8	88
14	Influence of clay nanofiller on electrical and rheological properties of conductive polymer composite. Materials Letters, 2004, 58, 739-745.	1.3	87
15	Enhancing the sensitivity of graphene/polyurethane nanocomposite flexible piezo-resistive pressure sensors with magnetite nano-spacers. Carbon, 2016, 108, 450-460.	5.4	87
16	Evolution of electrical properties of some conductive polymer composite textiles with organic solvent vapours diffusion. Sensors and Actuators B: Chemical, 2004, 97, 231-242.	4.0	84
17	Vapour sensing with conductive polymer nanocomposites (CPC): Polycarbonate-carbon nanotubes transducers with hierarchical structure processed by spray layer by layer. Sensors and Actuators B: Chemical, 2009, 140, 451-460.	4.0	82
18	Thermal conductivity enhancement of electrically insulating syndiotactic poly(styrene) matrix for diphasic conductive polymer composites. Polymers for Advanced Technologies, 2006, 17, 732-745.	1.6	76

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19	Non-intrusive health monitoring of infused composites with embedded carbon quantum piezo-resistive sensors. Composites Science and Technology, 2016, 123, 286-294.	3.8	71
20	Electromagnetic properties of Fe₃O₄â€functionalized graphene and its composites with a conducting polymer. Journal of Polymer Science Part A, 2012, 50, 927-935.	2.5	70
21	Novel architecture of carbon nanotube decorated poly(methyl methacrylate) microbead vapour sensors assembled by spray layer by layer. Journal of Materials Chemistry, 2011, 21, 4142.	6.7	67
22	Sensing Skin for Strain Monitoring Made of PCâ€“CNT Conductive Polymer Nanocomposite Sprayed Layer by Layer. ACS Applied Materials & Interfaces, 2012, 4, 3508-3516.	4.0	65
23	Engineering of graphene/epoxy nanocomposites with improved distribution of graphene nanosheets for advanced piezo-resistive mechanical sensing. Journal of Materials Chemistry C, 2016, 4, 3422-3430.	2.7	62
24	Measuring water diffusion in polymer films on the substrate by internal reflection fourier transform infrared spectroscopy. Journal of Applied Polymer Science, 1997, 66, 2465-2473.	1.3	61
25	Grapheneâ€“Fe3O4/PILâ€“PEDOT for the design of sensitive and stable quantum chemo-resistive VOC sensors. Carbon, 2014, 74, 104-112.	5.4	59
26	Conductive polymer composites (CPCs): comparison of electrical properties of poly(ethylene-co-ethyl) Tj ETQq0 0 0 rgBT /Overlock 10 T black. Polymers for Advanced Technologies, 2002, 13, 714-724.	1.6	58
27	Tribological response of an epoxy matrix filled with graphite and/or carbon nanotubes. Friction, 2017, 5, 171-182.	3.4	57
28	Hybrid Films of Graphene and Carbon Nanotubes for High Performance Chemical and Temperature Sensing Applications. Small, 2015, 11, 3485-3493.	5.2	54
29	Tailoring selectivity of sprayed carbon nanotube sensors (CNT) towards volatile organic compounds (VOC) with surfactants. Sensors and Actuators B: Chemical, 2015, 220, 840-849.	4.0	52
30	Controlled conductive junction gap for chitosanâ€“carbon nanotube quantum resistive vapour sensors. Journal of Materials Chemistry, 2012, 22, 10656.	6.7	50
31	High stability silver nanoparticlesâ€“graphene/poly(ionic liquid)-based chemoresistive sensors for volatile organic compoundsâ€™ detection. Analytical and Bioanalytical Chemistry, 2014, 406, 3995-4004.	1.9	50
32	Electrical response of Poly(styrene)/carbon black conductive polymer composites (CPC) to methanol, toluene, chloroform and styrene vapors as a function of filler nature and matrix tacticity. Synthetic Metals, 2005, 154, 193-196.	2.1	49
33	Ultrasensitive QRS made by supramolecular assembly of functionalized cyclodextrins and graphene for the detection of lung cancer VOC biomarkers. Journal of Materials Chemistry B, 2014, 2, 6571-6579.	2.9	48
34	Fine control of carbon nanotubesâ€“polyelectrolyte sensors sensitivity by electrostatic layer by layer assembly (eLbL) for the detection of volatile organic compounds (VOC). Talanta, 2012, 88, 396-402.	2.9	47
35	Influence of processing conditions on sensitivity of conductive polymer composites to organic solvent vapours. Synthetic Metals, 2004, 144, 81-88.	2.1	46
36	Conductive polymer composites with double percolated architecture of carbon nanoparticles and ceramic microparticles for high heat dissipation and sharp PTC switching. Smart Materials and Structures, 2008, 17, 025011.	1.8	46

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37	Polyaniline nanoparticleâ€“carbon nanotube hybrid network vapour sensors with switchable chemo-electrical polarity. Nanotechnology, 2010, 21, 255501.	1.3	46
38	Conductive polymer composites obtained from recycled poly(carbonate) and rubber blends for heating and sensing applications. Polymers for Advanced Technologies, 2006, 17, 727-731.	1.6	45
39	Conductive polymer composites: Influence of extrusion conditions on positive temperature coefficient effect of poly(butylene terephthalate)/poly(olefin)-carbon black blends. Journal of Applied Polymer Science, 2004, 91, 2151-2157.	1.3	44
40	Spray layer-by-layer assembly of POSS functionalized CNT quantum chemo-resistive sensors with tuneable selectivity and ppm resolution to VOC biomarkers. Sensors and Actuators B: Chemical, 2016, 222, 362-373.	4.0	42
41	Green carbon nanostructured quantum resistive sensors to detect volatile biomarkers. Sustainable Materials and Technologies, 2018, 16, 1-11.	1.7	40
42	Tailoring the chemo-resistive response of self-assembled polysaccharide-CNT sensors by chain conformation at tunnel junctions. Carbon, 2012, 50, 3627-3634.	5.4	38
43	Flax fibers â€“ epoxy with embedded nanocomposite sensors to design lightweight smart bio-composites. Nanocomposites, 2016, 2, 125-134.	2.2	37
44	Rectangularâ€shaped Polyaniline Tubes Covered with Nanorods and their Electrorheology. Macromolecular Chemistry and Physics, 2011, 212, 2300-2307.	1.1	36
45	Chemo-sensitivity of latex-based films containing segregated networks of carbon nanotubes. Sensors and Actuators B: Chemical, 2011, 155, 28-36.	4.0	36
46	Characterization of electrical and thermal properties of extruded tapes of thermoplastic conductive polymer composites (CPC). Polymer Testing, 2003, 22, 831-837.	2.3	33
47	Coupling ability of silane grafted poly(propene) at glass fibers/poly(propene) interface. Composites Part A: Applied Science and Manufacturing, 2004, 35, 1-10.	3.8	33
48	Hybrid film of chemically modified graphene and vapor-phase-polymerized PEDOT for electronic nose applications. Organic Electronics, 2013, 14, 2789-2794.	1.4	32
49	Crossed investigation of damage in composites with embedded quantum resistive strain sensors (sQRS), acoustic emission (AE) and digital image correlation (DIC). Composites Science and Technology, 2018, 160, 79-85.	3.8	32
50	Flexible latexâ€”polyaniline segregated network composite coating capable of measuring large strain on epoxy. Smart Materials and Structures, 2013, 22, 015008.	1.8	31
51	Sulfonated poly(ether ether ketone) [SPEEK] nanocomposites based on hybrid nanocarbons for the detection and discrimination of some lung cancer VOC biomarkers. Journal of Materials Chemistry B, 2017, 5, 348-359.	2.9	31
52	Rheological and calorimetric properties of recycled bisphenol A poly(carbonate). Polymer Degradation and Stability, 2003, 82, 99-104.	2.7	29
53	3D sprayed polyurethane functionalized graphene / carbon nanotubes hybrid architectures to enhance the piezo-resistive response of quantum resistive pressure sensors. Carbon, 2020, 168, 564-579.	5.4	28
54	Poly(butylene terephthalate)/ poly(ethylene-co-alkyl acrylate)/ carbon black conductive composites: Influence of composition and morphology on electrical properties. Polymer Engineering and Science, 2001, 41, 1124-1132.	1.5	27

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55	Selectivity of Chemoresistive Sensors Made of Chemically Functionalized Carbon Nanotube Random Networks for Volatile Organic Compounds (VOC). Chemosensors, 2014, 2, 26-40.	1.8	27
56	Upgrading of diesel engine exhaust waste into onion-like carbon nanoparticles for integrated degradation sensing in nano-biocomposites. New Journal of Chemistry, 2021, 45, 3675-3682.	1.4	26
57	Crystallization kinetics of poly(butylene terephthalate) (PBT): Influence of additives and free carboxylic acid chain ends. Polymer Engineering and Science, 2001, 41, 178-191.	1.5	25
58	Conductive polymer composites: Electrical, thermal, and rheological study of injected isotactic poly(propylene)/long stainless-steel fibers for electromagnetic interferences shielding. Journal of Applied Polymer Science, 2006, 100, 3280-3287.	1.3	25
59	Starch Modification, Destructuration and Hydrolysis duringO-Formylation. Starch/Staerke, 2004, 56, 389-398.	1.1	20
60	Simulation of Electrical and Thermal Behavior of Conductive Polymer Composites Heating Elements. Journal of Thermophysics and Heat Transfer, 2005, 19, 375-381.	0.9	20
61	Smart Poly(styrene)/Carbon Black Conductive Polymer Composites Films for Styrene Vapour Sensing. Macromolecular Symposia, 2005, 222, 273-280.	0.4	20
62	Carbon black-filled poly(ethylene-co-alkyl acrylate) composites: Calorimetric studies. Journal of Applied Polymer Science, 2001, 79, 779-793.	1.3	19
63	Conductive polymer composites(CPC): influence of processing conditions, shear rate and temperature on electrical properties of poly(butylene terephthalate)/poly(amide12-b-tetramethyleneglycol)â€“ carbon black blends. Macromolecular Symposia, 2003, 203, 309-316.	0.4	18
64	Chemical Sensors Based on New Polyamides Biobased on (Z) Octadecâ€9â€Enedioic Acid and Î²â€Cyclodextrin. Macromolecular Chemistry and Physics, 2016, 217, 1620-1628.	1.1	18
65	Thermophysical and Radiative Properties of Conductive Biopolymer Composite. Materials Science Forum, 0, 714, 115-122.	0.3	17
66	Rheological properties of silica dispersions stabilized by stereoregular poly(methyl methacrylate). Journal of Colloid and Interface Science, 2004, 272, 218-224.	5.0	16
67	Current passage tubes in conductive polymer composite for fluid heating. Energy Conversion and Management, 2008, 49, 493-505.	4.4	15
68	Robustness of carbon nanotube-based sensor to probe composites' interfacial damage in situ. Journal of Composite Materials, 2016, 50, 109-113.	1.2	15
69	Silane-Grafted Isotactic Polypropylene Used as a Coupling Agent on Glass. Consequences on The Interfacial Adhesion. Journal of Adhesion, 1996, 58, 299-313.	1.8	13
70	Elaboration and Characterization of Starch/ Poly(caprolactone) Blends. Macromolecular Symposia, 2005, 222, 233-238.	0.4	13
71	Ecoâ€friendly conductive polymer nanocomposites (CPC) for solar absorbers design. Polymers for Advanced Technologies, 2013, 24, 638-645.	1.6	13
72	Simple technique for the simultaneous determination of solvent diffusion coefficient in polymer by Quantum Resistive Sensors and FTâ€IR spectroscopy. Polymers for Advanced Technologies, 2013, 24, 487-494.	1.6	12

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73	vQRS Based on Hybrids of CNT with PMMA-POSS and PS-POSS Copolymers to Reach the Sub-PPM Detection of Ammonia and Formaldehyde at Room Temperature Despite Moisture. Chemosensors, 2017, 5, 22.	1.8	12
74	Influence of Water Molecules on the Detection of Volatile Organic Compounds (VOC) Cancer Biomarkers by Nanocomposite Quantum Resistive Vapor Sensors vQRS. Chemosensors, 2018, 6, 64.	1.8	12
75	Influence of Carbon-Black Nanoparticles on Poly(butylene terephthalate) Fractionated Crystallization in Bicomponent Poly(butylene terephthalate)/Poly[ethylene-co-(ethyl acrylate)] Blends. Macromolecular Materials and Engineering, 2006, 291, 1375-1387.	1.7	11
76	Ecoâ€plastics: Morphological and mechanical properties of recycled poly(carbonate)â€crushed rubber (rPCâ€CR) blends. Polymer Engineering and Science, 2007, 47, 1768-1776.	1.5	11
77	Coupling agents for polypropylene/glass fiber composites: synthesis of functionalized isotactic polypropene and crystallization. Composite Interfaces, 1995, 3, 121-134.	1.3	10
78	Multifunctional Carbon Nanotubes Enhanced Structural Composites with Improved Toughness and Damage Monitoring. Journal of Composites Science, 2019, 3, 109.	1.4	10
79	Investigation of the polycarbonate/crushed-rubber-particle interphase by nanoindentation. Journal of Applied Polymer Science, 2007, 103, 2687-2694.	1.3	8
80	Vapor and Pressure Sensors Based on Cellulose Nanofibers and Carbon Nanotubes Aerogel with Thermoelectric Properties. Journal of Renewable Materials, 2017, , .	1.1	8
81	A Review of Nanocarbon-Based Solutions for the Structural Health Monitoring of Composite Parts Used in Renewable Energies. Journal of Composites Science, 2022, 6, 32.	1.4	8
82	Gas barrier efficiency of clay- and graphene-poly(isobutylene-co-isoprene) nanocomposite membranes evidenced by a quantum resistive vapor sensor cell. Nanocomposites, 2015, 1, 96-105.	2.2	7
83	Interfacial nanocomposite sensors (sQRS) for the core monitoring of polymer compositesâ€™ fatigue and damage analysis. Nanocomposites, 2018, 4, 69-79.	2.2	7
84	Design and study of an electrical liquid heater using conductive polymer composite tubes. Applied Thermal Engineering, 2013, 54, 507-515.	3.0	6
85	Impact and strain monitoring in glass fiber reinforced epoxy laminates with embedded quantum resistive sensors (QRSs). Composites Science and Technology, 2022, 221, 109352.	3.8	5
86	Mechanical and rheological properties of poly(ethylene-co-ethyl acrylate) as a function of carbon black content. Macromolecular Symposia, 2003, 203, 317-324.	0.4	4
87	Simulation of Electrical and Thermal Behavior of Poly(propylene) / Carbon Filler Conductive Polymer Composites. Macromolecular Symposia, 2005, 222, 187-194.	0.4	4
88	Electrothermal Behavior of Conductive Polymer Composite Heating Elements Filled with Ceramic Particles. Journal of Thermophysics and Heat Transfer, 2008, 22, 545-554.	0.9	4
89	Thermo- and chemo-electrical behavior of carbon nanotube filled co-continuous conductive polymer nanocomposites (CPC) to develop amperometric sensors. Materials Research Society Symposia Proceedings, 2008, 1143, 51401.	0.1	4
90	Conductive biopolymer nanocomposites for sensors. , 2011, , 368-399.		4

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91	Electronic noses for VOCs detection based on the nanoparticles hybridized graphene composites. , 2012, , .		4
92	Core-shell nanostructured hybrid composites for volatile organic compound detection. International Journal of Nanomedicine, 2015, 10 Spec Iss, 203.	3.3	4
93	Rheological properties of conductive polymer composite (CPC) filled with double percolated network of carbon nanoparticles and boron nitride powder. E-Polymers, 2009, 9, .	1.3	3
94	6.10 Electrically Conductive Nanocomposites. , 2018, , 248-314.		3
95	Strain Mapping and Damage Tracking in Carbon Fiber Reinforced Epoxy Composites during Dynamic Bending Until Fracture with Quantum Resistive Sensors in Array. Journal of Composites Science, 2021, 5, 60.	1.4	3
96	Boosting Selectivity and Sensitivity to Biomarkers of Quantum Resistive Vapour Sensors Used for Volatolomics with Nanoarchitectured Carbon Nanotubes or Graphene Platelets Connected by Fullerene Junctions. Chemosensors, 2021, 9, 66.	1.8	3
97	An Electronic Nose Prototype for the On-Field Detection of Nerve Agents. , 2018, , .		2
98	Influence of carbon nanotube grafting on chemo-electrical properties of Conductive Polymer nanoComposites. Materials Research Society Symposia Proceedings, 2008, 1143, 20201.	0.1	1
99	Conducting Polymer nanoComposites (CPC): Nanocharacterisation of layer by layer sprayed PMMA-CNT vapour sensors by Atomic force Microscopy in current Sensing Mode (CS-AFM). Materials Research Society Symposia Proceedings, 2008, 1143, 20601.	0.1	1
100	Graphene Filled Polymers for Vapor/Gas Sensor Applications. , 2015, , 253-275.		1
101	A functionalized carbon nanotube based electronic nose for the detection of nerve agents. , 2018, , .		1
102	Conductive eco-polymer composites: wear behaviour of recycled polycarbonate/crushed rubber microparticles. Plastics, Rubber and Composites, 2011, 40, 139-145.	0.9	0
103	Electromagnetic properties of Fe₃O₄â€functionalized graphene and its composites with a conducting polymer. Journal of Polymer Science Part A, 2013, 51, 3767-3767.	2.5	0
104	A Review of In-Service Coating Health Monitoring Technologies: Towards â€œSmartâ€•Neural-Like Networks for Condition-Based Preventive Maintenance. Coatings, 2022, 12, 565.	1.2	0