

Beate Krause

List of Publications by Year in descending order

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101
papers

4,440
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101543

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docs citations

101
times ranked

4058
citing authors

#	ARTICLE	IF	CITATIONS
1	Electrically conductive nanocomposites based on poly(lactic acid)/flexible copolyester blends with multiwalled carbon nanotubes. <i>Journal of Applied Polymer Science</i> , 2022, 139, 51554.	2.6	8
2	Electrically conductive and piezoresistive polymer nanocomposites using multiwalled carbon nanotubes in a flexible copolyester: Spectroscopic, morphological, mechanical and electrical properties. <i>Nano Structures Nano Objects</i> , 2022, 29, 100806.	3.5	14
3	Nonlinear Thermopower Behaviour of N-Type Carbon Nanofibres and Their Melt Mixed Polypropylene Composites. <i>Polymers</i> , 2022, 14, 269.	4.5	5
4	Thermoelectric Performance of Polypropylene/Carbon Nanotube/Ionic Liquid Composites and Its Dependence on Electron Beam Irradiation. <i>Journal of Composites Science</i> , 2022, 6, 25.	3.0	10
5	Distribution of Carbon Nanotubes in Polycarbonate-Based Blends for Electromagnetic Interference Shielding. <i>ACS Applied Nano Materials</i> , 2022, 5, 662-677.	5.0	18
6	Cu _x Co _{1-x} Fe ₂ O ₄ (x = 0.33, 0.67, 1) Spinel Ferrite Nanoparticles Based Thermoplastic Polyurethane Nanocomposites with Reduced Graphene Oxide for Highly Efficient Electromagnetic Interference Shielding. <i>International Journal of Molecular Sciences</i> , 2022, 23, 2610.	4.1	13
7	The effect of branched carbon nanotubes as reinforcing nano-filler in polymer nanocomposites. <i>Composite Structures</i> , 2022, 295, 115794.	5.8	4
8	Three-Dimensional Printed and Biocompatible Conductive Composites Comprised of Polyhydroxybutyrate and Multiwalled Carbon Nanotubes. <i>Industrial & Engineering Chemistry Research</i> , 2021, 60, 885-897.	3.7	12
9	Blend Structure and n-Type Thermoelectric Performance of PA6/SAN and PA6/PMMA Blends Filled with Singlewalled Carbon Nanotubes. <i>Nanomaterials</i> , 2021, 11, 1146.	4.1	9
10	Thermoelectric properties of polypropylene carbon nanofiber melt-mixed composites: exploring the role of polymer on their Seebeck coefficient. <i>Polymer Journal</i> , 2021, 53, 1145-1152.	2.7	7
11	Highly Tunable Piezoresistive Behavior of Carbon Nanotube-Containing Conductive Polymer Blend Composites Prepared from Two Polymers Exhibiting Crystallization-Induced Phase Separation. <i>ACS Applied Materials & Interfaces</i> , 2021, 13, 43333-43347.	8.0	8
12	High-Performance, Lightweight, and Flexible Thermoplastic Polyurethane Nanocomposites with Zn ²⁺ -Substituted CoFe ₂ O ₄ Nanoparticles and Reduced Graphene Oxide as Shielding Materials against Electromagnetic Pollution. <i>ACS Omega</i> , 2021, 6, 28098-28118.	3.5	22
13	Graphite modified epoxy-based adhesive for joining of aluminium and PP/graphite composites. <i>Journal of Adhesion</i> , 2020, 96, 229-252.	3.0	1
14	Surface modification of MWCNT and its influence on properties of paraffin/MWCNT nanocomposites as phase change material. <i>Journal of Applied Polymer Science</i> , 2020, 137, 48428.	2.6	31
15	Mixed Carbon Nanomaterial/Epoxy Resin for Electrically Conductive Adhesives. <i>Journal of Composites Science</i> , 2020, 4, 105.	3.0	5
16	Effect of Filler Synergy and Cast Film Extrusion Parameters on Extrudability and Direction-Dependent Conductivity of PVDF/Carbon Nanotube/Carbon Black Composites. <i>Polymers</i> , 2020, 12, 2992.	4.5	7
17	Lightweight Polymer-Carbon Composite Current Collector for Lithium-Ion Batteries. <i>Batteries</i> , 2020, 6, 60.	4.5	10
18	Nanocomposites with p- and n-Type Conductivity Controlled by Type and Content of Nanotubes in Thermosets for Thermoelectric Applications. <i>Nanomaterials</i> , 2020, 10, 1144.	4.1	6

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19	Does the Type of Polymer and Carbon Nanotube Structure Control the Electromagnetic Shielding in Melt-Mixed Polymer Nanocomposites?. <i>Journal of Composites Science</i> , 2020, 4, 9.	3.0	10
20	Boron Doping of SWCNTs as a Way to Enhance the Thermoelectric Properties of Melt-Mixed Polypropylene/SWCNT Composites. <i>Energies</i> , 2020, 13, 394.	3.1	20
21	The force of MOFs: the potential of switchable metal-organic frameworks as solvent stimulated actuators. <i>Chemical Communications</i> , 2020, 56, 7411-7414.	4.1	15
22	Messanlage zur Untersuchung des Seebeck-Effektes in Polymermaterialien. <i>TM Technisches Messen</i> , 2020, 87, 495-503.	0.7	17
23	Nitrogen-Doped Carbon Nanotube/Polypropylene Composites with Negative Seebeck Coefficient. <i>Journal of Composites Science</i> , 2020, 4, 14.	3.0	22
24	Thermal Conductivity and Electrical Resistivity of Melt-Mixed Polypropylene Composites Containing Mixtures of Carbon-Based Fillers. <i>Polymers</i> , 2019, 11, 1073.	4.5	42
25	Development of joining methods for highly filled graphite/PP composite based bipolar plates for fuel cells: Adhesive joining and welding. <i>AIP Conference Proceedings</i> , 2019, , .	0.4	2
26	Improvement of electrical resistivity of highly filled graphite/PP composite based bipolar plates for fuel cells by addition of carbon black. <i>AIP Conference Proceedings</i> , 2019, , .	0.4	9
27	Sliding Crystals on Low-Dimensional Carbonaceous Nanofillers as Distributed Nanopistons for Highly Damping Materials. <i>ACS Applied Materials & Interfaces</i> , 2019, 11, 38147-38159.	8.0	12
28	Melt mixed composites of polypropylene with singlewalled carbon nanotubes for thermoelectric applications: Switching from p- to n-type behavior by additive addition. <i>AIP Conference Proceedings</i> , 2019, , .	0.4	9
29	Extruded polycarbonate/Di-Allyl phthalate composites with ternary conductive filler system for bipolar plates of polymer electrolyte membrane fuel cells. <i>Smart Materials and Structures</i> , 2019, 28, 064004.	3.5	8
30	Characterization of Highly Filled PP/Graphite Composites for Adhesive Joining in Fuel Cell Applications. <i>Polymers</i> , 2019, 11, 462.	4.5	46
31	Direction Dependent Electrical Conductivity of Polymer/Carbon Filler Composites. <i>Polymers</i> , 2019, 11, 591.	4.5	23
32	Influence of a supplemental filler in twin-screw extruded PP/CNT composites using masterbatch dilution. <i>AIP Conference Proceedings</i> , 2019, , .	0.4	5
33	The Influence of the Blend Ratio in PA6/PA66/MWCNT Blend Composites on the Electrical and Thermal Properties. <i>Polymers</i> , 2019, 11, 122.	4.5	17
34	Melt-Mixed PP/MWCNT Composites: Influence of CNT Incorporation Strategy and Matrix Viscosity on Filler Dispersion and Electrical Resistivity. <i>Polymers</i> , 2019, 11, 189.	4.5	38
35	Screening of Different Carbon Nanotubes in Melt-Mixed Polymer Composites with Different Polymer Matrices for Their Thermoelectrical Properties. <i>Journal of Composites Science</i> , 2019, 3, 106.	3.0	38
36	Hybrid conductive filler/polycarbonate composites with enhanced electrical and thermal conductivities for bipolar plate applications. <i>Polymer Composites</i> , 2019, 40, 3189-3198.	4.6	43

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37	Cellulose-carbon nanotube composite aerogels as novel thermoelectric materials. <i>Composites Science and Technology</i> , 2018, 163, 133-140.	7.8	72
38	Electrical and melt rheological characterization of PC and cocontinuous PC/SAN blends filled with CNTs: Relationship between melt mixing parameters, filler dispersion, and filler aspect ratio. <i>Journal of Polymer Science, Part B: Polymer Physics</i> , 2018, 56, 79-88.	2.1	29
39	Comparative study of singlewalled, multiwalled, and branched carbon nanotubes melt mixed in different thermoplastic matrices. <i>Polymer</i> , 2018, 159, 75-85.	3.8	47
40	Does the Processing Method Resulting in Different States of an Interconnected Network of Multiwalled Carbon Nanotubes in Polymeric Blend Nanocomposites Affect EMI Shielding Properties?. <i>ACS Omega</i> , 2018, 3, 5771-5782.	3.5	58
41	Tuneable Dielectric Properties Derived from Nitrogen-Doped Carbon Nanotubes in PVDF-Based Nanocomposites. <i>ACS Omega</i> , 2018, 3, 9966-9980.	3.5	16
42	Electrically Conductive Polyetheretherketone Nanocomposite Filaments: From Production to Fused Deposition Modeling. <i>Polymers</i> , 2018, 10, 925.	4.5	71
43	Development of electrically conductive microstructures based on polymer/CNT nanocomposites via two-photon polymerization. <i>Microelectronic Engineering</i> , 2017, 179, 48-55.	2.4	28
44	Impact of synthesis temperature on morphology, rheology and electromagnetic interference shielding of CVD-grown carbon nanotube/polyvinylidene fluoride nanocomposites. <i>Synthetic Metals</i> , 2017, 230, 39-50.	3.9	45
45	Polypropylene-based melt mixed composites with singlewalled carbon nanotubes for thermoelectric applications: Switching from p-type to n-type by the addition of polyethylene glycol. <i>Polymer</i> , 2017, 108, 513-520.	3.8	62
46	Graphene Derivatives Doped with Nickel Ferrite Nanoparticles as Excellent Microwave Absorbers in Soft Nanocomposites. <i>ChemistrySelect</i> , 2017, 2, 5984-5999.	1.5	14
47	Polymer - Carbon nanotube composites for thermoelectric applications. <i>AIP Conference Proceedings</i> , 2017, , .	0.4	8
48	An updated micromechanical model based on morphological characterization of carbon nanotube nanocomposites. <i>Composites Part B: Engineering</i> , 2017, 115, 70-78.	12.0	39
49	Effect of additives on MWCNT dispersion and electrical percolation in polyamide 12 composites. <i>AIP Conference Proceedings</i> , 2017, , .	0.4	1
50	Influence of mixing conditions on carbon nanotube shortening and curling in polycarbonate composites. <i>AIP Conference Proceedings</i> , 2017, , .	0.4	3
51	PP/SWCNT composites modified with ionic liquid. <i>AIP Conference Proceedings</i> , 2017, , .	0.4	3
52	Thermal conductivity of hybrid filled HDPE nanocomposites. <i>AIP Conference Proceedings</i> , 2017, , .	0.4	2
53	Impact of synthesis temperature on structure of carbon nanotubes and morphological and electrical characterization of their polymeric nanocomposites. <i>AIP Conference Proceedings</i> , 2017, , .	0.4	2
54	Influence of graphite and SEBS addition on thermal and electrical conductivity and mechanical properties of polypropylene composites. <i>AIP Conference Proceedings</i> , 2017, , .	0.4	7

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55	Development of a polymer composite with high electrical conductivity and improved impact strength for the application as bipolar plate. AIP Conference Proceedings, 2016, , .	0.4	4
56	Electrical and thermal conductivity of polypropylene filled with combinations of carbon fillers. AIP Conference Proceedings, 2016, , .	0.4	14
57	Effects of synthesis catalyst and temperature on broadband dielectric properties of nitrogen-doped carbon nanotube/polyvinylidene fluoride nanocomposites. Carbon, 2016, 106, 260-278.	10.3	99
58	Tuning the Network Structure in Poly(vinylidene fluoride)/Carbon Nanotube Nanocomposites Using Carbon Black: Toward Improvements of Conductivity and Piezoresistive Sensitivity. ACS Applied Materials & Interfaces, 2016, 8, 14190-14199.	8.0	163
59	A promising approach to low electrical percolation threshold in PMMA nanocomposites by using MWCNT-PEO pre-dispersions. Materials and Design, 2016, 111, 253-262.	7.0	23
60	Melt mixed SWCNT-polypropylene composites with very low electrical percolation. Polymer, 2016, 98, 45-50.	3.8	59
61	Effect of synthesis catalyst on structure of nitrogen-doped carbon nanotubes and electrical conductivity and electromagnetic interference shielding of their polymeric nanocomposites. Carbon, 2016, 98, 358-372.	10.3	202
62	Melt-mixed thermoplastic composites containing carbon nanotubes for thermoelectric applications. AIMS Materials Science, 2016, 3, 1107-1116.	1.4	29
63	Nanoporous Cathodes for High-Energy Li ⁺ S Batteries from Gyroid Block Copolymer Templates. ACS Nano, 2015, 9, 6147-6157.	14.6	82
64	Ultralow percolation threshold in polyamide 6.6/MWCNT composites. Composites Science and Technology, 2015, 114, 119-125.	7.8	71
65	Aspect ratio effects of multi-walled carbon nanotubes on electrical, mechanical, and thermal properties of polycarbonate/MWCNT composites. Journal of Polymer Science, Part B: Polymer Physics, 2014, 52, 73-83.	2.1	101
66	Dispersability of multiwalled carbon nanotubes in polycarbonate-chloroform solutions. Polymer, 2014, 55, 6335-6344.	3.8	16
67	Localization of carbon nanotubes in polyamide 6 blends with non-reactive and reactive rubber. Polymer, 2014, 55, 3062-3067.	3.8	14
68	Achieving Electrical Conductive Tracks by Laser Treatment of non-Conductive Polypropylene/Polycarbonate Blends Filled with MWCNTs. Macromolecular Materials and Engineering, 2014, 299, 869-877.	3.6	11
69	Effects of high energy electrons on the properties of polyethylene / multiwalled carbon nanotubes composites: Comparison of as-grown and oxygen-functionalised MWCNT. , 2014, , .		1
70	Improvement of carbon nanotube dispersion in thermoplastic composites using a three roll mill at elevated temperatures. Composites Science and Technology, 2013, 74, 78-84.	7.8	43
71	Interfacial chemistry using a bifunctional coupling agent for enhanced electrical properties of carbon nanotube based composites. Polymer, 2013, 54, 5391-5398.	3.8	3
72	Influence of talc with different particle sizes in melt-mixed LLDPE/MWCNT composites. Journal of Polymer Science, Part B: Polymer Physics, 2013, 51, 1680-1691.	2.1	16

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73	Melt mixed PCL/MWCNT composites prepared at different rotation speeds: Characterization of rheological, thermal, and electrical properties, molecular weight, MWCNT macrodispersion, and MWCNT length distribution. <i>Polymer</i> , 2013, 54, 3071-3078.	3.8	80
74	Characterization of Dispersability of Industrial Nanotube Materials and their Length Distribution Before and After Melt Processing. <i>RSC Nanoscience and Nanotechnology</i> , 2013, , 212-233.	0.2	2
75	A successful approach to disperse MWCNTs in polyethylene by melt mixing using polyethylene glycol as additive. <i>Polymer</i> , 2012, 53, 3079-3083.	3.8	52
76	Influence of different carbon nanotubes on the electrical and mechanical properties of melt mixed poly(ether sulfone)-multi walled carbon nanotube composites. <i>Composites Science and Technology</i> , 2012, 72, 1933-1940.	7.8	12
77	Methods to Characterize the Dispersability of Carbon Nanotubes and Their Length Distribution. <i>Chemie-Ingenieur-Technik</i> , 2012, 84, 263-271.	0.8	3
78	The influence of matrix viscosity on MWCNT dispersion and electrical properties in different thermoplastic nanocomposites. <i>Polymer</i> , 2012, 53, 495-504.	3.8	227
79	Electrical, mechanical, and glass transition behavior of polycarbonate-based nanocomposites with different multi-walled carbon nanotubes. <i>Polymer</i> , 2011, 52, 3835-3845.	3.8	156
80	Influence of feeding conditions in twin-screw extrusion of PP/MWCNT composites on electrical and mechanical properties. <i>Composites Science and Technology</i> , 2011, 71, 1535-1542.	7.8	87
81	Percolation behaviour of multiwalled carbon nanotubes of altered length and primary agglomerate morphology in melt mixed isotactic polypropylene-based composites. <i>Composites Science and Technology</i> , 2011, 71, 1936-1943.	7.8	83
82	Influence of dry grinding in a ball mill on the length of multiwalled carbon nanotubes and their dispersion and percolation behaviour in melt mixed polycarbonate composites. <i>Composites Science and Technology</i> , 2011, 71, 1145-1153.	7.8	128
83	Characterization of the State of Dispersion of Carbon Nanotubes in Polymer Nanocomposites. <i>Chemie-Ingenieur-Technik</i> , 2011, 83, 767-781.	0.8	20
84	A method for determination of length distributions of multiwalled carbon nanotubes before and after melt processing. <i>Carbon</i> , 2011, 49, 1243-1247.	10.3	139
85	Melt mixed nano composites of PA12 with MWNTs: Influence of MWNT and matrix properties on macrodispersion and electrical properties. <i>Composites Science and Technology</i> , 2011, 71, 306-314.	7.8	77
86	Electrical and thermal properties of polyamide 12 composites with hybrid fillers systems of multiwalled carbon nanotubes and carbon black. <i>Composites Science and Technology</i> , 2011, 71, 1053-1059.	7.8	157
87	Comparison of nanotubes produced by fixed bed and aerosol-CVD methods and their electrical percolation behaviour in melt mixed polyamide 6.6 composites. <i>Composites Science and Technology</i> , 2010, 70, 151-160.	7.8	55
88	Dispersability and particle size distribution of CNTs in an aqueous surfactant dispersion as a function of ultrasonic treatment time. <i>Carbon</i> , 2010, 48, 2746-2754.	10.3	220
89	Low electrical percolation threshold in poly(ethylene terephthalate)/multi-walled carbon nanotube nanocomposites. <i>European Polymer Journal</i> , 2010, 46, 928-936.	5.4	99
90	Influence of small scale melt mixing conditions on electrical resistivity of carbon nanotube-polyamide composites. <i>Composites Science and Technology</i> , 2009, 69, 1505-1515.	7.8	215

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91	Correlation of carbon nanotube dispersability in aqueous surfactant solutions and polymers. Carbon, 2009, 47, 602-612.	10.3	111
92	Elongational Viscosity and Foaming Behavior of PP Modified by Electron Irradiation or Nanotube Addition. Macromolecular Symposia, 2007, 254, 400-408.	0.7	26
93	Elongational Viscosity and Foaming Behavior of PP Modified by Electron Irradiation or Nanotube Addition. Macromolecular Symposia, 2007, 254, 400-408.	0.7	0
94	Long-chain branching of polypropylene by electron-beam irradiation in the molten state. Journal of Applied Polymer Science, 2006, 99, 260-265.	2.6	44
95	Comparison of the molecular properties and morphology of polypropylenes irradiated under different atmospheres and after annealing. Journal of Applied Polymer Science, 2006, 100, 634-639.	2.6	19
96	Characterization of electron beam irradiated polypropylene: Influence of irradiation temperature on molecular and rheological properties. Journal of Applied Polymer Science, 2006, 100, 2770-2780.	2.6	61
97	Long-Chain Branched Polypropylenes by Electron Beam Irradiation and Their Rheological Properties. Macromolecules, 2004, 37, 9465-9472.	4.8	303
98	Determination of low amounts of long-chain branches in polypropylene using a combination of chromatographic and rheological methods. Journal of Chromatography A, 2004, 1056, 217-222.	3.7	29
99	Determination of low amounts of long-chain branches in polypropylene using a combination of chromatographic and rheological methods. Journal of Chromatography A, 2004, 1056, 217-222.	3.7	9
100	Determination of low amounts of long-chain branches in polypropylene using a combination of chromatographic and rheological methods. Journal of Chromatography A, 2004, 1056, 217-22.	3.7	1
101	Polymer/CNT Composites and Filaments for Smart Textiles: Melt Mixing of Composites. Solid State Phenomena, 0, 333, 91-96.	0.3	1