## **Beate Krause**

## List of Publications by Year in Descending Order

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

58 3,542 94 32 h-index g-index citations papers 4,020 5.1 99 5.54 L-index avg, IF ext. citations ext. papers

#	Paper	IF	Citations
94	Distribution of Carbon Nanotubes in Polycarbonate-Based Blends for Electromagnetic Interference Shielding. <i>ACS Applied Nano Materials</i> , <b>2022</b> , 5, 662-677	5.6	3
93	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> , <b>2022</b> , 29, 100806	5.6	4
92	Thermoelectric Performance of Polypropylene/Carbon Nanotube/Ionic Liquid Composites and Its Dependence on Electron Beam Irradiation. <i>Journal of Composites Science</i> , <b>2022</b> , 6, 25	3	O
91	Electrically conductive nanocomposites based on poly(lactic acid)/flexible copolyester blends with multiwalled carbon nanotubes. <i>Journal of Applied Polymer Science</i> , <b>2022</b> , 139, 51554	2.9	2
90	The effect of branched carbon nanotubes as reinforcing nano-filler in polymer nanocomposites. <i>Composite Structures</i> , <b>2022</b> , 295, 115794	5.3	O
89	High-Performance, Lightweight, and Flexible Thermoplastic Polyurethane Nanocomposites with Zn-Substituted CoFeO Nanoparticles and Reduced Graphene Oxide as Shielding Materials against Electromagnetic Pollution. <i>ACS Omega</i> , <b>2021</b> , 6, 28098-28118	3.9	4
88	Blend Structure and n-Type Thermoelectric Performance of PA6/SAN and PA6/PMMA Blends Filled with Singlewalled Carbon Nanotubes. <i>Nanomaterials</i> , <b>2021</b> , 11,	5.4	3
87	Three-Dimensional Printed and Biocompatible Conductive Composites Comprised of Polyhydroxybutyrate and Multiwalled Carbon Nanotubes. <i>Industrial &amp; Engineering Chemistry Research</i> , <b>2021</b> , 60, 885-897	3.9	4
86	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 &amp; Discourse (Materials &amp; Discourse)</i> , 13, 43333-43347	9.5	1
85	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> , <b>2020</b> , 12,	4.5	3
84	Lightweight Polymer-Carbon Composite Current Collector for Lithium-Ion Batteries. <i>Batteries</i> , <b>2020</b> , 6, 60	5.7	3
83	Nanocomposites with p- and n-Type Conductivity Controlled by Type and Content of Nanotubes in Thermosets for Thermoelectric Applications. <i>Nanomaterials</i> , <b>2020</b> , 10,	5.4	4
82	Does the Type of Polymer and Carbon Nanotube Structure Control the Electromagnetic Shielding in Melt-Mixed Polymer Nanocomposites?. <i>Journal of Composites Science</i> , <b>2020</b> , 4, 9	3	6
81	Boron Doping of SWCNTs as a Way to Enhance the Thermoelectric Properties of Melt-Mixed Polypropylene/SWCNT Composites. <i>Energies</i> , <b>2020</b> , 13, 394	3.1	10
80	Messanlage zur Untersuchung des Seebeck-Effektes in Polymermaterialien. <i>TM Technisches Messen</i> , <b>2020</b> , 87, 495-503	0.7	7
79	Nitrogen-Doped Carbon Nanotube/Polypropylene Composites with Negative Seebeck Coefficient. Journal of Composites Science, <b>2020</b> , 4, 14	3	10
78	The force of MOFs: the potential of switchable metal-organic frameworks as solvent stimulated actuators. <i>Chemical Communications</i> , <b>2020</b> , 56, 7411-7414	5.8	5

## (2018-2020)

Graphite modified epoxy-based adhesive for joining of aluminium and PP/graphite composites 77 2020, 96, 229-252 Surface modification of MWCNT and its influence on properties of paraffin/MWCNT 76 17 2.9 nanocomposites as phase change material. Journal of Applied Polymer Science, 2020, 137, 48428 Mixed Carbon Nanomaterial/Epoxy Resin for Electrically Conductive Adhesives. Journal of 3 2 75 Composites Science, 2020, 4, 105 Development of joining methods for highly filled graphite/PP composite based bipolar plates for 74 fuel cells: Adhesive joining and welding 2019, Improvement of electrical resistivity of highly filled graphite/PP composite based bipolar plates for 73 3 fuel cells by addition of carbon black 2019, "Sliding Crystals" on Low-Dimensional Carbonaceous Nanofillers as Distributed Nanopistons for 6 72 9.5 Highly Damping Materials. ACS Applied Materials & Damping Materials. Melt mixed composites of polypropylene with singlewalled carbon nanotubes for thermoelectric 71 5 applications: Switching from p- to n-type behavior by additive addition 2019, Extruded polycarbonate/Di-Allyl phthalate composites with ternary conductive filler system for 70 bipolar plates of polymer electrolyte membrane fuel cells. Smart Materials and Structures, 2019, 28, 064004 Characterization of Highly Filled PP/Graphite Composites for Adhesive Joining in Fuel Cell 69 4.5 29 Applications. Polymers, 2019, 11, Direction Dependent Electrical Conductivity of Polymer/Carbon Filler Composites. Polymers, 2019, 68 4.5 13 Influence of a supplemental filler in twin-screw extruded PP/CNT composites using masterbatch 67 5 dilution 2019, The Influence of the Blend Ratio in PA6/PA66/MWCNT Blend Composites on the Electrical and 66 4.5 Thermal Properties. Polymers, 2019, 11, Melt-Mixed PP/MWCNT Composites: Influence of CNT Incorporation Strategy and Matrix Viscosity 65 4.5 22 on Filler Dispersion and Electrical Resistivity. Polymers, 2019, 11, Thermal Conductivity and Electrical Resistivity of Melt-Mixed Polypropylene Composites 64 4.5 25 Containing Mixtures of Carbon-Based Fillers. Polymers, 2019, 11, Screening of Different Carbon Nanotubes in Melt-Mixed Polymer Composites with Different 63 16 3 Polymer Matrices for Their Thermoelectrical Properties. Journal of Composites Science, 2019, 3, 106 Hybrid conductive filler/polycarbonate composites with enhanced electrical and thermal 62 26 conductivities for bipolar plate applications. Polymer Composites, 2019, 40, 3189-3198 Cellulose-carbon nanotube composite aerogels as novel thermoelectric materials. Composites 61 8.6 50 Science and Technology, 2018, 163, 133-140 Electrical and melt rheological characterization of PC and co-continuous PC/SAN blends filled with CNTs: Relationship between melt-mixing parameters, filler dispersion, and filler aspect ratio. 2.6 60 22 Journal of Polymer Science, Part B: Polymer Physics, 2018, 56, 79-88

59	Tuneable Dielectric Properties Derived from Nitrogen-Doped Carbon Nanotubes in PVDF-Based Nanocomposites. <i>ACS Omega</i> , <b>2018</b> , 3, 9966-9980	3.9	12
58	Electrically Conductive Polyetheretherketone Nanocomposite Filaments: From Production to Fused Deposition Modeling. <i>Polymers</i> , <b>2018</b> , 10,	4.5	39
57	Comparative study of singlewalled, multiwalled, and branched carbon nanotubes melt mixed in different thermoplastic matrices. <i>Polymer</i> , <b>2018</b> , 159, 75-85	3.9	31
56	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> , <b>2018</b> , 3, 5771-5782	3.9	41
55	Development of electrically conductive microstructures based on polymer/CNT nanocomposites via two-photon polymerization. <i>Microelectronic Engineering</i> , <b>2017</b> , 179, 48-55	2.5	23
54	Impact of synthesis temperature on morphology, rheology and electromagnetic interference shielding of CVD-grown carbon nanotube/polyvinylidene fluoride nanocomposites. <i>Synthetic Metals</i> , <b>2017</b> , 230, 39-50	3.6	36
53	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> , <b>2017</b> , 108, 513-520	3.9	49
52	Influence of graphite and SEBS addition on thermal and electrical conductivity and mechanical properties of polypropylene composites <b>2017</b> ,		7
51	Graphene Derivatives Doped with Nickel Ferrite Nanoparticles as Excellent Microwave Absorbers in Soft Nanocomposites. <i>ChemistrySelect</i> , <b>2017</b> , 2, 5984-5999	1.8	12
50	Polymer - Carbon nanotube composites for thermoelectric applications <b>2017</b> ,		5
49	An updated micromechanical model based on morphological characterization of carbon nanotube nanocomposites. <i>Composites Part B: Engineering</i> , <b>2017</b> , 115, 70-78	10	33
48	Effect of additives on MWCNT dispersion and electrical percolation in polyamide 12 composites <b>2017</b> ,		1
47	Influence of mixing conditions on carbon nanotube shortening and curling in polycarbonate composites <b>2017</b> ,		3
46	PP/SWCNT composites modified with ionic liquid <b>2017</b> ,		2
45	Thermal conductivity of hybrid filled HDPE nanocomposites 2017,		2
44	Melt mixed SWCNT-polypropylene composites with very low electrical percolation. <i>Polymer</i> , <b>2016</b> , 98, 45-50	3.9	48
43	Effect of synthesis catalyst on structure of nitrogen-doped carbon nanotubes and electrical conductivity and electromagnetic interference shielding of their polymeric nanocomposites. <i>Carbon</i> , <b>2016</b> , 98, 358-372	10.4	166
42	Melt-mixed thermoplastic composites containing carbon nanotubes for thermoelectric applications. <i>AIMS Materials Science</i> , <b>2016</b> , 3, 1107-1116	1.9	21

41	Development of a polymer composite with high electrical conductivity and improved impact strength for the application as bipolar plate <b>2016</b> ,		4
40	Electrical and thermal conductivity of polypropylene filled with combinations of carbon fillers <b>2016</b> ,		9
39	Effects of synthesis catalyst and temperature on broadband dielectric properties of nitrogen-doped carbon nanotube/polyvinylidene fluoride nanocomposites. <i>Carbon</i> , <b>2016</b> , 106, 260-278	10.4	84
38	Tuning the Network Structure in Poly(vinylidene fluoride)/Carbon Nanotube Nanocomposites Using Carbon Black: Toward Improvements of Conductivity and Piezoresistive Sensitivity. <i>ACS Applied Materials &amp; Discourse Sensitivity</i> , 14190-9	9.5	125
37	A promising approach to low electrical percolation threshold in PMMA nanocomposites by using MWCNT-PEO predispersions. <i>Materials and Design</i> , <b>2016</b> , 111, 253-262	8.1	17
36	Ultralow percolation threshold in polyamide 6.6/MWCNT composites. <i>Composites Science and Technology</i> , <b>2015</b> , 114, 119-125	8.6	55
35	Nanoporous Cathodes for High-Energy Li-S Batteries from Gyroid Block Copolymer Templates. <i>ACS Nano</i> , <b>2015</b> , 9, 6147-57	16.7	69
34	Aspect ratio effects of multi-walled carbon nanotubes on electrical, mechanical, and thermal properties of polycarbonate/MWCNT composites. <i>Journal of Polymer Science, Part B: Polymer Physics</i> , <b>2014</b> , 52, 73-83	2.6	91
33	Dispersability of multiwalled carbon nanotubes in polycarbonate-chloroform solutions. <i>Polymer</i> , <b>2014</b> , 55, 6335-6344	3.9	13
32	Localization of carbon nanotubes in polyamide 6 blends with non-reactive and reactive rubber. <i>Polymer</i> , <b>2014</b> , 55, 3062-3067	3.9	13
31	Achieving Electrical Conductive Tracks by Laser Treatment of non-Conductive Polypropylene/Polycarbonate Blends Filled with MWCNTs. <i>Macromolecular Materials and Engineering</i> , <b>2014</b> , 299, 869-877	3.9	10
30	Improvement of carbon nanotube dispersion in thermoplastic composites using a three roll mill at elevated temperatures. <i>Composites Science and Technology</i> , <b>2013</b> , 74, 78-84	8.6	36
29	Interfacial chemistry using a bifunctional coupling agent for enhanced electrical properties of carbon nanotube based composites. <i>Polymer</i> , <b>2013</b> , 54, 5391-5398	3.9	2
28	Influence of talc with different particle sizes in melt-mixed LLDPE/MWCNT composites. <i>Journal of Polymer Science, Part B: Polymer Physics</i> , <b>2013</b> , 51, 1680-1691	2.6	13
27	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> , <b>2013</b> , 54, 3071-3078	3.9	72
26	Chapter 7:Characterization of Dispersability of Industrial Nanotube Materials and their Length Distribution Before and After Melt Processing. <i>RSC Nanoscience and Nanotechnology</i> , <b>2013</b> , 212-233		2
25	The influence of matrix viscosity on MWCNT dispersion and electrical properties in different thermoplastic nanocomposites. <i>Polymer</i> , <b>2012</b> , 53, 495-504	3.9	187
24	A successful approach to disperse MWCNTs in polyethylene by melt mixing using polyethylene glycol as additive. <i>Polymer</i> , <b>2012</b> , 53, 3079-3083	3.9	47

23	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> , <b>2012</b> , 72, 1933-1940	8.6	11
22	Methoden zur Charakterisierung der Dispergierbarkeit und L\(\bar{\mathbb{B}}\)genanalyse von Carbon Nanotubes. <i>Chemie-Ingenieur-Technik</i> , <b>2012</b> , 84, 263-271	0.8	3
21	Electrical, mechanical, and glass transition behavior of polycarbonate-based nanocomposites with different multi-walled carbon nanotubes. <i>Polymer</i> , <b>2011</b> , 52, 3835-3845	3.9	142
20	Influence of feeding conditions in twin-screw extrusion of PP/MWCNT composites on electrical and mechanical properties. <i>Composites Science and Technology</i> , <b>2011</b> , 71, 1535-1542	8.6	77
19	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> , <b>2011</b> , 71, 1936-1943	8.6	73
18	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> , <b>2011</b> , 71, 1145-1153	8.6	109
17	Charakterisierung der DispersionsgEe von Carbon Nanotubes in Polymer-Nanokompositen. <i>Chemie-Ingenieur-Technik</i> , <b>2011</b> , 83, 767-781	0.8	15
16	A method for determination of length distributions of multiwalled carbon nanotubes before and after melt processing. <i>Carbon</i> , <b>2011</b> , 49, 1243-1247	10.4	125
15	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> , <b>2011</b> , 71, 306-314	8.6	69
14	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> , <b>2011</b> , 71, 1053-105	<u>8</u> .6	134
13	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> , <b>2010</b> , 70, 151-160	8.6	51
12	Dispersability and particle size distribution of CNTs in an aqueous surfactant dispersion as a function of ultrasonic treatment time. <i>Carbon</i> , <b>2010</b> , 48, 2746-2754	10.4	200
11	Low electrical percolation threshold in poly(ethylene terephthalate)/multi-walled carbon nanotube nanocomposites. <i>European Polymer Journal</i> , <b>2010</b> , 46, 928-936	5.2	91
10	Influence of small scale melt mixing conditions on electrical resistivity of carbon nanotube-polyamide composites. <i>Composites Science and Technology</i> , <b>2009</b> , 69, 1505-1515	8.6	195
9	Correlation of carbon nanotube dispersability in aqueous surfactant solutions and polymers. <i>Carbon</i> , <b>2009</b> , 47, 602-612	10.4	103
8	Elongational Viscosity and Foaming Behavior of PP Modified by Electron Irradiation or Nanotube Addition. <i>Macromolecular Symposia</i> , <b>2007</b> , 254, 400-408	0.8	26
7	Long-chain branching of polypropylene by electron-beam irradiation in the molten state. <i>Journal of Applied Polymer Science</i> , <b>2006</b> , 99, 260-265	2.9	40
6	Comparison of the molecular properties and morphology of polypropylenes irradiated under different atmospheres and after annealing. <i>Journal of Applied Polymer Science</i> , <b>2006</b> , 100, 634-639	2.9	16

## LIST OF PUBLICATIONS

5	Characterization of electron beam irradiated polypropylene: Influence of irradiation temperature on molecular and rheological properties. <i>Journal of Applied Polymer Science</i> , <b>2006</b> , 100, 2770-2780	2.9	56
4	Long-Chain Branched Polypropylenes by Electron Beam Irradiation and Their Rheological Properties. <i>Macromolecules</i> , <b>2004</b> , 37, 9465-9472	5.5	268
3	Determination of low amounts of long-chain branches in polypropylene using a combination of chromatographic and rheological methods. <i>Journal of Chromatography A</i> , <b>2004</b> , 1056, 217-222	4.5	27
2	Determination of low amounts of long-chain branches in polypropylene using a combination of chromatographic and rheological methods. <i>Journal of Chromatography A</i> , <b>2004</b> , 1056, 217-22	4.5	1
1	Thermoelectric properties of polypropylene carbon nanofiber melt-mixed composites: exploring the role of polymer on their Seebeck coefficient. <i>Polymer Journal</i> ,	2.7	2