Andreas Hartwig

List of Publications by Year
in descending order

87	1,798	218677	315739
papers	citations	26 h-index	38 g-index

97	97	97	2117
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Phosphonium-modified layered silicate epoxy resins nanocomposites and their combinations with ATH and organo-phosphorus fire retardants. Polymers for Advanced Technologies, 2006, 17, 281-293.	3.2	108
2	Linear Poly(methyl glycerol) and Linear Polyglycerol as Potent Protein and Cell Resistant Alternatives to Poly(ethylene glycol). Chemistry - an Asian Journal, 2010, 5, 1992-2000.	3.3	80
3	Shape memory polyurethanes cross-linked by surface modified silica particles. Journal of Materials Chemistry, 2009, 19, 1166.	6.7	72
4	Experimental and quantitative assessment of flame retardancy by the shielding effect in layered silicate epoxy nanocomposites. Combustion and Flame, 2012, 159, 3616-3623.	5.2	68
5	Combustion Behaviour of Epoxide Based Nanocomposites with Ammonium and Phosphonium Bentonites. Macromolecular Chemistry and Physics, 2003, 204, 2247-2257.	2.2	65
6	Waterborne polyurethane nanocomposites having shape memory effects. Journal of Polymer Science Part A, 2011, 49, 634-641.	2.3	59
7	Vibrational Circular Dichroism Spectroscopy of Solid Polymer Films: Effects of Sample Orientation. Applied Spectroscopy, 2008, 62, 901-905.	2.2	56
8	Preparation, Characterisation and Properties of Nanocomposites Based on Epoxy Resins - An Overview. Macromolecular Symposia, 2005, 221, 127-136.	0.7	55
9	Fast switchable, epoxy based shape-memory polymers with high strength and toughness. Polymer, 2016, 83, 40-49.	3.8	53
10	Fast functionalization of multi-walled carbon nanotubes by an atmospheric pressure plasma jet. Journal of Colloid and Interface Science, 2011, 359, 311-317.	9.4	50
11	Novel cationically polymerized epoxy/poly(É›-caprolactone) polymers showing a shape memory effect. Polymer, 2012, 53, 6089-6095.	3.8	50
12	The nature of bonding matters: Benzoxazine based shape memory polymers. Polymer, 2018, 135, 285-294.	3.8	43
13	Synergistic fire retardancy in layered-silicate nanocomposite combined with low-melting phenysiloxane glass. Journal of Fire Sciences, 2012, 30, 69-87.	2.0	41
14	Cross-linking of cationically polymerised epoxides by nanoparticles. Polymer, 2005, 46, 2029-2039.	3.8	39
15	Multivalent anchored and crosslinked hyperbranched polyglycerol monolayers as antifouling coating for titanium oxide surfaces. Colloids and Surfaces B: Biointerfaces, 2014, 122, 684-692.	5.0	39
16	Determining the structure of Î±-phenylethyl isocyanide in chloroform by VCD spectroscopy and DFT calculationsâ€"simple case or challenge?. Physical Chemistry Chemical Physics, 2010, 12, 11635.	2.8	38
17	Structural Examination of Dissolved and Solid Helical Chiral Poly(trityl methacrylate) by VCD Spectroscopy. Macromolecules, 2010, 43, 8373-8378.	4.8	37
18	Enhancement of photocatalytic self-cleaning activity and antimicrobial properties of poly(ethylene) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50	4.8	36

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19	Current State of Bone Adhesivesâ€"Necessities and Hurdles. Materials, 2019, 12, 3975.	2.9	36
20	Spheroidal Nanoparticles in Epoxideâ€Based Adhesives. Macromolecular Materials and Engineering, 2009, 294, 363-379.	3.6	33
21	Hydrolytic stability and physical properties of waterborne polyurethane based on hydrolytically stable polyol. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2007, 305, 126-131.	4.7	32
22	Partially crystalline polyols lead to morphology changes and improved mechanical properties of cationically polymerized epoxy resins. European Polymer Journal, 2013, 49, 167-176.	5.4	31
23	Observation of resonance electronic and nonâ€resonanceâ€enhanced vibrational natural Raman optical activity. Journal of Raman Spectroscopy, 2010, 41, 1563-1565.	2.5	30
24	Resorcinolâ€based benzoxazine with low polymerization temperature. Journal of Polymer Science Part A, 2014, 52, 1693-1699.	2.3	29
25	Phosphorus and Silicon Containing Lowâ€Melting Organicâ€"Inorganic Glasses Improve Flame Retardancy of Epoxy/Clay Composites. Macromolecular Materials and Engineering, 2011, 296, 952-964.	3.6	28
26	Preparation and properties of elastomers based on a cycloaliphatic diepoxide and poly(tetrahydrofuran). European Polymer Journal, 2003, 39, 1975-1981.	5.4	27
27	Determination of the Flat Band Potential of Nanoparticles in Porous Electrodes by Blocking the Substrateâ€"Electrolyte Contact. Journal of Physical Chemistry C, 2018, 122, 2796-2805.	3.1	27
28	A low melting organic-inorganic glass and its effect on flame retardancy of clay/epoxy composites. Polymer, 2011, 52, 2120-2131.	3.8	26
29	Flammability of layered silicate epoxy nanocomposites combined with lowâ€melting inorganic ceepree glass. Polymer Engineering and Science, 2012, 52, 507-517.	3.1	24
30	Polyoxopalladate-Loaded Metalâ€"Organic Framework (POP@MOF): Synthesis and Heterogeneous Catalysis. Inorganic Chemistry, 2020, 59, 10512-10521.	4.0	23
31	Noncovalent bonds are key mechanisms for the cohesion of barnacle (Balanus crenatus) adhesive proteins. Marine Biology, 2006, 149, 241-246.	1.5	22
32	In-situ determination of time-dependent alginate-hydrogel formation by mechanical texture analysis. Carbohydrate Polymers, 2019, 205, 287-294.	10.2	21
33	Surface amination of poly(acrylonitrile). Advances in Colloid and Interface Science, 1994, 52, 65-78.	14.7	20
34	Nucleation as a new concept for morphology adjustment of crystalline thermosetting epoxy polymers. Reactive and Functional Polymers, 2013, 73, 1038-1045.	4.1	19
35	Synthesis of polymer/inorganic nanocomposite films using highly porous inorganic scaffolds. Nanoscale, 2012, 4, 2326.	5.6	15
36	Synthesis and Photoinitiated Polymerization of Nematic Liquid-Crystalline Diepoxides. Macromolecular Chemistry and Physics, 2001, 202, 180-187.	2.2	13

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37	VCD study of Î±â€methylbenzyl amine derivatives: Detection of the unchanged chiral motif. Chirality, 2010, 22, 754-761.	2.6	13
38	Concomitant cationic polymerization of a hybrid monomer and an epoxy resin. Reactive and Functional Polymers, 2013, 73, 1625-1631.	4.1	13
39	FTIR Imaging of Poly(3â€hydroxybutyrate) and Isotactic Poly(propylene oxide) Spherulites. Macromolecular Chemistry and Physics, 2010, 211, 1627-1631.	2.2	12
40	Mutual Influence Between Adhesion and Molecular Conformation: Molecular Geometry is a Key Issue in Interphase Formation. Journal of Adhesion, 2013, 89, 77-95.	3.0	12
41	Adsorption mechanism and valency of catechol-functionalized hyperbranched polyglycerols. Beilstein Journal of Organic Chemistry, 2015, 11, 828-836.	2.2	12
42	Multivalent non-covalent interactions lead to strongest polymer adhesion. Nanoscale, 2022, 14, 3768-3776.	5.6	12
43	Influence of moisture present during polymerisation on the properties of a photocured epoxy resin. International Journal of Adhesion and Adhesives, 2002, 22, 409-414.	2.9	11
44	The absence of size-dependency in flame retarded composites containing low-melting organicâ€“inorganic glass and clay: Comparison between micro- and nanocomposites. Polymer Degradation and Stability, 2011, 96, 1616-1624.	5.8	11
45	Influence of immobilization protocol on the structure and function of surface bound proteins. Colloids and Surfaces B: Biointerfaces, 2014, 116, 378-382.	5.0	11
46	Inverse Nanocomposites Based on Indium Tin Oxide for Display Applications: Improved Electrical Conductivity via Polymer Addition. ACS Applied Nano Materials, 2019, 2, 2273-2282.	5.0	11
47	Preparation and Properties of Cholesteric Network Polymers Based on Liquid Crystalline Epoxides. Macromolecular Chemistry and Physics, 2005, 206, 1718-1730.	2.2	10
48	Dynamics in Poly(Ïµâ€‹<scp>C</scp>aprolactone) Containing Phase Separated Epoxy Thermosets. Macromolecular Materials and Engineering, 2013, 298, 1275-1281.	3.6	10
49	Adsorption studies of mussel-inspired peptides. Bioinspired, Biomimetic and Nanobiomaterials, 2013, 2, 45-53.	0.9	10
50	Vibrational circular dichroism of 3â€(trifluoroacetyl)â€camphor and its interaction with chiral amines. Chirality, 2010, 22, 772-777.	2.6	9
51	Conformational analysis and vibrational circular dichroism study of a chiral metallocene catalyst. Journal of Molecular Structure, 2010, 970, 101-105.	3.6	9
52	Track by Track: The Structure of Single Tracks of Atmospheric Pressure Plasma Polymerized Hexamethyl Disiloxane (HMDSO) Analyzed by Infrared Microscopy. Plasma Processes and Polymers, 2013, 10, 60-68.	3.0	9
53	Bifunctional benzoxazines: Synthesis and polymerization of resorcinol based single isomers. Journal of Polymer Science Part A, 2016, 54, 1243-1251.	2.3	9
54	Partially crystalline epoxy networks with superior mechanical and adhesion properties. Journal of Adhesion Science and Technology, 2016, 30, 960-971.	2.6	9

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55	Strong and super tough: Layered ceramicâ€polymer composites with bioâ€inspired morphology. Journal of the American Ceramic Society, 2018, 101, 4732-4742.	3.8	9
56	Influence of high-temperature and high-humidity aging on the material and adhesive properties of addition curing silicone adhesives. International Journal of Adhesion and Adhesives, 2021, 111, 102980.	2.9	9
57	Imbibition into Highly Porous Layers of Aggregated Particles. Transport in Porous Media, 2017, 119, 119-141.	2.6	9
58	Interphase Reaction of Isocyanates with Epoxy Resins Containing Functional Groups of Different Reactivity. Macromolecular Materials and Engineering, 2001, 286, 254-259.	3.6	8
59	Influence of addition curing silicone formulation and surface aging of aluminum adherends on bond strength. International Journal of Adhesion and Adhesives, 2019, 95, 102424.	2.9	8
60	Infrared Reflection Spectroscopy of Polycyanurate Thin Films on Solidsâ€“State of the Interphase. Journal of Adhesion, 1995, 54, 261-275.	3.0	7
61	Synthesis and photoinduced polymerization of liquid crystalline diepoxides for bonding in the microsystem technique. Polymers for Advanced Technologies, 2000, 11, 739-746.	3.2	7
62	Interaction of Poly(dimethylsiloxane) and octamethylcyclotetrasiloxane with aluminum oxides comprising different acid-base properties. Polymer Degradation and Stability, 2019, 161, 19-29.	5.8	7
63	Synthesis and Application Studies of DOPO-Based Organophosphorous Derivatives to Modify the Thermal Behavior of Polybenzoxazine. Polymers, 2022, 14, 606.	4.5	7
64	Adhesion promotors for gold: Bis-(ï‰-aminoalkyl)-disulfides. International Journal of Adhesion and Adhesives, 1998, 18, 359-364.	2.9	6
65	Modification of Polydimethylsiloxane Coatings by H₂ RF Plasma, Xe₂* Excimer VUV Radiation, and Lowâ€Energy Electron Beams. Macromolecular Materials and Engineering, 2012, 297, 1091-1101.	3.6	6
66	Structural Studies of Aromatic Surfactants for Dispergation of Multiwall Carbon Nanotubes. Soft Materials, 2012, 10, 462-471.	1.7	6
67	Control of reaction mechanisms in cationically polymerized epoxy resins facilitates the adjustment of morphology and mechanical properties. Journal of Polymer Science, Part B: Polymer Physics, 2016, 54, 2188-2199.	2.1	6
68	Secondary dispersionâ€based reactive pressureâ€sensitive adhesives with improved tack. Journal of Applied Polymer Science, 2018, 135, 46315.	2.6	6
69	Pressure sensitive adhesives with post-crosslinking ability based on acrylic dispersions obtained from solvent-borne copolymers. International Journal of Adhesion and Adhesives, 2019, 91, 36-42.	2.9	6
70	Influence of different initiators on the adhesion properties of photopolymerized epoxides on gold and silicon. Journal of Adhesion Science and Technology, 2003, 17, 1561-1572.	2.6	5
71	Highly cross-linked but tough: combination of contradicting properties in cationically polymerized epoxy-polyol adhesives. Journal of Adhesion Science and Technology, 2013, 27, 2531-2541.	2.6	5
72	Crystallinity as New Toughening Concept for Epoxy Resins:Influence of Branching of Integrated Polyester. Journal of the Adhesion Society of Japan, 2015, 51, 286-292.	0.0	5

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73	Structural and tribometric characterization of biomimetically inspired synthetic "insect adhesives". Beilstein Journal of Nanotechnology, 2017, 8, 45-63.	2.8	5
74	Interactions of hydrosiloxane and vinylsiloxane groups with aluminum oxide surfaces. Surface and Interface Analysis, 2019, 51, 1059-1069.	1.8	4
75	Syntheses of dialkenes and diepoxides, and the influence of their structural parameters on liquid crystalline properties. Liquid Crystals, 2005, 32, 921-931.	2.2	3
76	Nicht aus einem Guss. Nachrichten Aus Der Chemie, 2010, 58, 523-525.	0.0	3
77	Covalent integration of differently structured polyester polyols improves the toughness and strength of cationically polymerized, amorphous epoxy networks. Journal of Applied Polymer Science, 2016, 133, .	2.6	3
78	Inline characterization of dispersion formation of a solvent-borne acrylic copolymer by Photon Density Wave spectroscopy. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2018, 556, 113-119.	4.7	3
79	Highly porous nanocoatings tailored for inverse nanoparticleâ€polymer composites. Nano Select, 2021, 2, 271-292.	3.7	3
80	New laboratory cell to evaluate emissions from PUR hotmelts. International Journal of Adhesion and Adhesives, 2006, 26, 537-542.	2.9	2
81	Structural manipulation of colloidal silica. Nanoscale, 2011, 3, 2329.	5.6	2
82	Preparation and pHâ€Dependent Properties of Hydrogels Based on Acidic Copolymers with PEG Side Chains and Î±â€Cyclodextrin. Macromolecular Chemistry and Physics, 2019, 220, 1900081.	2.2	2
83	An in vitro bone-to-bone adhesion test method using the compression shear test. International Journal of Adhesion and Adhesives, 2021, 111, 102977.	2.9	2
84	Synthesis and Characterization ofPolyurethane/-urea Dispersions. Journal of the Adhesion Society of Japan, 2015, 51, 241-242.	0.0	1
85	In situ polymerization monitoring of a diacrylate in an electrically conducting mesoporous nanoparticle scaffold. Journal of Materials Science, 2022, 57, 1755-1777.	3.7	1
86	Preparation of optically active polymer layers by after-glow plasma polymerization. Angewandte Makromolekulare Chemie, 1993, 211, 141-155.	0.2	0
87	The amount makes the poison. Adhesion Adhesives and Sealants, 2014, 11, 10-15.	0.1	0