

# Bruno Van Mele

## List of Publications by Year in descending order

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110  
papers

3,754  
citations

136885

32  
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110  
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110  
docs citations

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times ranked

3891  
citing authors

#	ARTICLE	IF	CITATIONS
1	Tuning Electronic and Morphological Properties for High-Performance Wavelength-Selective Organic Near-Infrared Cavity Photodetectors. <i>Advanced Functional Materials</i> , 2022, 32, 2108146.	7.8	21
2	Hydrogen-Bond-Assisted Diels-Alder Kinetics or Self-Healing in Reversible Polymer Networks? A Combined Experimental and Theoretical Study. <i>Molecules</i> , 2022, 27, 1961.	1.7	5
3	UV stability of self-healing poly(methacrylate) network layers. <i>Polymer Degradation and Stability</i> , 2022, 199, 109930.	2.7	2
4	Phosphonium-Based polythiophene conjugated polyelectrolytes with different surfactant counterions: thermal properties, self-assembly and photovoltaic performances. <i>Polymer International</i> , 2021, 70, 457-466.	1.6	4
5	Time-Temperature-Transformation, Temperature-Conversion-Transformation, and Continuous-Heating-Transformation Diagrams of Reversible Covalent Polymer Networks. <i>Macromolecules</i> , 2021, 54, 412-425.	2.2	17
6	From Slow to Fast Self-Healing at Ambient Temperature of High-Modulus Reversible Poly(methacrylate) Networks. Single- and Dual-Dynamics and the Effect of Phase Separation. <i>Macromolecules</i> , 2021, 54, 9960-9977.	2.2	11
7	Self-Healing in Mobility-Restricted Conditions Maintaining Mechanical Robustness: Furan-Maleimide Diels-Alder Cycloadditions in Polymer Networks for Ambient Applications. <i>Polymers</i> , 2020, 12, 2543.	2.0	21
8	Self-healing UV-curable polymer network with reversible Diels-Alder bonds for applications in ambient conditions. <i>Polymer</i> , 2020, 203, 122762.	1.8	23
9	Fast scanning chip calorimetry study of P3HT/PCBM submicron layers: structure formation and eutectic behaviour. <i>Polymer International</i> , 2019, 68, 277-282.	1.6	4
10	Homocoupling Defects of a Small Donor Molecule for Organic Photovoltaics: Quantification of the Eutectic State Diagram by Rapid Heat-Cool Differential Scanning Calorimetry. <i>Journal of Physical Chemistry C</i> , 2019, 123, 22634-22642.	1.5	1
11	Diffusion- and Mobility-Controlled Self-Healing Polymer Networks with Dynamic Covalent Bonding. <i>Macromolecules</i> , 2019, 52, 8440-8452.	2.2	25
12	Probing Organic Thin Films by Coherent X-ray Imaging and X-ray Scattering. <i>ACS Applied Polymer Materials</i> , 2019, 1, 1787-1797.	2.0	2
13	Single-step solution polymerization of poly(alkylene terephthalate): synthesis parameters and polymer characterization. <i>Polymer International</i> , 2018, 67, 292-300.	1.6	16
14	Room-temperature versus heating-mediated healing of a Diels-Alder crosslinked polymer network. <i>Polymer</i> , 2018, 153, 453-463.	1.8	37
15	Anthracene-Based Thiol-Ene Networks with Thermo-Degradable and Photo-Reversible Properties. <i>Macromolecules</i> , 2017, 50, 1930-1938.	2.2	59
16	<i>In Vivo</i> Imaging of the Stability and Sustained Cargo Release of an Injectable Amphipathic Peptide-Based Hydrogel. <i>Biomacromolecules</i> , 2017, 18, 994-1001.	2.6	25
17	Supramolecular thermoplastics and thermoplastic elastomer materials with self-healing ability based on oligomeric charged triblock copolymers. <i>NPG Asia Materials</i> , 2017, 9, e385-e385.	3.8	30
18	Thermophysical characterization of a reversible dynamic polymer network based on kinetics and equilibrium of an amorphous furan-maleimide Diels-Alder cycloaddition. <i>Polymer</i> , 2017, 120, 176-188.	1.8	45

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19	Modelled decomposition mechanism of flame retarded poly(vinyl acetate) by melamine isocyanurate. <i>Journal of Thermal Analysis and Calorimetry</i> , 2017, 127, 2315-2324.	2.0	8
20	Effect of Substrate Temperature on Thermal Properties and Deposition Kinetics of Atmospheric Plasma Deposited Methyl(methacrylate) Films. <i>Plasma Processes and Polymers</i> , 2017, 14, 1500213.	1.6	5
21	The Influence of Conjugated Polymer Side Chain Manipulation on the Efficiency and Stability of Polymer Solar Cells. <i>Materials</i> , 2016, 9, 181.	1.3	13
22	X-Ray Nanoscopy of a Bulk Heterojunction. <i>PLoS ONE</i> , 2016, 11, e0158345.	1.1	7
23	Influence of the amorphous phase and preceding solution processing on the eutectic behaviour in the state diagram of P3HT/PCBM determined by rapid heat-cool calorimetry. <i>RSC Advances</i> , 2016, 6, 92981-92988.	1.7	6
24	High-Permittivity Conjugated Polyelectrolyte Interlayers for High-Performance Bulk Heterojunction Organic Solar Cells. <i>ACS Applied Materials &amp; Interfaces</i> , 2016, 8, 6309-6314.	4.0	37
25	Extremely robust and post-functionalizable gold nanoparticles coated with calix[4]arenes via metal-carbon bonds. <i>Chemical Communications</i> , 2016, 52, 10493-10496.	2.2	32
26	Deposition Kinetics and Thermal Properties of Atmospheric Plasma Deposited Methacrylate-Like Films. <i>Plasma Processes and Polymers</i> , 2016, 13, 521-533.	1.6	7
27	Injectable peptide hydrogels for controlled-release of opioids. <i>MedChemComm</i> , 2016, 7, 542-549.	3.5	27
28	Thermal behaviour below and inside the glass transition region of a submicron P3HT layer studied by fast scanning chip calorimetry. <i>Polymer</i> , 2016, 83, 59-66.	1.8	16
29	Thermal Properties of Plasma Deposited Methyl Methacrylate Films in an Atmospheric DBD Reactor. <i>Plasma Processes and Polymers</i> , 2015, 12, 260-270.	1.6	7
30	Isothermal structure development in submicron P3HT layers studied by fast scanning chip calorimetry. <i>Polymer</i> , 2015, 57, 39-44.	1.8	23
31	Self-assembled conjugated polyelectrolyte-surfactant complexes as efficient cathode interlayer materials for bulk heterojunction organic solar cells. <i>Journal of Materials Chemistry A</i> , 2015, 3, 23905-23916.	5.2	16
32	Adhesion Improvement between Epoxy and Stainless Steel Using a Silane Coupling Agent in an Atmospheric Plasma Process. <i>Plasma Processes and Polymers</i> , 2015, 12, 347-361.	1.6	16
33	Optimisation of wet chemical silane deposition to improve the interfacial strength of stainless steel/epoxy. <i>Applied Surface Science</i> , 2015, 324, 134-142.	3.1	23
34	A Latex-based Route to Disperse Carbon Nanotubes in Poly(2,6-dimethyl-1,4-pyrene Ether)/polystyrene Blends. <i>Macromolecular Materials and Engineering</i> , 2014, 299, 228-236.	1.7	4
35	Atomic force microscopy-based study of self-healing coatings based on reversible polymer network systems. <i>Journal of Intelligent Material Systems and Structures</i> , 2014, 25, 40-46.	1.4	36
36	Synthesis of ester side chain functionalized all-conjugated diblock copolythiophenes via the Rieke method. <i>Polymer Chemistry</i> , 2014, 5, 1832.	1.9	14

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37	A time dependent DFT study of the efficiency of polymers for organic photovoltaics at the interface with PCBM. RSC Advances, 2014, 4, 52658-52667.	1.7	17
38	All-conjugated cationic copolythiophene-rod-block copolyelectrolytes: synthesis, optical properties and solvent-dependent assembly. Polymer Chemistry, 2014, 5, 3352-3362.	1.9	18
39	Optimization of Extrusion Parameters for Preparing PCL-Layered Silicate Nanocomposites Supported by Modeling of Twin-Screw Extrusion. Macromolecular Materials and Engineering, 2013, 298, 210-220.	1.7	6
40	A self-healing polymer network based on reversible covalent bonding. Reactive and Functional Polymers, 2013, 73, 413-420.	2.0	137
41	Plasma Polymerization of a Saturated Branched Hydrocarbon. The Case of Heptamethylnonane. Plasma Processes and Polymers, 2013, 10, 51-59.	1.6	15
42	The Impact of Double Bonds in the APPECVD of Acrylate-Like Precursors. Plasma Processes and Polymers, 2013, 10, 857-863.	1.6	27
43	Surface Characterization of Atmospheric Pressure Plasma-Deposited Allyl Methacrylate and Acrylic Acid Based Coatings. Plasma Processes and Polymers, 2013, 10, 564-571.	1.6	27
44	Influence of temperature and UV intensity on photo-polymerization reaction studied by photo-DSC. Journal of Thermal Analysis and Calorimetry, 2012, 110, 287-294.	2.0	40
45	Influence of the processing solvent on the photoactive layer nanomorphology of P3HT/PCBM solar cells. Journal of Polymer Science Part A, 2012, 50, 1037-1041.	2.5	14
46	Deposition and Characterisation of Plasma Polymerised Allyl Methacrylate Based Coatings. Plasma Processes and Polymers, 2012, 9, 799-807.	1.6	21
47	The effect of nano-sized filler particles on the crystalline-amorphous interphase and thermal properties in polyester nanocomposites. Polymer, 2012, 53, 1494-1506.	1.8	24
48	Phase behavior of PCBM blends with different conjugated polymers. Physical Chemistry Chemical Physics, 2011, 13, 12285.	1.3	27
49	Adjacent UCST Phase Behavior in Aqueous Solutions of Poly(vinyl methyl ether): Detection of a Narrow Low Temperature UCST in the Lower Concentration Range. Macromolecules, 2011, 44, 993-998.	2.2	22
50	Self-healing property characterization of reversible thermoset coatings. Journal of Thermal Analysis and Calorimetry, 2011, 105, 805-809.	2.0	58
51	Rheology of nanocomposites. Journal of Thermal Analysis and Calorimetry, 2011, 105, 731-736.	2.0	16
52	Partially miscible polystyrene/polymethylphenylsiloxane blends for nanocomposites. Journal of Thermal Analysis and Calorimetry, 2011, 105, 775-781.	2.0	4
53	Isothermal crystallization of P3HT:PCBM blends studied by RHC. Journal of Thermal Analysis and Calorimetry, 2011, 105, 845-849.	2.0	17
54	Phase separation in polymer blend thin films studied by differential AC chip calorimetry. Polymer, 2010, 51, 647-654.	1.8	28

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55	Qualitative assessment of nanofiller dispersion in poly( $\mu$ -caprolactone) nanocomposites by mechanical testing, dynamic rheometry and advanced thermal analysis. <i>European Polymer Journal</i> , 2010, 46, 984-996.	2.6	33
56	RheoDSC Analysis of Hardening of Semi-Crystalline Polymers during Quiescent Isothermal Crystallization. <i>International Polymer Processing</i> , 2010, 25, 304-310.	0.3	17
57	Demixing and Remixing Kinetics of Poly(2-isopropyl-2-oxazoline) (PIPOZ) Aqueous Solutions Studied by Modulated Temperature Differential Scanning Calorimetry. <i>Macromolecules</i> , 2010, 43, 6853-6860.	2.2	54
58	From polyester grafting onto POSS nanocage by ring-opening polymerization to high performance polyester/POSS nanocomposites. <i>Journal of Materials Chemistry</i> , 2010, 20, 9415.	6.7	45
59	Quantifying the degree of nanofiller dispersion by advanced thermal analysis: application to polyester nanocomposites prepared by various elaboration methods. <i>Journal of Materials Chemistry</i> , 2010, 20, 9531.	6.7	22
60	Phase Behavior in Blends of Ethylene Oxide-Propylene Oxide Copolymer and Poly(ether sulfone) Studied by Modulated Temperature DSC and NMR Relaxometry. <i>Chemistry - A European Journal</i> , 2009, 15, 1177-1185.	1.7	6
61	Micro- and nano-thermal analysis applied to multi-layered biaxially-oriented polypropylene films. <i>Journal of Thermal Analysis and Calorimetry</i> , 2009, 95, 207-213.	2.0	8
62	LCST demixing in poly(vinyl methyl ether)/water studied by means of a High Resolution Ultrasonic Resonator. <i>Journal of Thermal Analysis and Calorimetry</i> , 2009, 98, 495-505.	2.0	5
63	RheoDSC: design and validation of a new hybrid measurement technique. <i>Journal of Thermal Analysis and Calorimetry</i> , 2009, 98, 675-681.	2.0	18
64	Demixing and Remixing Kinetics in Aqueous Dispersions of Poly( <i>N</i> -isopropylacrylamide) (PNIPAM) Brushes Bound to Gold Nanoparticles Studied by Means of Modulated Temperature Differential Scanning Calorimetry. <i>Macromolecules</i> , 2009, 42, 5317-5327.	2.2	23
65	Isotactic Polypropylene/Carbon Nanotube Composites Prepared by Latex Technology. <i>Thermal Analysis of Carbon Nanotube-Induced Nucleation. Macromolecules</i> , 2008, 41, 5753-5762.	2.2	126
66	On the Crucial Role of Wetting in the Preparation of Conductive Polystyrene-Carbon Nanotube Composites. <i>Chemistry of Materials</i> , 2007, 19, 3787-3792.	3.2	84
67	Influence of Macromolecular Architecture on the Thermal Response Rate of Amphiphilic Copolymers, Based on Poly( <i>N</i> -isopropylacrylamide) and Poly(oxyethylene), in Water. <i>Macromolecules</i> , 2007, 40, 3765-3772.	2.2	53
68	Dye-fiber interactions in PET fibers: Hydrogen bonding studied by IR spectroscopy. <i>Journal of Applied Polymer Science</i> , 2007, 106, 1648-1658.	1.3	5
69	Interfacial interaction in EVA-carbon nanotube and EVA-clay nanocomposites. <i>Journal of Polymer Science, Part B: Polymer Physics</i> , 2007, 45, 1291-1302.	2.4	24
70	Thermal hardening and structure of a phosphorus containing cementitious model material. <i>Journal of Thermal Analysis and Calorimetry</i> , 2007, 88, 723-729.	2.0	35
71	Reaction mechanism, kinetics and high temperature transformations of geopolymers. <i>Journal of Materials Science</i> , 2007, 42, 2982-2996.	1.7	170
72	Kinetics of Temperature-induced and Reaction-induced Phase Separation Studied by Modulated Temperature DSC. <i>Macromolecular Symposia</i> , 2006, 233, 36-41.	0.4	8

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73	End-group modified poly(methyl vinyl ether): Characterization and LCST demixing behavior in water. <i>Journal of Polymer Science, Part B: Polymer Physics</i> , 2006, 44, 461-469.	2.4	28
74	Restricted chain segment mobility in poly(amide) 6/clay nanocomposites evidenced by quasi-isothermal crystallization. <i>Polymer</i> , 2006, 47, 826-835.	1.8	97
75	The anomalous melting behavior of water in aqueous PVME solutions. <i>Polymer</i> , 2006, 47, 7034-7042.	1.8	23
76	Non-isothermal elimination process in the solid state of n-alkyl-sulphinyl precursor polymers towards conjugated poly[2-(3-oxo-7-oxo-2-dimethyloctyloxy)-5-methoxy-1,4-phenylene vinylene] studied with MTDSC and TGA. <i>Polymer</i> , 2006, 47, 7935-7942.	1.8	2
77	Exploration of high-resolution ultrasonic spectroscopy as an analytical tool to study demixing and remixing in poly(N-isopropyl acrylamide)/water solutions. <i>Journal of Polymer Science, Part B: Polymer Physics</i> , 2005, 43, 1283-1295.	2.4	26
78	Heat capacity of poly(vinyl methyl ether). <i>Journal of Polymer Science, Part B: Polymer Physics</i> , 2005, 43, 2141-2153.	2.4	27
79	Influence of Additives on the Thermoresponsive Behavior of Polymers in Aqueous Solution. <i>Macromolecules</i> , 2005, 38, 10155-10163.	2.2	135
80	Reaction kinetics modeling and thermal properties of epoxy-amines as measured by modulated-temperature DSC. I. Linear step-growth polymerization of DGEBA + aniline. <i>Journal of Applied Polymer Science</i> , 2004, 91, 2798-2813.	1.3	41
81	Reaction kinetics modeling and thermal properties of epoxy-amines as measured by modulated-temperature DSC. II. Network-forming DGEBA + MDA. <i>Journal of Applied Polymer Science</i> , 2004, 91, 2814-2833.	1.3	38
82	Kinetics of Demixing and Remixing in Poly(N-isopropylacrylamide)/Water Studied by Modulated Temperature DSC. <i>Macromolecules</i> , 2004, 37, 9596-9605.	2.2	141
83	Influence of Poly(ethylene oxide) Grafts on Kinetics of LCST Behavior in Aqueous Poly(N-vinylcaprolactam) Solutions and Networks Studied by Modulated Temperature DSC. <i>Macromolecules</i> , 2004, 37, 1054-1061.	2.2	106
84	Title is missing!. <i>Journal of Materials Science</i> , 2003, 38, 3131-3136.	1.7	73
85	Thermal properties relevant to the processing of PET fibers. <i>Journal of Applied Polymer Science</i> , 2003, 89, 3840-3849.	1.3	33
86	Interrelation between dyeing and thermal properties of PET fibers. <i>Journal of Applied Polymer Science</i> , 2003, 90, 105-114.	1.3	13
87	Reaction thermodynamics of amine-cured epoxy systems: Validation of the enthalpy and heat capacity of reaction as determined by modulated temperature differential scanning calorimetry. <i>Journal of Polymer Science, Part B: Polymer Physics</i> , 2003, 41, 594-608.	2.4	31
88	Modulated-temperature differential scanning calorimetry study of temperature-induced mixing and demixing in poly(vinylmethylether)/water. <i>Journal of Polymer Science, Part B: Polymer Physics</i> , 2003, 41, 1824-1836.	2.4	45
89	Mechanistic Modeling of the Epoxy-Amine Reaction in the Presence of Polymeric Modifiers by Means of Modulated Temperature DSC. <i>Macromolecules</i> , 2003, 36, 4424-4435.	2.2	40
90	In situ monitoring of reaction-induced phase separation with modulated temperature DSC. <i>Macromolecular Symposia</i> , 2003, 198, 363-376.	0.4	6

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91	On the entanglement density of differently N-substituted alternating styrene-maleimide copolymers. <i>E-Polymers</i> , 2003, 3, .	1.3	1
92	Mechanistic modeling of the wall reactions in the pyrolysis of pentachloroethane. <i>International Journal of Chemical Kinetics</i> , 2002, 34, 322-330.	1.0	0
93	Modeling and experimental verification of the kinetics of reacting polymer systems. <i>Thermochimica Acta</i> , 2002, 388, 327-341.	1.2	54
94	Kinetics of demixing and remixing in poly(ethylene oxide)/poly(ether sulphone) blends as studied by modulated temperature differential scanning calorimetry. <i>Polymer</i> , 2002, 43, 3611-3620.	1.8	32
95	Interphase formation in model composites studied by micro-thermal analysis. <i>Polymer</i> , 2002, 43, 4605-4610.	1.8	33
96	Frequency dependent heat capacity in the cure of epoxy resins. <i>Thermochimica Acta</i> , 2001, 377, 125-130.	1.2	25
97	Phase separation in miscible polymer blends as detected by modulated temperature differential scanning calorimetry. <i>Polymer</i> , 2001, 42, 1449-1459.	1.8	42
98	Flexibilized styrene-N-substituted maleimide copolymers. I. Multiblock copolymers prepared from styrene-maleimide telechelics and polytetrahydrofuran. <i>Journal of Polymer Science Part A</i> , 2000, 38, 3550-3557.	2.5	9
99	Title is missing!. <i>Magyar Árvad Kzlemnyek</i> , 2000, 59, 305-318.	1.4	23
100	Title is missing!. <i>Magyar Árvad Kzlemnyek</i> , 2000, 62, 417-427.	1.4	65
101	Isothermal crystallization of concentrated amorphous starch systems measured by modulated differential scanning calorimetry. <i>Journal of Polymer Science, Part B: Polymer Physics</i> , 1999, 37, 2881-2892.	2.4	25
102	Title is missing!. <i>Magyar Árvad Kzlemnyek</i> , 1998, 54, 585-604.	1.4	53
103	Title is missing!. <i>Journal of Materials Science</i> , 1997, 32, 2237-2247.	1.7	183
104	Modulated temperature differential scanning calorimetry. <i>Journal of Theoretical Biology</i> , 1997, 49, 437-442.	0.8	29
105	Modulated temperature differential scanning calorimetry. <i>Journal of Theoretical Biology</i> , 1997, 49, 443-447.	0.8	19
106	Low-temperature synthesized aluminosilicate glasses. <i>Journal of Materials Science</i> , 1996, 31, 71-79.	1.7	198
107	Low-temperature synthesized aluminosilicate glasses. <i>Journal of Materials Science</i> , 1996, 31, 80-85.	1.7	134
108	Physico-Chemical Characterisation of the Influence of Moisture on the Fibre/Matrix Interaction in Epoxy/Anhydride Composites. <i>Journal of Adhesion</i> , 1996, 57, 245-260.	1.8	8

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109	Physico-chemical characterization of the fibre/matrix interaction in polyethylene fibre/epoxy matrix composites. <i>Composite Interfaces</i> , 1995, 3, 101-119.	1.3	9
110	Physico-chemical characterization of the fibre/matrix interaction in polyethylene fibre/epoxy matrix composites. <i>Composite Interfaces</i> , 1995, 3, 83-100.	1.3	8