Thomas Hanemann

List of Publications by Year in descending order

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#	Article	IF	CITATIONS
1	Polymer-Nanoparticle Composites: From Synthesis to Modern Applications. Materials, 2010, 3, 3468-3517.	1.3	669
2	Micromolded easy-assembly multi fiber connector: RibCon ®. Microsystem Technologies, 2002, 8, 83-87.	1.2	198
3	Suppressed lithium dendrite growth in lithium batteries using ionic liquid electrolytes: Investigation by electrochemical impedance spectroscopy, scanning electron microscopy, and in situ 7Li nuclear magnetic resonance spectroscopy. Journal of Power Sources, 2013, 228, 237-243.	4.0	137
4	Injection molding and related techniques for fabrication of microstructures. Microsystem Technologies, 1997, 3, 129-133.	1.2	101
5	Gel electrolytes based on ionic liquids for advanced lithium polymer batteries. Electrochimica Acta, 2013, 89, 823-831.	2.6	88
6	A 3D-Printable Polymer-Metal Soft-Magnetic Functional Composite—Development and Characterization. Materials, 2018, 11, 189.	1.3	80
7	Fused Filament Fabrication of Small Ceramic Components. Materials, 2018, 11, 1463.	1.3	78
8	Fused Deposition Modeling of ABS-Barium Titanate Composites: A Simple Route towards Tailored Dielectric Devices. Polymers, 2018, 10, 666.	2.0	70
9	Crystal structure of 4′-pentyl-4-cyanobiphenyl (5CB). Liquid Crystals, 1995, 19, 699-702.	0.9	59
10	Various replication techniques for manufacturing three-dimensional metal microstructures. Microsystem Technologies, 1997, 4, 28-31.	1.2	59
11	Preventing Li-ion cell explosion during thermal runaway with reduced pressure. Applied Thermal Engineering, 2017, 124, 539-544.	3.0	53
12	Tuning the Refractive Index of Polymers for Polymer Waveguides Using Nanoscaled Ceramics or Organic Dyes. Advanced Engineering Materials, 2004, 6, 52-57.	1.6	48
13	Influence of particle properties on the viscosity of polymer–alumina composites. Ceramics International, 2008, 34, 2099-2105.	2.3	46
14	Calculation of UV/VIS absorption spectra of liquid crystals and dye molecules An INDO MO approach. Liquid Crystals, 1992, 11, 917-927.	0.9	43
15	Cross Linking Behavior of Preceramic Polymers Effected by UV- and Synchrotron Radiation. Advanced Engineering Materials, 2004, 6, 676-680.	1.6	43
16	Large-Area Screen-Printed Internal Extraction Layers for Organic Light-Emitting Diodes. ACS Photonics, 2017, 4, 928-933.	3.2	43
17	Thermoplastic polymer nanocomposites for applications in optical devices. Materials Science and Engineering C, 2006, 26, 1067-1071.	3.8	42
18	Mixtures of Ionic Liquid and Sulfolane as Electrolytes for Li-Ion Batteries. Electrochimica Acta, 2014, 147, 704-711.	2.6	36

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19	Anodic Aluminum Dissolution of LiTFSA Containing Electrolytes for Li-Ion-Batteries. Electrochimica Acta, 2014, 116, 388-395.	2.6	35
20	Investigation of the degradation of SnO2 electrodes for use in Li-ion cells. Journal of Power Sources, 2013, 233, 139-147.	4.0	34
21	Cladded self-written multimode step-index waveguides using a one-polymer approach. Optics Letters, 2015, 40, 1830.	1.7	34
22	Polymer materials for microsystem technologies. Microsystem Technologies, 1998, 5, 44-48.	1.2	33
23	Rapid fabrication of microcomponents - UV-laser assisted prototyping, laser micro-machining of mold inserts and replication via photomolding. Microsystem Technologies, 2002, 9, 67-74.	1.2	33
24	Temperature treatment of nano-scaled barium titanate filler to improve the dielectric properties of high-k polymer based composites. Microelectronic Engineering, 2010, 87, 1978-1983.	1.1	33
25	New Feedstock System for Fused Filament Fabrication of Sintered Alumina Parts. Materials, 2020, 13, 4461.	1.3	33
26	Anodic Aluminum Dissolution in Conducting Salt Containing Electrolytes for Lithium-Ion Batteries. Journal of the Electrochemical Society, 2014, 161, A431-A438.	1.3	31
27	Polymer/Phenanthrene-Derivative Host-Guest Systems: Rheological, Optical and Thermal Properties. Macromolecular Materials and Engineering, 2007, 292, 285-294.	1.7	30
28	Investigation of Binary Mixtures Containing 1-Ethyl-3-methylimidazolium Bis(trifluoromethanesulfonyl)azanide and Ethylene Carbonate. Journal of Chemical & Engineering Data, 2016, 61, 114-123.	1.0	30
29	Development of a Multi-Material Stereolithography 3D Printing Device. Micromachines, 2020, 11, 532.	1.4	30
30	Replication technologies for HARM devices: status and perspectives. Microsystem Technologies, 2008, 14, 1599-1605.	1.2	29
31	Surface Analytical Study Regarding the Solid Electrolyte Interphase Composition of Nanoparticulate SnO ₂ Anodes for Li-Ion Batteries. Journal of Physical Chemistry C, 2016, 120, 24706-24714.	1.5	29
32	Rapid fabrication and replication of metal, ceramic and plastic mould inserts for application in microsystem technologies. Proceedings of the Institution of Mechanical Engineers, Part C: Journal of Mechanical Engineering Science, 2003, 217, 53-63.	1.1	28
33	Influence of Stearic Acid Concentration on the Processing of ZrO2-Containing Feedstocks Suitable for Micropowder Injection Molding. International Journal of Applied Ceramic Technology, 2011, 8, 865-872.	1.1	28
34	3D Printing of ABS Barium Ferrite Composites. Materials, 2020, 13, 1481.	1.3	28
35	Novel photocrosslinkable systems for nonlinear optics. Advanced Materials, 1995, 7, 465-468.	11.1	26
36	Simulation of micro powder injection moulding: Powder segregation and yield stress effects during form filling. Journal of the European Ceramic Society, 2011, 31, 2525-2534.	2.8	26

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37	Novel electrolyte mixtures based on dimethyl sulfone, ethylene carbonate and LiPF6 for lithium-ion batteries. Journal of Power Sources, 2015, 298, 322-330.	4.0	25
38	Influence of dispersants on the flow behaviour of unsaturated polyester–alumina composites. Composites Part A: Applied Science and Manufacturing, 2006, 37, 735-741.	3.8	24
39	Electrolyte Mixtures Based on Ethylene Carbonate and Dimethyl Sulfone for Liâ€lon Batteries with Improved Safety Characteristics. ChemSusChem, 2015, 8, 1892-1900.	3.6	24
40	Additives for Cycle Life Improvement of Highâ€Voltage LNMOâ€Based Liâ€Ion Cells. ChemElectroChem, 2019, 6, 5255-5263.	1.7	24
41	Printing of Zirconia Parts via Fused Filament Fabrication. Materials, 2021, 14, 5467.	1.3	24
42	Microstructuring of Preceramic Polymers. Advanced Engineering Materials, 2002, 4, 869-873.	1.6	23
43	Laser micromaching and light induced reaction injection molding as suitable process sequence for the rapid fabrication of microcomponents. Microsystem Technologies, 2002, 7, 209-214.	1.2	23
44	Compounding, micro injection moulding and characterisation of polycarbonate-nanosized alumina-composites for application in microoptics. Microsystem Technologies, 2009, 15, 421-427.	1.2	23
45	Comparative surface analysis study of the solid electrolyte interphase formation on graphite anodes in lithiumâ€ion batteries depending on the electrolyte composition. Surface and Interface Analysis, 2017, 49, 361-369.	0.8	23
46	From micro to nano: properties and potential applications of micro- and nano-filled polymer ceramic composites in microsystem technology. IET Nanobiotechnology, 2004, 151, 167.	2.1	22
47	Development of Two-Component Micropowder Injection Molding (2C MicroPIM): Characteristics of Applicable Materials. International Journal of Applied Ceramic Technology, 2011, 8, 194-202.	1.1	22
48	Development of new polymer–BaTiO3-composites with improved permittivity for embedded capacitors. Microsystem Technologies, 2011, 17, 195-201.	1.2	20
49	Automated Misalignment Compensating Interconnects Based on Self-Written Waveguides. Journal of Lightwave Technology, 2017, 35, 2678-2684.	2.7	19
50	Polymerization conditions influence on the thermomechanical and dielectric properties of unsaturated polyester–styrene-copolymers. Microelectronic Engineering, 2010, 87, 15-19.	1.1	18
51	Process chain development for the rapid prototyping of microstructured polymer, ceramic and metal parts: composite flow behaviour optimisation, replication via reaction moulding and thermal postprocessing. International Journal of Advanced Manufacturing Technology, 2007, 33, 167-175.	1.5	17
52	Some novel disaccharide-derived liquid crystals. Liquid Crystals, 1997, 22, 47-50.	0.9	16
53	Conformation Analysis and Absorption Properties of Anthraquinone Dyes—A Quantum-chemical Approach. Molecular Crystals and Liquid Crystals, 1991, 207, 103-116.	0.7	15
54	Micromolding and photopolymerization. Advanced Materials, 1997, 9, 927-929.	11.1	15

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55	Viscosity change of unsaturated polyester–alumina-composites using polyethylene glycol alkyl ether based dispersants. Composites Part A: Applied Science and Manufacturing, 2006, 37, 2155-2163.	3.8	15
56	Tailoring the optical and rheological properties of an epoxy acrylate based host-guest system. Optical Engineering, 2014, 53, 087106.	0.5	15
57	3D-Printed Hermetic Alumina Housings. Materials, 2021, 14, 200.	1.3	15
58	Structure-Property Relation of Trimethyl Ammonium Ionic Liquids for Battery Applications. Applied Sciences (Switzerland), 2021, 11, 5679.	1.3	14
59	<title>Hot embossing and injection molding for micro-optical components</title> . , 1997, , .		13
60	Process Chain for Tailoring the Refractive Index of Thermoplastic Optical Materials using Ceramic Nanoparticles. Advanced Engineering Materials, 2005, 7, 540-545.	1.6	13
61	Process chain development for the realization of zirconia microparts using composite reaction molding. Ceramics International, 2009, 35, 269-275.	2.3	13
62	Low-flammable electrolytes with fluoroethylene carbonate based solvent mixtures and lithium bis(trifluoromethanesulfonyl)imide for lithium-ion batteries. Electrochimica Acta, 2019, 298, 960-972.	2.6	13
63	<title>Photorefractivity in new organic polymeric materials</title> . , 1995, 2526, 82.		12
64	Fabrication of ceramic microcomponents using deep X-ray lithography. Microsystem Technologies, 2005, 11, 271-277.	1.2	12
65	Ink-jet printed optical waveguides. Flexible and Printed Electronics, 2017, 2, 045003.	1.5	12
66	Towards low-temperature deposition of piezoelectric Pb(Zr,Ti)O3: Influence of pressure and temperature on the properties of pulsed laser deposited Pb(Zr,Ti)O3. Thin Solid Films, 2017, 636, 680-687.	0.8	12
67	<title>Innovations in molding technologies for microfabrication</title> ., 1999, 3874, 53.		11
68	<title>Micromolding of polymer waveguides</title> . , 1999, , .		11
69	Overcoming oxygen inhibition effect by TODA in acrylate-based ceramic-filled inks. Progress in Organic Coatings, 2019, 130, 221-225.	1.9	11
70	Dielectric property improvement of polymer-nanosized strontium titanate-composites for applications in microelectronics. Microsystem Technologies, 2011, 17, 1529-1535.	1.2	10
71	Polymethylmethacrylate/polyethyleneglycol-based partially water soluble binder system for micro ceramic injection moulding. Microsystem Technologies, 2014, 20, 51-58.	1.2	10
72	Electrochemical performance of tin-based nano-composite electrodes using a vinylene carbonate-containing electrolyte for Li-ion cells. Journal of Power Sources, 2014, 263, 145-153.	4.0	10

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73	Interaction of High Flash Point Electrolytes and PE-Based Separators for Li-Ion Batteries. International Journal of Molecular Sciences, 2015, 16, 20258-20276.	1.8	10
74	Ink-jet printed fluorescent materials as light sources for planar optical waveguides on polymer foils. Optical Engineering, 2016, 55, 107107.	0.5	10
75	Optically and rheologically tailored polymers for applications in integrated optics. Sensors and Actuators A: Physical, 2016, 241, 224-230.	2.0	10
76	PVB/PEG-Based Feedstocks for Injection Molding of Alumina Microreactor Components. Materials, 2019, 12, 1219.	1.3	10
77	Investigation of Feedstock Preparation for Injection Molding of Oxide–Oxide Ceramic Composites. Journal of Manufacturing and Materials Processing, 2019, 3, 9.	1.0	10
78	Innovative molding technologies for the fabrication of components for microsystems. , 1999, , .		9
79	Tuning the dielectric constant of polymers using organic dopants. Microelectronic Engineering, 2010, 87, 533-536.	1.1	9
80	Nanoparticles in polymer-matrix composites. Microsystem Technologies, 2011, 17, 183-193.	1.2	9
81	Tailoring the optical and thermomechanical properties of polymer host–guest systems. Journal of Applied Polymer Science, 2011, 122, 3514-3519.	1.3	9
82	Realization of embedded capacitors using polymer matrix composites with barium titanate as high-k-active filler. Microsystem Technologies, 2012, 18, 745-751.	1.2	9
83	Investigations on the Processing of Ceramic Filled Inks for 3D InkJet Printing. Materials, 2020, 13, 2587.	1.3	9
84	Structure–Property Relationship of Polymerized Ionic Liquids for Solid-State Electrolyte Membranes. Polymers, 2021, 13, 792.	2.0	9
85	Viscosity and refractive index tailored methacrylateâ€based polymers. Journal of Applied Polymer Science, 2014, 131, .	1.3	8
86	Viscosity and refractive index adjustment of poly(methyl methacrylateâ€coâ€ethyleneglycol) Tj ETQq0 0 0 rgBT	Overlock	10 ₈ Tf 50 222
87	Investigation of Ternary Mixtures Containing 1-Ethyl-3-methylimidazolium Bis(trifluoromethanesulfonyl)azanide, Ethylene Carbonate and Lithium Bis(trifluoromethanesulfonyl)azanide. International Journal of Molecular Sciences, 2016, 17, 670.	1.8	8
88	Pulsed laser deposition of piezoelectric lead zirconate titanate thin films maintaining a post-CMOS compatible thermal budget. Journal of Applied Physics, 2017, 122, .	1.1	8
89	Polymerizable Ionic Liquids for Solid-State Polymer Electrolytes. Molecules, 2019, 24, 324.	1.7	8

⁹⁰Influence of Al2O3 Nanoparticle Addition on a UV Cured Polyacrylate for 3D Inkjet Printing. Polymers,
2019, 11, 633.2.08

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91	Crosslinking Behavior of UV-Cured Polyorganosilazane as Polymer-Derived Ceramic Precursor in Ambient and Nitrogen Atmosphere. Polymers, 2021, 13, 2424.	2.0	8
92	<title>RibCon: micromolded easy-assembly multifiber connector for single- and multimode applications</title> . , 2001, 4408, 478.		7
93	Laser micromachining of polymeric mold inserts for rapid prototyping of PMMA devices via photomolding. , 2002, 4637, 318.		7
94	Direct laser-assisted processing of polymers for microfluidic and micro-optical applications. , 2003, , .		7
95	Refractive index modification of polymers using nanosized dopants. Proceedings of SPIE, 2008, , .	0.8	7
96	Polymer nanocomposites for optical applications. , 2012, , 567-604.		7
97	Thickness variation of electrophoretically deposited strontium titanate films for photoelectrochemical energy conversion. Journal of Applied Physics, 2013, 114, 027020.	1.1	7
98	Inkjet-printed internal light extraction layers for organic light emitting diodes. Flexible and Printed Electronics, 2018, 3, 015007.	1.5	6
99	Formulation of a Ceramic Ink for 3D Inkjet Printing. Micromachines, 2021, 12, 1136.	1.4	6
100	Synthesis and characterization of new liquid-crystalline dyes for non-linear optics. Liquid Crystals, 1993, 14, 635-643.	0.9	5
101	<title>New developments of process technologies for microfabrication</title> ., 1997, , .		5
102	Fatty Acid Surfactant Structure-Feedstock Flow Properties: Correlation for High-Pressure Ceramic Injection Molding. International Journal of Applied Ceramic Technology, 2011, 8, 1296-1304.	1.1	5
103	New methacrylate-based feedstock systems for micro powder injection moulding. Microsystem Technologies, 2011, 17, 451-457.	1.2	5
104	Metal-ceramic-composite casting of complex micro components. Microsystem Technologies, 2013, 19, 159-165.	1.2	5
105	Nanoparticle surface polarity influence on the flow behavior of polymer matrix composites. Polymer Composites, 2013, 34, 1425-1432.	2.3	5
106	Ferroelectric thin film fabrication by direct UV-lithography. Microsystem Technologies, 2014, 20, 1859-1867.	1.2	5
107	Polymers with Customizable Optical and Rheological Properties for Printable Single-mode Waveguides. Procedia Engineering, 2015, 120, 3-6.	1.2	5
108	Investigation of the Oxidative Stability of Li-Ion Battery Electrolytes Using Cathode Materials. ECS Electrochemistry Letters, 2015, 4, A141-A144.	1.9	5

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109	Morphology and oxygen vacancy investigation of strontium titanate-based photo electrochemical cells. Journal of Materials Science, 2015, 50, 40-48.	1.7	5
110	A Novel Co-casting Process for Piezoelectric Multilayer Ceramics with Silver Inner Electrodes. Procedia Engineering, 2015, 120, 124-129.	1.2	5
111	The co-casting process: A new manufacturing process for ceramic multilayer devices. Sensors and Actuators A: Physical, 2016, 251, 266-275.	2.0	5
112	Optical and Thermomechanical Properties of Doped Polyfunctional Acrylate Copolymers. Polymers, 2018, 10, 337.	2.0	5
113	Orientational Behavior of Stilbene Dyes in Nematic Liquid Crystals. Molecular Crystals and Liquid Crystals, 1993, 231, 119-127.	0.3	4
114	Guestâ€hostâ€mixtures: A correlation between the dye's order parameter with thermodynamic and structural quantities. Zeitschrift Fur Elektrotechnik Und Elektrochemie, 1994, 98, 596-602.	0.9	4
115	<title>Rapid fabrication of microcomponents</title> ., 2000, , .		4
116	Rheological investigations on the flow behavior of polymerâ€microsized iron powder composites. Polymer Composites, 2009, 30, 1114-1118.	2.3	4
117	Polymerâ€based route to ferroelectric lead strontium titanate thin films. Journal of Applied Polymer Science, 2014, 131, .	1.3	4
118	Tuning the Optical and Rheological Properties of Host-guest Systems based on an Epoxy Acrylate and MMA. Procedia Technology, 2014, 15, 161-167.	1.1	4
119	Low Temperature Sintering of PZT. Journal of Physics: Conference Series, 2014, 557, 012132.	0.3	4
120	Refractive index increase of acrylateâ€based polymers by adding soluble aromatic guestâ€molecules. Polymers for Advanced Technologies, 2017, 28, 506-510.	1.6	4
121	The influence on sintering and properties of sodium niobate (NaNbO3) ceramics by "non-stoichiometric―precursor compositions. Materials Chemistry and Physics, 2019, 229, 437-447.	2.0	4
122	Powder Injection Molding of Oxide Ceramic CMC. Key Engineering Materials, 2019, 809, 148-152.	0.4	4
123	Ceramic Injection Moulding using 3D-Printed Mould Inserts. Ceramics in Modern Technologies, 2019, 1, 104-110.	0.3	4
124	Poly(ionic liquid) Based Composite Electrolytes for Lithium Ion Batteries. Polymers, 2021, 13, 4469.	2.0	4
125	Laser Micromachining of Metallic Mold Inserts for Replication Techniques. Materials Research Society Symposia Proceedings, 2000, 617, 551.	0.1	3
126	Micron-Sized Pored Membranes Based on Polyvinylidene Difluoride Hexafluoropropylene Prepared by Phase Inversion Techniques. Polymers, 2017, 9, 489.	2.0	3

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127	LOWERING THE SINTERING TEMPERATURE OF BARIUM STRONTIUM TITANATE BULK CERAMICS BY BARIUM STRONTIUM TITANATE-GEL AND BaCu(Bâ"Oâ,). Ceramics - Silikaty, 2016, , 1-11.	0.2	3
128	Flow behavior of unsaturated polyester resin—Microsized 17â€4PH stainless steel powder—Feedstocks. Polymer Composites, 2009, 30, 1873-1878.	2.3	2
129	Polyester-styrene/ceramic nanocomposites for antenna applications. , 2013, , .		2
130	Development and characterization of high refractive index and high scattering acrylate polymer layers. Optical Engineering, 2016, 55, 117106.	0.5	2
131	The influence of photo initiators on refractive index and glass transition temperature of optically and rheologically adjusted acrylate based polymers. Polymers for Advanced Technologies, 2016, 27, 1294-1300.	1.6	2
132	Tailoring Optical and Rheological Properties of Host-guest Systems Based on an Epoxy Acrylate. Materials Today: Proceedings, 2016, 3, 289-293.	0.9	2
133	Development and characterization of adjustable refractive index scattering epoxy acrylate polymer layers. Optical Engineering, 2017, 56, 037105.	0.5	2
134	ELECTROPHORETIC DEPOSITION OF BiVOâ,,, LAYERS ON FTO SUBSTRATES FOR PHOTO ELECTRO-CHEMICAL CELLS. Ceramics - Silikaty, 2019, , 124-130.	0.2	2
135	Polymer-Dopant-Systems: Tailoring of Optical and Thermomechanical Properties. , 2010, , .		1
136	Modeling of the Electrical Properties of Bidirectional Alkaline Air Electrodes. Journal of the Electrochemical Society, 2014, 161, A1019-A1022.	1.3	1
137	Rapid prototyping of glass microfluidic chips. , 2015, , .		1
138	Development and characterization of adjustable refractive index scattering epoxy acrylate polymer layers. , 2016, , .		1
139	Ink-jet printing of host-guest systems based on acrylates with fluorescent dopants. , 2016, , .		1
140	Experimental dataset on electrolyte mixtures containing fluoroethylene carbonate and lithium bis(trifluoromethanesulfonyl)imide. Data in Brief, 2019, 23, 103703.	0.5	1
141	Überwachung der kontinuierlichen hydrothermalen Synthese mittels Impedanzspektroskopie. Chemie-Ingenieur-Technik, 0, , .	0.4	1
142	Fabrication of functional polymeric prototypes for micro-fluidical and micro-optical applications. , 0,		0
143	Influence of the nanoparticle surface polarity on the flow behavior of polymer matrix composites. , 2012, , .		0
144	Tailoring the optical and rheological properties of an epoxy acrylate based host-guest system. , 2014, , .		0

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145	"LIGA2.X―process for mass production of single polymeric LIGA micro parts. Microsystem Technologies, 2014, 20, 1955-1960.	1.2	0
146	Polymers with customizable optical and rheological properties based on an epoxy acrylate based host-guest system. , 2015, , .		0
147	Development and characterization of high refractive index and high scattering acrylate polymer layers. , 2016, , .		0
148	Refractive index increase of acrylate-based polymers by adding soluble aromatic guest-molecules. Polymers for Advanced Technologies, 2017, 28, 1209-1209.	1.6	0
149	Screen-Printed Internal Extraction Layers based on Scattering Polymer/Nanoparticle Composites for OLEDs. , 2017, , .		0
150	LIGHT INTENSITY INFLUENCE ON STRONTIUM TITANATE BASED PHOTO- ELECTROCHEMICAL CELLS. Ceramics - Silikaty, 2017, , 179-182.	0.2	0
151	Optical waveguides fabricated by combination of ink-jet and flexographic printing. NIP & Digital Fabrication Conference, 2016, 32, 294-297.	0.1	0