Patrick Gane

List of Publications by Year
in descending order

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51 papers	1,443 citations	331670 21 h-index	330143 37 g-index
51 all docs	51 docs citations	51 times ranked	1744 citing authors

#	Article	IF	Citations
1	General overview of graphene: Production, properties and application in polymer composites. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2017, 215, 9-28.	3.5	289
2	A comparative study of mechanical, thermal and electrical properties of graphene-, graphene oxide- and reduced graphene oxide-doped microfibrillated cellulose nanocomposites. Composites Part B: Engineering, 2018, 147, 104-113.	12.0	128
3	Characterisation of pore structures of pharmaceutical tablets: A review. International Journal of Pharmaceutics, 2018, 538, 188-214.	5.2	90
4	A review of modified surfaces for high speed inkjet coating. Surface and Coatings Technology, 2010, 204, 2103-2109.	4.8	86
5	The role of MFC/NFC swelling in the rheological behavior and dewatering of high consistency furnishes. Cellulose, 2013, 20, 2847-2861.	4.9	73
6	Characterization of the Pore Structure of Functionalized Calcium Carbonate Tablets by Terahertz Time-Domain Spectroscopy and X-Ray Computed Microtomography. Journal of Pharmaceutical Sciences, 2017, 106, 1586-1595.	3.3	59
7	High-concentration shear-exfoliated colloidal dispersion of surfactantâ€“polymer-stabilized few-layer graphene sheets. Journal of Materials Science, 2017, 52, 8321-8337.	3.7	47
8	Influence of aqueous Mg concentration on the transformation of amorphous calcium carbonate. Journal of Crystal Growth, 2018, 498, 381-390.	1.5	44
9	Compaction of functionalized calcium carbonate, a porous and crystalline microparticulate material with a lamellar surface. International Journal of Pharmaceutics, 2014, 466, 266-275.	5.2	32
10	Separation of off-set ink components during absorption into pigment coating structures. Nordic Pulp and Paper Research Journal, 2000, 15, 527-535.	0.7	32
11	Resolving the rapid water absorption of porous functionalised calcium carbonate powder compacts by terahertz pulsed imaging. Chemical Engineering Research and Design, 2018, 132, 1082-1090.	5.6	28
12	Effect of fibril length, aspect ratio and surface charge on ultralow shear-induced structuring in micro and nanofibrillated cellulose aqueous suspensions. Cellulose, 2018, 25, 117-136.	4.9	28
13	Comparing the rheological properties of novel nanofibrillar cellulose-formulated pigment coating colours with those using traditional thickener. Nordic Pulp and Paper Research Journal, 2014, 29, 253-270.	0.7	27
14	Fast and non-destructive pore structure analysis using terahertz time-domain spectroscopy. International Journal of Pharmaceutics, 2018, 537, 102-110.	5.2	27
15	Simultaneous investigation of the liquid transport and swelling performance during tablet disintegration. International Journal of Pharmaceutics, 2020, 584, 119380.	5.2	27
16	Micro nanofibrillated cellulose (MNFC) gel dewatering induced at ultralow-shear in presence of added colloidally-unstable particles. Cellulose, 2017, 24, 1463-1481.	4.9	26
17	Achieving Rapid Absorption and Extensive Liquid Uptake Capacity in Porous Structures by Decoupling Capillarity and Permeability: Nanoporous Modified Calcium Carbonate. Transport in Porous Media, 2006, 63, 239-259.	2.6	24
18	Influence on Pore Structure of Micro/Nanofibrillar Cellulose in Pigmented Coating Formulations. Transport in Porous Media, 2014, 103, 155-179.	2.6	23

#	Article	IF	Citations
19	From colloidal spheres to nanofibrils: Extensional flow properties of mineral pigment and mixtures with micro and nanofibrils under progressive double layer suppression. Journal of Colloid and Interface Science, 2015, 446, 31-43.	9.4	23
20	Rheology of microfibrillated cellulose (MFC) suspensions: influence of the degree of fibrillation and residual fibre content on flow and viscoelastic properties. Cellulose, 2019, 26, 845-860.	4.9	23
21	Pore wall rugosity: The role of extended wetting contact line length during spontaneous liquid imbibition in porous media. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2014, 443, 286-295.	4.7	22
22	Influence of shear rheometer measurement systems on the rheological properties of microfibrillated cellulose (MFC) suspensions. Cellulose, 2018, 25, 961-976.	4.9	22
23	Co-exfoliation and fabrication of graphene based microfibrillated cellulose composites â€“ mechanical and thermal stability and functional conductive properties. Nanoscale, 2018, 10, 9569-9582.	5.6	20
24	Application of pigmented coating colours containing MFC/NFC: Coating properties and link to rheology. Nordic Pulp and Paper Research Journal, 2015, 30, 165-178.	0.7	19
25	Hydrophobic patterning of functional porous pigment coatings by inkjet printing. Microfluidics and Nanofluidics, 2016, 20, 1.	2.2	18
26	Enhancing the Stability of Aqueous Dispersions and Foams Comprising Cellulose Nanofibrils (CNF) with CaCO3 Particles. Nanomaterials, 2018, 8, 651.	4.1	17
27	Rheological investigation of complex micro and nanofibrillated cellulose (MNFC) suspensions: Discussion of flow curves and gel stability. Tappi Journal, 2016, 15, 405-416.	0.5	17
28	Spontaneous Inertial Imbibition in Porous Media Using a Fractal Representation of Pore Wall Rugosity. Transport in Porous Media, 2014, 104, 231-251.	2.6	16
29	Short time spreading and wetting of offset printing liquids on model calcium carbonate coating structures. Journal of Colloid and Interface Science, 2012, 369, 426-434.	9.4	15
30	Microfluidic Lateral Flow Cytochrome P450 Assay on a Novel Printed Functionalized Calcium Carbonateâ€Based Platform for Rapid Screening of Human Xenobiotic Metabolism. Advanced Functional Materials, 2018, 28, 1802793.	14.9	15
31	Limitations of Current Formulations when Decreasing the Coating Layer Thickness of Papers for Inkjet Printing. Industrial & Engineering Chemistry Research, 2011, 50, 7251-7263.	3.7	13
32	Acid dissociation of surface bound water on cellulose nanofibrils in aqueous micro nanofibrillated cellulose (MNFC) gel revealed by adsorption of calcium carbonate nanoparticles under the application of ultralow shear. Cellulose, 2017, 24, 3155-3178.	4.9	11
33	Influence of the Surface Modification of Calcium Carbonate on Polyamide 12 Composites. Polymers, 2020, 12, 1295.	4.5	11
34	Nitrogen plasma surface treatment for improving polar ink adhesion on micro/nanofibrillated cellulose films. Cellulose, 2019, 26, 3845-3857.	4.9	10
35	Unveiling a Recycling-Sourced Mineral-Biocellulose Fibre Composite for Use in Combustion-Generated NOx Mitigation Forming Plant Nutrient: Meeting Sustainability Development Goals in the Circular Economy. Applied Sciences (Switzerland), 2020, 10, 3927.	2.5	10
36	The investigation of rheological and strength properties of NFC hydrogels and aerogels from hardwood pulp by short catalytic bleaching (Hcat). Cellulose, 2018, 25, 1637-1655.	4.9	9

#	Article	IF	Citations
37	Extending waste paper, cellulose and filler use beyond recycling by entering the circular economy creating cellulose-CaCO3 composites reconstituted from ionic liquid. Cellulose, 2022, 29, 5037-5059.	4.9	7
38	Inkjet printed polyelectrolyte patterns for analyte separation on inherently porous microfluidic analytical designs. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2017, 522, 218-232.	4.7	6
39	Iso- and Anisotropic Etching of Micro Nanofibrillated Cellulose Films by Sequential Oxygen and Nitrogen Gas Plasma Exposure for Tunable Wettability on Crystalline and Amorphous Regions. Materials, 2021, 14, 3571.	2.9	6
40	Modification of CaCO3 and CaCO3 pin-coated cellulose paper under supercritical carbon dioxideâ€“ethanol mixture for enhanced NO2 capture. Environmental Science and Pollution Research, 2022, 29, 11707-11717.	5.3	6
41	Structural evidence for the timescale separated liquid imbibition phenomenon in porous media. Powder Technology, 2017, 310, 8-16.	4.2	5
42	Contrasting liquid imbibition into uncoated versus pigment coated paper enables a description of imbibition into new-generation surface-filled paper. European Physical Journal E, 2017, 40, 111.	1.6	5
43	Multidimensional Coâ€Exfoliated Activated Grapheneâ€Based Carbon Hybrid for Supercapacitor Electrode. Energy Technology, 2019, 7, 1900578.	3.8	5
44	Characterising exfoliated few-layer graphene interactions in co-processed nanofibrillated cellulose suspension via water retention and dispersion rheology. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2019, 242, 37-51.	3.5	4
45	Calcium Carbonate as Functional Filler in Polyamide 12-Manipulation of the Thermal and Mechanical Properties. Processes, 2021, 9, 937.	2.8	4
46	Investigating chromatographic interactions in porous pigment coatings between inkjettable polyelectrolytes and model colorant solutions. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2019, 579, 123676.	4.7	3
47	Fully inkjet-printed glucose assay fabricated on highly porous pigment coating. Microfluidics and Nanofluidics, 2020, 24, 1.	2.2	3
48	Inkjet jettability and physical characterization of waterâ€“ethanol solutions of low molecular weight sodium polyacrylate and poly-diallyl dimethyl ammonium chloride (polyDADMAC). AIP Advances, 2020, 10, .	1.3	3
49	Impact of Bimodal Particle Size Distribution Ratio of Functional Calcium Carbonate Filler on Thermal and Flowability Properties of Polyamide 12. Applied Sciences (Switzerland), 2021, 11, 641.	2.5	3
50	Revealing the Components at Work in Classical Liquid Imbibition Models: Inertial, Bosanquet and Viscous Lucas-Washburn Applied to Printing. Lecture Notes in Electrical Engineering, 2017, , 987-995.	0.4	2
51	Stochastic transient Liquid-Solid Phase Separation reveals multi-level Dispersion States of Particles in Suspension. Applied Rheology, 2019, 29, 41-57.	5.2	0