

Jean-Francis Bloch

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/6125502/publications.pdf>

Version: 2024-02-01

49
papers

1,331
citations

394421

19
h-index

345221

36
g-index

51
all docs

51
docs citations

51
times ranked

1783
citing authors

#	ARTICLE	IF	CITATIONS
1	Paper-Based, Capacitive Touch Pads. <i>Advanced Materials</i> , 2012, 24, 2850-2856.	21.0	186
2	Fabrication of Low-Cost Paper-Based Microfluidic Devices by Embossing or Cut-and-Stack Methods. <i>Chemistry of Materials</i> , 2014, 26, 4230-4237.	6.7	140
3	Electrically Activated Paper Actuators. <i>Advanced Functional Materials</i> , 2016, 26, 2446-2453.	14.9	135
4	Heat and mass transfer in wet porous media in presence of evaporation-condensation. <i>International Journal of Heat and Mass Transfer</i> , 1998, 41, 2263-2277.	4.8	90
5	Estimation of microstructural properties from synchrotron X-ray microtomography and determination of the REV in paper materials. <i>Acta Materialia</i> , 2007, 55, 2841-2850.	7.9	90
6	Draw your assay: Fabrication of low-cost paper-based diagnostic and multi-well test zones by drawing on a paper. <i>Talanta</i> , 2015, 144, 289-293.	5.5	50
7	Finding fibres and their contacts within 3D images of disordered fibrous media. <i>Composites Science and Technology</i> , 2013, 89, 202-210.	7.8	48
8	Recruiting physisorbed water in surface polymerization for bio-inspired materials of tunable hydrophobicity. <i>Journal of Materials Chemistry A</i> , 2016, 4, 14729-14738.	10.3	45
9	Microstructural effects on the flow law of power-law fluids through fibrous media. <i>Modelling and Simulation in Materials Science and Engineering</i> , 2004, 12, 995-1015.	2.0	42
10	Modelling the flow of power-law fluids through anisotropic porous media at low-pore Reynolds number. <i>Chemical Engineering Science</i> , 2006, 61, 4490-4502.	3.8	37
11	Magnetic Two-Way Valves for Paper-Based Capillary-Driven Microfluidic Devices. <i>ACS Omega</i> , 2018, 3, 2049-2057.	3.5	36
12	Statistical analysis of paper surface microstructure: A multi-scale approach. <i>Applied Surface Science</i> , 2008, 254, 7431-7437.	6.1	34
13	Upscaling the flow of generalised Newtonian fluids through anisotropic porous media. <i>Journal of Non-Newtonian Fluid Mechanics</i> , 2007, 145, 15-29.	2.4	33
14	Transport properties of heterogeneous materials. Combining computerised X-ray micro-tomography and direct numerical simulations. <i>International Journal of Computational Fluid Dynamics</i> , 2009, 23, 713-721.	1.2	33
15	Analysis of the hygroexpansion of a lignocellulosic fibrous material by digital correlation of images obtained by X-ray synchrotron microtomography: application to a folding box board. <i>Journal of Materials Science</i> , 2011, 46, 4756-4769.	3.7	33
16	Synchrotron radiation microtomography applied to investigation of paper. <i>Journal Physics D: Applied Physics</i> , 2005, 38, A78-A84.	2.8	30
17	Self-Amplification of Solid Friction in Interleaved Assemblies. <i>Physical Review Letters</i> , 2016, 116, 015502.	7.8	25
18	Nonsmooth Developable Geometry for Interactively Animating Paper Crumpling. <i>ACM Transactions on Graphics</i> , 2015, 35, 1-18.	7.2	25

#	ARTICLE	IF	CITATIONS
19	Structural Analysis by X-Ray Microtomography of a Strained Nonwoven Papermaker Felt. Textile Research Journal, 2002, 72, 480-485.	2.2	19
20	Effect of calendaring on paper surface micro-structure: A multi-scale analysis. Journal of Materials Processing Technology, 2009, 209, 5204-5210.	6.3	19
21	Paper-based microfluidic devices by asymmetric calendaring. Biomicrofluidics, 2017, 11, 014104.	2.4	19
22	Flow of non-Newtonian liquid polymers through deformed composites reinforcements. Composites Science and Technology, 2009, 69, 612-619.	7.8	15
23	Effect of calendaring on paper surface properties. Applied Surface Science, 2010, 256, 6923-6927.	6.1	14
24	Surface polymerization of perfluorosilane treatments on paper mitigates HF production upon incineration. RSC Advances, 2016, 6, 82233-82237.	3.6	13
25	Substituting Plastic Casings with Hydrophobic (Perfluorosilane treated) paper improves Biodegradability of Low-Cost Diagnostic Devices. Industrial Crops and Products, 2016, 94, 294-298.	5.2	13
26	Crumpled paper sheets: Low-cost biobased cellular materials for structural applications. Materials and Design, 2017, 136, 150-164.	7.0	13
27	Rapid Prototyping of Reconfigurable Microfluidic Channels in Undercooled Metal Particle-Elastomer Composites. Industrial & Engineering Chemistry Research, 2019, 58, 4137-4142.	3.7	13
28	Heat Transfer in Nonsaturated Porous Media. Modelling by Homogenisation. Transport in Porous Media, 1998, 30, 301-321.	2.6	9
29	Reprint of 'Draw your assay: Fabrication of low-cost paper-based diagnostic and multi-well test zones by drawing on a paper'. Talanta, 2015, 145, 73-77.	5.5	9
30	Synchrotron X-ray Microtomography: A New Tool to Characterize the Interaction Between Paper and Toner. Journal of Imaging Science and Technology, 2008, 52, 10502-1-10502-6.	0.5	8
31	A method to quantify the 3D microstructure of fibrous materials containing mineral fillers using X-ray microtomography: application to paper materials. Journal of Materials Science, 2012, 47, 6517-6521.	3.7	7
32	Melt-and-mold fabrication (MnM-Fab) of reconfigurable low-cost devices for use in resource-limited settings. Talanta, 2015, 145, 20-28.	5.5	7
33	Forced stick-slip oscillations allow the measurement of the friction force: Application to paper materials. Tribology International, 2015, 91, 94-98.	5.9	7
34	A new approach to bound states in potential wells. American Journal of Physics, 2001, 69, 1177-1181.	0.7	6
35	Upscaling of Diffusion-Reaction Phenomena by Homogenisation Technique: Possible Appearance of Morphogenesis. Transport in Porous Media, 2019, 127, 191-209.	2.6	6
36	Gloss optical elementary representative surface. Applied Optics, 2008, 47, 5429.	2.1	5

#	ARTICLE	IF	CITATIONS
37	About the theoretical aspect of multiple light scattering: Silvy's theory. Color Research and Application, 2003, 28, 227-228.	1.6	4
38	Inverting Thermal Degradation (iTd) of Paper Using Chemi- and Physi-Sorbed Modifiers for Templated Material Synthesis. Frontiers in Chemistry, 2018, 6, 338.	3.6	4
39	Effect of surface morphologies and chemistry of paper on deposited collagen. Applied Surface Science, 2019, 484, 461-469.	6.1	3
40	Paper Actuators: Electrically Activated Paper Actuators (Adv. Funct. Mater. 15/2016). Advanced Functional Materials, 2016, 26, 2398-2398.	14.9	2
41	Anisotropy of paper: comparison of different laser tools. , 2000, 4103, 106.		1
42	INVESTIGATION OF THE TRANSVERSE PERMEABILITY OF SATURATED PAPER SHEETS. Drying Technology, 2001, 19, 2421-2433.	3.1	1
43	Toward the link between structural and mechanical properties of fiber aggregates in paper materials. Journal of Materials Science, 2022, 57, 7587-7599.	3.7	1
44	<title>Modeling of surface roughness: application to physical properties of paper</title>. , 2000, 4100, 96.		0
45	<title>Tool for the evaluation of cigarette paper marking quality</title>. , 2000, , .		0
46	Modelling of the flow of generalised Newtonian fluids through deformed textile reinforcements. International Journal of Material Forming, 2008, 1, 903-906.	2.0	0
47	Quelques aspects du comportement hygromécanique du papier. Mecanique Et Industries, 2009, 10, 43-48.	0.2	0
48	Influence of the history of loading during beating on the evolution of the drainage resistance (SR). Nordic Pulp and Paper Research Journal, 2012, 27, 208-210.	0.7	0
49	Model of friction to take into account the sliding distance dependence and its memory effect. Tribology International, 2015, 91, 184-188.	5.9	0