Niki Baccile

List of Publications by Year in Descending Order

84 papers	4,643 citations	29 h-index	67 g-index
97 ext. papers	5,163 ext. citations	6.6 avg, IF	5.6 L-index

#	Paper	IF	Citations
84	Homogeneous supported monolayer from microbial glycolipid biosurfactant. *Journal of Molecular Liquids*, **2022**, 345, 117827	6	
83	Cellulose Nanocrystal-Fibrin Nanocomposite Hydrogels Promoting Myotube Formation. *Biomacromolecules*, **2021**, 22, 2740-2753	6.9	3
82	From bumblebee to bioeconomy: Recent developments and perspectives for sophorolipid biosynthesis. *Biotechnology Advances*, **2021**, 107788	17.8	9
81	Microbial biosurfactant research: time to improve the rigour in the reporting of synthesis, functional characterization and process development. *Microbial Biotechnology*, **2021**, 14, 147-170	6.3	21
80	Self-assembly, interfacial properties, interactions with macromolecules and molecular modelling and simulation of microbial bio-based amphiphiles (biosurfactants). A tutorial review. *Green Chemistry*, **2021**, 23, 3842-3944	10	14
79	Palmitic acid sophorolipid biosurfactant: from self-assembled fibrillar network (SAFiN) to hydrogels with fast recovery. *Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences*, **2021**, 379, 20200343	3	5
78	pH-switchable pickering emulsions stabilized by polyelectrolyte-biosurfactant complex coacervate colloids. *Journal of Colloid and Interface Science*, **2021**, 600, 23-36	9.3	10
77	Interpenetrated biosurfactant-silk fibroin networks - a SANS study. *Soft Matter*, **2021**, 17, 2302-2314	3.6	3
76	Primary and Secondary Hydration Forces between Interdigitated Membranes Composed of Bolaform Microbial Glucolipids. *Langmuir*, **2020**, 36, 2191-2198	4	5
75	Effects of pH, temperature and shear on the structure-property relationship of lamellar hydrogels from microbial glucolipids probed by in situ rheo-SAXS. *Soft Matter*, **2020**, 16, 2540-2551	3.6	10
74	Unveiling the Interstitial Pressure between Growing Ice Crystals during Ice-Templating Using a Lipid Lamellar Probe. *Journal of Physical Chemistry Letters*, **2020**, 11, 1989-1997	6.4	6
73	Single-molecule lamellar hydrogels from bolaform microbial glucolipids. *Soft Matter*, **2020**, 16, 2528-2539	3.6	15
72	Synthesis of multilamellar walls vesicles polyelectrolyte-surfactant complexes from pH-stimulated phase transition using microbial biosurfactants. *Journal of Colloid and Interface Science*, **2020**, 580, 493-502	9.3	8
71	Synthesis and self-assembly of aminyl and alkynyl substituted sophorolipids. *Green Chemistry*, **2020**, 22, 8323-8336	10	4
70	Stimuli-Induced Nonequilibrium Phase Transitions in Polyelectrolyte-Surfactant Complex Coacervates. *Langmuir*, **2020**, 36, 8839-8857	4	8
69	Antibacterial properties of glycosylated surfaces: variation of the glucosidal moiety and fatty acid conformation of grafted microbial glycolipids. *Molecular Systems Design and Engineering*, **2020**, 5, 1307-1316	4.6	4
68	Biocompatible Glyconanoparticles by Grafting Sophorolipid Monolayers on Monodispersed Iron Oxide Nanoparticles.. *ACS Applied Bio Materials*, **2019**, 2, 3095-3107	4.1	7

67	pH-Controlled Self-Assembled Fibrillar Network Hydrogels: Evidence of Kinetic Control of the Mechanical Properties. *Chemistry of Materials*, **2019**, 31, 4817-4830	9.6	24
66	Lipid-Based Quaternary Ammonium Sophorolipid Amphiphiles with Antimicrobial and Transfection Activities. *ChemSusChem*, **2019**, 12, 3642-3653	8.3	11
65	Asymmetrical, Symmetrical, Divalent, and Y-Shaped (Bola)amphiphiles: The Relationship between the Molecular Structure and Self-Assembly in Amino Derivatives of Sophorolipid Biosurfactants. *Journal of Physical Chemistry B*, **2019**, 123, 3841-3858	3.4	14
64	Nanoscale antiadhesion properties of sophorolipid-coated surfaces against pathogenic bacteria. *Nanoscale Horizons*, **2019**, 4, 975-982	10.8	13
63	Soft lamellar solid foams from ice-templating of self-assembled lipid hydrogels: organization drives the mechanical properties. *Materials Horizons*, **2019**, 6, 2073-2086	14.4	12
62	Easy Formation of Functional Liposomes in Water Using a pH-Responsive Microbial Glycolipid: Encapsulation of Magnetic and Upconverting Nanoparticles. *ChemNanoMat*, **2019**, 5, 1188-1201	3.5	7
61	From lab to market: An integrated bioprocess design approach for new-to-nature biosurfactants produced by Starmerella bombicola. *Biotechnology and Bioengineering*, **2018**, 115, 1195-1206	4.9	50
60	pH- and Time-Resolved in Situ SAXS Study of Self-Assembled Twisted Ribbons Formed by Elaidic Acid Sophorolipids. *Langmuir*, **2018**, 34, 2121-2131	4	10
59	Complex coacervation of natural sophorolipid bolaamphiphile micelles with cationic polyelectrolytes. *Green Chemistry*, **2018**, 20, 3371-3385	10	20
58	Bio-based glyco-bolaamphiphile forms a temperature-responsive hydrogel with tunable elastic properties. *Soft Matter*, **2018**, 14, 7859-7872	3.6	19
57	Synthesis and Biological Evaluation of Bolaamphiphilic Sophorolipids. *ACS Sustainable Chemistry and Engineering*, **2018**, 6, 8992-9005	8.3	14
56	Micelles versus Ribbons: How Congeners Drive the Self-Assembly of Acidic Sophorolipid Biosurfactants. *ChemPhysChem*, **2017**, 18, 643-652	3.2	23
55	Adjuvant Antibiotic Activity of Acidic Sophorolipids with Potential for Facilitating Wound Healing. *Antimicrobial Agents and Chemotherapy*, **2017**, 61,	5.9	52
54	Surface-Induced Frustration in Solid State Polymorphic Transition of Native Cellulose Nanocrystals. *Biomacromolecules*, **2017**, 18, 1975-1982	6.9	14
53	Antibacterial properties of sophorolipid-modified gold surfaces against Gram positive and Gram negative pathogens. *Colloids and Surfaces B: Biointerfaces*, **2017**, 157, 325-334	6	28
52	Development of a Cradle-to-Grave Approach for Acetylated Acidic Sophorolipid Biosurfactants. *ACS Sustainable Chemistry and Engineering*, **2017**, 5, 1186-1198	8.3	45
51	Glucosomes: Glycosylated Vesicle-in-Vesicle Aggregates in Water from pH-Responsive Microbial Glycolipid. *ChemistryOpen*, **2017**, 6, 526-533	2.3	15
50	Surface-induced assembly of sophorolipids. *Physical Chemistry Chemical Physics*, **2017**, 19, 15227-15238	3.6	7

49	Degradation and Crystallization of Cellulose in Hydrogen Chloride Vapor for High-Yield Isolation of Cellulose Nanocrystals. *Angewandte Chemie - International Edition*, **2016**, 55, 14455-14458	16.4	83
48	pH-Driven Self-Assembly of Acidic Microbial Glycolipids. *Langmuir*, **2016**, 32, 6343-59	4	47
47	Self-Assembly Mechanism of pH-Responsive Glycolipids: Micelles, Fibers, Vesicles, and Bilayers. *Langmuir*, **2016**, 32, 10881-10894	4	55
46	Structure of Bolaamphiphile Sophorolipid Micelles Characterized with SAXS, SANS, and MD Simulations. *Journal of Physical Chemistry B*, **2015**, 119, 13113-33	3.4	43
45	Biocidal Properties of a Glycosylated Surface: Sophorolipids on Au(111). *ACS Applied Materials & Interfaces*, **2015**, 7, 18086-95	9.5	21
44	Nanoscale Platelet Formation by Monounsaturated and Saturated Sophorolipids under Basic pH Conditions. *Chemistry - A European Journal*, **2015**, 21, 19265-77	4.8	22
43	Synthesis of Uniform, Monodisperse, Sophorolipid Twisted Ribbons. *Chemistry - an Asian Journal*, **2015**, 10, 2419-26	4.5	19
42	Characterization of biomass and its derived char using 13C-solid state nuclear magnetic resonance. *Green Chemistry*, **2014**, 16, 4839-4869	10	64
41	Impact of batch variability on physicochemical properties of manufactured TiO 2 and SiO 2 nanopowders. *Powder Technology*, **2014**, 267, 39-53	5.2	5
40	pH-triggered formation of nanoribbons from yeast-derived glycolipid biosurfactants. *Soft Matter*, **2014**, 10, 3950-9	3.6	49
39	One-Step Introduction of Broad-Band Mesoporosity in Silica Particles Using a Stimuli-Responsive Bioderived Glycolipid. *ACS Sustainable Chemistry and Engineering*, **2014**, 2, 512-522	8.3	2
38	Practical methods to reduce impurities for gram-scale amounts of acidic sophorolipid biosurfactants. *European Journal of Lipid Science and Technology*, **2013**, 115, 1404-1412	3	27
37	Surface charge of acidic sophorolipid micelles: effect of base and time. *Soft Matter*, **2013**, 9, 4911	3.6	27
36	Characterization of Hydrothermal Carbonization Materials **2013**, 151-211		3
35	Sophorolipids-functionalized iron oxide nanoparticles. *Physical Chemistry Chemical Physics*, **2013**, 15, 1606-20	3.6	32
34	Nanomaterials from Renewable Resources **2013**, 335-356		2
33	Using Evaporation-Induced Self-Assembly for the Direct Drug Templating of Therapeutic Vectors with High Loading Fractions, Tunable Drug Release, and Controlled Degradation. *Chemistry of Materials*, **2013**, 25, 4671-4678	9.6	22
32	Hierarchical Porosity in Silica Thin Films by a One-Step Templating Strategy Using a Stimuli-Responsive Bioderived Glycolipid. *Journal of Physical Chemistry C*, **2013**, 117, 23899-23907	3.8	10

31	Biosurfactant-mediated one-step synthesis of hydrophobic functional imogolite nanotubes. *RSC Advances*, **2012**, 2, 426-435	3.7	19
30	In situ time-resolved SAXS study of the formation of mesostructured organically modified silica through modeling of micelles evolution during surfactant-templated self-assembly. *Langmuir*, **2012** , 28, 17477-93	4	21
29	Unusual, pH-induced, self-assembly of sophorolipid biosurfactants. *ACS Nano*, **2012**, 6, 4763-76	16.7	80
28	Morphological and structural differences between glucose, cellulose and lignocellulosic biomass derived hydrothermal carbons. *Green Chemistry*, **2011**, 13, 3273	10	483
27	Hydrothermal carbon from biomass: structural differences between hydrothermal and pyrolyzed carbons via 13C solid state NMR. *Langmuir*, **2011**, 27, 14460-71	4	209
26	Mesostructured silica from amino acid-based surfactant formulations and sodium silicate at neutral pH. *Journal of Sol-Gel Science and Technology*, **2011**, 58, 170-174	2.3	9
25	Structural Insights on Nitrogen-Containing Hydrothermal Carbon Using Solid-State Magic Angle Spinning 13C and 15N Nuclear Magnetic Resonance. *Journal of Physical Chemistry C*, **2011**, 115, 8976-8982	3.8	85
24	Kinetics of the formation of 2D-hexagonal silica nanostructured materials by nonionic block copolymer templating in solution. *Journal of Physical Chemistry B*, **2011**, 115, 11330-44	3.4	59
23	Sophorolipids: a yeast-derived glycolipid as greener structure directing agents for self-assembled nanomaterials. *Green Chemistry*, **2010**, 12, 1564	10	57
22	One-step hydrothermal synthesis of nitrogen-doped nanocarbons: albumine directing the carbonization of glucose. *ChemSusChem*, **2010**, 3, 246-53	8.3	107
21	Application of Advanced Solid-State NMR Techniques to the Characterization of Nanomaterials: A Focus on Interfaces and Structure **2010**, 139-182		2
20	Sustainable nitrogen-doped carbonaceous materials from biomass derivatives. *Carbon*, **2010**, 48, 3778-3787	6.4	332
19	Solid-state nuclear magnetic resonance: A valuable tool to explore organic-inorganic interfaces in silica-based hybrid materials. *Comptes Rendus Chimie*, **2010**, 13, 58-68	2.7	39
18	Proteins Induced Formation of Hydrothermal Nitrogen Doped Carbons. *Materials Research Society Symposia Proceedings*, **2009**, 1219, 4051		
17	Introducing ecodesign in silica sol-gel materials. *Journal of Materials Chemistry*, **2009**, 19, 8537		109
16	Carboxylate-Rich Carbonaceous Materials via One-Step Hydrothermal Carbonization of Glucose in the Presence of Acrylic Acid. *Chemistry of Materials*, **2009**, 21, 484-490	9.6	428
15	Structural Characterization of Hydrothermal Carbon Spheres by Advanced Solid-State MAS 13C NMR Investigations. *Journal of Physical Chemistry C*, **2009**, 113, 9644-9654	3.8	333
14	Nuclear Magnetic Resonance as Investigation Tool for Pollutant/Sorbent Interactions. *NATO Science for Peace and Security Series C: Environmental Security*, **2008**, 31-46	0.3	

13	Hydrothermal carbon from biomass: a comparison of the local structure from poly- to monosaccharides and pentoses/hexoses. *Green Chemistry*, **2008**, 10, 1204	10	609
12	Time-Resolved in Situ Raman and Small-Angle X-ray Diffraction Experiments: From Silica-Precursor Hydrolysis to Development of Mesoscopic Order in SBA-3 Surfactant-Templated Silica *Chemistry of Materials*, **2008**, 20, 1161-1172	9.6	17
11	Core-shell effects of functionalized oxide nanoparticles inside long-range meso-ordered spray-dried silica spheres. *Journal of Sol-Gel Science and Technology*, **2008**, 47, 119-123	2.3	9
10	Ecodesign of ordered mesoporous materials obtained with switchable micellar assemblies. *Angewandte Chemie - International Edition*, **2008**, 47, 8433-7	16.4	38
9	Ecodesign of Ordered Mesoporous Materials Obtained with Switchable Micellar Assemblies. *Angewandte Chemie*, **2008**, 120, 8561-8565	3.6	5
8	Organo-modified mesoporous silicas for organic pollutant removal in water: Solid-state NMR study of the organic/silica interactions. *Microporous and Mesoporous Materials*, **2008**, 110, 534-542	5.3	37
7	Physical properties and in vitro bioactivity of hierarchical porous silicaHAP composites. *Journal of Materials Chemistry*, **2007**, 17, 463-468		16
6	Solid-State NMR Characterization of the SurfactantSilica Interface in Templated Silicas:´ Acidic versus Basic Conditions. *Chemistry of Materials*, **2007**, 19, 1343-1354	9.6	90
5	Advanced solid state NMR techniques for the characterization of sol-gel-derived materials. *Accounts of Chemical Research*, **2007**, 40, 738-46	24.3	92
4	tude par des expiences HETCOR 1H29Si des interfaces tensioactif/silice dans des matiaux msostructurs porositordonne. *Comptes Rendus Chimie*, **2006**, 9, 478-484	2.7	10
3	NMR Characterisation of the Organic/SiO2 Interfaces in Templated Porous Silica.. *Materials Research Society Symposia Proceedings*, **2006**, 984, 1		1
2	Solid-State NMR Study of Ibuprofen Confined in MCM-41 Material. *Chemistry of Materials*, **2006**, 18, 6382-6390	9.6	222
1	Aerosol generated mesoporous silica particles. *Journal of Materials Chemistry*, **2003**, 13, 3011		80