Kerstin Koch

List of Publications by Year
in descending order

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28	3,498	394421 19	526287 27
papers	citations	h-index	g-index

28	28	28	3605
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Multifunctional surface structures of plants: An inspiration for biomimetics. Progress in Materials Science, 2009, 54, 137-178.	32.8	756
2	Superhydrophobic and superhydrophilic plant surfaces: an inspiration for biomimetic materials. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2009, 367, 1487-1509.	3.4	621
3	Diversity of structure, morphology and wetting of plant surfaces. Soft Matter, 2008, 4, 1943.	2.7	613
4	Plant Surfaces: Structures and Functions for Biomimetic Innovations. Nano-Micro Letters, 2017, 9, 23.	27.0	304
5	Hierarchically Sculptured Plant Surfaces and Superhydrophobicity. Langmuir, 2009, 25, 14116-14120.	3.5	165
6	Self assembly of epicuticular waxes on living plant surfaces imaged by atomic force microscopy (AFM). Journal of Experimental Botany, 2004, 55, 711-718.	4.8	133
7	Influences of air humidity during the cultivation of plants on wax chemical composition, morphology and leaf surface wettability. Environmental and Experimental Botany, 2006, 56, 1-9.	4.2	131
8	Chemistry and Crystal Growth of Plant Wax Tubules of Lotus (Nelumbo nucifera) and Nasturtium (Tropaeolum majus) Leaves on Technical Substrates. Crystal Growth and Design, 2006, 6, 2571-2578.	3.0	130
9	A fast, precise and low-cost replication technique for nano- and high-aspect-ratio structures of biological and artificial surfaces. Bioinspiration and Biomimetics, 2008, 3, 046002.	2.9	91
10	Biomimetic replicas: Transfer of complex architectures with different optical properties from plant surfaces onto technical materials. Acta Biomaterialia, 2009, 5, 1848-1854.	8.3	87
11	The superhydrophilic and superoleophilic leaf surface of Ruellia devosiana (Acanthaceae): a biological model for spreading of water and oil on surfaces. Functional Plant Biology, 2009, 36, 339.	2.1	61
12	Hierarchically structured superhydrophobic flowers with low hysteresis of the wild pansy (<i>Viola) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 2011, 2, 228-236.	2.8	52
13	Thermal evaporation of multi-component waxes and thermally activated formation of nanotubules for superhydrophobic surfaces. Progress in Organic Coatings, 2009, 66, 221-227.	3.9	51
14	Droplets on Superhydrophobic Surfaces: Visualization of the Contact Area by Cryo-Scanning Electron Microscopy. Langmuir, 2009, 25, 13077-13083.	3.5	51
15	Fog Collection on Polyethylene Terephthalate (PET) Fibers: Influence of Cross Section and Surface Structure. Langmuir, 2017, 33, 5555-5564.	3.5	38
16	Comparative and functional morphology of hierarchically structured anti-adhesive surfaces in carnivorous plants and kettle trap flowers. Functional Plant Biology, 2010, 37, 952.	2.1	37
17	Plant cuticles. , 2004, , 171-III.		34
18	Surface microstructures of daisy florets (Asteraceae) and characterization of their anisotropic wetting. Bioinspiration and Biomimetics, 2013, 8, 036005.	2.9	31

#	Article	IF	Citations
19	Nanostructure of epicuticular plant waxes: Self-assembly of wax tubules. Surface Science, 2009, 603, 1961-1968.	1.9	30
20	Influence of surface structure and chemistry on water droplet splashing. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2016, 374, 20160183.	3.4	27
21	Surfactant-induced enhancement of droplet adhesion in superhydrophobic soybean (Glycine) Tj ETQq1 1 0.784314 rgBT /Overlock	2.8	16
22	Plant Surfaces: Structures and Functions for Biomimetic Applications. Springer Handbooks, 2017, , 1265-1305.	0.6	10
23	Morphological diversity of Î²-diketone wax tubules on Eucalyptus gunnii leaves and real time observation of self-healing of defects in the wax layer. Australian Journal of Botany, 2018, 66, 313.	0.6	10
24	Biomimetic materials. Beilstein Journal of Nanotechnology, 2011, 2, 135-136.	2.8	5
25	Biological and biomimetic surfaces: adhesion, friction and wetting phenomena. Beilstein Journal of Nanotechnology, 2019, 10, 481-482.	2.8	4
26	Self-assembly of Eucalyptus gunnii wax tubules and pure ÃŸ-diketone on HOPG and glass. Beilstein Journal of Nanotechnology, 2021, 12, 939-949.	2.8	4
27	From sticky to slippery: Biological and biologically-inspired adhesion and friction. Beilstein Journal of Nanotechnology, 2014, 5, 1450-1451.	2.8	3
28	Kinetics of solvent supported tubule formation of Lotus (Nelumbo nucifera) wax on highly oriented pyrolytic graphite (HOPG) investigated by atomic force microscopy. Beilstein Journal of Nanotechnology, 2018, 9, 468-481.	2.8	3