

# Leon A Van Paassen

## List of Publications by Year in descending order

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Version: 2024-02-01

41  
papers

3,612  
citations

471061

17  
h-index

433756

31  
g-index

42  
all docs

42  
docs citations

42  
times ranked

1484  
citing authors

#	ARTICLE	IF	CITATIONS
1	Microbial Carbonate Precipitation as a Soil Improvement Technique. Geomicrobiology Journal, 2007, 24, 417-423.	1.0	1,313
2	Quantifying Biomediated Ground Improvement by Ureolysis: Large-Scale Biogrout Experiment. Journal of Geotechnical and Geoenvironmental Engineering - ASCE, 2010, 136, 1721-1728.	1.5	656
3	Fixation and distribution of bacterial activity in sand to induce carbonate precipitation for ground reinforcement. Ecological Engineering, 2010, 36, 112-117.	1.6	523
4	Potential soil reinforcement by biological denitrification. Ecological Engineering, 2010, 36, 168-175.	1.6	341
5	Effect of Particle Shape on Strength and Stiffness of Biocemented Glass Beads. Journal of Geotechnical and Geoenvironmental Engineering - ASCE, 2019, 145, .	1.5	112
6	Applying MICP by denitrification in soils: a process analysis. Environmental Geotechnics, 2018, 5, 79-93.	1.3	58
7	Assessing the Kinetics and Pore-Scale Characteristics of Biological Calcium Carbonate Precipitation in Porous Media using a Microfluidic Chip Experiment. Water Resources Research, 2020, 56, e2019WR025420.	1.7	51
8	Gas Bubble Migration and Trapping in Porous Media: Pore-Scale Simulation. Journal of Geophysical Research: Solid Earth, 2018, 123, 1060-1071.	1.4	48
9	Toe-Bearing Capacity of Precast Concrete Piles through Biogrouting Improvement. Journal of Geotechnical and Geoenvironmental Engineering - ASCE, 2020, 146, .	1.5	47
10	Crystal Growth of MICP through Microfluidic Chip Tests. Journal of Geotechnical and Geoenvironmental Engineering - ASCE, 2022, 148, .	1.5	42
11	Applications of Microbial Processes in Geotechnical Engineering. Advances in Applied Microbiology, 2018, 104, 39-91.	1.3	41
12	Microbially induced calcite precipitation along a circular flow channel under a constant flow condition. Acta Geotechnica, 2019, 14, 673-683.	2.9	40
13	Kinetic biomineralization through microfluidic chip tests. Acta Geotechnica, 2021, 16, 3229-3237.	2.9	37
14	Evaluating Strategies to Improve Process Efficiency of Denitrification-Based MICP. Journal of Geotechnical and Geoenvironmental Engineering - ASCE, 2018, 144, .	1.5	36
15	Experimental and Numerical Analysis of a Field Trial Application of Microbially Induced Calcite Precipitation for Ground Stabilization. Journal of Geotechnical and Geoenvironmental Engineering - ASCE, 2021, 147, .	1.5	31
16	Bio-Grout Materials: A Review. , 2017, , .		27
17	Recent Advances in Nature-Inspired Solutions for Ground Engineering (NiSE). International Journal of Geosynthetics and Ground Engineering, 2022, 8, 1.	0.9	25
18	Flocculation of Clay Suspensions by Anionic and Cationic Polyelectrolytes: A Systematic Analysis. Minerals (Basel, Switzerland), 2020, 10, 999.	0.8	22

#	ARTICLE	IF	CITATIONS
19	Pullout behavior of geosynthetic reinforcement in biocemented soils. <i>Geotextiles and Geomembranes</i> , 2021, 49, 646-656.	2.3	20
20	Using and Improving Neural Network Models for Ground Settlement Prediction. <i>Geotechnical and Geological Engineering</i> , 2014, 32, 687.	0.8	16
21	Variability in the Unconfined Compressive Strength of EICP-Treated "Standard" Sand. <i>Journal of Geotechnical and Geoenvironmental Engineering - ASCE</i> , 2021, 147, .	1.5	15
22	Laboratory Tests on Mitigation of Soil Liquefaction Using Microbial Induced Desaturation and Precipitation. <i>Geotechnical Testing Journal</i> , 2021, 44, 520-534.	0.5	15
23	Small-scale evaporation tests on clay: influence of drying rate on clayey soil layer. <i>Canadian Geotechnical Journal</i> , 2018, 55, 437-445.	1.4	13
24	Lateral Responses of a Model Pile in Biocemented Sand. <i>International Journal of Geomechanics</i> , 2021, 21, .	1.3	13
25	Functional properties of soils formed from biochemical ripening of dredged sediments"subsidence mitigation in delta areas. <i>Journal of Soils and Sediments</i> , 2017, 17, 286-298.	1.5	10
26	Desaturation via Biogenic Gas Formation as a Ground Improvement Technique. , 2018, , .		9
27	Microbial-Induced Desaturation in Stratified Soil Conditions. <i>International Journal of Geosynthetics and Ground Engineering</i> , 2021, 7, 1.	0.9	8
28	Feasibility Study on Liquefaction Mitigation of Fraser River Sediments by Microbial Induced Desaturation and Precipitation (MIDP). , 2020, , .		7
29	Use of Waste Streams and Microbes for in situ Transformation of Sand Into Sandstone. , 2009, , .		7
30	Impact of Pore-Scale Characteristics on Immiscible Fluid Displacement. <i>Geofluids</i> , 2020, 2020, 1-10.	0.3	6
31	Review and Recalculation of Growth and Nucleation Kinetics for Calcite, Vaterite and Amorphous Calcium Carbonate. <i>Crystals</i> , 2021, 11, 1318.	1.0	6
32	Centrifuge Model Testing of Liquefaction Mitigation via Denitrification-Induced Desaturation. , 2018, , .		5
33	The effect of solid"phase composition on the drying behavior of Markermeer sediment. <i>Vadose Zone Journal</i> , 2020, 19, e20028.	1.3	5
34	Modelling desiccation cracking in a homogenous soil clay layer: comparison between different hypotheses on constitutive behaviour. <i>E3S Web of Conferences</i> , 2016, 9, 08006.	0.2	2
35	Subsidence of organic dredged sediments in an upland deposit in Wormer- en Jisperveld: North Holland, the Netherlands. <i>Environmental Earth Sciences</i> , 2018, 77, 1.	1.3	2
36	Experimental Investigation of Microbial Induced Desaturation and Precipitation (MIDP) in a Layered Granular Soil System. , 2022, , .		1

#	ARTICLE	IF	CITATIONS
37	Stabilization of Mine Tailings Using Microbiological Induced Carbonate Precipitation for Dust Mitigation: Treatment Optimization and Durability Assessment. , 2022, , .		1
38	Nanomechanical Characterization of Enzyme Induced Carbonate Precipitates. Crystals, 2022, 12, 995.	1.0	1
39	Investigating the Susceptibility of Iron Ore to Liquefaction. , 2013, , .		0
40	The Soil Water Characteristic Curve for 3D Printed Soil Samples. , 2018, , .		0
41	Guest Editorial for the Special Issue on "Sustainable Ground Improvement Technologies", International Journal of Geosynthetics and Ground Engineering, 2021, 7, 1.	0.9	0