Ralph Lukas Stoop

List of Publications by Year
in descending order

27	677	623734	642732
papers	citations	14 h-index	23 g-index

28	28	28	932
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Light absorption and emission in nanowire array solar cells. Optics Express, 2010, 18, 27589.	3.4	143
2	Understanding the Electrolyte Background for Biochemical Sensing with Ion-Sensitive Field-Effect Transistors. ACS Nano, 2012, 6, 9291-9298.	14.6	105
3	Selective Sodium Sensing with Gold-Coated Silicon Nanowire Field-Effect Transistors in a Differential Setup. ACS Nano, 2013, 7, 5978-5983.	14.6	88
4	Sensing with Advanced Computing Technology: Fin Field-Effect Transistors with High-k Gate Stack on Bulk Silicon. ACS Nano, 2015, 9, 4872-4881.	14.6	53
5	Investigation of the dominant 1/f noise source in silicon nanowire sensors. Sensors and Actuators B: Chemical, 2014, 191, 270-275.	7.8	46
6	Beyond Scale-Free Small-World Networks: Cortical Columns for Quick Brains. Physical Review Letters, 2013, 110, 108105.	7.8	30
7	Clogging and jamming of colloidal monolayers driven across disordered landscapes. Communications Physics, 2018, 1, .	5.3	28
8	Collective Directional Locking of Colloidal Monolayers on a Periodic Substrate. Physical Review Letters, 2020, 124, 058002.	7.8	27
9	Competing surface reactions limiting the performance of ion-sensitive field-effect transistors. Sensors and Actuators B: Chemical, 2015, 220, 500-507.	7.8	22
10	Charge Noise in Organic Electrochemical Transistors. Physical Review Applied, 2017, 7, .	3.8	20
11	Enhancing Nanoparticle Diffusion on a Unidirectional Domain Wall Magnetic Ratchet. Nano Letters, 2019, 19, 433-440.	9.1	20
12	SHRIMPS: OCCURRENCE, SCALING AND RELEVANCE. International Journal of Bifurcation and Chaos in Applied Sciences and Engineering, 2012, 22, 1230032.	1.7	16
13	Sensor system including silicon nanowire ion sensitive FET arrays and CMOS readout. Sensors and Actuators B: Chemical, 2014, 204, 568-577.	7.8	15
14	Label-Free FimH Protein Interaction Analysis Using Silicon Nanoribbon BioFETs. ACS Sensors, 2016, 1, 781-788.	7.8	15
15	Universal dynamical properties preclude standard clustering in a large class of biochemical data. Bioinformatics, 2014, 30, 2486-2493.	4.1	13
16	Implementing Silicon Nanoribbon Field-Effect Transistors as Arrays for Multiple Ion Detection. Biosensors, 2016, 6, 21.	4.7	10
17	Emergent colloidal currents across ordered and disordered landscapes. Communications Physics, 2021, 4, .	5.3	7
18	Hydrodynamic synchronization and clustering in ratcheting colloidal matter. Science Advances, 2022, 8, .	10.3	5

#	Article	IF	Citations
19	Dynamics and clogging of colloidal monolayers magnetically driven through a heterogeneous landscape. Soft Matter, 2020, 16, 6985-6992.	2.7	4
20	At Grammatical Faculty of Language, Flies Outsmart Men. PLoS ONE, 2013, 8, e70284.	2.5	4
21	Excess Entropies Suggest the Physiology of Neurons to Be Primed for Higher-Level Computation. Physical Review Letters, 2021, 127, 148101.	7.8	3
22	Analysis of the â€œSonar Hopfâ€•Cochlea. Sensors, 2011, 11, 5808-5818.	3.8	2
23	'Active Surfaces' as Possible Functional Systems in Detection and Chemical (Bio) Reactivity. Chimia, 2016, 70, 402.	0.6	1
24	Sensing with liquid-gated graphene field-effect transistors. , 2012, , .		0
25	Parameter properties of electronic and biological circuits and systems. , 2013, , .		0
26	Cortical columns for quick brains. IEICE Proceeding Series, 2014, 1, 852-855.	0.0	0
27	Enhanced diffusion and non-Gaussian dynamics in driven magnetic nanoparticles. Physical Review Research, 2020, 2, .	3.6	0