

Amir Farokh Payam

List of Publications by Year in descending order

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48
papers

934
citations

623188

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476904

29
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48
all docs

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docs citations

48
times ranked

1373
citing authors

#	ARTICLE	IF	CITATIONS
1	Nanoplasmonic biosensor for rapid detection of multiple viral variants in human serum. <i>Sensors and Actuators B: Chemical</i> , 2022, 365, 131906.	4.0	32
2	Frequency equation and semi-empirical mechanical coupling strength of microcantilevers in an array. <i>Microscopy Research and Technique</i> , 2022, 85, 3237-3244.	1.2	3
3	Dynamic analysis of flexural vibration mode of an atomic force microscope cantilever with a sidewall probe in liquid. <i>Microscopy Research and Technique</i> , 2021, 84, 782-788.	1.2	3
4	Multiparametric analytical quantification of materials at nanoscale in tapping force microscopy. <i>Applied Surface Science</i> , 2021, 536, 147698.	3.1	13
5	Data acquisition and imaging using wavelet transform: a new path for high speed transient force microscopy. <i>Nanoscale Advances</i> , 2021, 3, 383-398.	2.2	6
6	Development of a flexure-based nano-actuator for high-frequency high-resolution directional sensing with atomic force microscopy. <i>Review of Scientific Instruments</i> , 2021, 92, 093703.	0.6	1
7	Clinical evaluation of SARS-CoV-2 lung HRCT and RT-PCR Techniques: Towards risk factor based diagnosis of infectious diseases. <i>Computational and Structural Biotechnology Journal</i> , 2021, 19, 2699-2707.	1.9	3
8	Modelling and nanoscale force spectroscopy of frequency modulation atomic force microscopy. <i>Applied Mathematical Modelling</i> , 2020, 79, 544-554.	2.2	4
9	Theoretical study on the optimal thermal excitation of bimaterial cantilevers. <i>Applied Physics Express</i> , 2020, 13, 064002.	1.1	6
10	Nanoscale Mapping of the Directional Flow Patterns at Liquid-Solid Interfaces. <i>Physical Review Applied</i> , 2020, 13, .	1.5	10
11	Opportunities and Challenges for Biosensors and Nanoscale Analytical Tools for Pandemics: COVID-19. <i>ACS Nano</i> , 2020, 14, 7783-7807.	7.3	284
12	Development of fatigue testing system for in-situ observation of stainless steel 316 by HS-AFM & SEM. <i>International Journal of Fatigue</i> , 2019, 127, 1-9.	2.8	8
13	Development of Fatigue Testing System for in-situ Observation by AFM & SEM. <i>MATEC Web of Conferences</i> , 2019, 300, 14002.	0.1	0
14	Determining the spring constant of arbitrarily shaped cantilevers in viscous environments. <i>Applied Physics Letters</i> , 2018, 112, .	1.5	10
15	Application of Atomic Force Microscopy to Study Metal-Organic Frameworks Materials and Composites. <i>Materials Horizons</i> , 2018, , 37-73.	0.3	3
16	A non-destructive method to calibrate the torsional spring constant of atomic force microscope cantilevers in viscous environments. <i>Journal of Applied Physics</i> , 2018, 124, .	1.1	7
17	Simultaneous viscosity and density measurement of small volumes of liquids using a vibrating microcantilever. <i>Analyst</i> , 2017, 142, 1492-1498.	1.7	24
18	Mapping Elastic Properties of Heterogeneous Materials in Liquid with Angstrom-Scale Resolution. <i>ACS Nano</i> , 2017, 11, 8650-8659.	7.3	67

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19	Dynamic modeling and sensitivity analysis of dAFM in the transient and steady state motions. Ultramicroscopy, 2016, 169, 55-61.	0.8	8
20	Sub-nanometer Resolution Imaging with Amplitude-modulation Atomic Force Microscopy in Liquid. Journal of Visualized Experiments, 2016, , .	0.2	21
21	Optimization of phase contrast in bimodal amplitude modulation AFM. Beilstein Journal of Nanotechnology, 2015, 6, 1072-1081.	1.5	20
22	Effect of tip mass on frequency response and sensitivity of AFM cantilever in liquid. Micron, 2015, 70, 50-54.	1.1	22
23	Force reconstruction from tapping mode force microscopy experiments. Nanotechnology, 2015, 26, 185706.	1.3	56
24	A comparative study on material selection of microelectromechanical systems electrostatic actuators using Ashby, VIKOR and TOPSIS. Materials & Design, 2015, 65, 328-334.	5.1	105
25	Effect of Tip Mass on Modal Flexural Sensitivity of Rectangular AFM Cantilevers to Surface Stiffness Variations. Arabian Journal for Science and Engineering, 2014, 39, 1393-1397.	1.1	2
26	Design of Hybrid Closed Loop Control Systems for a MEMS Accelerometer Using Nonlinear Control Principles. International Review of Aerospace Engineering, 2014, 7, 164.	0.2	1
27	Study of the tip mass and interaction force effects on the frequency response and mode shapes of the AFM cantilever. International Journal of Advanced Manufacturing Technology, 2013, 65, 957-966.	1.5	12
28	Sensitivity of flexural vibration mode of the rectangular atomic force microscope micro cantilevers in liquid to the surface stiffness variations. Ultramicroscopy, 2013, 135, 84-88.	0.8	28
29	Molecular and Nanoscale Compositional Contrast of Soft Matter in Liquid: Interplay between Elastic and Dissipative Interactions. ACS Nano, 2012, 6, 4663-4670.	7.3	51
30	A capillary force model for interactions between two spheres. Particuology, 2011, 9, 381-386.	2.0	34
31	Robust DTC Control of Doubly-Fed Induction Machines Based on Input-Output Feedback Linearization Using Recurrent Neural Networks. Journal of Power Electronics, 2011, 11, 719-725.	0.9	18
32	Design of a smart MEMS accelerometer using nonlinear control principles. Smart Structures and Systems, 2010, 6, 1-16.	1.9	19
33	A backstepping controller for piezoelectric actuators with hysteresis in nanopositioning. , 2009, , .		0
34	Design of a feedforward controller for AFM nanopositioning based on neural network control theory. , 2009, , .		1
35	An estimator for the MEMS capacitive accelerometer based on adaptive back stepping theory. , 2008, , .		0
36	A Hybrid PD-Fuzzy Controller for Atomic Force Microscopes. , 2008, , .		0

#	ARTICLE	IF	CITATIONS
37	An Energy Method for Determination of Flicker Source at the Point of Common Coupling. , 2007, , .		9
38	Backstepping Control Approach for Closed Loop Feedback Control of Atomic Force Microscope. , 2007, , .		1
39	An adaptive nonlinear estimator for the MEMS capacitive accelerometer based on adaptive input-output feedback linearization. , 2007, , .		1
40	An Input-Output Feedback Linearization Controller for Doubly-Fed Induction Machine Drives. , 2007, , .		0
41	Design of a hybrid closed loop control system for a MEMS accelerometer using backstepping principle. , 2007, , .		2
42	Adaptive input-output feedback linearization controller for doubly-fed induction machine drive. , 2007, , .		2
43	An Adaptive Backstepping Controller for Doubly-F d Induction Machine Drives. , 2006, , .		0
44	A Speed Sensorless Sliding-Mode Controller for Doubly-Fed Induction Machine Drives with Adaptive Backstepping Observer. , 2006, , .		7
45	Nonlinear Sliding-Mode Controller for Sensorless Speed control of DC servo Motor Using Adaptive Backstepping Observer. , 2006, , .		9
46	Robust Speed Sensorless Control of Doubly-Fed Induction Machine Based on Input-Output Feedback Linearization Control Using a Sliding-Mode Observer. , 2006, , .		10
47	A Robust Adaptive Sliding-Mode Controller for Slip Power Recovery Induction Machine Drives. , 2006, , .		5
48	Dynamic Modeling and Simulation of an Induction Motor with Adaptive Backstepping Design of an Input-Output Feedback Linearization Controller in Series Hybrid Electric Vehicle. , 2006, , .		6