

Shengkai Yu

List of Publications by Year in descending order

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73
papers

649
citations

623734

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677142

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73
all docs

73
docs citations

73
times ranked

307
citing authors

#	ARTICLE	IF	CITATIONS
1	Investigation of slider out-of-plane and in-plane vibrations during the track-seeking process. <i>Microsystem Technologies</i> , 2016, 22, 1189-1197.	2.0	2
2	Dynamics of head-disk interface in hard disk drives during operational shock. <i>Microsystem Technologies</i> , 2016, 22, 1389-1395.	2.0	4
3	Direct Monte Carlo simulation of nanoscale mixed gas bearings. <i>Advances in Mechanical Engineering</i> , 2015, 7, 168781401558952.	1.6	5
4	Operational shock response of ultrathin hard disk drives. <i>Microsystem Technologies</i> , 2015, 21, 2573-2579.	2.0	3
5	Numerical investigation of thermal effects on a HAMR head-disk interface. <i>Microsystem Technologies</i> , 2015, 21, 2641-2647.	2.0	5
6	Effect of the Thickness of a Diamond-Like Carbon Layer on the Local Temperature Increase in a Multilayered Structure Induced by Laser Heating. <i>Numerical Heat Transfer; Part A: Applications</i> , 2015, 67, 791-807.	2.1	6
7	Evaluation of thermal performance of graphene overcoat on multi-layered structure subject to laser heating. <i>International Communications in Heat and Mass Transfer</i> , 2015, 68, 27-31.	5.6	4
8	Electrostatic Force Manipulation Methodology: Principles, Mechanisms, and Setup for Head-Disk Interactions Monitoring. <i>IEEE Transactions on Magnetics</i> , 2015, 51, 1-8.	2.1	0
9	Operational Shock Response of Ultrathin Hard Disk Drives. , 2014, , .		0
10	Investigations of Light Contact and Lube-Surfing State With Electrical Current. <i>IEEE Transactions on Magnetics</i> , 2014, 50, 1-4.	2.1	4
11	Adsorbed Water Film and Heat Conduction from Disk to Slider in Heat-Assisted Magnetic Recording. <i>Tribology Letters</i> , 2014, 56, 93-99.	2.6	3
12	Heater AC Voltage Induced Flying Height Modulations. <i>Journal of Tribology</i> , 2014, 136, .	1.9	2
13	Numerical Investigation of Thermal Effects on a HAMR Head-Disk Interface. , 2014, , .		0
14	Performance analysis of an integrated piezoelectric ZnO sensor for detection of head-disk contact. <i>Microsystem Technologies</i> , 2013, 19, 1449-1455.	2.0	4
15	Modeling laser heated thin film media for heat assisted magnetic recording. <i>Microsystem Technologies</i> , 2013, 19, 1457-1463.	2.0	8
16	Numerical study of thermal-induced lubricant depletion induced on an anisotropic multilayer disk in a heat assisted magnetic recording system. <i>International Journal of Heat and Mass Transfer</i> , 2013, 60, 322-333.	4.8	4
17	A ZnO microcantilever for high-frequency nanopositioning: Modeling, fabrication and characterization. <i>Sensors and Actuators A: Physical</i> , 2013, 194, 75-83.	4.1	9
18	Thermal Effect of a Thin Overcoating Layer Subject to Laser Heating. <i>IEEE Transactions on Magnetics</i> , 2013, 49, 2782-2785.	2.1	2

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19	Laser-induced local heating and lubricant depletion in heat assisted magnetic recording systems. International Journal of Heat and Mass Transfer, 2013, 59, 36-45.	4.8	20
20	A ZnO thin-film driven microcantilever for nanoscale actuation and sensing. International Journal of Smart and Nano Materials, 2013, 4, 128-141.	4.2	20
21	Flying Height Drop Due to Air Entrapment in Lubricant. Tribology Letters, 2013, 52, 137-145.	2.6	0
22	A modified slip model for gas lubrication at nanoscale head-disk interface. Proceedings of the Institution of Mechanical Engineers, Part J: Journal of Engineering Tribology, 2013, 227, 1367-1375.	1.8	4
23	Numerical Simulation on Lubricant Recovery After Depletion. , 2013, , .		0
24	Slider Posture Effects on Air Bearing in a Heat-Assisted Magnetic Recording System. Advances in Tribology, 2012, 2012, 1-6.	2.1	2
25	Effect of Interfacial Roughness on Slider-Disk Interactions at Near-Contact Regime. IEEE Transactions on Magnetism, 2012, 48, 4459-4462.	2.1	4
26	A Fast Implicit Algorithm for Time-Dependent Dynamic Simulations of Air Bearing Sliders. Journal of Tribology, 2012, 134, .	1.9	7
27	Frequency Analyses of Air Bearing Slider in Near Contact and Contact States. Tribology Letters, 2012, 48, 345-353.	2.6	6
28	Lubricant evolution and depletion under laser heating: a molecular dynamics study. Soft Matter, 2012, 8, 5649.	2.7	42
29	Numerical study on thermal-induced lubricant depletion in laser heat-assisted magnetic recording systems. International Journal of Heat and Mass Transfer, 2012, 55, 886-896.	4.8	25
30	A Model for Laser Induced Lubricant Depletion in Heat-Assisted Magnetic Recording. Tribology Letters, 2012, 45, 411-416.	2.6	13
31	Nonlinear Dynamics of Thermal Flying Height Control Sliders at Touch-Down. IEEE Transactions on Magnetism, 2011, 47, 1798-1804.	2.1	8
32	Air Bearing Features on Discrete Track Media. IEEE Transactions on Magnetism, 2011, 47, 1813-1816.	2.1	0
33	Dynamic Studies on Lube-Surfing Recording. IEEE Transactions on Magnetism, 2011, 47, 3578-3581.	2.1	1
34	Direct Monte Carlo Simulations of Air Bearing Characteristics on Patterned Media. IEEE Transactions on Magnetism, 2011, 47, 2660-2663.	2.1	9
35	Molecular Dynamics Simulation of Lubricant Redistribution and Transfer at Near-Contact Head-Disk Interface. Tribology Letters, 2011, 43, 89-99.	2.6	28
36	Thermal protrusion induced air bearing frequency variations. Microsystem Technologies, 2011, 17, 891-896.	2.0	9

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37	Direct Monte Carlo simulation of air bearing effects in heat-assisted magnetic recording. <i>Microsystem Technologies</i> , 2011, 17, 903-909.	2.0	13
38	Evaporation of Polydisperse Perfluoropolyether Lubricants in Heat-Assisted Magnetic Recording. <i>Applied Physics Express</i> , 2011, 4, 095201.	2.4	13
39	Molecular Study of Dynamic Behavior between Head and Ultrathin Lubricant Film. <i>Journal of Advanced Mechanical Design, Systems and Manufacturing</i> , 2010, 4, 56-60.	0.7	3
40	Effects of environmental temperature and humidity on thermal flying height adjustment. <i>Microsystem Technologies</i> , 2010, 16, 49-55.	2.0	3
41	Contact recording review. <i>Microsystem Technologies</i> , 2010, 16, 493-503.	2.0	13
42	Slider Design Optimization for Lube-Surfing Head-Disk Interface Scheme. <i>IEEE Transactions on Magnetics</i> , 2010, 46, 1922-1924.	2.1	10
43	Numerical Simulations of Accommodation Coefficient Effects at the Head-Disk Interface. <i>Japanese Journal of Applied Physics</i> , 2010, 49, 095206.	1.5	6
44	Influences of Surface Topography on the Flying Performances of a Sub-3 nm Air Bearing Slider. <i>Japanese Journal of Applied Physics</i> , 2010, 49, 125202.	1.5	4
45	Effects of Gas Physical Properties on Flying Performance of Air Bearing Slider. <i>IEEE Transactions on Magnetics</i> , 2010, 46, 1389-1392.	2.1	6
46	Dynamic Stability Analysis for Surfing Head-Disk Interface. <i>IEEE Transactions on Magnetics</i> , 2009, 45, 4979-4983.	2.1	23
47	Mechanical performance study of pattern media based head-disk systems. , 2009, , .		0
48	Nanoscale roughness contact in a slider-disk interface. <i>Nanotechnology</i> , 2009, 20, 285710.	2.6	21
49	Numerical Studies of Heat Transfer in Rarefied Gases at Head-Disk Interface. <i>Japanese Journal of Applied Physics</i> , 2009, 48, 105005.	1.5	6
50	Inert Gas Filled Head-disk Interface for Future Extremely High Density Magnetic Recording. <i>Tribology Letters</i> , 2009, 33, 179-186.	2.6	14
51	Effect of environment humidity and temperature on stationary and transient flying responses of air bearing slider. <i>Tribology International</i> , 2009, 42, 1125-1131.	5.9	8
52	Effects of temperature dependent air properties on the performances of a thermal actuated slider. <i>Tribology International</i> , 2009, 42, 902-910.	5.9	17
53	Lube-Surfing Recording and Its Feasibility Exploration. <i>IEEE Transactions on Magnetics</i> , 2009, 45, 899-904.	2.1	60
54	Energy Analysis on Flying Stability of Sub-5-nm Air Bearing Slider. <i>IEEE Transactions on Magnetics</i> , 2009, 45, 4998-5001.	2.1	5

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55	Mechanical Performance Study of Pattern Media-Based Head-Disk Systems. IEEE Transactions on Magnetism, 2009, 45, 5002-5005.	2.1	4
56	Light Delivery System for Heat-Assisted Magnetic Recording. IEEE Transactions on Magnetism, 2009, 45, 5016-5021.	2.1	12
57	Effects of Surface Roughness on the Fly-Ability of a Thermal Protrusion Air Bearing Slider. , 2009, , .		0
58	Performance Optimization of Thermal Nano-Actuator for Fly Height Control in Disk Drives. , 2009, , .		0
59	Twisted transition of one bit written by trapezoidal single pole. Journal of Magnetism and Magnetic Materials, 2008, 320, 2948-2951.	2.3	0
60	Towards fly- and lubricant-contact recording. Journal of Magnetism and Magnetic Materials, 2008, 320, 3183-3188.	2.3	27
61	Dynamics of Fly-Contact Head Disk Interface. IEEE Transactions on Magnetism, 2008, 44, 3683-3686.	2.1	5
62	Air-Bearing Design Towards Highly Stable Head-Disk Interface at Ultralow Flying Height. IEEE Transactions on Magnetism, 2007, 43, 715-720.	2.1	46
63	Dynamics of Read/Write Head Positioning in Both Flying-Height and Off-Track Directions. IEEE Transactions on Magnetism, 2007, 43, 3796-3801.	2.1	9
64	Probability Model for the intermolecular force with surface roughness considered. Tribology International, 2007, 40, 1047-1055.	5.9	28
65	Flying Stability Study of a Thermal Actuated Slider. , 2006, , .		1
66	Air-Bearing Design Towards Super Stable Head-Disk Interface. , 2006, , .		0
67	Analysis and optimization of dynamic response of air bearing sliders to disk waviness. Tribology International, 2005, 38, 542-553.	5.9	4
68	Flying height adjustment by slider's air bearing surface profile control. Journal of Applied Physics, 2005, 97, 10P309.	2.5	9
69	Femto slider: fabrication and evaluation. IEEE Transactions on Magnetism, 2003, 39, 909-914.	2.1	14
70	Dynamic characteristics of a flex suspension assembly. , 0, , .		1
71	Femto slider: fabrication and evaluation [magnetic disk storage]. , 0, , .		1
72	Two dimensional position stability of head-slider and its in-situ characterization. , 0, , .		0

#	ARTICLE	IF	CITATIONS
73	Optimal suspension design for femto sliders. , 0, , .		0