

Frank E Talke

List of Publications by Year in descending order

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86
papers

1,122
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411340

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29
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86
docs citations

86
times ranked

844
citing authors

| # | ARTICLE | IF | CITATIONS |
|----|---|-----|-----------|
| 1 | Material loss of silicon nitride thin films in a simulated ocular environment. <i>Microsystem Technologies</i> , 2021, 27, 2263-2268. | 1.2 | 3 |
| 2 | A comparative study of experimental urinary catheters containing silver and zinc for biofilm inhibition. <i>Journal of Biomaterials Applications</i> , 2021, 35, 1071-1081. | 1.2 | 2 |
| 3 | Investigation of long term drift of an intraocular pressure sensor. <i>Microsystem Technologies</i> , 2021, 27, 2473-2479. | 1.2 | 0 |
| 4 | Investigation of an improved electricidal coating for inhibiting biofilm formation on urinary catheters. <i>Journal of Materials Research and Technology</i> , 2021, 10, 339-348. | 2.6 | 5 |
| 5 | First Clinical Experience With Ophthalmic e-Device for Unaided Patient Self-Examination During COVID-19 Lockdown. <i>Cornea</i> , 2021, Publish Ahead of Print, . | 0.9 | 3 |
| 6 | A Wireless Handheld Pressure Measurement System for <i>In Vivo</i> Monitoring of Intraocular Pressure in Rabbits. <i>IEEE Transactions on Biomedical Engineering</i> , 2020, 67, 931-937. | 2.5 | 14 |
| 7 | Dependence of optical laser power on disk radius, head-disk spacing and media properties in heat-assisted magnetic recording. <i>Microsystem Technologies</i> , 2020, 26, 3371-3376. | 1.2 | 0 |
| 8 | A smartphone attachment for remote ophthalmic slit lamp examinations. <i>Microsystem Technologies</i> , 2020, 26, 3403-3407. | 1.2 | 8 |
| 9 | Temperature-Induced Near-Field Transducer Failure in Heat-Assisted Magnetic Recording. <i>IEEE Transactions on Magnetics</i> , 2020, 56, 1-4. | 1.2 | 3 |
| 10 | Investigation of Bias Voltage and Relative Humidity on Wear and Pit Formation at the Head-Disk Interface. <i>IEEE Transactions on Magnetics</i> , 2020, 56, 1-7. | 1.2 | 59 |
| 11 | Fretting Wear Simulation of the Dimple/Gimbal Interface. <i>IEEE Transactions on Magnetics</i> , 2019, 55, 1-6. | 1.2 | 1 |
| 12 | Tip-enhanced Raman spectroscopy studies of nanodiamonds and carbon onions. <i>Carbon</i> , 2018, 132, 495-502. | 5.4 | 37 |
| 13 | Effect of Air and Helium on the Head-Disk Interface During Load-Unload. <i>Tribology Letters</i> , 2018, 66, 1. | 1.2 | 2 |
| 14 | Effect of Track-Seeking Motion on Off-Track Vibrations of the Head-Gimbal Assembly in HDDs. <i>IEEE Transactions on Magnetics</i> , 2018, , 1-6. | 1.2 | 1 |
| 15 | Design of an Optical Pressure Measurement System for Intraocular Pressure Monitoring. <i>IEEE Sensors Journal</i> , 2018, 18, 61-68. | 2.4 | 19 |
| 16 | Investigation of Lubricant Transfer and Lubricant Fragmentation in a Hard Disk Drive. <i>Tribology Letters</i> , 2018, 66, 1. | 1.2 | 1 |
| 17 | Effect of Air and Helium on the Head-Disk Interface During Load-Unload. , 2017, , . | | 0 |
| 18 | Optical intraocular pressure measurement system for glaucoma management. , 2017, , . | | 2 |

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|----|---|-----|-----------|
| 19 | Wear Between Lift Tab and Load/Unload Ramp in Hard Disk Drives. IEEE Transactions on Magnetism, 2016, 52, 1-7. | 1.2 | 1 |
| 20 | The Effect of Diamondlike Carbon Overcoat on the Tribological Performance of the Dimple/Gimbal Interface in Hard Disk Drives. Journal of Tribology, 2016, 138, . | 1.0 | 1 |
| 21 | Fretting wear volume and wear coefficient at the dimple/gimbal interface of a hard disk drive suspension. Microsystem Technologies, 2015, 21, 2533-2538. | 1.2 | 3 |
| 22 | Design and optimization of collocated dual stage suspensions. Microsystem Technologies, 2015, 21, 2657-2662. | 1.2 | 3 |
| 23 | Molecular Dynamics Simulation of Lubricant Transfer at the Head-Disk Interface. IEEE Transactions on Magnetism, 2014, 50, 1-4. | 1.2 | 13 |
| 24 | Investigation of Lubricant Transfer between Slider and Disk Using Molecular Dynamics Simulation. Tribology Letters, 2014, 53, 373-381. | 1.2 | 18 |
| 25 | Touch-down induced contact and friction forces at the dimple/gimbal interface. Microsystem Technologies, 2013, 19, 1625-1632. | 1.2 | 0 |
| 26 | Numerical Simulation of Thermal Flying-Height Control Sliders to Dynamically Minimize Flying Height Variations. IEEE Transactions on Magnetism, 2013, 49, 1337-1342. | 1.2 | 13 |
| 27 | Investigation of Head Burnishing of Thermal Flying Height Control Sliders. , 2013, , . | | 4 |
| 28 | Suppression of cross-track vibrations using a self-sensing micro-actuator in hard disk drives. Microsystem Technologies, 2012, 18, 1309-1317. | 1.2 | 6 |
| 29 | Contact between a thermal flying height control slider and a disk asperity. Microsystem Technologies, 2012, 18, 1549-1557. | 1.2 | 14 |
| 30 | Design of suspension-based and collocated dual stage actuated suspensions. Microsystem Technologies, 2012, 18, 1615-1622. | 1.2 | 3 |
| 31 | Time dependent simulation of active flying height control of TFC sliders. Microsystem Technologies, 2012, 18, 1661-1667. | 1.2 | 2 |
| 32 | Contact and temperature rise of thermal flying height control sliders in hard disk drives. Microsystem Technologies, 2012, 18, 1693-1701. | 1.2 | 1 |
| 33 | Numerical simulation of thermal flying height control sliders in heat-assisted magnetic recording. Microsystem Technologies, 2012, 18, 1731-1739. | 1.2 | 14 |
| 34 | Reference Signal Shaping for Closed-Loop Systems With Application to Seeking in Hard Disk Drives. IEEE Transactions on Control Systems Technology, 2012, 20, 335-345. | 3.2 | 11 |
| 35 | Plastic yield inception of an indented coated flat and comparison with a flattened coated sphere. Tribology International, 2012, 53, 61-67. | 3.0 | 26 |
| 36 | Dynamic Flying Height Adjustment in Hard Disk Drives Through Feedforward Control. IEEE Transactions on Magnetism, 2011, 47, 1823-1829. | 1.2 | 24 |

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|----|--|-----|-----------|
| 37 | Servo signal processing for flying height control in hard disk drives. <i>Microsystem Technologies</i> , 2011, 17, 937-944. | 1.2 | 7 |
| 38 | The effect of air bearing contour design on thermal pole-tip protrusion. <i>Microsystem Technologies</i> , 2011, 17, 813-820. | 1.2 | 7 |
| 39 | An experimental study of the dimple/gimbal interface in a hard disk drive. <i>Microsystem Technologies</i> , 2011, 17, 863-868. | 1.2 | 3 |
| 40 | Analytical read back signal modeling in magnetic recording. <i>Microsystem Technologies</i> , 2011, 17, 997-1002. | 1.2 | 1 |
| 41 | A numerical study of the dimple/gimbal interface in a hard disk drive. <i>Microsystem Technologies</i> , 2011, 17, 869-873. | 1.2 | 6 |
| 42 | Modeling laser induced lubricant depletion in heat-assisted-magnetic recording systems using a multiple-layered disk structure. <i>Microsystem Technologies</i> , 2011, 17, 1109-1114. | 1.2 | 31 |
| 43 | The effect of frequency on fretting in a micro-spherical contact. <i>Wear</i> , 2011, 270, 857-865. | 1.5 | 19 |
| 44 | Modeling and Control of a Dual Stage Actuator Hard Disk Drive. <i>Journal of Advanced Mechanical Design, Systems and Manufacturing</i> , 2010, 4, 107-118. | 0.3 | 17 |
| 45 | Strongly superhydrophobic silicon nanowires by supercritical CO ₂ drying. <i>Electronic Materials Letters</i> , 2010, 6, 59-64. | 1.0 | 19 |
| 46 | Effect of suspension design on the non-operational shock response in a load/unload hard disk drive. <i>Microsystem Technologies</i> , 2010, 16, 267. | 1.2 | 8 |
| 47 | Simulation of Flying Height and Response Time of Thermal Flying Height Control Sliders With Thermal Insulators. <i>IEEE Transactions on Magnetics</i> , 2010, 46, 1292-1294. | 1.2 | 23 |
| 48 | Simulation of Magnetic Erasure Due to Transient Slider-Disk Contacts. <i>IEEE Transactions on Magnetics</i> , 2010, 46, 770-777. | 1.2 | 36 |
| 49 | Numerical Simulation of the Head/Disk Interface for Bit Patterned Media. <i>IEEE Transactions on Magnetics</i> , 2009, 45, 4984-4989. | 1.2 | 5 |
| 50 | Dynamic Modeling and Control of a Piezo-Electric Dual-Stage Tape Servo Actuator. <i>IEEE Transactions on Magnetics</i> , 2009, 45, 3017-3024. | 1.2 | 26 |
| 51 | Numerical Simulation of a Spherical Pad-Slider Flying Over Bit Patterned Media. <i>IEEE Transactions on Magnetics</i> , 2009, 45, 3616-3619. | 1.2 | 1 |
| 52 | Numerical Simulation of a Thermal Flying Height Control Slider With Dual Heater and Insulator Elements. <i>IEEE Transactions on Magnetics</i> , 2009, 45, 3628-3631. | 1.2 | 31 |
| 53 | Effect of thermal pole tip protrusion and disk roughness on slider disk contacts. <i>Microsystem Technologies</i> , 2009, 15, 687-693. | 1.2 | 15 |
| 54 | Air Bearing Simulation for Bit Patterned Media. <i>Tribology Letters</i> , 2009, 33, 199-204. | 1.2 | 10 |

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|----|--|-----|-----------|
| 55 | Measurement and Sources of Lateral Tape Motion: A Review. Journal of Tribology, 2009, 131, . | 1.0 | 12 |
| 56 | Film Thickness Dependence of Lubricant Mobility. Tribology Letters, 2008, 32, 35-41. | 1.2 | 1 |
| 57 | Effect of Intermolecular Forces on the Dynamic Response of a Slider. Journal of Tribology, 2007, 129, 177-180. | 1.0 | 7 |
| 58 | Enhancing tribological performance of the magnetic tape/guide interface by laser surface texturing. Tribology Letters, 2007, 27, 89-95. | 1.2 | 45 |
| 59 | A Model for Magnetic Tape/Guide Friction Reduction by Laser Surface Texturing. Tribology Letters, 2007, 28, 9-17. | 1.2 | 33 |
| 60 | Analysis of Surface Textured Air Bearing Sliders with Rarefaction Effects. Tribology Letters, 2007, 28, 251-261. | 1.2 | 42 |
| 61 | Microdrive operational and non-operational shock and vibration testing. Microsystem Technologies, 2007, 13, 1015-1021. | 1.2 | 9 |
| 62 | Dynamic response of 1-in. form factor disk drives to external shock and vibration loads. Microsystem Technologies, 2007, 13, 1031-1038. | 1.2 | 11 |
| 63 | Simulation of the head disk interface for discrete track media. Microsystem Technologies, 2007, 13, 1023-1030. | 1.2 | 20 |
| 64 | Dynamics of ultra low flying sliders during contact with a lubricated disk. Microsystem Technologies, 2007, 13, 1371-1375. | 1.2 | 20 |
| 65 | Non-contact tape tension measurement and correlation of lateral tape motion and tape tension transients. Microsystem Technologies, 2006, 12, 814-821. | 1.2 | 2 |
| 66 | Experimental and numerical investigation of shock response in 3.5 and 2.5 in. form factor hard disk drives. Microsystem Technologies, 2006, 12, 1109-1116. | 1.2 | 23 |
| 67 | Dynamic simulation of in-plane transverse displacement of tape. Microsystem Technologies, 2006, 12, 1117-1124. | 1.2 | 4 |
| 68 | Nano-hardness testing with ultrasonic excitation. Wear, 2005, 259, 1497-1501. | 1.5 | 4 |
| 69 | Investigation of disk damage caused during load/unload using a surface reflectance analyzer. Tribology International, 2005, 38, 81-87. | 3.0 | 13 |
| 70 | Investigation of roller interactions with flexible tape medium. Tribology International, 2005, 38, 599-605. | 3.0 | 24 |
| 71 | Tape edge wear and its relationship to lateral tape motion. Microsystem Technologies, 2005, 11, 1158-1165. | 1.2 | 8 |
| 72 | High frequency lateral tape motion and the dynamics of tape edge contact. Microsystem Technologies, 2005, 11, 1166-1170. | 1.2 | 6 |

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|----|---|-----|-----------|
| 73 | Spreading and mobility analysis of PFPE lubricants using a Surface Reflectance Analyzer (SRA). Tribology International, 2003, 36, 241-246. | 3.0 | 19 |
| 74 | FM-09 HIGH FREQUENCY LATERAL TAPE MOTION AND THE DYNAMICS OF TAPE EDGE CONTACT. Proceedings of JSME-IIP/ASME-ISPS Joint Conference on Micromechatronics for Information and Precision Equipment IIP/ISPS Joint MIPE, 2003, 2003, 179-180. | 0.0 | 0 |
| 75 | FM-08 TAPE EDGE WEAR AND ITS RELATIONSHIP TO LATERAL TAPE MOTION. Proceedings of JSME-IIP/ASME-ISPS Joint Conference on Micromechatronics for Information and Precision Equipment IIP/ISPS Joint MIPE, 2003, 2003, 177-178. | 0.0 | 0 |
| 76 | Experimental Comparison of Load/Unload Slider Dynamics For Two Different Pico-Slider Designs. Tribology Transactions, 2001, 44, 699-703. | 1.1 | 3 |
| 77 | Wear and hardness of carbon overcoats on magnetic recording sliders. Wear, 2000, 243, 18-24. | 1.5 | 37 |
| 78 | Load/unload measurements using laser doppler vibrometry and acoustic emission. Tribology International, 2000, 33, 367-372. | 3.0 | 19 |
| 79 | Effect of slot edge defects on the head/tape spacing. Tribology International, 2000, 33, 623-628. | 3.0 | 1 |
| 80 | Contact force measurement using acoustic emission analysis and system identification methods. Tribology International, 2000, 33, 639-646. | 3.0 | 22 |
| 81 | Head/Tape Spacing Measurements for Digital Linear Tape Drives Using Three-Color Interferometry. Tribology Transactions, 2000, 43, 144-150. | 1.1 | 7 |
| 82 | A review of 'contact recording' technologies. Wear, 1997, 207, 118-121. | 1.5 | 24 |
| 83 | An Efficient Finite Element-Based Air Bearing Simulator for Pivoted Slider Bearings using Bi-Conjugate Gradient Algorithms. Tribology Transactions, 1996, 39, 130-138. | 1.1 | 49 |
| 84 | An investigation of nano-wear during contact recording. Wear, 1996, 197, 211-220. | 1.5 | 24 |
| 85 | On tribological problems in magnetic disk recording technology. Wear, 1995, 190, 232-238. | 1.5 | 31 |
| 86 | The dynamics of slider bearings during contacts between slider and disk. IBM Journal of Research and Development, 1989, 33, 2-14. | 3.2 | 20 |