# Kheong Sann Chan

List of Publications by Year
in descending order

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|---|---|---|---|
| 42 papers | 540 citations | 687363 <br> 13 h-index | 677142 <br> 22 g-index |
| 42 all docs | 42 docs citations | 42 times ranked | 202 citing authors |

| # | Article | IF | Citations |
|---|---------|----|-----------| 
| 1 | Channel Models and Detectors for Two-Dimensional Magnetic Recording. IEEE Transactions on Magnetics, 2010, 46, 804-811. | 2.1 | 77 |
| 2 | Analysis of the frequency-domain block LMS algorithm. IEEE Transactions on Signal Processing, 2000, 48, 2332-2342. | 5.3 | 69 |
| 3 | TDMR Platform Simulations and Experiments. IEEE Transactions on Magnetics, 2009, 45, 3837-3843. | 2.1 | 52 |
| 4 | Low-Complexity Iterative Row-Column Soft Decision Feedback Algorithm for 2-D Inter-Symbol Interference Channel Detection With Gaussian Approximation. IEEE Transactions on Magnetics, 2013, 49, 4768-4773. | 2.1 | 26 |
| 5 | Deep Neural Network Based Media Noise Predictors for Use in High-Density Magnetic Recording Turbo-Detectors. IEEE Transactions on Magnetics, 2019, 55, 1-6. | 2.1 | 25 |
| 6 | Deep Neural Network *a Posteriori* Probability Detector for Two-Dimensional Magnetic Recording. IEEE Transactions on Magnetics, 2020, 56, 1-12. | 2.1 | 24 |
| 7 | Analysis of the partitioned frequency-domain block LMS (PFBLMS) algorithm. IEEE Transactions on Signal Processing, 2001, 49, 1860-1874. | 5.3 | 20 |
| 8 | Modeling of 2-D Magnetic Recording and a Comparison of Data Detection Schemes. IEEE Transactions on Magnetics, 2011, 47, 3685-3690. | 2.1 | 19 |
| 9 | A Study of SMR/TDMR With a Double/Triple Reader Head Array and Conventional Read Channels. IEEE Transactions on Magnetics, 2014, 50, 24-30. | 2.1 | 15 |
| 10 | Areal Density Capability of Dual-Structure Media for Microwave-Assisted Magnetic Recording. IEEE Transactions on Magnetics, 2019, 55, 1-9. | 2.1 | 14 |
| 11 | Data Recovery for Multilayer Magnetic Recording. IEEE Transactions on Magnetics, 2019, 55, 1-16. | 2.1 | 14 |
| 12 | Deep Neural Network Media Noise Predictor Turbo-Detection System for 1-D and 2-D High-Density Magnetic Recording. IEEE Transactions on Magnetics, 2021, 57, 1-13. | 2.1 | 14 |
| 13 | Deep Neural Network-Based Detection and Partial Response Equalization for Multilayer Magnetic Recording. IEEE Transactions on Magnetics, 2021, 57, 1-12. | 2.1 | 14 |
| 14 | Comparison of one- and two-dimensional detectors on simulated and spin-stand readback waveforms. Journal of Magnetism and Magnetic Materials, 2012, 324, 336-343. | 2.3 | 13 |
| 15 | ISI/ITI Turbo Equalizer for TDMR Using Trained Local Area Influence Probabilistic Model. IEEE Transactions on Magnetics, 2019, 55, 1-15. | 2.1 | 13 |
| 16 | A System Level Study of Two-Dimensional Magnetic Recording (TDMR). IEEE Transactions on Magnetics, 2013, 49, 2812-2817. | 2.1 | 12 |
| 17 | Asymmetric Iterative Multi-Track Detection for 2-D Non-Binary LDPC-Coded Magnetic Recording. IEEE Transactions on Magnetics, 2013, 49, 5215-5221. | 2.1 | 12 |
| 18 | User Areal Density Optimization for Conventional and 2-D Detectors/Decoders. IEEE Transactions on Magnetics, 2018, 54, 1-12. | 2.1 | 10 |

| # | Article | IF | Citations |
|---|---------|----|-----------|
| 19 | A Study on Block-Based Neural Network Equalization in TDMR System With LDPC Coding. IEEE Transactions on Magnetics, 2019, 55, 1-5. | 2.1 | 9 |
| 20 | Techniques for Addressing Saddle Points in the Response Surface Methodology (RSM). IEEE Access, 2019, 7, 85613-85621. | 4.2 | 9 |
| 21 | A perspective on deep neural network-based detection for multilayer magnetic recording. Applied Physics Letters, 2021, 119, . | 3.3 | 9 |
| 22 | Skew angle effects in shingled magnetic recording system with double/triple reader head array. Journal of Applied Physics, 2014, 115, 17B753. | 2.5 | 7 |
| 23 | Comparison of Signals From Micromagnetic Simulations, GFP Model, and an HDD Readback. IEEE Transactions on Magnetics, 2015, 51, 1-4. | 2.1 | 7 |
| 24 | Optimization of Dual-Structure Recording Media for Microwave-Assisted Magnetic Recording. IEEE Transactions on Magnetics, 2019, , 1-5. | 2.1 | 7 |
| 25 | Recording Performance and Comparison of Graded-${T_{c}}$ and -${K_{u}}$ HAMR Systems. IEEE Transactions on Magnetics, 2014, 50, 107-113. | 2.1 | 6 |
| 26 | Embedded Marker Code for Channels Corrupted by Insertions, Deletions, and AWGN. IEEE Transactions on Magnetics, 2013, 49, 2535-2538. | 2.1 | 5 |
| 27 | Optimization of the 3-D-MAMR Media Stack. IEEE Transactions on Magnetics, 2019, 55, 1-5. | 2.1 | 5 |
| 28 | Maximum Likelihood Detection for 3-D-MAMR. IEEE Transactions on Magnetics, 2019, 55, 1-9. | 2.1 | 5 |
| 29 | Convolutional Neural Network Based Symbol Detector for Two-Dimensional Magnetic Recording. IEEE Transactions on Magnetics, 2021, 57, 1-5. | 2.1 | 5 |
| 30 | Evaluation of a Joint Detector Demodulator Decoder (JDDD) Performance With Modulation Schemes Specified in the DVB-S2 Standard. IEEE Access, 2019, 7, 86217-86225. | 4.2 | 4 |
| 31 | Turbo-Detection for Multilayer Magnetic Recording Using Deep Neural Network-Based Equalizer and Media Noise Predictor. IEEE Transactions on Magnetics, 2022, 58, 1-11. | 2.1 | 4 |
| 32 | Channel Characterization and Performance Evaluation of Bit-Patterned Media. IEEE Transactions on Magnetics, 2013, 49, 723-729. | 2.1 | 3 |
| 33 | A near zero skew actuation mechanism for hard disk drives. Microsystem Technologies, 2015, 21, 131-137. | 2.0 | 3 |
| 34 | Optimization of the Spin-Torque Oscillator Response for Microwave-Assisted Magnetic Recording. IEEE Access, 2019, 7, 140134-140141. | 4.2 | 3 |
| 35 | TDMR Detection System with Local Area Influence Probabilistic a Priori Detector. , 2019, , . | | 3 |
| 36 | Iterative Reduced-Complexity Graph-Based Detection for LDPC Coded 2D Recording Channels. IEEE Transactions on Magnetics, 2013, 49, 2598-2602. | 2.1 | 2 |

| # | ARTICLE | IF | CITATIONS |
|---|---------|----|-----------| 
| 37 | Effect of media property variations on shingled magnetic recording channel bit error rate and signal to noise ratio performance. Journal of Applied Physics, 2015, 117, 17E311. | 2.5 | 1 |
| 38 | Automated 2-D Scanning Setup on Spinstand for Evaluation of Ultra-High-Density Recording Data. IEEE Transactions on Magnetics, 2009, 45, 5100-5103. | 2.1 | 0 |
| 39 | Position error signal detection from the user sector for high position update rate in patterned media recording technology. Transactions of the Institute of Measurement and Control, 2010, 32, 120-136. | 1.7 | 0 |
| 40 | Application and Optimization of Factor Graph-Based Detector on 1D ISI Magnetic Recording Channel. IEEE Transactions on Magnetics, 2013, 49, 2500-2503. | 2.1 | 0 |
| 41 | Optimization of Bit-Patterned Media Recording (BPMR) System via Tolerance Design. IEEE Transactions on Magnetics, 2013, 49, 3624-3627. | 2.1 | 0 |
| 42 | Analysis of the Joint Viterbi Detector/Decoder (JVDD) Over a Coded AWGN/ISI System ss an LDPC Alternative. IEEE Transactions on Broadcasting, 2019, 65, 1-9. | 3.2 | 0 |