

A comparative analysis of multidimensional features of objects resembling sets of graphs. / Dehmer, Matthias; Emmert-Streib, Frank; Gesell, Tanja.

In: Applied Mathematics and Computation, Vol. 196, No. 1, 15.02.2008, p. 221-235.

Research output: Contribution to journal › Article › Scientific › peer-review

A full-potential linearized augmented plane wave study of the interaction of CO₂ with α -Pu (020) surface nanolayers. / Wang, Jianguang; Ray, Asok K.

In: Journal of Computational and Theoretical Nanoscience, Vol. 11, No. 7, 2014, p. 1710-1717.

Research output: Contribution to journal › Article › Scientific › peer-review

Algorithmic computation of knot polynomials of secondary structure elements of proteins. / Emmert-Streib, Frank.

In: Journal of Computational Biology, Vol. 13, No. 8, 01.10.2006, p. 1503-1512.

Research output: Contribution to journal › Article › Scientific › peer-review

A microscopic view of the mechanisms of active transport across the cellular membrane. / Enkavi, Giray; Li, Jing; Wen, Pochao; Thangapandian, Sundarapandian; Moradi, Mahmoud; Jiang, Tao; Han, Wei; Tajkhorshid, Emad.

In: Annual Reports in Computational Chemistry, Vol. 10, 2014, p. 77-125.

Research output: Contribution to journal › Article › Scientific › peer-review

An automated algorithm for reliable equation of state fitting of magnetic systems. / Levämäki, H.; Tian, L.-Y.; Vitos, L.; Ropo, M.

In: Computational Materials Science, Vol. 156, 2019, p. 121-128.

Research output: Contribution to journal › Article › Scientific › peer-review

An efficient heuristic approach to detecting graph isomorphism based on combinations of highly discriminating invariants. / Dehmer, Matthias; Grabner, Martin; Mowshowitz, Abbe; Emmert-Streib, Frank.

In: Advances in Computational Mathematics, Vol. 39, No. 2, 08.2013, p. 311-325.

Research output: Contribution to journal › Article › Scientific › peer-review

A novel epidemic model considering demographics and intercity commuting on complex dynamical networks. / Yin, Qian; Wang, Zhishuang; Xia, Chengyi; Dehmer, Matthias; Emmert-Streib, Frank; Jin, Zhen.

In: Applied Mathematics and Computation, Vol. 386, 125517, 2020.

Research output: Contribution to journal › Article › Scientific › peer-review

A robust AMMI model for the analysis of genotype-by-environment data. / Rodrigues, Paulo C.; Monteiro, Andreia; Lourenço, Vanda M.

In: Bioinformatics, Vol. 32, No. 1, 01.07.2015, p. 58-66.

Research output: Contribution to journal › Article › Scientific › peer-review

A similarity measure for graphs with low computational complexity. / Dehmer, Matthias; Emmert-Streib, Frank; Kilian, Jürgen.

In: Applied Mathematics and Computation, Vol. 182, No. 1, 01.11.2006, p. 447-459.

Research output: Contribution to journal › Article › Scientific › peer-review

BACOM : In silico detection of genomic deletion types and correction of normal cell contamination in copy number data. / Yu, Guoqiang; Zhang, Bai; Bova, G. Steven; Xu, Jianfeng; Shih, Ie Ming; Wang, Yue.

In: Bioinformatics, Vol. 27, No. 11, btr183, 06.2011, p. 1473-1480.

Research output: Contribution to journal › Article › Scientific › peer-review

Characterizing rate limiting steps in transcription from RNA production times in live cells. / Häkkinen, Antti; Ribeiro, Andre S.

In: Bioinformatics, Vol. 32, No. 9, 01.05.2016, p. 1346-1352.

Research output: Contribution to journal › Article › Scientific › peer-review

Comparative analysis of tissue reconstruction algorithms for 3D histology. / Kartasalo, Kimmo; Latonen, Leena; Vihinen, Jorma; Visakorpi, Tapio; Nykter, Matti; Ruusuvaori, Pekka.

In: Bioinformatics, Vol. 34, No. 17, 01.09.2018, p. 3013-3021.
Research output: Contribution to journal › Article › Scientific › peer-review

Comparing large graphs efficiently by margins of feature vectors. / Dehmer, Matthias; Emmert-Streib, Frank.
In: Applied Mathematics and Computation, Vol. 188, No. 2, 15.05.2007, p. 1699-1710.
Research output: Contribution to journal › Article › Scientific › peer-review

Cuts for 3-D magnetic scalar potentials : Visualizing unintuitive surfaces arising from trivial knots. / Stockrahm, Alex; Lahtinen, Valtteri; Kangas, Jari J.J.; Kotiuga, P. Robert.
In: Computers and Mathematics with Applications, 2019.
Research output: Contribution to journal › Article › Scientific › peer-review

Density functional theory study of FePd_n (n = 2-14) clusters and interactions with small molecules. / Ma, Li; Wang, Jianguang; Hao, Yuanyuan; Wang, Guanghou.
In: Computational Materials Science, Vol. 68, 02.2013, p. 166-173.
Research output: Contribution to journal › Article › Scientific › peer-review

Entropy bounds for dendrimers. / Chen, Zengqiang; Dehmer, Matthias; Emmert-Streib, Frank; Shi, Yongtang.
In: Applied Mathematics and Computation, Vol. 242, 01.09.2014, p. 462-472.
Research output: Contribution to journal › Article › Scientific › peer-review

Estimation of GFP-tagged RNA numbers from temporal fluorescence intensity data. / Häkkinen, Antti; Ribeiro, Andre S.
In: Bioinformatics, Vol. 31, No. 1, 01.01.2015, p. 69-75.
Research output: Contribution to journal › Article › Scientific › peer-review

Evolutionary dynamics of the spatial Prisoner's Dilemma with self-inhibition. / Emmert-Streib, Frank.
In: Applied Mathematics and Computation, Vol. 218, No. 11, 05.02.2012, p. 6482-6488.
Research output: Contribution to journal › Article › Scientific › peer-review

Gene set analysis for self-contained tests : Complex null and specific alternative hypotheses. / Rahmatallah, Y.; Emmert-Streib, F.; Glazko, G.
In: Bioinformatics, Vol. 28, No. 23, 12.2012, p. 3073-3080.
Research output: Contribution to journal › Article › Scientific › peer-review

Gene Sets Net Correlations Analysis (GSNCA) : A multivariate differential coexpression test for gene sets. / Rahmatallah, Yasir; Emmert-Streib, Frank; Glazko, Galina.
In: Bioinformatics, Vol. 30, No. 3, 01.02.2014, p. 360-368.
Research output: Contribution to journal › Article › Scientific › peer-review

Graph distance measures based on topological indices revisited. / Dehmer, Matthias; Emmert-Streib, Frank; Shi, Yongtang.
In: Applied Mathematics and Computation, Vol. 266, 18.06.2015, p. 623-633.
Research output: Contribution to journal › Article › Scientific › peer-review

Graph entropy based on the number of spanning forests of c-cyclic graphs. / Wan, Pengfei; Tu, Jianhua; Dehmer, Matthias; Zhang, Shenggui; Emmert-Streib, Frank.
In: Applied Mathematics and Computation, Vol. 363, 124616, 15.12.2019.
Research output: Contribution to journal › Article › Scientific › peer-review

Growth behavior and magnetic properties of spherical uranium oxide nanoclusters. / Ma, Li; Ray, Asok K.
In: Journal of Computational and Theoretical Nanoscience, Vol. 10, No. 2, 02.2013, p. 334-340.
Research output: Contribution to journal › Article › Scientific › peer-review

Homogeneous (α,k)-Polynomial Solutions of the Fractional Riesz System in Hyperbolic Space. / Orelma, H.; Vieira, N.
In: Complex Analysis and Operator Theory, Vol. 11, No. 5, 2017, p. 1253-1267.
Research output: Contribution to journal › Article › Scientific › peer-review

Hypermonogenic Functions of Two Vector Variables. / Eriksson, S. L.; Orelma, H.; Vieira, N.

In: Complex Analysis and Operator Theory, Vol. 12, No. 2, 2018, p. 555–570.

Research output: Contribution to journal › Article › Scientific › peer-review

Hypermonogenic solutions and plane waves of the Dirac operator in $\mathbb{R}^p \times \mathbb{R}^q$. / Guzmán Adán, Alí; Orelma, Heikki; Sommen, Franciscus.

In: Applied Mathematics and Computation, Vol. 346, 01.04.2019, p. 1-14.

Research output: Contribution to journal › Article › Scientific › peer-review

Information theoretic measures of UHG graphs with low computational complexity. / Emmert-Streib, Frank; Dehmer, Matthias.

In: Applied Mathematics and Computation, Vol. 190, No. 2, 15.07.2007, p. 1783-1794.

Research output: Contribution to journal › Article › Scientific › peer-review

Integral kernels for k-hypermonogenic functions. / Vuojamo, Vesa; Eriksson, Sirkka-Liisa.

In: Complex Variables and Elliptic Equations, Vol. 62, No. 9, 2017, p. 1-12.

Research output: Contribution to journal › Article › Scientific › peer-review

Introducing libeemd : a program package for performing the ensemble empirical mode decomposition. / Luukko, P. J. J.; Helske, J.; Räsänen, E.

In: Computational Statistics, Vol. 31, No. 2, 01.06.2016, p. 545-557.

Research output: Contribution to journal › Article › Scientific › peer-review

Magnetic origin of the chemical balance in alloyed Fe-Cr stainless steels : First-principles and Ising model study. /

Airiskallio, E.; Nurmi, E.; Väyrynen, I. J.; Kokko, K.; Ropo, M.; Punkkinen, M. P J; Johansson, B.; Vitos, L.

In: Computational Materials Science, Vol. 92, 2014, p. 135-140.

Research output: Contribution to journal › Article › Scientific › peer-review

Melting of copper clusters. / Valkealahti, S.; Manninen, M.

In: Computational Materials Science, Vol. 1, No. 2, 01.01.1993, p. 123-134.

Research output: Contribution to journal › Article › Scientific › peer-review

Modeling mass transfer in fracture flows with the time domain-random walk method. / Kuva, J.; Voutilainen, M.; Mattila, K.

In: COMPUTATIONAL GEOSCIENCES, 2019.

Research output: Contribution to journal › Article › Scientific › peer-review

Modeling probability densities with sums of exponentials via polynomial approximation. / Dumitrescu, Bogdan; Şicleru, Bogdan C.; Avram, Florin.

In: Journal of Computational and Applied Mathematics, Vol. 292, 2016, p. 513–525.

Research output: Contribution to journal › Article › Scientific › peer-review

Multichannel Blind Sound Source Separation using Spatial Covariance Model with Level and Time Differences and Non-Negative Matrix Factorization. / Carabias Orti, Julio Jose; Nikunen, Joonas; Virtanen, Tuomas; Vera-Candeas, Pedro.

In: IEEE/ACM Transactions on Audio Speech and Language Processing, Vol. 26, No. 9, 09.2018, p. 1512-1527.

Research output: Contribution to journal › Article › Scientific › peer-review

NetBioV : An R package for visualizing large network data in biology and medicine. / Tripathi, Shailesh; Dehmer, Matthias; Emmert-Streib, Frank.

In: Bioinformatics, Vol. 30, No. 19, 02.04.2014, p. 2834-2836.

Research output: Contribution to journal › Article › Scientific › peer-review

On efficient network similarity measures. / Dehmer, Matthias; Chen, Zengqiang; Shi, Yongtang; Zhang, Y.; Tripathi, Shailesh; Ghorbani, Modjtaba; Mowshowitz, Abbe; Emmert-Streib, F.

In: Applied Mathematics and Computation, Vol. 362, 124521, 01.12.2019.

Research output: Contribution to journal › Article › Scientific › peer-review

On k-Hypermonogenic Functions and Their Mean Value Properties. / Eriksson, Sirkka-Liisa; Orelma, Heikki.

In: Complex Analysis and Operator Theory, Vol. 10, No. 2, 2016, p. 311-325.

Research output: Contribution to journal › Article › Scientific › peer-review

Optimal energy decay for the wave-heat system on a rectangular domain. / Batty, Charles; Paunonen, Lassi; Seifert, David.

In: SIAM JOURNAL ON MATHEMATICAL ANALYSIS, Vol. 51, No. 2, 2019, p. 808-819.

Research output: Contribution to journal › Article › Scientific › peer-review

Relations and bounds for the zeros of graph polynomials using vertex orbits. / Dehmer, Matthias; Emmert-Streib, Frank; Mowshowitz, Abbe; Ilić, Aleksandar; Chen, Zengqiang; Yu, Guihai; Feng, Lihua; Ghorbani, Modjtaba; Varmuza, Kurt; Tao, Jin.

In: Applied Mathematics and Computation, Vol. 380, 125239, 01.09.2020.

Research output: Contribution to journal › Article › Scientific › peer-review

Revealing differences in gene network inference algorithms on the network level by ensemble methods. / Altay, Gökmen; Emmert-Streib, Frank.

In: Bioinformatics, Vol. 26, No. 14, btq259, 25.05.2010, p. 1738-1744.

Research output: Contribution to journal › Article › Scientific › peer-review

SamExploreR : Exploring reproducibility and robustness of RNA-seq results based on SAM files. / Stupnikov, Alexey; Tripathi, Shailesh; De Matos Simoes, Ricardo; McArt, Darragh; Salto-Tellez, Manuel; Glazko, Galina; Dehmer, Matthias; Emmert-Streib, Frank.

In: Bioinformatics, Vol. 32, No. 21, 01.11.2016, p. 3345-3347.

Research output: Contribution to journal › Article › Scientific › peer-review

Satisfiability of modal inclusion logic : Lax and strict semantics. / Hella, Lauri; Kuusisto, Antti; Meier, Arne; Vollmer, Heribert.

In: ACM TRANSACTIONS ON COMPUTATIONAL LOGIC, Vol. 21, No. 1, 7, 01.10.2019.

Research output: Contribution to journal › Article › Scientific › peer-review

SCIP : a single-cell image processor toolbox. / Martins, Leonardo; Neeli-Venkata, Ramakanth; Oliveira, Samuel M.D.; Häkkinen, Antti; Ribeiro, Andre S.; Fonseca, José M.

In: Bioinformatics, Vol. 34, No. 24, 15.12.2018, p. 4318-4320.

Research output: Contribution to journal › Article › Scientific › peer-review

Sound Event Detection in the DCASE 2017 Challenge. / Mesaros, Annamaria; Diment, Aleksandr; Elizalde, Benjamin; Heittola, Toni; Vincent, Emmanuel; Raj, Bhiksha; Virtanen, Tuomas.

In: IEEE/ACM Transactions on Audio Speech and Language Processing, Vol. 27, No. 6, 01.06.2019, p. 992-1006.

Research output: Contribution to journal › Article › Scientific › peer-review

Structural similarity of directed universal hierarchical graphs : A low computational complexity approach. / Dehmer, Matthias; Emmert-Streib, Frank.

In: Applied Mathematics and Computation, Vol. 194, No. 1, 01.12.2007, p. 7-20.

Research output: Contribution to journal › Article › Scientific › peer-review

The watching system as a generalization of identifying code. / Ghorbani, Modjtaba; Dehmer, Matthias; Maimani, Hamidreza; Maddah, Sheyda; Roozbayani, Maryam; Emmert-Streib, Frank.

In: Applied Mathematics and Computation, Vol. 380, 125302, 2020.

Research output: Contribution to journal › Article › Scientific › peer-review

Topological mappings between graphs, trees and generalized trees. / Emmert-Streib, Frank; Dehmer, Matthias.

In: Applied Mathematics and Computation, Vol. 186, No. 2, 15.03.2007, p. 1326-1333.

Research output: Contribution to journal › Article › Scientific › peer-review

Unite and conquer : Univariate and multivariate approaches for finding differentially expressed gene sets. / Glazko, Galina V.; Emmert-Streib, Frank.
In: *Bioinformatics*, Vol. 25, No. 18, 09.2009, p. 2348-2354.
Research output: [Contribution to journal](#) › [Article](#) › [Scientific](#) › [peer-review](#)

Universal construction mechanism for networks from one-dimensional symbol sequences. / Emmert-Streib, Frank.
In: *Applied Mathematics and Computation*, Vol. 219, No. 3, 15.10.2012, p. 1020-1030.
Research output: [Contribution to journal](#) › [Article](#) › [Scientific](#) › [peer-review](#)

Van der Waals interactions are critical in Car-Parrinello molecular dynamics simulations of porphyrin-fullerene dyads. / Karilainen, Topi; Cramariuc, Oana; Kuisma, Mikael; Tappura, Kirsi; Hukka, Terttu I.
In: *Journal of Computational Chemistry*, Vol. 36, No. 9, 2015, p. 612-621.
Research output: [Contribution to journal](#) › [Article](#) › [Scientific](#) › [peer-review](#)

Two models for hydraulic cylinders in flexible multibody simulations. / Ylinen, Antti; Mäkinen, Jari; Kouhia, Reijo.
Computational Methods for Solids and Fluids: Multiscale Analysis, Probability Aspects and Model Reduction. Springer, 2016. p. 463-493 (*Computational Methods in Applied Sciences*; Vol. 41).
Research output: [Chapter in Book/Report/Conference proceeding](#) › [Chapter](#) › [Scientific](#) › [peer-review](#)

Chipless graphene tag and dual-CP reader for Internet of Things. / Dong, Guoqing; Shen, Yizhu; He, Han; Virkki, Johanna; Hu, Sanming.
2017 International Applied Computational Electromagnetics Society Symposium in China, ACES-China 2017. IEEE, 2017.
Research output: [Chapter in Book/Report/Conference proceeding](#) › [Conference contribution](#) › [Scientific](#) › [peer-review](#)

Circularly Polarized Textile Tag Antenna for Wearable Passive UHF RFID Systems. / Kuang, Ye; Ma, Shubin; Ukkonen, Leena; Virkki, Johanna; Björninen, Toni.
2018 International Applied Computational Electromagnetics Society Symposium in China, ACES-China 2018. IEEE, 2019.
Research output: [Chapter in Book/Report/Conference proceeding](#) › [Conference contribution](#) › [Scientific](#) › [peer-review](#)

Comparison of Human Head Phantoms with Different Complexities for Implantable Antenna Development. / Ma, Shubin; Ukkonen, Leena; Sydänheimo, Lauri; Björninen, Toni.
2018 International Applied Computational Electromagnetics Society (ACES) Symposium: 29 July-1 Aug. 2018, China. IEEE, 2019.
Research output: [Chapter in Book/Report/Conference proceeding](#) › [Conference contribution](#) › [Scientific](#) › [peer-review](#)

Introducing Multi-Convexity in Path Constrained Trajectory Optimization for Mobile Manipulators. / Singh, Arun Kumar; Ahonen, Andrei; Ghabcheloo, Reza; Mueller, Andreas.
European Control Conference 2020, ECC 2020. IEEE, 2020. p. 1178-1185.
Research output: [Chapter in Book/Report/Conference proceeding](#) › [Conference contribution](#) › [Scientific](#) › [peer-review](#)

Resilient Cooperative Voltage Control for Distribution Network with High Penetration Distributed Energy Resources. / Gusrialdi, Azwirman; Xu, Ying; Qu, Zhihua; Simaan, Marwan A.
European Control Conference 2020, ECC 2020. IEEE, 2020. p. 1533-1539.
Research output: [Chapter in Book/Report/Conference proceeding](#) › [Conference contribution](#) › [Scientific](#) › [peer-review](#)

The different levels of magneto-mechanical coupling in energy conversion machines and devices. / Belahcen, A.; Kouhia, R.; Fonteyn, K.
Proceedings of the 4th International Conference on Computational Methods for Coupled Problems in Science and Engineering, COUPLED PROBLEMS 2011. 2011. p. 472-483.
Research output: [Chapter in Book/Report/Conference proceeding](#) › [Conference contribution](#) › [Scientific](#) › [peer-review](#)

Visibility-Aware Part Coding for Vehicle Viewing Angle Estimation. / Yang, Dan; Qian, Yanlin; Cai, Dingding; Yan, Song; Kämäräinen, Joni-Kristian; Chen, Ke.

9th International Conference on Information Science and Technology, ICIST 2019. IEEE, 2019. p. 65-70.

Research output: Chapter in Book/Report/Conference proceeding › Conference contribution › Scientific › peer-review

Machine learning : How it can help nanocomputing. / Uusitalo, Mikko A.; Peltonen, Jaakko; Ryhänen, Tapani.

In: Journal of Computational and Theoretical Nanoscience, Vol. 8, No. 8, 08.2011, p. 1347-1363.

Research output: Contribution to journal › Review Article › Scientific › peer-review