S. Kobe, Analyse zum h-Index (Juni 2020)

Der h-Index wird bei der Scientometrie als Parameter benutzt. Ordnet man die n Publikationen eines Autors von i = 1 bis n absteigend nach der Anzahl der Arbeiten a_i, in denen diese zitiert werden, so ist i = h, wenn gilt: $a_{i+1} < h + 1$. Bis zur h-ten Arbeit gibt es also mindestens h Arbeiten von Autoren, die auf diese Arbeit Bezug nehmen.

Google Scholar hat 987 Zitate registriert: h = 17
i10 = 28 (d.h. in 28 Arbeiten gibt es mehr als 10 Zitate)

Die eigene Analyse (privat) ergibt h = 18, dabei wurden alle Selbstzitate weggelassen.
Zum Vergleich wurden tlw. Angaben aus Web of Science (WoS) angegeben.

Im folgenden sind die ersten h+1 Arbeiten aufgeführt, z.T. ergänzt durch Beispiele für zitierende Publikationen aus jüngerer Zeit.

(1) Amorphe Ferro-und Ferrimagnetika
K Handrich, S Kobe
Akademie-Verlag, Physik-Verlag 1980
158 Zitate (Google Scholar)

Zitate seit 2015:

[HTML] Ferrimagnetic Tb–Fe Alloy thin films: composition and thickness dependence of magnetic properties and all-optical switching
B Hebler, A Hassdenteufel, P Reinhardt, H Karl… - Frontiers in …, 2016 - frontiersin.org
Ferrimagnetic rare earth-transition metal Tb-Fe alloy thin films exhibit a variety of different magnetic properties, which depends strongly on composition and temperature. In this study, first the influence of the film thickness (5-85 nm) on the sample magnetic properties was …
Zitiert von: 42 Ähnliche Artikel Alle 8 Versionen

Magnetic-field-dependent thz emission of spintronic tbfe/pt layers
R Schneider, M Fix, R Heming… - ACS …, 2018 - ACS Publications
We measure the THz emission of a layered spintronic system based on platinum (Pt) and terbium–iron (Tb x Fe1–x) alloys for the entire range of Tb content ($0 \leq x \leq 1$) under different external applied magnetic fields. We find that the THz emission amplitude closely follows the …
Zitiert von: 13 Ähnliche Artikel Alle 2 Versionen

Effect of composition on the structural relaxation of amorphous iron-based alloys
NV Ilin, AK Tcesarskaia, VV Tkachev, VA Ivanov… - Bulletin of the Russian …, 2017 - Springer
The structural relaxation of iron-based amorphous alloys upon changes in their relative electrical resistance and magnetic moments upon a rise in temperature is investigated. The presence of Nb in Fe (Cu, Nb)–Si, B alloys stabilizes amorphous states, lowering the Curie …
Zitiert von: 3 Ähnliche Artikel Alle 4 Versionen

[PDF] mdpi.com

Magnetoimpedance Effect in the Ribbon-Based Patterned Soft Ferromagnetic Meander-Shaped Elements for Sensor Application

Z Yang, AA Chlenova, EV Golubeva, SO Volchkov… - Sensors, 2019 - mdpi.com

Amorphous and nanocrystalline soft magnetic materials have attracted much attention in the area of sensor applications. In this work, the magnetoimpedance (MI) effect of patterned soft ferromagnetic meander-shaped sensor elements has been investigated. They were …

Zitiert von: 3 Ähnliche Artikel Alle 13 Versionen

[HTML] mdpi.com

Magnetoimpedance in symmetric and non-symmetric nanostructured multilayers: A theoretical study

NA Buznikov, GV Kurlyandskaya - Sensors, 2019 - mdpi.com

Intensive studies of the magnetoimpedance (MI) effect in nanostructured multilayers provide a good phenomenological basis and theoretical description for the symmetric case when top and bottom layers of ferromagnet/conductor/ferromagnet structure have the same thickness …

Zitiert von: 3 Ähnliche Artikel Alle 15 Versionen

Magnetism in transition metal base amorphous alloys

J Durand - Glassy metals: magnetic, chemical and structural …, 2018 - books.google.com

This chapter will review the magnetic properties of transition-metal base amorphous alloys. These properties include both the dilute (occurrence of localized magnetic moments at zero temperature and properties of the moments at finite temperature) and the concentrated …

Zitiert von: 2 Ähnliche Artikel Alle 2 Versionen

Surface irregularities and magnetism in amorphous metal foils on Fe basis

VV Tkachev, GS Kraynova, DA Polyansky… - Solid State …, 2016 - Trans Tech Publ

This paper presents the study results of morphology contact and free surface at amorphous metal foils (Fe 7 Co 71 Ni 12 (SiB) 10, Fe 70 Ni 10 (SiB) 10, Fe 60 Co 30 (SiB) 10) and their analysis of the elemental composition. Using spectral methods of research was allowed to …

Zitiert von: 2 Ähnliche Artikel Alle 4 Versionen

Features of the Structural and Magnetic Characteristics of Cobalt-Rich Amorphous Thick Microwires

EE Shalygina, VD Rubtsov, AN Shalygin… - Bulletin of the Russian …, 2019 - Springer

Results are presented from investigating the structural and magnetic characteristics of Co 69 Fe 4 Cr 4 Si 12 B 11 amorphous microwires with magnetic core diameters of 35–360 μm, obtained using an updated Ulitovskii–Taylor approach. It is found that the microwires have …

Zitiert von: 1 Ähnliche Artikel Alle 2 Versionen

[PDF] archives-ouvertes.fr

Short-period multilayer X-ray mirrors for “water” and “carbon windows” wavelengths

I Kopylets, O Devizenko, E Zubarev… - … of nanoscience and …, 2019 - ingentaconnect.com

This review paper summarizes and provides an overview of our recent studies related to two types of short-period multilayer X-ray mirrors, W/B4C and Co/C. It deals with the experimental observation of the layer intermixing effects and how they affect the X-ray …

Zitiert von: 1 Ähnliche Artikel Alle 5 Versionen

[HTML] mdpi.com

Influence of HPT Deformation on the Structure and Properties of Amorphous Alloys

D Gunderov, V Astanin - Metals, 2020 - mdpi.com

Recent studies showed that structural changes in amorphous alloys under high pressure

torsion (HPT) are determined by their chemical composition and processing regimes. For example, HPT treatment of some amorphous alloys leads to their nanocrystallization; in...

(2) Einführung in die Physik der Molekeln
KH Hellwege
Springer-verlag
(2013 übernommen aus Landoldt-Börnstein)
60 Zitate (Google Scholar)

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(3) Theory of amorphous and liquid ferromagnets
K Handrich, S Kobe
ACTA PHYS POLON, 819-827 (1970)
57 Zitate (Google Scholar)

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(4) Spontaneous magnetization of an amorphous ferromagnet
S Kobe
physica status solidi (b) 41 (1), K13-K1 (1970)
48 Zitate (Google Scholar); 34 (WoS)

Magnetic properties of thin epitaxial PdFe alloy films
A Esmaeili, IV Yanilkin, AI Gumarov, IR Vakhitov… - arXiv preprint arXiv …, 2019 - arxiv.org
vor 197 Tagen - In the paper we present the results of extensive studies of palladium-rich Pd1-xFex alloy films epitaxially grown on MgO single-crystal substrate. In a composition range of x= 0.01-0.07 these materials are soft ferromagnets, the saturation magnetization and

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(5) A recursive branch-and-bound algorithm for the exact ground state of Ising spin-glass models
A Hartwig, F Daske, S Kobe
Computer Physics Communications 32 (2), 133-138 (1984)
47 Zitate (Google Scholar); 28 (WoS)

How to Compute Using Quantum Walks
V Kendon - arXiv preprint arXiv:2004.01329, 2020 - arxiv.org
vor 80 Tagen - Quantum walks are widely and successfully used to model diverse physical processes. This leads to computation of the models, to explore their properties. Quantum walks have also been shown to be universal for quantum computing. This is a more subtle

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(6) Constant Coupling Approximation for Amorphous Magnets
S Kobe, K Handrich
physica status solidi (b) 54 (2), 663-67 (1972)
46 Zitate (Google Scholar, WoS)

Isotropic and anisotropic quantum Heisenberg models under bond randomness: An effective-field theory study
E Vatansever, U Akinci - Physica A: Statistical Mechanics and its …, 2018 - Elsevier

We study phase transition properties of the isotropic and anisotropic quantum Heisenberg models for the three dimensional simple cubic lattice under bond randomness. Effects of hamiltonian parameters on the phase diagrams and also magnetization profiles have been

(7) " Valley structures" in the phase space of a finite 3D Ising spin glass with+ or-I interactions

T Klotz, S Kobe
Journal of Physics A: Mathematical and General 27 (4), L95 (1994)
42 Zitate (Google Scholar); 48 (WoS)

Basin Hopping Graph: a computational framework to characterize RNA folding landscapes

M Kucharik, IL Hofacker, PF Stadler, J Qin - Bioinformatics, 2014 - academic.oup.com
Motivation: RNA folding is a complicated kinetic process. The minimum free energy structure provides only a static view of the most stable conformational state of the system. It is insufficient to give detailed insights into the dynamic behavior of RNAs. A sufficiently …

Zitiert von: 43Ähnliche ArtikelAlle 20 Versionen

[PDF] mdpi.com

Design of artificial riboswitches as biosensors

S Findeiß, M Etzel, S Will, M Mörl, PF Stadler - Sensors, 2017 - mdpi.com
RNA aptamers readily recognize small organic molecules, polypeptides, as well as other nucleic acids in a highly specific manner. Many such aptamers have evolved as parts of regulatory systems in nature. Experimental selection techniques such as SELEX have been …

Zitiert von: 18Ähnliche ArtikelAlle 8 Versionen

[HTML] oup.com

Pseudoknots in RNA folding landscapes

M Kucharik, IL Hofacker, PF Stadler, J Qin - Bioinformatics, 2016 - academic.oup.com
Motivation: The function of an RNA molecule is not only linked to its native structure, which is usually taken to be the ground state of its folding landscape, but also in many cases crucially depends on the details of the folding pathways such as stable folding intermediates or the …

Zitiert von: 15Ähnliche ArtikelAlle 20 Versionen

[PDF] univie.ac.at

Generalized topologies: hypergraphs, chemical reactions, and biological evolution

C Flamm, BMR Stadler, PF Stadler - Advances in Mathematical Chemistry …, 2015 - Elsevier
In the analysis of complex networks, the description of evolutionary processes, or investigations into dynamics on fitness or energy landscapes notions such as similarity, neighborhood, connectedness, or continuity of change appear in a natural way. These …

Zitiert von: 7Ähnliche ArtikelAlle 13 Versionen

[PDF] researchgate.net

The ground state energy per site of the quantum and classical Edwards-Anderson spin glass in the thermodynamic limit

WF Wreszinski - Journal of Statistical Physics, 2012 - Springer
We derive general rigorous lower bounds for the average ground state energy per site e (d) of the quantum and classical Edwards-Anderson spin-glass model in dimensions d= 2 and d= 3 in the thermodynamic limit. For the classical model they imply that e (2)≥− 3/2 and e

(8) Ernst Ising—physicist and teacher
S Kobe
Journal of statistical physics 88 (3-4), 991-995 (1997)
39 Zitate (Google Scholar); 7 (WoS)

Markov chains and mixing times
DA Levin, Y Peres - 2017 - books.google.com
This book is an introduction to the modern theory of Markov chains, whose goal is to determine the rate of convergence to the stationary distribution, as a function of state space size and geometry. This topic has important connections to combinatorics, statistical physics …

Zitiert von: 2817Ähnliche ArtikelAlle 26 Versionen

[PDF] researchgate.net

Ising model, econophysics and analogies
C Schinckus - Physica A: Statistical Mechanics and its Applications, 2018 - Elsevier
Econophysics emerged in the 1990s by importing statistical physics into economics and finance. Such extension of physics to another context generated a lot of epistemological debates and although it this transfer appears to be internally (disciplinary) justified, there …

Zitiert von: 7Ähnliche ArtikelAlle 7 Versionen

[PDF] unb.br

[PDF] Lectures notes Gibbs measures and phase transitions-part 2
A Bovier - Diponıvel em http://www-wt. iam. uni-bonn. de/~ bovier …, 2012 - mat.unb.br
L'analyse mathématique, n'est elle donc qu'un vain jeu d'esprit? Elle ne peut donner au physicien qu'un langage commode; n'est-ce pas la un médiocre service, dont on aurait pu se passera la rigueur; et même n'est il pasa craindre que ce langage artificiel ne soit un …

Zitiert von: 3Ähnliche ArtikelAlle 6 Versionen

[PDF] coventry.ac.uk

[PDF] Critical Phenomena and Fisher Renormalization
J Flanagan-Jones - 2010 - curve.coventry.ac.uk
This thesis offers a full background to the subject of phase transitions and critical phenomena through derivation and explanation of all relevant thermodynamic quantities, and the critical exponents and amplitudes that accompany them. Then, all universal …

Ähnliche ArtikelAlle 3 Versionen

[PDF] archives-ouvertes.fr

Propriétés magnétiques de nanomatériaux: Etude par la méthode Monte Carlo
T Sahdane - 2017 - tel.archives-ouvertes.fr
Dans cette thèse, nous nous intéressons essentiellement à l'étude des propriétés magnétiques et thermiques de nano-systèmes. En se basant sur le modèle Blume-Capel, nous étudions l'influence du champ magnétique externe et du champ cristallin sur les

(9) Amorphous magnetism and metallic magnetic materials-digest: a survey of the literature with a complete bibliography
AR Ferchmin, S Kobe
Elsevier (1983)
36 Zitate (Google Scholar)

Solid· State Magnetism

J Crangle - 2012 - books.google.com

Solid state magnetism is important and attempts to understand magnetic properties have led to an increasingly deep insight into the fundamental make up of solids. Both experimental and theoretical research into magnetism continue to be very active, yet there is still much …

Zitiert von: 157Ähnliche ArtikelAlle 4 Versionen

Perpendicularly magnetized Co20Fe60B20 layer sandwiched between Au with low Gilbert damping

P Kuświk, H Głowiński, E Coy, J Dubowik… - Journal of Physics …, 2017 - iopscience.iop.org

Nowadays, the CoFeB thin layered film is intensively studied because of its potential applications in spintronic devices, especially devices based on spin-transfer torque phenomena. Hitherto, it has been shown that CoFeB may possess perpendicular magnetic …

Zitiert von: 11Ähnliche ArtikelAlle 4 Versionen

[HTML] diva-portal.org

[HTML] Metallic Amorphous Thin Films and Heterostructures with Tunable Magnetic Properties

A Zamani - 2015 - diva-portal.org

Faculty of Science and Technology 1218. 60 pp. Uppsala: Acta Universitatis Upsaliensis. ISBN 978-91-554-9139-0. The primary focus of this thesis is to study the effect of doping on magnetic properties in amorphous Fe100− xZrx alloys. Samples with compositions of x= 7 …

Zitiert von: 1Ähnliche Artikel

Ruhr-Universität, D-4630 Bochum, FRG

S METHFESSEL - Amorphous and Liquid Materials, 2012 - books.google.com

151 ATOMIC SHORT RANGE ORDER IN AMORPHOUS MATERIALS S. METHFESSEL Ruhr-Universität, D-4630 Bochum, FRG ABSTRACT: 1. INTRODUCTION 2. TOPOLOGY OF DENSELY PACKED ATOMS 2.1. The Tetrahedra Problem 2.2. The Bernal Model for DRPHS 2.3

(10) INFLUENCE OF STRUCTURE FLUCTUATIONS ON MAGNETIC PROPERTIES OF AN AMORPHOUS FERROMAGNET
S Kobe, K Handrich
SOVIET PHYSICS SOLID STATE, USSR 13 (3), 734-+ (1971)
36 Zitate (Google Scholar); 38 (WoS)

Amorphous and nanocrystalline materials for applications as soft magnets

ME McHenry, MA Willard, DE Laughlin - Progress in materials Science, 1999 - Elsevier

This review seeks to summarize the recent developments in the synthesis, structural characterization, properties, and applications in the fields of amorphous, bulk amorphous, and nanocrystalline soft magnetic materials. Conventional physical metallurgical …

Zitiert von: 1617Ähnliche ArtikelAlle 14 Versionen

[PDF] researchgate.net

Distributed exchange interactions and temperature dependent magnetization in amorphous alloys

KA Gallagher, MA Willard, VN Zabenkin… - Journal of applied …, 1999 - aip.scitation.org

The temperature dependence of the magnetization for Fe88Zr7B4Cu1 amorphous alloy has been measured. M (T) has been fit using a Handrich–Kobe model with a modified Brillouin function with an additional exchange fluctuation term. Here for the first time, an asymmetrical …

Zitiert von: 81Ähnliche ArtikelAlle 9 Versionen

Effect of the addition of Ge to the FINEMET alloy

D Muraca, VJ Cremaschi, H Sirkin - Journal of magnetism and magnetic …, 2007 - Elsevier

The results obtained by partially substituting Ge for B and Si in the FINEMET alloy for the purpose of improving its magnetic properties at high temperatures are presented in this work. Nanocrystalline ribbons were obtained from controlled crystallization of amorphous …

Zitiert von: 21Ähnliche ArtikelAlle 7 Versionen

[PDF] cmu.edu

Magnetic moment and magnetization

ME McHenry, DE Laughlin - Characterization of materials, 2002 - Wiley Online Library

This article explores theories describing magnetic dipole moments and magnetization, including the origin and coupling of magnetic dipole moments and their addition to yield a magnetization. In particular, we define field quantities and magnetic dipole moments. This is …

Zitiert von: 6Ähnliche ArtikelAlle 7 Versionen

[PDF] researchgate.net

Electrical and magnetic properties of amorphous Fe22. 5Co22. 5Ni22. 5Cr22. 5Zr10 alloy

M Ghafari, Y Fang, T Feng, H Gleiter - Journal of Magnetism and Magnetic …, 2020 - Elsevier

This report is focused on the investigation of electrical and magnetic properties of distorted bcc system. The inspiration for the selection of amorphous Fe 22.5 Co 22.5 Ni 22.5 Cr 22.5 Zr 10 alloy with a distorted bcc structure is based on the theoretical band calculation. It is

(11) Exact ground state of finite amorphous Ising systems
S Kobe, A Hartwig
Computer Physics Communications 16 (1), 1-4 (1978)
32 Zitate (Google Scholar); 17 (WoS)

Exhaustive search for low-autocorrelation binary sequences

S Mertens - Journal of Physics A: Mathematical and General, 1996 - iopscience.iop.org

Binary sequences with low autocorrelations are important in communication engineering and in statistical mechanics as ground states of the Bernasconi model. Computer searches are the main tool in the construction of such sequences. Owing to the exponential size of the …

Zitiert von: 135Ähnliche ArtikelAlle 15 Versionen

Coulomb gap in two-and three-dimensional systems: Simulation results for large samples

A Möbius, M Richter, B Drittler - Physical Review B, 1992 - APS

Computer experiments have been performed to study the single-particle density of states, g (E), in the Coulomb gap. This gap occurs in disordered insulating systems as an effect of the long-range tail of the Coulomb interaction. In order to compare these numerical results with …

Zitiert von: 108Ähnliche ArtikelAlle 6 Versionen

Zur effektiven Lösung von booleschen, quadratischen Optimierungsproblemen

F Körner, C Richter - Numerische Mathematik, 1982 - Springer

Summary. The dual of the boolean quadratic programming problem is considered. The optimal value of their objective function gives bounds for the branch and bound process, which seem to be better then known from other autors … Zusammenfassuug. Es wird die zum …

Zitiert von: 15Ähnliche ArtikelAlle 7 Versionen

[PDF] arxiv.org

Low-energy excitations in spin glasses from exact ground states

M Palassini, F Liers, M Juenger, AP Young - Physical Review B, 2003 - APS

We investigate the nature of the low-energy, large-scale excitations in the three-dimensional Edwards-Anderson Ising spin glass with Gaussian couplings and free boundary conditions, by studying the response of the ground state to a coupling-dependent perturbation …

Zitiert von: 29Ähnliche ArtikelAlle 11 Versionen

[PDF] arxiv.org

Low-temperature specific heat of the Coulomb glass: Role of correlations

A Möbius, M Pollak - Physical Review B, 1996 - APS

An algorithm for the determination of an almost complete set of low-lying system states of an Ising glass sample of up to roughly 500 sites is presented. The method is applied to the investigation of the specific heat of the Coulomb glass. The importance of correlations and …

Zitiert von: 19Ähnliche ArtikelAlle 5 Versionen

Ising lattices with±J second-nearest-neighbor interactions

AJ Ramirez-Pastor, F Nieto, EE Vogel - Physical Review B, 1997 - APS

Second-nearest-neighbor interactions are added to the usual nearest-neighbor Ising Hamiltonian for square lattices in different ways. The starting point is a square lattice where half the nearest-neighbor interactions are ferromagnetic and the other half of the bonds are …

Zitiert von: 18Ähnliche ArtikelAlle 2 Versionen

[PDF] acm.org

[PDF] d-nb.info

[PDF] Contributions to Determining Exact Ground States Of Ising Spin Glasses And To Their Physics

F Liers - 2004 - d-nb.info

In the last decades, much research has focused on a better understanding of socalled spin glasses (eg, the alloys CuMn and AuFe.) Spin glasses are not yet fully understood. In order to be able to test the different theories that have been proposed for the nature of spin …

Zitiert von: 17 Ähnliche Artikel Alle 2 Versionen

Frustration in mixed two-dimensional±J Ising lattices

W Lebrecht, JF Valdés, EE Vogel - Physica A: Statistical Mechanics and its …, 2003 - Elsevier

Method of the sublattice previously introduced for homogeneous lattices is adapted here to characterize ground state properties of two inhomogeneous lattices: Kagomé lattice with coordination 4 and Five-points-star lattice with coordination 5. A representative cell must be …

Zitiert von: 10 Ähnliche Artikel Alle 7 Versionen

[PDF] aps.org

Quantum speedup of branch-and-bound algorithms

A Montanaro - Physical Review Research, 2020 - APS

Branch-and-bound is a widely used technique for solving combinatorial optimization problems where one has access to two procedures: a branching procedure that splits a set of potential solutions into subsets, and a cost procedure that determines a lower bound on …

Zitiert von: 7 Ähnliche Artikel Alle 4 Versionen

[PDF] arxiv.org

[ZITATION] Ein effektiver Branch and Bound-Algorithmus für Boolesche quadratische Optimierungsprobleme

F Körner - ZAMM-Journal of Applied Mathematics and …, 1985 - Wiley Online Library

(1) nj= 1 f (x):= xT (C+ n) x+ PTx- d, rnit D= diag (df). WPhlt man die Elemente d, hinreichend groB, dann ist die Matrix (C+ D) positiv definit. Aus der linearen, diskreten Optimierung ist seit langem bekannt, daB es sich als gut erweist, vor Beginn des Branch and Bound …

Zitiert von: 2 Ähnliche Artikel Alle 4 Versionen

[PDF] Combinatorial optimization methods in disordered systems

S Bastea, A Burkov, C Moukarzel… - Computer physics …, 1999 - Citeseer

We give an overview of the applications of methods from combinatorial optimisation to problems in disordered systems. The optimisation methods are e cient, for example it is possible to find the ground state of a random field Ising magnet containing one million sites

Computer Simulation Studies in Condensed-Matter Physics X: Proceedings of the Tenth Workshop Athens, GA, USA, February 24–28, 1997

DP Landau, KK Mon, HB Schüttler - 2012 - books.google.com

Computer Simulation Studies in Condensed-Matter Physics X is devoted to Prof. Masuo Suzuki's ideas, which have made novel, new simulations possible. These proceedings, of the 1997 workshop, comprise three parts that deal with new algorithms, methods of analysis …

Zitiert von: 1 Ähnliche Artikel Alle 4 Versionen

[PDF] arxiv.org

Generalized Bell inequalities and frustrated spin systems

HJ Schmidt - arXiv preprint cond-mat/0604591, 2006 - arxiv.org

We find a close correspondence between generalized Bell inequalities of a special kind and certain frustrated spin systems. For example, the Clauser-Horn-Shimony-Holt inequality corresponds to the frustrated square with the signs+++-for the nearest neighbor interaction …

Zitiert von: 1 Ähnliche Artikel Alle 6 Versionen

Recursive branch and bound

A Hartwig - Optimization, 1985 - Taylor & Francis

The context describes a method for solving integer programming problems. Using branch and bound the solution of a problem is transformed into the solution of a series of problems, which belong to the same recursive class like the problem being solved. To determine series …

Zitiert von: 1 Ähnliche Artikel

[PDF] tu-dresden.de

The modularity of attention from an artificial intelligence perspective

N Catenacci Volpi - 2013 - e-theses.imtlucca.it

The development of agents with bounded rationality is still an important challenge of artificial intelligence. Indeed, when we are facing problems with a large number of states, if we do not reason about the computational resources of our agent, it is easy to encounter exponential …

Ähnliche ArtikelAlle 3 Versionen

[PDF] arxiv.org

Combinatorial Approach to the Ground-State Energy of Square and Triangular+/-J Spin Glasses

P Polaszek - arXiv preprint cond-mat/9510116, 1995 - arxiv.org

A new combinatorial, analytical approach to the ground-state energy problem of spin glasses with different concentrations of+/-J interactions is developed. The energy e_0 is expressed in terms of the fraction of broken bonds mu_0 and expanded into a fast …

Ähnliche ArtikelAlle 3 Versionen

[PDF] academia.edu

[16 Zitate ohne Selbstzitate]

(12) Ernst Ising 1900-1998

S Kobe
Brazilian Journal of Physics 30 (4), 649-654 (2000)
29 Zitate (Google Scholar)

Influence of LPPL traders on financial markets

D Philipp - 2015 - ethz.ch

We have studied an agent-based model proposed by Kaizoji et al.[16] that was designed to investigate bubbles on financial markets. The model assumes two types of agents: rational traders that invest a constant fraction of their wealth in stocks and noise traders that rely in …

Zitiert von: 2Ähnliche ArtikelAlle 2 Versionen

[PDF] scitation.org

Exact solution for an Ising model on the Cayley tree of order 5

H Jamil, CH Pah - AIP Conference Proceedings, 2016 - aip.scitation.org

We investigate an Ising model with two restricted competing interactions (nearest neighbors, and one-level neighbors) on the Cayley tree of order 5. The translation Gibbs measures is considered for this model. Our result of the critical curve shows that the phase transition …

Ähnliche Artikel

[PDF] archives-ouvertes.fr

Thermalisation and Relaxation of Quantum Systems

SS Wald - 2017 - tel.archives-ouvertes.fr

This study deals with the dynamic properties of open quantum systems far from equilibrium in d dimensions. The focus is on a special, exactly solvable model, the spherical model (SM), which is technically simple. The analysis is of interest, since the critical behaviour in …

Ähnliche ArtikelAlle 11 Versionen

Phase diagrams of the spin-5/2 Blume–Capel model

M Karimou, AS de Arruda, M Godoy - Physica A: Statistical Mechanics and …, 2020 - Elsevier

We have used the Curie–Weiss mean-field approximation to study the effects of the random single-ion anisotropy and random magnetic field in the phase diagram and thermodynamic properties of the spin-5/2 Blume–Capel model. The phase diagrams have been presented in …

Ähnliche ArtikelAlle 5 Versionen

[PDF] arxiv.org

Critical behavior of the spin-3/2 Blume Capel quantum model with two random transverse single-ion anisotropies

IJ Souza, M Godoy, AS de Arruda, TM Tunes - arXiv preprint arXiv …, 2020 - arxiv.org

Using the approach based on the Bogoliubov inequality for free energy, we have studied the magnetic properties of the spin-3/2 Blume-Capel quantum model in the presence of the random transverse single-ion anisotropy (RTSIA). By analyzis of the phase diagrams in …

Ähnliche ArtikelAlle 2 Versionen

[PDF] ufba.br

[PDF] UTILIZAÇÃO DO EMPACOTAMENTO APOLONIANO NO ESTUDO DE FLUIDOS EM MEIOS POROSOS E EM SISTEMAS MAGNÉTICOS

RS DE OLIVEIRA - ppgfis.ufba.br

Neste trabalho o empacotamento Apoloniano (EA) é aplicado como um meio poroso granular não estacionário e não homogêneo e como uma rede apoloniana (RA) para modelar um material magnético. No primeiro caso, o EA é posicionado na região central de …

Ähnliche ArtikelAlle 3 Versionen

[PDF] unb.br

Expoentes críticos no modelo núcleo/casca nanomagnético

LE Rezende - 2018 - repositorio.unb.br

Diariamente, o conhecimento científico rompe barreiras e umas delas diz respeito ao tamanho dos materiais utilizados em aplicações tecnológicas. Nesse sentido, partículas formadas por apenas algumas centenas de átomos já são fabricadas e utilizadas em

(11) Frustration: How it can be measured
S Kobe, T Klotz
Physical Review E 52 (5), 5660 (1995)
29 Zitate (Google Scholar)

Seeking quantum speedup through spin glasses: The good, the bad, and the ugly

HG Katzgraber, F Hamze, Z Zhu, AJ Ochoa… - Physical Review X, 2015 - APS

There has been considerable progress in the design and construction of quantum annealing devices. However, a conclusive detection of quantum speedup over traditional silicon-based machines remains elusive, despite multiple careful studies. In this work we outline strategies …

Zitiert von: 95Ähnliche ArtikelAlle 6 Versionen

[PDF] arxiv.org

Computational hardness of spin-glass problems with tile-planted solutions

D Perera, F Hamze, J Raymond, M Weigel… - Physical Review E, 2020 - APS

We investigate the computational hardness of spin-glass instances on a square lattice, generated via a recently introduced tunable and scalable approach for planting solutions. The method relies on partitioning the problem graph into edge-disjoint subgraphs and …

Zitiert von: 3Ähnliche ArtikelAlle 10 Versionen

Universal lowest energy configurations in a classical Heisenberg model describing frustrated systems with wheel geometry

W Florek, G Kamieniarz, A Marlewski - Physical Review B, 2019 - APS

We minimize the energy function of the classical Heisenberg model describing the frustrated wheel shape systems consisting of an odd number of spin vectors, where a single vector is located at the center and the remaining vectors occupy n sites on a ring. Using the Lagrange …

Zitiert von: 2Ähnliche ArtikelAlle 3 Versionen

[PDF] arxiv.org

Ising antiferromagnet on the 2-uniform lattices

U Yu - Physical Review E, 2016 - APS

The antiferromagnetic Ising model is investigated on the twenty 2-uniform lattices using the Monte Carlo method based on the Wang-Landau algorithm and the Metropolis algorithm to study the geometric frustration effect systematically. Based on the specific heat, the residual …

Zitiert von: 2Ähnliche ArtikelAlle 5 Versionen

[PDF] arxiv.org

Frustration of signed networks: How does it affect the thermodynamic properties of a system?

J Cao, Y Fan, Z Di - arXiv preprint arXiv:1810.10481, 2018 - arxiv.org

Signed networks with positive and negative interaction are widely observed in the real systems. The negative links would induce frustration, then affect global properties of the system. Based on previous studies, frustration of signed networks is investigated and

(13) Exact low-energy landscape and relaxation phenomena in Ising spin glasses

T Klotz, S Kobe

acta physica slovaca **44** (1994) 347–356 , arXiv preprint cond-mat/9406023 (1994)

27 Zitate (Google Scholar)

Barrier trees of degenerate landscapes

C Flamm, IL Hofacker, PF Stadler… - Zeitschrift fur …, 2002 - tbi.univie.ac.at

The heights of energy barriers separating two (macro-) states are useful for estimating transition frequencies. In non-degenerate landscapes the decomposition of a landscape into basins surrounding local minima connected by saddle points is straightforward and yields a …

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Studying the energy hypersurface of continuous systems-the threshold algorithm

JC Schön, H Putz, M Jansen - Journal of Physics: Condensed …, 1996 - iopscience.iop.org

A new method is presented for the study of the structure of the energy hypersurface of continuous systems. This so-called threshold algorithm is an adaptation of thelid method'introduced by Sibani and co-workers in 1993 (Sibani P et al 1993 Europhys. Lett. 22 …

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[PDF] researchgate.net

Prediction, determination and validation of phase diagrams via the global study of energy landscapes

JC Schön, M Jansen - International journal of materials …, 2009 - hanser-elibrary.com

Traditionally, the determination of phase diagrams has followed the inductive paradigm, where experimental observations provide the phase boundaries in more or less detail and phenomenological and semi-phenomenological models are employed to interpolate …

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Monte Carlo studies of Ising spin glasses and random field systems

H Rieger - Annual Reviews of Computational Physics II, 1995 - World Scientific

We review recent numerical progress in the study of finite dimensional strongly disordered magnetic systems like spin glasses and random field systems. In particular we report in some detail results for the critical properties and the non-equilibrium dynamics of Ising spin …

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Landscape statistics of the low-autocorrelation binary string problem

FF Ferreira, JF Fontanari… - Journal of Physics A …, 2000 - iopscience.iop.org

The statistical properties of the energy landscape of the low-autocorrelation binary string problem (LABSP) are studied numerically and compared with those of several classic disordered models. Using two global measures of landscape structure which have been …

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Energy and entropy of metastable states in glassy systems

JC Schön, P Sibani - EPL (Europhysics Letters), 2000 - iopscience.iop.org

We investigate the multi-valley energy landscape of a 3-D on-lattice network model for covalent glasses, numerically determining the shape of the valleys, the local density of states, the density of minima and the local connectivity. We present some of these quantities …

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Characteristic regions on the energy landscape of MgF2

MAC Wevers, JC Schön, M Jansen - Journal of Physics A …, 2001 - iopscience.iop.org

High-dimensional energy landscapes of complex systems often exhibit a very complicated structure, with many local minima separated by a multitude of barriers of various heights. For the analysis of the dynamics on such landscapes, simplified models based on combining …

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Kinetic features of preferential trapping on energy landscapes

KH Hoffmann, JC Schön - Foundations of Physics Letters, 2005 - Springer

No Heading The dynamics of complex systems can be mapped onto trajectories on their energy landscape. The properties of such trajectories as a function of temperature, and thus the chances of the system to enter certain regions of the state space, can be understood in

Competitive trapping in complex state spaces

A Fischer, KH Hoffmann, JC Schön - Journal of Physics A …, 2011 - iopscience.iop.org

In complex state space dynamics at finite time scales, the trapping in certain regions of state space is of great importance, eg in the field of protein folding or in the application of stochastic global optimization algorithms. Here, we analyze the influence of the density of …

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Aging in enumerated spin glass state spaces

S Schubert, KH Hoffmann - EPL (Europhysics Letters), 2004 - iopscience.iop.org

Aging phenomena are observed in many spin class experiments. Heuristic state space models were presented in the past to reproduce these effects. We here start the investigation by considering the real state space of an Ising spin glass Hamiltonian. A branch-and-bound …

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[PDF] Structure prediction in solid-state chemistry as an approach to rational synthesis planning

M Jansen, JC Schön - … Inorganic Chemistry II (Second …, 2011 - www-wales.ch.cam.ac.uk

Traditionally, solid state chemistry has followed the inductive paradigm, where experimental synthesis and observations provide information about the possible compounds in a chemical system and phenomenological and semi-phenomenological models are employed …

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Modelling aging experiments in spin glasses

KH Hoffmann, A Fischer, S Schubert… - Parallel Algorithms and …, 2006 - Springer

Spin glasses are a paradigm for complex systems. They show a wealth of different phenomena including metastability and aging. Especially in the low temperature regime they reveal a very complex dynamical behaviour. For temperatures below the spin glass …

Zitiert von: 2Ähnliche ArtikelAlle 8 Versionen

[PDF] univie.ac.at

[BUCH] Energy landscapes of Biopolymers

M Wolfinger - 2004 - tbi.univie.ac.at

Suggested by Dill, Chan and Lau in the late 1980ies. In this simplified model, a conformation is a self-avoiding walk (SAW) on a given lattice in 2 or 3 dimensions. Each bond is a straight line, bond angles have a few discrete values. The 20 letter alphabet of amino acids …

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[BUCH] Computer Simulation Studies in Condensed-Matter Physics X: Proceedings of the Tenth Workshop Athens, GA, USA, February 24–28, 1997

DP Landau, KK Mon, HB Schüttler - 2012 - books.google.com

Computer Simulation Studies in Condensed-Matter Physics X is devoted to Prof. Masuo Suzuki's ideas, which have made novel, new simulations possible. These proceedings, of the 1997 workshop, comprise three parts that deal with new algorithms, methods of analysis

Searching ground states in Ising spin glass systems

S Homer, M Peinado - … of the 10th International Conference on … - pdfs.semanticscholar.org

We present an application of the MaxCut problem in statistical physics. We design a branch-and-bound algorithm for MaxCut and use it to nd all ground states in three dimen- sional 5 5 5 Ising spin glass systems … Keywords: Ising spin glass systems, brand-and-bound …

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[PS] Random-field systems, spin glasses and vertex covers: on the relation of statistical physics and combinatorial optimization

AK Hartmann - uol.de

This text gives an overview of the central topics of the work of the author in the years from 1998 to 2003 and states the main achievements he contributed to. A a selection of his research papers can be found reprinted in the appendix. The author works at the interface of …

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[PDF] Barrier Trees of Degenerate Landscapes

PF Stadler, C Flamma, IL Hofackera - Citeseer

The heights of energy barriers separating two (macro-) states are useful for estimating transition frequencies. In non-degenerate landscapes the decomposition of a landscape into basins surrounding local minima connected by saddle points is straightforward and yields a …

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[PDF] Modelling Complex Systems: Tree Structures

P Sibani, P Salamon - d-nb.info

The state space is a very important and fundamental concept for the treatment of complex systems. All the system's properties can be understood by means of its structure. Due to the gigantic extent of a real system's state space, a coarse grained approach is inevitable for the …

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[18 Zitate ohne Selbstzitate]

(14) Correlation Function and Misfit in a Computer-Simulated Two-Dimensional Amorphous Ising Antiferromagnet
S Kobe, K Handrich
physica status solidi (b) 73 (1), K65-K67 (1976)
26 Zitate (Google Scholar); 12 (WoS)

[16 Zitate ohne Selbstzitate]

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(15) Susceptibility of an amorphous antiferromagnet
S Kobe, K Handrich
PSSBR 42 (1), K69-K7 (1970)
3 Zitate (Google Scholar); 25 (WoS); 24 (private)

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(16) Amorphous magnetism and magnetic materials: Bibliography 1950–1976
S Kobe, AR Ferchmin
Journal of Materials Science 12 (9), 1713-1749
16 Zitate (Google Scholar); 13 (WoS); 23 (privat)

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(17) Curie temperature of an amorphous ferromagnet in effective field approximations
S Kobe, K Handrich
physica status solidi (b) 44 (2), K53-K55 (1971)
12 Zitate (Google Scholar); 16 (WoS); 23 (privat)

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(18) Influence of Structure Fluctuations on the Curie Temperature and Susceptibility of Amorphous Ferromagnets
J **Schreiber**, S **Kobe**, K **Handrich, J. Richter,** physica status solidi (b) 70, 673-682 (1975)
Within the stochastical lattice model of amorphous Heisenberg and Ising ferromagnets the influence is investigated of fluctuations of exchange integrals on the Curie temperature Tc for different spin values and numbers of nearest neighbours using the constant coupling approximation and a high temperature expansion for the susceptibility χ. TC and χ are always reduced by the fluctuations of the exchange integrals within the Heisenberg model for any spin and within the Ising model for S= 1/2 (for S≧ 1 the situation is more
19 Zitate (Google Scholar, davon 1 Selbstzitat); 17 (WoS)

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(19) Finding ground states of sherrington-kirkpatrick spin glasses with hierarchical boa and genetic algorithms
M Pelikan, Helmut Katzgraber, S Kobe
Proceedings of the 10th annual conference on Genetic and evolutionary, 2008
17 Zitate (Google Scholar)

[13 Zitate ohne Selbstzitate]