

CSIRO CITATION SURVEY

Below is a list of recent papers with CSIRO authors who have used the words "complex systems", "complexity" or "fractal" in the title, keywords, or abstract. This is not an exhaustive list of relevant publications.

Of course this is flawed, just like the web search, because people working in complex systems may not have used these words. Likewise, people using the words may have used them in the common language sense rather than the technical meaning we are attempting to define. "Fractal" gives a more selective response as there isn't a common language usage of the word.

FRACTAL

Gunning J, Paterson L

Conditioning of Levy-stable fractal reservoir models to seismic data
SPE J 6 (2): 137-143 JUN 2001

Elmegreen BG, Kim S, Staveley-Smith L

A fractal analysis of the HI emission from the Large Magellanic Cloud
ASTROPHYS J 548 (2): 749-769 Part 1 FEB 20 2001

Fletcher NH, Tarnopolskaya T, de Hoog FR

Wave propagation on helices and hyperhelices: a fractal regression
P ROY SOC LOND A MAT 457 (2005): 33-43 JAN 8 2001

Boers R, van Lammeren A, Feijt A

Accuracy of cloud optical depth retrievals from ground-based pyranometers
J ATMOS OCEAN TECH 17 (7): 916-927 JUL 2000

Gaynor GC, Chang EY, Painter SL, et al.

Application of Levy random fractal simulation techniques in modeling reservoir mechanisms in the Kuparuk River Field, North Slope, Alaska
SPE RESERV EVAL ENG 3 (3): 263-271 JUN 2000

Marrink SJ, Paterson L, Knackstedt MA

Definition of percolation thresholds on self-affine surfaces
PHYSICA A 280 (3-4): 207-214 JUN 1 2000

Westcott DA, Graham DL

Patterns of movement and seed dispersal of a tropical frugivore
OECOLOGIA 122 (2): 249-257 FEB 2000

Painter S, Mahinthakumar G

Prediction uncertainty for tracer migration in random heterogeneities with multifractal character
ADV WATER RESOUR 23 (1): 49-57 SEP 15 1999

Wang YG, Lin YX, Haywood MDE

A quasi-likelihood method for fractal-dimension estimation
MATH COMPUT SIMULAT 48 (4-6): 429-436 JUN 1999

Clark RM, Cox SJD, Laslett GM

Generalizations of power-law distributions applicable to sampled fault-trace lengths: model choice, parameter estimation and caveats
GEOPHYS J INT 136 (2): 357-372 FEB 1999

Stanimirovic S, Staveley-Smith L, Dickey JM, et al.

The large-scale H I structure of the Small Magellanic Cloud
MON NOT R ASTRON SOC 302 (3): 417-436 JAN 21 1999

Kim S, Staveley-Smith L, Dopita MA, et al.

An H I aperture synthesis mosaic of the large magellanic cloud

ASTROPHYS J 503 (2): 674-688 Part 1 AUG 20 1998

Popescu DC

Fractal image coding - achievements and prospects
ANN TELECOMMUN 53 (5-6): 219-228 MAY-JUN 1998

Painter S

Numerical method for conditional simulation of Levy random fields
MATH GEOL 30 (2): 163-179 FEB 1998

Power WL, Durham WB

Topography of natural and artificial fractures in granitic rocks: Implications for studies of rock friction and fluid migration
INT J ROCK MECH MIN 34 (6): 979-989 SEP 1997

Baines PG

Fluid dynamics - A fractal world of cloistered waves
NATURE 388 (6642): 518-519 AUG 7 1997

Popescu DC, Dimca A, Yan H

A nonlinear model for fractal image coding
IEEE T IMAGE PROCESS 6 (3): 373-382 MAR 1997

Hall P, Polzehl J

On the dimension of the boundary of clumps in a multi-type Boolean model
ANN STAT 24 (4): 1521-1535 AUG 1996

Liu KY, Boulton P, Painter S, et al.

Outcrop analog for sandy braided stream reservoirs: Permeability patterns in the Triassic Hawkesbury sandstone, Sydney basin, Australia
AAPG BULL 80 (12): 1850-1866 DEC 1996

Fisher NI, Hall P, Kirk DJ

Effects of smoothing on multivariate statistical properties of the normal to a rough curve or surface
J MULTIVARIATE ANAL 59 (2): 217-229 NOV 1996

COMPLEX SYSTEMS

Mahony B, Dong JS

Network topology and a case study in TCOZ
LECT NOTES COMPUT SC 1493: 308-327 1998

Bellamy JA, Lowes D

Modelling change in state of complex ecological systems in space and time: An application to sustainable grazing management
ENVIRON INT 25 (6-7): 701-712 SEP-OCT 1999

Chen YD, O'Reilly SY, Griffin WL, et al.

Combined U-Pb dating and Sm-Nd studies on lower crustal and mantle xenoliths from the Delegate basaltic pipes, southeastern Australia
CONTRIB MINERAL PETR 130 (2): 154-161 JAN 1998

Xu X, O'Reilly SY, Zhou X, et al.

A xenolith-derived geotherm and the crust-mantle boundary at Qilin, southeastern China
LITHOS 38 (1-2): 41-62 JUL 1996

Voit EO, Sands PJ

Modeling forest growth .1. Canonical approach
ECOL MODEL 86 (1): 51-71 APR 1996

Pearson NJ, O'Reilly SY, Griffin WL
The crust-mantle boundary beneath cratons and craton margins: A transect across the south-west margin of the Kaapvaal craton
LITHOS 36 (3-4): 257-287 DEC 1995

PEARSON NJ, O'REILLY SY, GRIFFIN WL
THE GRANULITE TO ECLOGITE TRANSITION BENEATH THE EASTERN MARGIN OF THE AUSTRALIAN CRATON
EUR J MINERAL 3 (2): 293-322 1991

COMPLEXITY

Stobutzki IC
Marine reserves and the complexity of larval dispersal
REV FISH BIOL FISHER 10 (4): 515-518 2001

Watson J, Freudenberger D, Paull D
An assessment of the focal-species approach for conserving birds in variegated landscapes in southeastern Australia
CONSERV BIOL 15 (5): 1364-1373 OCT 2001

Meinke H, Baethgen WE, Carberry PS, et al.
Increasing profits and reducing risks in crop production using participatory systems simulation approaches
AGR SYST 70 (2-3): 493-513 NOV-DEC 2001

Considine RF, Drummond CJ, Dixon DR
Force of interaction between a biocolloid and an inorganic oxide: Complexity of surface deformation, roughness, and brushlike behavior
LANGMUIR 17 (20): 6325-6335 OCT 2 2001

Zhang H, Henderson-Sellers A, Pitman AJ, et al.
Limited-area model sensitivity to the complexity of representation of the land surface energy balance
J CLIMATE 14 (19): 3965-3986 2001

Steinbauer MJ, Mc Quillan PB, Young CJ
Life history and behavioural traits of *Mnesampela privata* that exacerbate population responses to eucalypt plantations: Comparisons with Australian and outbreak species of forest geometrid from the Northern Hemisphere
AUSTRAL ECOL 26 (5): 525-534 2001

Banks J, Corke P
Quantitative evaluation of matching methods and validity measures for stereo vision
INT J ROBOT RES 20 (7): 512-532 JUL 2001

Linderfelt WR, Turner JV
Interaction between shallow groundwater, saline surface water and nutrient discharge in a seasonal estuary: the Swan-Canning system
HYDROL PROCESS 15 (13): 2631-2653 SEP 2001

McIlwee AM, Lawler IR, Cork SJ, et al.
Coping with chemical complexity in mammal-plant interactions: near-infrared spectroscopy as a predictor of *Eucalyptus* foliar nutrients and of the feeding rates of folivorous marsupials
OECOLOGIA 128 (4): 539-548 AUG 2001

Madsen IC, Scarlett NVY, Cranswick LMD, et al.
Outcomes of the International Union of Crystallography Commission on Powder Diffraction round robin on quantitative phase analysis: samples 1a to 1h
J APPL CRYSTALLOGR 34: 409-426 Part 4 AUG 2001

Roget DK
Prediction modelling of soilborne plant diseases

AUSTRALAS PLANT PATH 30 (2): 85-89 2001

Asseng S, Turner NC, Keating BA
Analysis of water- and nitrogen-use efficiency of wheat in a Mediterranean climate
PLANT SOIL 233 (1): 127-143 JUN 2001

Coops NC, Catling PC
Prediction of historical forest habitat patterns using binomial distributions and simple Boolean logic from high spatial resolution remote sensing
COMPUT GEOSCI-UK 27 (7): 795-805 AUG 2001

Bates BC, Campbell EP
A Markov chain Monte Carlo scheme for parameter estimation and inference in conceptual rainfall-runoff modeling
WATER RESOUR RES 37 (4): 937-947 APR 2001

Slaney J, Thiebaut S
Blocks World revisited
ARTIF INTELL 125 (1-2): 119-153 JAN 2001

Asseng S, Fillery IRP, Dunin FX, et al.
Potential deep drainage under wheat crops in a Mediterranean climate. I. Temporal and spatial variability
AUST J AGR RES 52 (1): 45-56 2001

Asseng S, Dunin FX, Fillery IRP, et al.
Potential deep drainage under wheat crops in a Mediterranean climate. II. Management opportunities to control drainage
AUST J AGR RES 52 (1): 57-66 2001

Tan KL, Ooi BC, Abel DJ
Exploiting spatial indexes for semijoin-based join processing in distributed spatial databases
IEEE T KNOWL DATA EN 12 (6): 920-937 NOV-DEC 2000

Catling PC, Burt RJ, Forrester RI
Models of the distribution and abundance of ground-dwelling mammals in the eucalypt forests of north-eastern New South Wales in relation to habitat variables
WILDLIFE RES 27 (6): 639-654 2000

Kookana RS, Simpson BW
Pesticide fate in farming systems: Research and monitoring
COMMUN SOIL SCI PLAN 31 (11-14): 1641-1659 2000
Coops NC, Catling PC
Estimating forest habitat complexity in relation to time since fire
AUSTRAL ECOL 25 (4): 344-351 AUG 2000

Shane MW, McCully ME, Canny MJ
The vascular system of maize stems revisited: Implications for water transport and xylem safety
ANN BOT-LONDON 86 (2): 245-258 AUG 2000

Lindenmayer DB, Margules CR, Botkin DB
Indicators of biodiversity for ecologically sustainable forest management
CONSERV BIOL 14 (4): 941-950 AUG 2000

Gaynor GC, Chang EY, Painter SL, et al.
Application of Levy random fractal simulation techniques in modeling reservoir mechanisms in the Kuparuk River Field, North Slope, Alaska
SPE RESERV EVAL ENG 3 (3): 263-271 JUN 2000

Cleary PW, Ha J
Three dimensional modelling of high pressure die casting
INT J CAST METAL RES 12 (6): 357-365 2000

Zoppou C, Roberts S, Renka RJ

Exponential spline interpolation in characteristic based scheme for solving the advective-diffusion equation
INT J NUMER METH FL 33 (3): 429-452 JUN 15 2000

Klass KD, Thorne BL, Lenz M

The male postabdomen of *Stolotermes inopinus*: a termite with unusually well-developed external genitalia
(Dictyoptera : Isoptera : Stolotermitinae)
ACTA ZOOL-STOCKHOLM 81 (2): 121-130 APR 2000

Smith TA, Dimitrijevic S, Harrison HB

Controlling a DC-DC converter by using the power MOSFET as a voltage controlled resistor
IEEE T CIRCUITS-I 47 (3): 357-362 MAR 2000

Ludwig JA, Wiens JA, Tongway DJ

A scaling rule for landscape patches and how it applies to conserving soil resources in savannas
ECOSYSTEMS 3 (1): 84-97 JAN-FEB 2000

Bax N, Kloser R, Williams A, et al.

Seafloor habitat definition for spatial management in fisheries: a case study on the continental shelf of southeast Australia
OCEANOL ACTA 22 (6): 705-720 NOV-DEC 1999

Ledesma EB, Kalish MA, Wornat MJ, et al.

Observation of cyclopenta-fused and ethynyl-substituted PAH during the fuel-rich combustion of primary tar from a bituminous coal
ENERG FUEL 13 (6): 1167-1172 NOV-DEC 1999

Lehnert SA, Wilson KJ, Byrne K, et al.

Tissue-specific expressed sequence tags from the black tiger shrimp *Penaeus monodon*
MAR BIOTECHNOL 1 (5): 465-476 SEP-OCT 1999

Coakley SM, Scherm H, Chakraborty S

Climate change and plant disease management
ANNU REV PHYTOPATHOL 37: 399-426 1999

Catling PC, Coops NC

Prediction of the distribution and abundance of small mammals in the eucalypt forests of south-eastern Australia from airborne videography
WILDLIFE RES 26 (5): 641-650 1999

Banks J, Bennamoun M, Corke P

Fast and robust stereo matching algorithms for mining automation
DIGIT SIGNAL PROCESS 9 (3): 137-148 JUL 1999

McEvoy PB, Coombs EM

Biological control of plant invaders: Regional patterns, field experiments, and structured population models
ECOL APPL 9 (2): 387-401 MAY 1999

Anderssen RS, Hegland M

For numerical differentiation, dimensionality can be a blessing!
MATH COMPUT 68 (227): 1121-1141 JUL 1999

Oliver NHS, Pearson PJ, Holcombe RJ, et al.

Mary Kathleen metamorphic-hydrothermal uranium - rare-earth element deposit: ore genesis and numerical model of coupled deformation and fluid flow
AUST J EARTH SCI 46 (3): 467-483 JUN 1999

Griffin WL, Fisher NI, Friedman J, et al.

Cr-pyrope garnets in the lithospheric mantle. I. Compositional systematics and relations to tectonic setting

J PETROL 40 (5): 679-704 MAY 1999

McKenzie NJ, Ryan PJ
Spatial prediction of soil properties using environmental correlation
GEODERMA 89 (1-2): 67-94 APR 1999