

**CELEBRATING
40 YEARS!**

EXCLU DU PRBT

May 5, 1997

Volume 28

Number 18

CURRENT CONTENTS®

Engineering, Computing & Technology

INCLUDING

**Acoustics • Aerospace • Artificial Intelligence • Automation
Chemical Engineering • Civil Engineering • Computer-aided Engineering
Computer Hardware & Software • Computing Systems & Networks
Electrical & Electronics Engineering • Engineering Management • Energy
Environmental Engineering • Fuels • Geotechnology • Information Technology
Instrumentation • Lasers • Manufacturing • Materials • Mechanical Engineering
Mechanics • Metallurgy • Microelectronics • Mining • Neurocomputing
Operations Research • Optics • Optoelectronics • Polymers • Process Industries
Robotics • Semiconductors • Superconductors
Signal & Image Processing • Telecommunications**

ISISM

Institute for Scientific InformationSM

3501 Market Street, Philadelphia, PA 19104 U.S.A.



VOLUME May 5, 1997

28

NUMBER

18

Not all journals covered by *Current Contents* are published weekly. Therefore, in any given issue your favorite journal may not be listed. However, it will be included as often as it is issued. For the complete List of Serials covered and the latest Publisher Guide see issue #1, January 6, 1997. For the latest Triannual Cumulative Index see issue #5, February 3, 1997.

FEATURED IN THIS ISSUE OF CURRENT CONTENTS®/ENGINEERING, COMPUTING & TECHNOLOGY

FEATURES

5 Current Book Contents®

DISCIPLINE GUIDE

- 9 Aerospace Engineering
- 12 AI, Robotics & Automatic Control
- 16 Chemical Engineering
- 23 Civil Engineering
- 27 Computer Engineering, Technology & Applications
- 32 Electrical and Electronics Engineering
- 50 Engineering Management/General
- 56 Engineering Mathematics
- 59 Environmental Engineering/Energy

- 66 Geological/Petroleum/Mining Engineering
- 68 Information Technology & Communications Systems
- 73 Instrumentation/Measurement
- 76 Materials Science and Engineering
- 87 Mechanical Engineering
- 100 Metallurgy
- 106 Nuclear Engineering
- 107 Optics & Acoustics

INDEXES

- 3 Publishers Address Directory
- 117 Title Word Index
- 144 Author Index & Address Directory

Current Contents processes all journal issues within two weeks of their receipt and makes every reasonable effort to insure their prompt delivery to ISI. Please note that the cover dates of some journals do not correspond to the actual publication dates.

If a journal is covered in more than one *CC*®, a letter code appears in parentheses next to the volume and issue number to identify which editions: (L)=Life Sciences; (P)=Physical, Chemical & Earth Sciences; (S)=Social & Behavioral Sciences; (A)=Agriculture, Biology & Environmental Sciences; (C)=Clinical Medicine; (E)=Engineering, Computing & Technology; (H)=Arts & Humanities.

JOURNALS APPEARING IN THIS ISSUE:

- | | | | |
|-----|--------------------------------------|-----|--|
| 27 | ACM TRANS COMPUT SYST,15 (1) | 30 | GRAPH MODEL IMAGE PROCESSING,59 (2) |
| 9 | ACTA ASTRONAUT,39 (6) | 77 | HOLZ ROH WERKST,55 (2) |
| 100 | ACTA MATER,45 (4) | 102 | HYDROMETALLURGY,45 (1-2) |
| 9 | AERONAUT J,101 (1003) | 9 | IEEE AEROSP ELECT SYST MAG,12 (4) |
| 56 | ALGORITHMICA,18 (2) | 12 | IEEE EXPERT,12 (2) |
| 76 | AMER CERAM SOC BULL,76 (4) | 69 | IEEE J SEL AREA COMMUN,15 (3) |
| 68 | ANN TELECOMMUN,51 (9-10) | 30 | IEEE MICRO,17 (2) |
| 107 | APPL OPT,36 (11) | 109 | IEEE T ULTRASON FERROELECTR,44 (2) |
| 73 | APPL SPECTROSC,51 (3) | 10 | IEEE TRANS AEROSP ELECTRON SY,33 (2)P1 |
| 87 | APPL THERM ENG,17 (5) | 10 | IEEE TRANS AEROSP ELECTRON SY,33 (2)P2 |
| 87 | ASHRAE J-HEAT REFRIG AIR-COND,39 (4) | 70 | IEEE TRANS ANTENNAS PROPAGAT,45 (4) |
| 59 | BIOCYCLE,38 (4) | 13 | IEEE TRANS AUTOMAT CONTR,42 (4) |
| 76 | CEM CONCR RES,27 (2) | 36 | IEEE TRANS CIRC SYST VIDEO T,7 (2) |
| 16 | CHEM ENG PROGR,93 (4) | 37 | IEEE TRANS CONSUM ELECTRON,43 (1) |
| 17 | CHEM ENG SCI,52 (8) | 37 | IEEE TRANS MED IMAGING,16 (2) |
| 18 | CHEM ENG TECHNOL,20 (2) | 38 | IEEE TRANS MICROWAVE THEORY,45 (4) |
| 18 | CHEMTECH,27 (4) | 14 | IEEE TRANS PATT ANAL MACH INT,19 (3) |
| 23 | CIVIL ENG,67 (4) | 39 | IEEE TRANS REL,46 (1) |
| 27 | COMPUT AIDED GEOM DESIGN,14 (3) | 40 | IEEE TRANS SIGNAL PROCESS,45 (4) |
| 69 | COMPUT COMMUN,20 (1) | 41 | IEEE TRANS SPEECH AUDIO PROC,5 (3) |
| 88 | COMPUT FLUIDS,26 (3) | 15 | IMAGE VISION COMPUT,15 (3) |
| 28 | COMPUT MATH APPL,33 (5) | 19 | IND ENG CHEM RES,36 (4) |
| 28 | COMPUT MATH APPL,33 (6) | 20 | INDIAN J CHEM TECHNOLOGY,4 (2) |
| 24 | COMPUT STRUCT,63 (4) | 71 | INF PROCESS LETT,61 (4) |
| 28 | COMPUTER,30 (4) | 89 | INT COMMUN HEAT MASS TRANS,24 (3) |
| 12 | CONTROL ENG,1997 (MAR)SI | 50 | INT J ADV MANUF TECHNOL,13 (2) |
| 56 | DISCRETE APPL MATH,74 (1) | 15 | INT J COMPUT VISION,22 (1) |
| 108 | EARTH OBSERVATION REMOTE SENS,14 (2) | 31 | INT J GEN SYSTEM,25 (1) |
| 32 | ELEC TECHNOL-ENGL TR,1996 (4) | 90 | INT J HEAT MASS TRANSFER,40 (12) |
| 33 | ELECTRON COMMUN JPN III,80 (2) | 31 | INT J HIGH SPEED COMPUT,8 (3) |
| 33 | ELECTRON LETT,32 (25) | 64 | INT J HYDROGEN ENERG,22 (5) |
| 35 | ELECTRON PROD MAG,39 (11) | 90 | INT J IMPACT ENG,19 (4) |
| 35 | ELECTRON WORLD,103 (1733) | 91 | INT J MACH TOOL MANUF,37 (5) |
| 61 | ENERG CONV MANAGE,38 (9) | 56 | INT J NUMER METHOD ENG,40 (8) |
| 61 | ENERGY J,18 (2) | 91 | INT J NUMER METHOD FLUID,24 (7) |
| 61 | ENVIRON SCI TECHNOL,31 (4) | 42 | INTEGR FERROELECTRICS,12 (1) |
| 88 | EXP TECH,21 (2) | 42 | INTEGR FERROELECTRICS,14 (1-4) |
| 89 | EXP THERM FLUID SCI,14 (3) | 43 | INTEGR FERROELECTRICS,15 (1-4) |
| 66 | GEOTIMES,42 (4) | 45 | INTEGR FERROELECTRICS,16 (1-4) |

CONTINUED

CONTINUED

- | | | | |
|-----|---------------------------------------|-----|--|
| 21 | INZ CHEM PROCESOWA,18 (1) | 84 | NANOSTRUCT MATER,8 (2) |
| 50 | ISSUES SCI TECHNOL,13 (3) | 54 | NEW SCI,153 (2075) |
| 25 | ITE J,67 (4) | 114 | NOISE CONTR ENG J,44 (6) |
| 78 | J ADV MATER,28 (2) | 96 | NONLINEAR DYNAMICS,12 (2) |
| 65 | J AGR ENG RES,66 (3) | 96 | NONLINEAR DYNAMICS,12 (3) |
| 78 | J APPL POLYM SCI,64 (4) | 106 | NUCL INSTRUM METH PHYS RES A,386 (2-3) |
| 79 | J COMPOS MATER,31 (5) | 25 | OCEAN ENG,24 (7) |
| 31 | J CRYPTOL,10 (2) | 67 | OIL GAS J,95 (14) |
| 65 | J ENERG RESOUR TECHNOL,119 (1) | 114 | OPTICS LETTERS,22 (7) |
| 57 | J ENG MATH,31 (1) | 115 | PHOTOGRAMM ENG REMOTE SENSING,63 (4) |
| 91 | J FLUID ENG,119 (1) | 103 | PLAT SURF FINISH,84 (4) |
| 92 | J FLUID MECH,334 (MAR 10) | 47 | POWER,141 (2) |
| 79 | J INTEL MAT SYST STRUCT,8 (1) | 16 | PRESENCE-TELEOPER VIRTUAL ENV,6 (1) |
| 51 | J INTELL MANUF,8 (1) | 59 | PROBAB ENG INFORM SCI,11 (2) |
| 110 | J LASER APPL,9 (2) | 26 | PROC INST CIVIL ENG-GEOTECH E,125 (2) |
| 110 | J LIGHTWAVE TECHNOL,15 (4) | 97 | PROC INST MECH ENG A-J POWER,211 (1) |
| 80 | J MATER RES,12 (4) | 104 | PROT MET-ENGL TR,33 (2) |
| 93 | J MECH DESIGN,119 (1) | 75 | QUAL PROGR,30 (4) |
| 94 | J MECH PHYS SOLIDS,45 (4) | 55 | QUAL RELIAB ENG INT,13 (2) |
| 46 | J MICROMECHANIC MICROENGINEER,7 (1) | 66 | RESOUR CONSERV RECYCL,19 (4) |
| 112 | J OPT TECHNOL-ENG TR,64 (3) | 21 | REV CHIM,48 (1) |
| 81 | J POLYM ENG,17 (1) | 97 | REV GEN THERM,35 (418-19) |
| 81 | J REINF PLAST COMPOSITE,16 (4) | 84 | SAMPE J,32 (3) |
| 52 | J RES NATL INST STAND TECHNOL,102 (1) | 71 | SIGNAL PROCESS,56 (1) |
| 82 | J SOL-GEL SCI TECHNOL,9 (1) | 72 | SIGNAL PROCESS,56 (2) |
| 113 | J SOUND VIB,201 (3) | 48 | SOLID STATE ELECTRON,41 (4) |
| 11 | J SPACECRAFT ROCKET,34 (2) | 49 | SOLID STATE TECHNOL,40 (4) |
| 94 | J STRAIN ANAL ENG DESIGN,32 (1) | 85 | SURF COAT TECH,89 (1-2) |
| 57 | J SYMB COMPUT,23 (1) | 86 | TAPPI J,80 (4) |
| 57 | J SYMB COMPUT,23 (2-3) | 55 | TECHNOVATION,17 (3) |
| 103 | JOM-J MIN MET MAT SOC,49 (4) | 22 | TENSIDE SURFACTANTS DETERG,34 (1) |
| 95 | JSME INT J SER B,40 (1) | 31 | THEOR COMPUT SCI,175 (1) |
| 82 | KUNSTST-PLAST EUR,87 (3) | 22 | THEOR FOUND CHEM ENGINEERING,31 (2) |
| 15 | MACH VISION APPL,9 (4) | 26 | TRANSPORT PLANNING TECHNOL,20 (2) |
| 83 | MATER EVAL,55 (4) | 26 | TRANSPORT PLANNING TECHNOL,20 (3) |
| 83 | MATER HIGH TEMP,14 (1) | 98 | VACUUM,48 (3-4) |
| 58 | MATH COMPUT MODELLING,25 (3) | 99 | VEH SYST DYN,27 (1997)S |
| 58 | MATH COMPUT MODELLING,25 (4) | 32 | VISUAL COMPUT,13 (1) |
| 58 | MATH PROBL ENG,3 (3) | 66 | WASTE MANAGE RES,15 (1) |
| 74 | MEAS TECH-ENGL TR,39 (7) | 26 | WATER ENG MANAGE, 144 (4) |
| 96 | MECH MACH THEOR,32 (4) | 116 | WAVE MOTION,25 (2) |
| 46 | MICROELECTRON REL,37 (6) | 105 | WELD J,76 (4) |
| 113 | MICROWAVE OPT TECHNOL LETT,15 (1) | 72 | WIRTSCHAFTSINFORMATIK,39 (2) |
| 67 | MINER ENG,10 (4) | | |

The publisher's name appears with the journal title of each contents page. The address of each publisher is provided at the end of this issue.

Fax delivery
of full-text
articles.

**THE
Genuine
Article®**

Call
800-336-4474 or
215-386-0100.