Gian-Carlo Rota

List of Publications.

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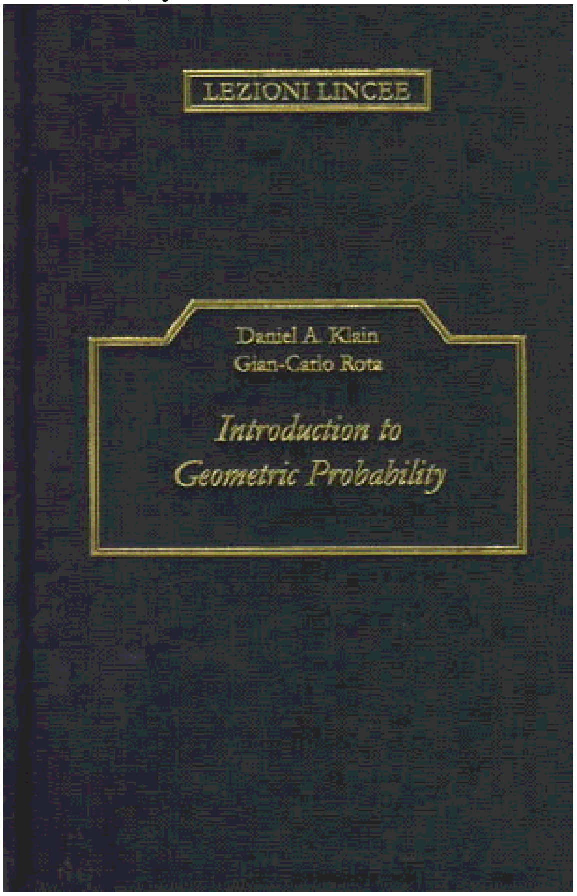
1. Mathematical Essays in Honor of Gian-Carlo Rota (Progress in Mathematics (Birkhauser), Vol 161) by Bruce E. Sagan (Editor), Richard P. Stanley (Editor)
2. Introduction to Geometric Probability (Lezioni Lincee Lectures) by Daniel A. Klain, Gian-Carlo Rota



3. Gian-Carlo Rota on Combinatorics : Introductory Papers and Commentaries (Contemporary Mathematicians) by Gian-Carlo Rota (Editor), Joseph P. S. Kung (Editor)
4. Science, Computers, and People : From the Tree of Mathematics by Stanislaw M. Ulam, Mark C. Reynolds, Gian-Carlo Rota
5. Studies in Applied Math : A Volume Dedicated to Irving Segal by Gian-Carlo Rota (Editor)
6. Analysis (George Polya, Collected Papers, Vol. 3) by George Polya, Joseph Hersh, Gian-Carlo Rota
7. New Directions in Physics : The Los Alamos 40th Anniversary Volume by N. Metropolis (Editor), D.M. Kerr (Editor), Gian-Carlo Rota (Editor)
8. A New Era in Computation by N. Metropolis (Editor), Gian-Carlo Rota (Editor)
9. The Theory of Information and Coding (Encyclopedia of Mathematics and Its Applications, Vol 3) by Robert McEliece (Editor), Rota Gian-Carlo (Editor)

10. 1 347 448 Davis, Philip J. ; Hersh, Reuben ; Marchisotto, Elena Anne The mathematical experience. With an introduction by Gian-Carlo Rota. Study edition. Birkhauser Boston, Inc., Boston, MA, 1995. xxiv+487 pp. ISBN: 0-8176-3739-7 00A35 (00A05 00A30 01A05)
11. 1 324 815 Bernardi, Claudio Gian-Carlo Rota: a mathematician reflecting on the activity of mathematics. (Italian) Archimede 46 (1994), no. 4, 189--197.00A99 (00A30 01A70)
12. 1 324 291 Di Crescenzo, Antonio ; Rota, Gian-Carlo On umbral calculus. (Italian) Ricerche Mat. 43 (1994), no. 1, 129--162.05Axx (11Bxx)
13. 1 315 924 Metropolis, N. ; Rota, Gian-Carlo ; Stein, Joel A. Symmetry classes of functions. J. Algebra 171 (1995), no. 3, 845--866.20Cxx
14. 1 306 901 Rota, Gian-Carlo ; Stein, Joel A. Plethystic algebras and vector symmetric functions. Proc. Nat. Acad. Sci. U.S.A. 91 (1994), no. 26, 13062--13066.16Wxx (05Exx)
15. 1 306 900 Rota, Gian-Carlo ; Stein, Joel A. Plethystic Hopf algebras. Proc. Nat. Acad. Sci. U.S.A. 91 (1994), no. 26, 13057--13061.16Wxx
16. 96a:05015 Rota, G.-C. ; Taylor, B. D. An introduction to the umbral calculus. Analysis, geometry and groups: a Riemann legacy volume, 513--525, Hadronic Press Collect. Orig. Artic., Hadronic Press, Palm Harbor, FL, 1993. (Reviewer: Heinrich Niederhausen) 05A40 (05A19)
17. 95i:18003 Buchsbaum, D. A. ; Rota, Gian-Carlo A new construction in homological algebra. Proc. Nat. Acad. Sci. U.S.A. 91 (1994), no. 10, 4115--4119.18G10 (20G05)
18. 95i:05036 Huang, Rosa ; Rota, Gian-Carlo On the relations of various conjectures on Latin squares and straightening coefficients. Discrete Math. 128 (1994), no. 1-3, 225--236. (Reviewer: Neil L. White) 05B15 (13A50 15A03)
19. 95d:05014 Rota, G.-C. ; Taylor, B. D. The classical umbral calculus. SIAM J. Math. Anal. 25 (1994), no. 2, 694--711. (Reviewer: Heinrich Niederhausen) 05A40 (05A19)
20. 94m:52010 Chen, Beifang ; Rota, Gian-Carlo Totally invariant set functions of polynomial type. Comm. Pure Appl. Math. 47 (1994), no. 2, 187--197. (Reviewer: G. D. Chakerian) 52A39 (05E05 28A12)
21. 94m:11096 Alexander, Kenneth S. ; Baclawski, Kenneth ; Rota, Gian-Carlo A stochastic interpretation of the Riemann zeta function. Proc. Nat. Acad. Sci. U.S.A. 90 (1993), no. 2, 697--699. (Reviewer: Shigeru Kanemitsu) 11M06 (11K99)
22. 94e:15062 Ehrenborg, Richard ; Rota, Gian-Carlo Apolarity and canonical forms for homogeneous polynomials. European J. Combin. 14 (1993), no. 3, 157--181. (Reviewer: Frank D. Grosshans) 15A72 (15A69)
23. 94a:20074 Buchsbaum, D. A. ; Rota, Gian-Carlo Projective resolutions of Weyl modules. Proc. Nat. Acad. Sci. U.S.A. 90 (1993), no. 6, 2448--2450. (Reviewer: Mihalis Maliakas) 20G15 (05E15)
24. 93m:05204 Rota, Gian-Carlo ; Stein, Joel A. On the span of supersymmetric Young tableaux. Proc. Nat. Acad. Sci. U.S.A. 90 (1993), no. 2, 700--701.05E10 (16W55)
25. 93j:20067 Mushtaq, Qaiser ; Rota, Gian-Carlo Alternating groups as quotients of two generator groups. Adv. Math. 96 (1992), no. 1, 113--121. (Reviewer: Michael Klemm) 20F05 (20B35)
26. 93h:05167 Bonetti, Flavio ; Rota, Gian-Carlo ; Senato, Domenico ; Venezia, Antonietta M. On the foundation of combinatorial theory. X. A categorical setting for symmetric functions. Stud. Appl. Math. 86 (1992), no. 1, 1--29. (Reviewer: A. Kerber) 05E05
27. 93h:05012 Chen, William Y. C. ; Rota, Gian-Carlo q-analogs of the inclusion-exclusion principle and permutations with restricted position. Discrete Math. 104 (1992), no. 1, 7--22. (Reviewer: Ira Gessel) 05A30 (05A15 06A07)
28. 93f:39013 Loeb, D. ; Rota, G.-C. Recent contributions to the calculus of finite differences: a survey. Geometry and complex variables (Bologna, 1988/1990), 239--276, Lecture Notes in Pure and Appl. Math., 132, Dekker, New York, 1991. (Reviewer: Luis Verde-Star) 39A70 (05A40

33E20)
29. 93d:00013 Kac, Mark ; Rota, Gian-Carlo ; Schwartz, Jacob T. Discrete thoughts. Essays on mathematics, science, and philosophy. Revised and corrected reprint of the first edition. With the assistance of Peter Renz. Birkhauser Boston, Inc., Boston, MA, 1992. xii+266 pp. ISBN: 0-8176-3636-6 00A30 (00B60 01A75)
30. 93a:00007 Rota, Gian-Carlo The pernicious influence of mathematics upon philosophy. New directions in the philosophy of mathematics (New Orleans, LA, 1990). Synthese 88 (1991), no. 2, 165--178. (Reviewer: Alvin M. White) 00A30 (01A60)
31. 92m:05002 Gul\cprime den, Ya. ; Dzhekson, D. {\cyr Perechislitel\cprime naya kombinatorika}. (Russian) [Combinatorial enumeration] With a foreword by Gian-Carlo Rota. Translated from the 1983 English original by Yu. V. Bolotnikov and A. E. Zhukov. Translation edited and with a preface by V. E. Tarakanov. ‘‘Nauka’’, Moscow, 1990. 504 pp. ISBN: 5-02-013967-X 05-02
32. 92k:15058 Anick, David ; Rota, Gian-Carlo Higher-order syzygies for the bracket algebra and for the ring of coordinates of the Grassmannian. Proc. Nat. Acad. Sci. U.S.A. 88 (1991), no. 18, 8087--8090. (Reviewer: Andrea Brini) 15A72 (13F50 14M15)
33. 92h:15017 Huang, Rosa Q. ; Rota, Gian-Carlo ; Stein, Joel A. Supersymmetric bracket algebra and invariant theory. Acta Appl. Math. 21 (1990), no. 1-2, 193--246. (Reviewer: Joseph Kung) 15A72 (05E15 16W55)
34. 92g:05181 Metropolis, N. ; Rota, Gian-Carlo ; Stein, Joel A. Theory of symmetry classes. Proc. Nat. Acad. Sci. U.S.A. 88 (1991), no. 19, 8415--8419. (Reviewer: Stuart Martin) 05E10 (20C30)
35. 92d:26024 Metropolis, N. ; Rota, Gian-Carlo Symmetry classes: functions of three variables. Amer. Math. Monthly 98 (1991), no. 4, 328--332. (Reviewer: M. Laczkovich) 26B40 (20C30)
36. 92c:00007 Rota, Gian-Carlo The concept of mathematical truth. Math. Sci. 15 (1990), no. 2, 65--73. (Reviewer: Mario Bunge) 00A30 (01A99)
37. 92b:00010 Rota, Gian-Carlo Mathematics and philosophy: history of a misunderstanding. (Italian) Boll. Un. Mat. Ital. A (7) 4 (1990), no. 3, 295--307. (Reviewer: Mario Bunge) 00A30 (01A99)
38. 91m:05183 Rota, Gian-Carlo ; Stein, Joel A. Schur maps, Young tableaux, and supersymmetric algebra. Proc. Nat. Acad. Sci. U.S.A. 87 (1990), no. 23, 9250--9254. (Reviewer: Yuching You) 05E10 (05A40 16W30)
39. 91m:05002 Stanley, R. {\cyr Perechislitel\cprime naya kombinatorika}. (Russian) [Enumerative combinatorics] With a preface by Gian-Carlo Rota. Translated from the English by A. I. Barvinok and A. A. Lodkin. Translation edited and with a preface by A. M. Vershik. ‘‘Mir’’, Moscow, 1990. 440 pp. ISBN: 5-03-001348-2 05-02 (05A15 06-02 11-02)
40. 91m:05001 Cerasoli, Mauro ; Eugeni, Franco ; Protasi, Marco Elementi di matematica discreta. (Italian) [Elements of discrete mathematics] With an introduction by Gian-Carlo Rota. Nicola Zanichelli Editore S.p.A., Bologna, 1988. x+277 pp. ISBN: 88-08-03858-0 05-01 (00A05 08-01 94-01)
41. 91h:00012 Rota, Gian-Carlo Les ambiguïtés de la pensée mathématique. (French) [The ambiguities of mathematical thought] Gaz. Math. No. 45 (1990), 54--64.00A30
42. 91f:05118 Rota, Gian-Carlo ; Sturmfels, Bernd Introduction to invariant theory in superalgebras. Invariant theory and tableaux (Minneapolis, MN, 1988), 1--35, IMA Vol. Math. Appl., 19, Springer, New York, 1990. (Reviewer: Andrea Brini) 05E10 (05A40 15A15 15A72 17A70)
43. 91b:15035 Rota, Gian-Carlo ; Stein, Joel A. Supersymmetric Hilbert space. Proc. Nat. Acad. Sci. U.S.A. 87 (1990), no. 2, 653--657. (Reviewer: Anargyros =46ellouris) 15A75 (58A50)
44. 90h:34001 Birkhoff, Garrett ; Rota, Gian-Carlo Ordinary differential equations. Fourth edition. John Wiley & Sons, Inc., New York, 1989. xii+399 pp. ISBN: 0-471-86003-4 (Reviewer: Michal \v Cver\v cko) 34-01
45. 90g:15044 Rota, Gian-Carlo ; Stein, Joel A. Standard basis in supersymplectic algebras. Proc. Nat.

Acad. Sci. U.S.A. 86 (1989), no. 8, 2521--2524. (Reviewer: Andrea Brini) 15A72 (15A75 17B70 20C30)
46. 90g:01044 Rota, Gian-Carlo Fine Hall in its golden age: remembrances of Princeton in the early fifties. A century of mathematics in America, Part II, 223--236, Hist. Math., 2, Amer. Math. Soc., Providence, RI, 1989. (Reviewer: J. Dieudonné) 01A65 (01A70)
47. 90f:05014 Loeb, Daniel E. ; Rota, Gian-Carlo Formal power series of logarithmic type. Adv. Math. 75 (1989), no. 1, 1--118. (Reviewer: Marilena Barnabei) 05A40 (33A65 47B37)
48. 90c:01098 Rota, Gian-Carlo Mikio Sato: impressions. Algebraic analysis, Vol. I, 13--15, Academic Press, Boston, MA, 1988. 01A70
49. 90b:01088 Rota, Gian-Carlo The barrier of meaning. In memorium: Stanislaw Ulam. Notices Amer. Math. Soc. 36 (1989), no. 2, 141--143.01A70
50. 89k:00016 Rota, Gian-Carlo ; Sharp, David H. ; Sokolowski, Robert Syntax, semantics, and the problem of the identity of mathematical objects. Philos. Sci. 55 (1988), no. 3, 376--386. (Reviewer: V. Ya. Kre\u\i novich) 00A25
51. 89j:01070 1988 Steele Prizes awarded at centennial celebration in Providence. Notices Amer. Math. Soc. 35 (1988), no. 7, 965--970.01A70
52. 88m:05011 Metropolis, N. ; Rota, Gian-Carlo Symmetric functions: a bijective identity. Proc. Amer. Math. Soc. 102 (1988), no. 1, 218--220. (Reviewer: Heinrich Niederhausen) 05A19
53. 88k:15035 Grosshans, Frank D. ; Rota, Gian-Carlo ; Stein, Joel A. Invariant theory and superalgebras. CBMS Regional Conference Series in Mathematics, 69. Published for the Conference Board of the Mathematical Sciences, Washington, D.C.; by the American Mathematical Society, Providence, R.I., 1987. xxiv+80 pp. ISBN: 0-8218-0719-6 (Reviewer: Joseph Kung) 15A72 (05A40 11E39 15A15 16A24 17A70 20G45)
54. 88h:00010 Kac, Mark ; Rota, Gian-Carlo ; Schwartz, Jacob T. Discrete thoughts. Essays on mathematics, science, and philosophy. Scientists of Our Time. Birkhauser Boston, Inc., Boston, Mass., 1986. xii+264 pp. ISBN: 0-8176-3285-9 (Reviewer: H.-J. Vollrath) 00A25 (00A10 01A75)
55. 88e:05028 Kung, Joseph P. S. A source book in matroid theory. With a foreword by Gian-Carlo Rota. Birkhauser Boston, Inc., Boston, Mass., 1986. 413 pp. ISBN: 0-8176-3173-9 (Reviewer: Ulrich Faigle) 05B35
56. 88e:00015 Davis, Philip J. ; Hersh, Reuben L'univers mathématique. (French) [The mathematical experience] Translated from the English by Lucien Chambadal. With a preface by Gian-Carlo Rota. Gauthier-Villars, Paris, 1985. x+406 pp. ISBN: 2-04-015588-0 00A25 (00A05 01A05)
57. 88c:01055 Classic papers in combinatorics. Edited by Ira Gessel and Gian-Carlo Rota. Birkhauser Boston, Inc., Boston, Mass., 1987. x+491 pp. ISBN: 0-8176-3364-2 01A75 (05-03 05-06)
58. 88b:05014 Bonetti, Flavio ; Rota, Gian-Carlo ; Senato, Domenico ; Venezia, Antonietta M. Symmetric functions and symmetric species. Combinatorics '84 (Bari, 1984), 107--113, North-Holland Math. Stud., 123, North-Holland, Amsterdam-New York, 1986. (Reviewer: Heinrich Niederhausen) 05A19
59. 88a:01069 MacMahon, Percy Alexander Collected papers. Vol. II. Number theory, invariants and applications. Edited and with a preface by George E. Andrews. With an introduction by Gian-Carlo Rota. Mathematicians of Our Time, 24. MIT Press, Cambridge, Mass.-London, 1986. xxviii+952 pp. ISBN: 0-262-13214-1 (Reviewer: A. L. Whiteman) 01A75 (05-XX)
60. 87k:05008 Barnabei, M. ; Brini, A. ; Rota, Dzh.-K. The theory of Möbius functions. (Russian) Translated from the Italian by S. I. Gel\cprime fand. Uspekhi Mat. Nauk 41 (1986), no. 3(249), 113--157. (Reviewer: J. E. Cigler) 05A15 (06A10 06D99)
61. 87j:15056 Rota, Gian-Carlo ; Stein, Joel A. Symbolic method in invariant theory. Proc. Nat. Acad. Sci. U.S.A. 83 (1986), no. 4, 844-847. (Reviewer: J. Désarménien) 15A72
62. 87j:05003 Stanley, Richard P. Enumerative combinatorics. Vol. I. With a foreword by Gian-Carlo

Rota. The Wadsworth & Brooks/Cole Mathematics Series. Wadsworth & Brooks/Cole Advanced Books & Software, Monterey, Calif., 1986. xiv+306 pp. ISBN: 0-534-06546-5 (Reviewer: J. B. Roberts) 05-02 (05A15 06-02 11-02)

63. 87j:05002 Barnabei, Marilena ; Brini, Andrea ; Rota, Gian-Carlo On the exterior calculus of invariant theory. J. Algebra 96 (1985), no. 1, 120--160. (Reviewer: Heinrich Niederhausen) 05-02 (05A40 15A72)
64. 87j:00012 Probability, statistical mechanics, and number theory. A volume dedicated to Mark Kac. Edited by Gian-Carlo Rota. Advances in Mathematics, Supplementary Studies, 9. Academic Press, Inc., Orlando, Fla., 1986. xii+194 pp. ISBN: 0-12-598543-6 00A10 (60-06 82-06)
65. 87h:05057 Barnabei, Marilena ; Brini, Andrea ; Rota, Gian-Carlo An introduction to the theory of Möbius functions. (Italian) Matroid theory and its applications, 7--109, Liguori, Naples, 1982. 05B35 (06D05)
66. 87e:05010 Nava, Oscar ; Rota, Gian-Carlo Plethysm, categories, and combinatorics. Adv. in Math. 58 (1985), no. 1, 61--88. (Reviewer: S. Milne) 05A15 (06E99)
67. 86e:05009 Metropolis, N. ; Rota, Gian-Carlo The cyclotomic identity. Combinatorics and algebra (Boulder, Colo., 1983), 19--27, Contemp. Math., 34, Amer. Math. Soc., Providence, R.I., 1984. (Reviewer: Heinrich Niederhausen) 05A19 (05A15)
68. 86b:01036 Rota, Gian-Carlo Words spoken at the memorial service for S. M. Ulam. Math. Intelligencer 6 (1984), no. 4, 40--42.01A70
69. 85m:01108b Pólya, George Collected papers. Vol. IV. Probability; combinatorics; teaching and learning in mathematics. Edited by Gian-Carlo Rota, M. C. Reynolds and R. M. Shortt. Mathematicians of Our Time, 22. MIT Press, Cambridge, Mass.-London, 1984. ix+642 pp. ISBN: 0-262-16097-8 (Reviewer: R. P. Boas, Jr.) 01A75 (00A25 05-00 60-00)
70. 85m:01108a Pólya, George Collected papers. Vol. III. Analysis. Edited by Joseph Hersch, Gian-Carlo Rota, M. C. Reynolds and R. M. Shortt. Mathematicians of Our Time, 21. MIT Press, Cambridge, Mass.-London, 1984. x+536 pp. ISBN: 0-262-16096-X (Reviewer: R. P. Boas, Jr.) 01A75 (41-00 49-00)
71. 85g:05002 Kung, Joseph P. S. ; Rota, Gian-Carlo The invariant theory of binary forms. Bull. Amer. Math. Soc. (N.S.) 10 (1984), no. 1, 27--85. (Reviewer: Heinrich Niederhausen) 05-02 (05A40 13-02 14-02 15A72)
72. 85g:00029 Science, computers, and the information onslaught. A collection of essays. Proceedings of the meeting on science and the information onslaught held at Los Alamos, N.M., June 1981. Edited by Donald M. Kerr, Karl Braithwaite, N. Metropolis, David H. Sharp and Gian-Carlo Rota. Academic Press, Inc., Orlando, FL, 1984. xiii+276 pp. ISBN: 0-12-404970-2 00A11 (00A69)
73. 85d:05026 Metropolis, N. ; Rota, Gian-Carlo Witt vectors and the algebra of necklaces. Adv. in Math. 50 (1983), no. 2, 95--125. (Reviewer: S. Milne) 05A19 (05A15 13K05)
74. 84m:05002 Goulden, I. P. ; Jackson, D. M. Combinatorial enumeration. With a foreword by Gian-Carlo Rota. A Wiley-Interscience Publication. Wiley-Interscience Series in Discrete Mathematics. John Wiley & Sons, Inc., New York, 1983. xxiv+569 pp. ISBN: 0-471-86654-7 (Reviewer: R. W. Robinson) 05-02 (05A15)
75. 84i:05006 Joni, S. A. ; Rota, G.-C. ; Sagan, B. From sets to functions: three elementary examples. Discrete Math. 37 (1981), no. 2-3, 193--202.05A10
76. 84b:05013b Barnabei, M. ; Brini, A. ; Rota, G.-C. Systems of section coefficients. II. (Italian) Rend. Circ. Mat. Palermo (2) 30 (1981), no. 2, 161--198. (Reviewer: J. Désarménien) 05A10 (16A24)
77. 84b:05013a Barnabei, M. ; Brini, A. ; Rota, G.-C. Systems of section coefficients. I. (Italian) Rend. Circ. Mat. Palermo (2) 29 (1980), no. 3, 457--484 (1981). (Reviewer: J. Désarménien) 05A10 (16A24)

78. 84a:15001 Kim, Ki Hang Boolean matrix theory and applications. With a foreword by Gian-Carlo Rota. Monographs and Textbooks in Pure and Applied Mathematics, 70. Marcel Dekker, Inc., New York, 1982. xiv+288 pp. ISBN: 0-8247-1788-0 (Reviewer: S. Rudeanu) 15-02 (04A05 05-XX 06E99 20M99 94C10)
79. 83j:05005b Joni, S. A. ; Rota, G.-C. On restricted bases for finite fields. Combinatorial mathematics, optimal designs and their applications (Proc. Sympos. Combin. Math. and Optimal Design, Colorado State Univ., Fort Collins, Colo., 1978). Ann. Discrete Math. 6 (1980), 215--217. (Reviewer: Dennis White) 05A15 (05A05)
80. 83j:05005a Joni, S. A. ; Rota, G.-C. A vector space analog of permutations with restricted position. J. Combin. Theory Ser. A 29 (1980), no. 1, 59--73. (Reviewer: Dennis White) 05A15 (05A05)
81. 83j:01086 Study, Eduard Methoden zur Theorie der tern=E4ren Formen. (German) [Methods for the theory of ternary forms] Reprint of the 1889 original. With an introduction by Gian-Carlo Rota. Springer-Verlag, Berlin-New York, 1982. 12+xii+210 pp. ISBN: 3-540-09850-X 01A75 (14-03 14L30 15-03 15A72)
82. 83c:05005 Metropolis, N. ; Nicoletti, G. ; Rota, Gian-Carlo A new class of symmetric functions. Mathematical analysis and applications, Part B, pp. 563--575, Adv. in Math. Suppl. Stud., 7b, Academic Press, New York-London, 1981. (Reviewer: Dominique Foata) 05A10 (20C30)
83. 83c:00001 Davis, Philip J. ; Hersh, Reuben The mathematical experience. With an introduction by Gian-Carlo Rota. Reprint. Houghton Mifflin Co., Boston, Mass., 1982. xx+440 pp. ISBN: 0-395-32131-X 00A05
84. 83b:05003 Joni, S. A. ; Rota, G.-C. Coalgebras and bialgebras in combinatorics. Umbral calculus and Hopf algebras (Norman, Okla., 1978), pp. 1--47, Contemp. Math., 6, Amer. Math. Soc., Providence, R.I., 1982. 05A10 (16A24)
85. 82k:05008 Barnabei, Marilena ; Brini, Andrea ; Rota, Gian-Carlo Section coefficients and section sequences. Atti Accad. Naz. Lincei Rend. Cl. Sci. Fis. Mat. Natur. (8) 68 (1980), no. 1, 5--12. (Reviewer: Giuseppe Pellegrino) 05A10
86. 82i:12026 Kung, Joseph P. S. ; Rota, Gian-Carlo On the differential invariants of a linear ordinary differential equation. Proc. Roy. Soc. Edinburgh Sect. A 89 (1981), no. 1-2, 111--123. (Reviewer: K. Okugawa) 12H05 (34A35)
87. 82i:00020 Davis, Philip J. ; Hersh, Reuben The mathematical experience. With an introduction by Gian-Carlo Rota. Birkhauser, Boston, Mass., 1980. xv+440 pp. ISBN: 3-7643-3018-X (Reviewer: H. B. Griffiths) 00A25 (00A05 01A80)
88. 82c:06018 Kung, Joseph P. S. ; Murty, M. Ram ; Rota, Gian-Carlo On the Rédei zeta function. J. Number Theory 12 (1980), no. 3, 421--436. (Reviewer: Louis Solomon) 06B99 (10H10)
89. 82b:05017 Rota, Gian-Carlo ; Sagan, Bruce ; Stein, Paul R. A cyclic derivative in noncommutative algebra. J. Algebra 64 (1980), no. 1, 54--75. (Reviewer: David M. Jackson) 05A15 (12H05 13F25)
90. 82a:20021 Doubilet, Peter ; Fox, John ; Rota, Gian-Carlo The elementary theory of the symmetric group. Combinatorics, representation theory and statistical methods in groups, pp. 31--65, Lecture Notes in Pure and Appl. Math., 57, Dekker, New York, 1980. (Reviewer: Michael H. Peel) 20C30 (05A10)
91. 81i:68002 A history of computing in the twentieth century. A collection of essays. Edited by N. Metropolis, J. Howlett and Gian-Carlo Rota. Academic Press, Inc. [Harcourt Brace Jovanovich, Publishers], New York-London, 1980. xix+659 pp. ISBN: 0-12-491650-3 (Reviewer: A. D. Booth) 68-03 (01A60)
92. 81g:05018 Rota, Gian-Carlo ; Sagan, Bruce Congruences derived from group action. European J. Combin. 1 (1980), no. 1, 67--76. (Reviewer: Hugo S. Sun) 05A15 (20B99)
93. 81c:05002 Joni, S. A. ; Rota, G.-C. Coalgebras and bialgebras in combinatorics. Stud. Appl. Math.

61 (1979), no. 2, 93--139. (Reviewer: R. W. Quackenbush) 05A10 (16A24)

94. 81c:03027 Ellerman, David P. ; Rota, Gian-Carlo A measure-theoretic approach to logical quantification. Rend. Sem. Mat. Univ. Padova 59 (1978), 227--246 (1979). (Reviewer: F. Speranza) 03C90 (03B05 03B10 03G25 28-XX)
95. 80k:01065 MacMahon, Percy Alexander Collected papers. Vol. I. Combinatorics. Mathematicians of Our Time. Edited and with a preface by George E. Andrews. With an introduction by Gian-Carlo Rota. MIT Press, Cambridge, Mass.-London, 1978. xxix+1438 pp. (1 plate). ISBN: 0-262-13121-8 (Reviewer: Dominique Foata) 01A75 (05-02)
96. 80j:01030 Kolata, Gina Bari Gian-Carlo Rota and combinatorial math. Science 204 (1979), no. 4388, 44--45. (Reviewer: Richard K. Guy) 01A70
97. 80i:05012 Rota, Gian-Carlo Hopf algebra methods in combinatorics. Problèmes combinatoires et théorie des graphes (Colloq. Internat. CNRS, Univ. Orsay, Orsay, 1976), pp. 363--365, Colloq. Internat. CNRS, 260, CNRS, Paris, 1978. (Reviewer: J. W. Moon) 05A15
98. 80h:05007 d'Antona, Ottavio ; Rota, Gian-Carlo Two rings connected with the inclusion-exclusion principle. J. Combin. Theory Ser. A 24 (1978), no. 3, 395--402. (Reviewer: Dominique Foata) 05A19
99. 80g:82017 Ruelle, David Thermodynamic formalism. The mathematical structures of classical equilibrium statistical mechanics. With a foreword by Giovanni Gallavotti and Gian-Carlo Rota. Encyclopedia of Mathematics and its Applications, 5. Addison-Wesley Publishing Co., Reading, Mass., 1978. xix+183 pp. ISBN: 0-201-13504-3 (Reviewer: J. E. Marsden) 82A05 (28D20)
100. 80f:00006 Studies in analysis. Edited by Gian-Carlo Rota. Advances in Mathematics, Supplementary Studies, 4. Academic Press, Inc. [Harcourt Brace Jovanovich, Publishers], New York-London, 1979. xi+322 pp. ISBN: 0-12-599150-9 00A10
101. 80c:06015 Metropolis, N. ; Rota, Gian-Carlo Combinatorial structure of the faces of the n-cube. SIAM J. Appl. Math. 35 (1978), no. 4, 689--694. (Reviewer: R. W. Quackenbush) 06C15 (05A17 05B30)
102. 80c:00012 Studies in algebraic topology. Edited by Gian-Carlo Rota. Advances in Mathematics, Supplementary Studies, 5. Academic Press, Inc. [Harcourt Brace Jovanovich, Publishers], New York-London, 1979. xi+263 pp. ISBN: 0-12-599152-5 00A10
103. 80c:00011 Studies in algebra and number theory. Edited by Gian-Carlo Rota. Advances in Mathematics, Supplementary Studies, 6. Academic Press, Inc. [Harcourt Brace Jovanovich, Publishers], New York-London, 1979. xi+369 pp. ISBN: 0-12-599153-3 00A10
104. 80b:28001 Studies in probability and ergodic theory. Edited by Gian-Carlo Rota. Advances in Mathematics, Supplementary Studies, 2. Academic Press, Inc. [Harcourt Brace Jovanovich, Publishers], New York-London, 1978. xiii+293 pp. ISBN: 0-12-599102-9 28-06 (60-06)
105. 80b:00004 Studies in foundations and combinatorics. Edited by Gian-Carlo Rota. Advances in Mathematics, Supplementary Studies, 1. Academic Press, Inc. [Harcourt Brace Jovanovich, Publishers], New York-London, 1978. x+265 pp. ISBN: 0-12-599101-0 00A10
106. 80a:34001 Birkhoff, Garrett ; Rota, Gian-Carlo Ordinary differential equations. Third edition. John Wiley & Sons, New York-Chichester-Brisbane, 1978. xi+342 pp. ISBN: 0-471-07411-X 34-01
107. 58 #27931 Faltin, F. ; Metropolis, N. ; Ross, B. ; Rota, G.-C. The real numbers as a wreath product. Surveys in applied mathematics (Proc. First Los Alamos Sympos. Math. in Natural Sci., Los Alamos, N.M., 1974), pp. 271--297. Academic Press, New York, 1976. 12J15 (68A15)
108. 58 #27667 Metropolis, N. ; Rota, Gian-Carlo ; Strehl, Volker ; White, Neil Partitions into chains of a class of partially ordered sets. Proc. Amer. Math. Soc. 71 (1978), no. 2, 193--196. (Reviewer: Curtis Greene) 06A10 (05B99)
109. 58 #27571 Crapo, Henry H. ; Rota, Gian-Carlo Simplicial geometries. Combinatorics (Proc.

Sympos. Pure Math., Vol. XIX, Univ. California, Los Angeles, Calif., 1968), pp. 71--75. Amer. Math. Soc., Providence, R.I., 1971. 05B99 (57C05)
110. 58 #21703 Rota, Gian-Carlo Combinatorial theory, old and new. Actes du Congrès International des Mathématiciens (Nice, 1970), Tome 3, pp. 229--233. Gauthier-Villars, Paris, 1971. 05B25
111. 58 #20950 Surveys in applied mathematics. Proceedings of the First Los Alamos Symposium on Mathematics in the Natural Sciences, held at Los Alamos Scientific Laboratory, Los Alamos, N.M., 1974. Essays dedicated to Stanislaw M. Ulam. Edited by N. Metropolis, S. Orszag and G.-C. Rota. Academic Press [Harcourt Brace Jovanovich, Publishers], New York-London, 1976. xv+297 pp.00A10
112. 58 #16736 Doubilet, Peter ; Rota, Gian-Carlo ; Stein, Joel On the foundations of combinatorial theory. IX. Combinatorial methods in invariant theory. Studies in Appl. Math. 53 (1974), 185--216.15A72 (14M15)
113. 58 #16326 Rota, Gian-Carlo ; Smith, David A. Enumeration under group action. Ann. Scuola Norm. Sup. Pisa Cl. Sci. (4) 4 (1977), no. 4, 637--646. (Reviewer: Louis Comtet) 05A15
114. 58 #16318 Studies in combinatorics. Edited by Gian-Carlo Rota. MAA Studies in Mathematics, 17. Mathematical Association of America, Washington, D.C., 1978. xi+262 pp. ISBN: 0-88385-117-2 05-06
115. 58 #9832 Faltin, F. ; Metropolis, N. ; Ross, B. ; Rota, G.-C. A Boolean analysis of addition and multiplication. Studies in Appl. Math. 56 (1976/77), no. 2, 147--158. (Reviewer: H. Rohleder) 94A20
116. 58 #5737 Désarménien, J. ; Kung, Joseph P. S. ; Rota, Gian-Carlo Invariant theory, Young bitableaux, and combinatorics. Advances in Math. 27 (1978), no. 1, 63--92. (Reviewer: A.-A. A. Jucys) 15A72 (14M15)
117. 58 #5256 Roman, Steven M. ; Rota, Gian-Carlo The umbral calculus. Advances in Math. 27 (1978), no. 2, 95--188. (Reviewer: L. Carlitz) 05A15
118. 57 #10579 Rota, Gian-Carlo ; Stein, Joel Applications of Cayley algebras. Colloquio Internazionale sulle Teorie Combinatorie (Rome, 1973), Tomo II, pp. 71--97. Atti dei Convegni Lincei, No. 17, Accad. Naz. Lincei, Rome, 1976. (Reviewer: S. G. Hoggar) 50D30 (14M15 50D20)
119. 57 #2961 Metropolis, N. ; Rota, Gian-Carlo On the lattice of faces of the n-cube. Bull. Amer. Math. Soc. 84 (1978), no. 2, 284--286. (Reviewer: Curtis Greene) 05B40 (06A20 52A45)
120. 56 #67 Ulam, Stanislaw Sets, numbers, and universes: selected works. Edited by W. A. Beyer, J. Mycielski and G.-C. Rota. Mathematicians of Our Time, Vol. 9. The MIT Press, Cambridge, Mass.-London, 1974. xxiii+709 pp.01A75
121. 54 #7508 Doubilet, Peter ; Rota, Gian-Carlo Skew-symmetric invariant theory. Advances in Math. 21 (1976), no. 2, 196--201. (Reviewer: G. B. Gurevic) 15A72
122. 53 #10673 Rota, Gian-Carlo The valuation ring of a distributive lattice. Proceedings of the University of Houston Lattice Theory Conference (Houston, Tex., 1973), pp. 574--628. Dept. Math., Univ. Houston, Houston, Tex., 1973. (Reviewer: D. Monk) 06A35
123. 53 #7796 Doubilet, Peter ; Rota, Gian-Carlo ; Stanley, Richard On the foundations of combinatorial theory. VI. The idea of generating function. Proceedings of the Sixth Berkeley Symposium on Mathematical Statistics and Probability (Univ. California, Berkeley, Calif., 1970/1971), Vol. II: Probability theory, pp. 267--318. Univ. California Press, Berkeley, Calif., 1972. (Reviewer: A. G. Law) 05A15
124. 52 #362 Faltin, F. ; Metropolis, N. ; Ross, B. ; Rota, G.-C. The real numbers as a wreath product. Advances in Math. 16 (1975), 278--304. (Reviewer: George Bachman) 12J15 (68A15)
125. 52 #119 Finite operator calculus. Edited by Gian-Carlo Rota. With the collaboration of P. Doubilet, C. Greene, D. Kahaner, A. Odlyzko and R. Stanley. Academic Press, Inc. [Harcourt

Brace Jovanovich, Publishers], New York-London, 1975. x+159 pp.05-06 (06-06 39-06)
126. 50 #9633 Kelly, Douglas ; Rota, Gian-Carlo Some problems in combinatorial geometry. A survey of combinatorial theory (Proc. Internat. Sympos., Colorado State Univ., Fort Collins, Colo., 1971), pp. 309--312. North-Holland, Amsterdam, 1973. (Reviewer: W. T. Tutte) 05B35
127. 50 #6815 Metropolis, N. ; Rota, Gian-Carlo Significance arithmetic---on the algebra of binary strings. Studies in numerical analysis (papers in honour of Cornelius Lanczos on the occasion of his 80th birthday), pp. 241--251. Academic Press, London, 1974. (Reviewer: Stephen Tanny) 02F43 (68A15)
128. 50 #1889 A survey of combinatorial theory. A volume dedicated to Professor R. C. Bose on the occasion of his seventieth birthday, and containing the Proceedings of the International Symposium on Combinatorial Mathematics and its Applications held at the University of Colorado, Fort Collins, Colo., on September 9--11, 1971. Edited by Jagdish N. Srivastava with the cooperation of Frank Harary, C. R. Rao, G.-C. Rota and S. S. Shrikhande. North-Holland Publishing Col., Amsterdam-London; American Elsevier Publishing Co., Inc., New York, 1973. xviii+457 pp.05-06
129. 49 #10556 Rota, Gian-Carlo ; Kahaner, D. ; Odlyzko, A. On the foundations of combinatorial theory. VIII. Finite operator calculus. J. Math. Anal. Appl. 42 (1973), 684--760. (Reviewer: P. Saphar) 05-02
130. 49 #7838 Rota, Gian-Carlo ; Smith, D. A. Fluctuation theory and Baxter algebras. Symposia Mathematica, Vol. IX (Convegno di Calcolo delle Probabilitì, INDAM, Rome, 1971), pp. 179--201. Academic Press, London, 1972. (Reviewer: J. B. Miller) 47B99
131. 48 #5891 Crapo, Henry ; Rota, Gian-Carlo Geometric lattices. Trends in lattice theory (Sympos., U. S. Naval Academy, Annapolis, Md., 1966), pp. 127--172. Van Nostrand Reinhold, New York, 1970. 05B35
132. 48 #222 Metropolis, N. ; Rota, Gian-Carlo ; Tanny, S. Significance arithmetic: the carrying algorithm. J. Combinatorial Theory Ser. A 14 (1973), 386--421. (Reviewer: R. L. Goodstein) 10A30 (02E10)
133. 45 #6632 Goldman, J. ; Rota, G.-C. On the foundations of combinatorial theory. IV. Finite vector spaces and Eulerian generating functions. Combinatorial theory and its applications, II (Proc. Colloq., Balatonf=FCred, 1969), pp. 477--509. North-Holland, Amsterdam, 1970. 05-02
134. 45 #74 Crapo, Henry H. ; Rota, Gian-Carlo On the foundations of combinatorial theory: Combinatorial geometries. Preliminary edition. The M.I.T. Press, Cambridge, Mass.-London, 1970. iv+289 pp. (not consecutively paged) (39 figures). (Reviewer: J. Cofman) 05-02
135. 44 #3882 Crapo, Henry H. ; Rota, Gian-Carlo On the foundations of combinatorial theory. II. Combinatorial geometries. Studies in Appl. Math. 49 1970 109--133.05.00
136. 44 #1769 Lange, K. ; Ramsay, A. ; Rota, Gian-Carlo Frobenius reciprocity in ergodic theory. Bull. Amer. Math. Soc. 77 1971 713--718. (Reviewer: J. R. Isbell) 22.60 (18.00)
137. 44 #126 Rota, Gian-Carlo On the combinatorics of the Euler characteristic. 1971 Studies in Pure Mathematics (Presented to Richard Rado) pp. 221--233 Academic Press, London (Reviewer: H. E. Debrunner) 06.50 (05.00)
138. 44 #89 Rota, Gian-Carlo ; Harper, L. H. Matching theory, an introduction. 1971 Advances in Probability and Related Topics, Vol. 1 pp. 169--215 Dekker, New York (Reviewer: J. R. Isbell) 05.04
139. 43 #3791 Kallman, Robert R. ; Rota, Gian-Carlo On the inequality $\|f\sp{\prime} \| \sp{2}\leqq 4\|f\| \cdot f’’\|$. 1970 Inequalities, II (Proc. Second Sympos., U.S. Air Force Acad., Colo., 1967) pp. 187--192 Academic Press, New York (Reviewer: M. Z. Nashed) 46.35
140. 43 #65 Mullin, Ronald ; Rota, Gian-Carlo On the foundations of combinatorial theory. III. Theory of binomial enumeration. 1970 Graph Theory and its Applications (Proc. Advanced Sem., Math.

Research Center, Univ. of Wisconsin, Madison, Wis., 1969) pp. 167--213 (loose errata) Academic Press, New York (Reviewer: A. Garsia) 05.05
141. 42 #93 Goldman, Jay ; Rota, Gian-Carlo On the foundations of combinatorial theory. IV. Finite vector spaces and Eulerian generating functions. Studies in Appl. Math. 49 1970 239--258. (Reviewer: L. D. Baumert) 05.10
142. 40 #5453 Goldman, Jay ; Rota, Gian-Carlo The number of subspaces of a vector space. 1969 Recent Progress in Combinatorics (Proc. Third Waterloo Conf. on Combinatorics, 1968) pp. 75--83 Academic Press, New York (Reviewer: L. Carlitz) 05.04
143. 39 #5387 Rota, Gian-Carlo Baxter algebras and combinatorial identities. I, II. Bull. Amer. Math. Soc. 75 (1969), 325--329; ibid. 75 1969 330--334. (Reviewer: J. H. B. Kemperman) 05.10 (62.00)
144. 38 #4737 Birkhoff, Garrett ; Rota, Gian-Carlo Ordinary differential equations. Second edition Blaisdell Publishing Co. Ginn and Co., Waltham, Mass.-Toronto, Ont.-London 1969 xiv+366 pp.34.00
145. 33 #7264 Frucht W., Roberto ; Rota, Gian-Carlo Bell polynomials and partitions of abstract sets. (Spanish) Scientia (Valparaiso) No. 126 1965 5--10. (Reviewer: J. R. Isbell) 05.10
146. 33 #55 Frucht W., Roberto ; Rota, Gian-Carlo The Möbius function for partitions of a set. (Spanish) Scientia (Valparaiso) No. 122 1963 111--115. (Reviewer: J. R. Isbell) 05.05
147. 31 #605 Foia\lfhook s, Ciprian A remark on the universal model for contractions of G. C. Rota. (Romanian) Com. Acad. R. P. Rom\cflex\i ne 13 1963 349--352.47.10
148. 30 #4688 Rota, Gian-Carlo On the foundations of combinatorial theory. I. Theory of Möbius functions. Z. Wahrscheinlichkeitstheorie und Verw. Gebiete 2 1964 340--368 (1964). (Reviewer: M. A. Harrison) 05.05
149. 28 #5009 Rota, Gian-Carlo The number of partitions of a set. Amer. Math. Monthly 71 1964 498--504. (Reviewer: L. Carlitz) 05.10
150. 28 #4349 Rota, Gian-Carlo Reynolds operators. 1964 Proc. Sympos. Appl. Math., Vol. XVI pp. 70--83 Amer. Math. Soc., Providence, R.I. (Reviewer: G. Baxter) 46.50 (47.25)
151. 28 #185 Rota, Gian-Carlo On the maximal ergodic theorem for Abel-limits. Proc. Amer. Math. Soc. 14 1963 722--723. (Reviewer: R. V. Chacon) 28.70
152. 26 #5434 Rota, Gian-Carlo ; Strang, Gilbert A note on the joint spectral radius. Nederl. Akad. Wetensch. Proc. Ser. A 63 Indag. Math. 22 1960 379--381. (Reviewer: H. Heuser) 47.10
153. 26 #2882 Rota, Gian-Carlo Spectral theory of smoothing operators. Proc. Nat. Acad. Sci. U.S.A. 46 1960 863--868. (Reviewer: C. Davis) 47.25
154. 25 #5540 Rota, Gian-Carlo Une théorie unifiée des martingales et des moyennes ergodiques. (French) C. R. Acad. Sci. Paris 252 1961 2064--2066. (Reviewer: A. Fuchs) 60.40
155. 25 #2253 Birkhoff, Garrett ; Rota, Gian-Carlo Ordinary differential equations. Introductions to Higher Mathematics Ginn and Company, Boston, Mass.-New York-Toronto 1962 vii+318 pp. (Reviewer: N. D. Kazarinoff) 34.00
156. 25 #1269 Rota, Gian-Carlo On the classification of periodic flows. Proc. Amer. Math. Soc. 13 1962 659--662. (Reviewer: S. Puckette) 28.70
157. 24 #A3671 Rota, Gian-Carlo An ‘‘Alternierende Verfahren’’ for general positive operators. Bull. Amer. Math. Soc. 68 1962 95--102. (Reviewer: J. L. Doob) 60.05
158. 24 #A1621 Rota, Gian-Carlo On the eigenvalues of positive operators. Bull. Amer. Math. Soc. 67 (1961), 556--558; addendum 68 1961 49. (Reviewer: R. V. Chacon) 47.30
159. 23 #A2577 Birkhoff, Garrett ; Rota, Gian-Carlo On the completeness of Sturm-Liouville expansions. Amer. Math. Monthly 67 1960 835--841. (Reviewer: E. C. Titchmarsh) 34.30
160. 23 #A2449 Billik, Martin ; Rota, Gian-Carlo On Reynolds operators in finite-dimensional algebras. J. Math. Mech. 9 1960 927--932. (Reviewer: C. Davis) 16.99
161. 23 #A1096 Rota, Gian-Carlo On the spectra of singular boundary value problems. J. Math. Mech.

10 1961 83--90. (Reviewer: R. R. D. Kemp) 34.30

162. 22 #8933 Rota, Gian-Carlo Représentation des opérateurs de Reynolds. (French) C. R. Acad. Sci. Paris 250 1960 2831--2833. (Reviewer: J. Bass) 76.00 (28.00)
163. 22 #8932 Rota, Gian-Carlo Endomorphismes de Reynolds et théorie ergodique. (French) C. R. Acad. Sci. Paris 250 1960 2791--2793. (Reviewer: J. Bass) 76.00 (28.00)
164. 22 #7502 Rota, Gian-Carlo Une généralisation de l'espérance mathématique conditionnelle qui se présente dans la théorie statistique de la turbulence. (French) C. R. Acad. Sci. Paris 251 1960 624--626. (Reviewer: J. Bass) 76.00
165. 22 #2899 Rota, Gian-Carlo On the representation of aeraging operators. Rend. Sem. Mat. Univ. Padova 30 1960 52--64. (Reviewer: C. Davis) 46.00 (60.00)
166. 22 #2898 Rota, Gian-Carlo On models for linear operators. Comm. Pure Appl. Math. 13 1960 469--472. (Reviewer: C. Davis) 46.00
167. 22 #2897 Rota, G. C. Note on the invariant subspaces of linear operators. Rend. Circ. Mat. Palermo (2) 8 1959 182--184. (Reviewer: C. Davis) 46.00
168. 20 #3334 Rota, G. C. Extension theory of differential operators. I. Comm. Pure Appl. Math. 11 1958 23--65. (Reviewer: R. R. Kemp) 34.00
169. 1 091 909 Guinot, Marc Comment on: ''The ambiguities of mathematical thought'' [The ambiguities of mathematical thought] by G.-C. Rota. (French) Gaz. Math. No. 47 (1991), 62--63.00A30
170. 994 903 Rota, Gian-Carlo Remarks on artificial intelligence. (Bulgarian) Translated from the Italian by A. Nikolova. Fiz.-Mat. Spis. B\cdprime lgar. Akad. Nauk. 31(64) (1989), no. 1, 19--27.01A65 (68T01)
171. 935 782 Conversations with Rota. Transcribed and edited by Françoise Ulam. Stanislaw Ulam 1909--1984. Los Alamos Sci. No. 15, Special Issue (1987), 300--312.01A70
172. 935 764 Rota, Gian-Carlo The lost café. Stanislaw Ulam 1909--1984. Los Alamos Sci. No. 15, Special Issue (1987), 23--32.01A70
173. 878 148 Rota, Gian-Carlo In memoriam of Stan Ulam---the barrier of meaning. Evolution, games and learning (Los Alamos, N.M., 1985). Phys. D 22 (1986), no. 1-3, 1--3.01A70
174. 833 374 Rota, Gian-Carlo Remarks on artificial intelligence. (Italian) Boll. Un. Mat. Ital. A (6) 5 (1986), no. 1, 1--12.01A65 (68T01)
175. 815 230 Rota, Gian-Carlo The barrier of meaning. Lett. Math. Phys. 10 (1985), no. 2-3, 97--99.00A25

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Daniel E. Loeb, `loeb@delanet.com`
