

Recollections of Leonard Carlitz

by

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1. Joel V. Brawley ⁽¹⁾. While I had heard about the amazing mathematical productivity of Leonard Carlitz and had read a few of his papers during my graduate student days in the early 1960's at NCSU (North Carolina State University), I first met him in December of 1964 when I was invited, partly through his efforts, to give a colloquium lecture at Duke University. I had just finished my PhD at NCSU a few months earlier under Jack Levine and was doing research and teaching at NCSU as an instructor prior to moving to Clemson University in 1965.

Before that December meeting, Carlitz and I had had a few written communications, but I did not meet him until shortly before my talk. He was nearly fifty-seven years old at the time, had published or had had accepted nearly 500 research papers and had just been named "James B. Duke Professor of Mathematics", a very prestigious, chaired position at the university. I was a new PhD with one accepted publication, so I was somewhat anxious about meeting this mathematical giant; however, I remember being immediately relaxed by his quiet, kind and gentle nature and I very much appreciated the way he put me at ease.

During my talk I made a certain conjecture about irreducible reciprocal polynomials over finite fields, a result which Levine and I had discovered experimentally but had been unable to prove. I returned that evening to Raleigh (25 miles from Durham) and three days later, I received in the mail a neatly typed paper [4] in which Carlitz had not only established the conjecture but had proved a generalization of it. I was amazed by this feat but came to realize that occurrences like this were quite common for him.

2010 *Mathematics Subject Classification*: Primary 01A70.

⁽¹⁾ In 1995 while Carlitz was still alive, I had the pleasure of writing an article [1] dedicated to him and surveying his finite field research. Then in 1999, I wrote his obituary [2]. A few of the accounts I give in this article were first reported in those earlier articles but others are new.

During my early years at Clemson, Carlitz and I did not have much contact except when we would occasionally see each other at professional meetings; but that started to change after he accepted my invitation to speak at Clemson in 1969. His colloquium talk to the Clemson department was a beautiful survey talk on “Permutation Polynomials over Finite Fields”, much of which had been done by Carlitz or his students. His talk inspired me to want to spend my upcoming 1971–72 sabbatical leave near Durham and we discussed it during my visit. Mrs. Carlitz, who was a petite, kind and gentle lady, accompanied him on his visit to Clemson and my wife and I hosted a party in our home in their honor.

For the 1971–72 academic year I was able to obtain a half-time teaching position at NCSU, so in August of 1971 I moved my wife and three children to Raleigh. It was during that year that I got to know Dr. Carlitz and also Mrs. Carlitz much better.

While I would spend most of my week in Raleigh, every Tuesday I would make the 25-mile drive to Durham to visit Dr. Carlitz. My Tuesday office was the Duke mathematics department library, which was located only a few steps from Carlitz’s office. He and I would meet for a while soon after I arrived on campus, and I would spend the rest of the day working in the library with brief visits to his office or he to mine. He was never too busy for me. Theresa Vaughan (who was his student at the time and unfortunately passed away in June of 2009) told me that he was always accessible to his students and to anyone who wanted to talk to him.

His office was a very interesting place. At first glance, one might think the office was in disarray, but he seemed to know where everything was located. It was a fairly large office and the walls were lined with shelves containing, for example, mathematical books, lecture notes, copies of his numerous reprints, and many manila folders containing his handwritten versions and preprints of his papers. A picture (circa 1964) of Carlitz in his office and seated in front of his desk can be found in [5].

His desk was also quite interesting. Its top contained a bell-shaped mass resembling the 3-dimensional graph of a bivariate normal distribution. The main objects making up this mass were hand-written and typed papers, many of which were done on inexpensive yellow, canary-colored paper. There was no place on the desk to work. Carlitz did his writing on the small, pullout shelves of the desk. The desktop was for storage.

I remember one time I went to his office to ask him if he had ever seen a derivation of a certain counting formula that was needed for a paper we were working on. After hearing my question, he stood up, walked about a fourth of the way around the desk, lifted several of the yellow canary papers, pulled a paper from under the lifted papers and said, “I believe you’ll find

the formula here". It was a hand-written derivation he had done on an earlier occasion and was exactly what was needed.

He was a great person with whom to collaborate. In addition to having "short order" formulas in his bivariate normal pile, he had an amazing store of mathematical knowledge and great recall. For example, when I would ask him a question of the form, "Have you ever seen a result such as {—}", he would sometimes respond, "Oh, I believe you will find that in {—}", citing author, journal, and year (and the spot was invariably right). On other occasions when I would ask such a question, he would walk to the exact spot where the journal was located in the library, pull the precise volume down from the shelf, and quickly open it to the appropriate page.

One of his great strengths as a mathematician was his incredible feel for technical manipulations. I remember one particular time in the library I was trying to obtain an enumeration formula (relative to our joint paper [3]) and had derived a recurrence in four variables together with initial conditions, but I had no idea how to get a closed form solution. I showed the recurrence to Dr. Carlitz when he came by the library to see me on returning from his lunch. He took the recurrence with him to his office and in ten or so minutes he returned and handed me a piece of yellow canary paper saying, "I think this formula will work." I checked the expression (taking I am sure more than 10 minutes to do so) and he was absolutely correct. Hoping to get some insights that I could apply in the future, I asked him, "How did you solve that recurrence?", to which he replied, "Oh, I just have some experience in these kinds of matters." I still have no idea how he solved the recurrence, but I do think had he had some reasonably explainable procedure, he would have shared it with me.

Several of his students have described to me their idea of how Carlitz wrote some of his papers. He would read a journal paper of interest to him and get an idea of how to improve or generalize it. Then he would produce a neatly written paper (a seemingly quite easy task for him) and hand it to his secretary to type and send to a journal. Sometimes all of this would be done in a single day. He was not known for his detailed proofing of his papers but instead focused on the main thread of the work.

During the 1971–72 years, my wife and I were invited to his home on the edge of the Duke campus. He and Mrs. Carlitz were hosting a dinner party for us and several other couples in the Duke mathematics department. In contrast to the appearance of his office, his home was always neat and tidy, thanks to Mrs. Carlitz. She was a great host and a gracious lady who loved houseplants and had many inside their home.

They both loved and spent a lot of their time in a glass-enclosed room on the back of their house overlooking a beautiful, naturally forested area. Much of Dr. Carlitz's research at home was done in that room.

In the years after his retirement in 1977, I visited Dr. and Mrs. Carlitz in their home a number of times to discuss joint research projects. We always sat in the glass-enclosed room, and I always found the home neat, tidy and immaculately kept. Mrs. Carlitz died in 1990 and Dr. Carlitz lived in their home for nine more years. The home was neat the several times I visited him after Mrs. Carlitz's death, but not to the extent that it was while she was living. His caretakers did not take pride in the home as he and Mrs. Carlitz did.

One of my visits to the Carlitz home after Mrs. Carlitz's death occurred in the fall of 1991 when Theresa Vaughan, Drew Long, and I went there to collect information for the Collected Works project headed by John Brillhart. Carlitz was nearly 84 at the time.

One thing we wanted to find out from him on that visit was what he viewed as his most significant research. We tried to find this out with a few differently posed questions, but were having little success getting the kind of response we wanted. Carlitz was a modest man who did not seem to want to make judgments on his own research. When I mentioned his large number of publications he replied, "Of course many of them were slight." I retorted, "But many of them were very solid." to which he replied simply, "Let's hope so."

Finally, I asked him, "Well of all the research papers you've written, of which ones are you the proudest?" He rose from his chair and walked out of the room to find his list of publications ⁽²⁾, and after a few minutes he returned with the list, sat back down, and started perusing it. After a not so brief pause, he said "I liked numbers 3 and 5 pretty well." Then after another pause, "I also liked number 11," and then maybe ten seconds later he said, "13 was pretty good and perhaps 16 and 18."

He called out a few more numbers, but we soon moved the conversation to a less time-consuming topic realizing, with a list of some 770 papers, his complete answer would have required hours and was still not what we wanted. It was clear to us that he was content to let history be his judge. For him, the joy of discovery seemed enough.

My wife and I visited him at his home in 1996 when he was nearing 89. He had earlier broken his hip (a second time), but he had relearned to walk and was walking in his home with the aid of a walker. As usual he was very pleased to see us, and he still had that wonderful smile, but naturally, he was becoming more forgetful and beginning to repeat himself. One of the purposes of our visit was for me to personally take him copies of the two

⁽²⁾ His personal list was compiled by secretaries and was ordered differently from the bibliography compiled by John Brillhart that accompanies these Recollections. Also, Carlitz's list contained duplications and missing entries.

issues [5, 6] of *Finite Fields and their Applications* that were dedicated to him. He had not seen them before that visit.

As we visited, I sensed that he probably would not be reading much in the two journals, so I asked him if he'd like for me to read aloud to him my dedication article that was the lead article in [5]. He said that he would like that very much, so I read to him most of the article, emphasizing the things I thought would make him proudest. Through that reading I was able one last time to express to him my appreciation and admiration. The twinkle in his eyes and his wonderful smile let me know that he was also appreciative. That was the last time I ever saw him.

In June of 1999, when he needed more attention than he could receive from his caregivers at home, he was moved to a nursing home in Pittsburgh near his son Robert and his family.

Leonard's death on September 17, 1999 came quickly and peacefully. He was taken to the hospital with pneumonia on Wednesday, September 15, slept all day Thursday, and died Friday morning just after midnight.

Leonard Carlitz was a great and gentle man with deep mathematical insights who left us a remarkable legacy not only through his research but also through his students and the many associates whose lives he touched. He is greatly missed by his family, his friends, and his colleagues throughout the mathematical world.

References

- [1] J. V. Brawley, *Dedicated to Leonard Carlitz: The man and his work*, *Finite Fields Appl.* 1 (1995), 135–151.
- [2] J. V. Brawley, *In Memoriam: Leonard Carlitz (1907–1999)*, *Finite Fields Appl.* 6 (2000), 203–206.
- [3] J. V. Brawley and L. Carlitz, *Enumeration of matrices with prescribed row and column sums*, *Linear Algebra Appl.* 6 (1973), 165–174.
- [4] L. Carlitz, *Some theorems on irreducible reciprocal polynomials over a finite field*, *J. Reine Angew. Math.* 227 (1967), 212–220.
- [5] *Finite Fields and Their Applications* 1, no. 2, April 1995.
- [6] *Finite Fields and Their Applications* 1, no. 3, July 1995.

2. John Brillhart. As a graduate student at U. C. Berkeley in the late 1950's and early 1960's I was familiar with the name "Leonard Carlitz" from his contributions and solutions to problems in the current mathematical journals as they came out and were displayed in the departmental library. The two journals I especially liked were the MAA Monthly and the Duke Mathematical Journal, the latter being edited by Carlitz. Another was a local journal, begun in 1963 by a group of mathematicians in the San Francisco bay area who were given to an almost excessive zeal for all things "Fibonacci", the Fibonacci Quarterly.

At the time, their enthusiasm seemed to me like that of the Pythagorean Brotherhood crossed with that of the Junior Chamber of Commerce. I liked all the founders whom I got to know from their meetings, especially Brother Alfred at St. Mary's College and Vern Hoggatt at San Jose State. Carlitz was also an editor of this journal and was very supportive of their efforts. His presence there also contributed to improving the quality of this journal.

At about that time, August 1963, there was to be a remarkable three weeks meeting of prominent mathematicians at the University of Colorado at Boulder. D. H. Lehmer suggested that Ron Graham and I, both his students at Berkeley, attend the meeting, which we did. I think the meeting was important for both of us; certainly it was for me because many of the attendees lived in the dormitory where the talks were given and I became well acquainted with many of them due to this informal atmosphere. Among these people I had the pleasure of first meeting Carlitz and getting to know him.

There were no parallel sessions at the meeting so one could go to all the talks, which I did, and which Carlitz did also. He often participated during the question period following a talk by asking the speaker, "I wonder if you have considered...?". When the speaker said he hadn't, Carlitz went on to amplify his question and give references.

Carlitz also gave four talks at the meeting and I attended them all. I found his lecturing style quite agreeable, as were his topics. He spoke simply and clearly in a soft Southern accent; he also used no notes, the formulas coming naturally onto the board as he lectured.

I was particularly interested in one talk in which he posed the question of whether the fifth Euler polynomial was the only Euler polynomial with a multiple root [11, Problem 9, p. 91]. Actually, I had come to the meeting with the hope of finding such a problem to which I might be able to apply the idea I had, viz., that a polynomial with integer coefficients and an odd discriminant would not have a multiple root. This seemed to be such a problem.

When I returned to Berkeley after the meeting, I examined his question with a simple algorithm I had written for computing a discriminant mod 2. I found to my surprise that all even degree Euler polynomials had odd discriminants and thus had no multiple roots. I sent my arguments to Carlitz who promptly replied in quite a nice way, thanking me for my letter.

Settling the odd degree case proved to be more complicated, since the fifth Euler polynomial did have a multiple root. But with a little effort the mod 2 approach settled this case as well. In the process, Carlitz had sent me information about how the cyclotomic polynomial factors modulo a prime. It was certainly pleasant to have a real authority to whom I could ask questions.

I next turned to the odd degree Bernoulli polynomials to see if the mod 2 approach would work on these as well. It did. Before I had sent this result to Carlitz, however, he wrote to say he would be at the American Mathematical Society meeting at Cal Tech in Pasadena on November 21–23, 1963. I decided to go to the meeting and wrote I would see him there and show him the results I had gotten on the Bernoulli polynomials.

At the meeting we discussed what I had done. He said it was all right, even though I had my doubts about some of the things I had done since I was inexperienced with polynomial matters over finite fields. Certainly the best way to learn something is to need it... and then learn it from a real expert. It was easy to see why he had had 45 PhD students, the women among them being especially comfortable with him, a friendly and informal man with Southern charm and a tremendous mathematical depth.

At this point, however, the meeting was thrown into a complete turmoil; for during a lecture in the large auditorium, a man came running in the back door shouting “PRESIDENT KENNEDY HAS JUST BEEN SHOT!!” People leaped up and rushed out into the hall. Groups of excited people were clustered around the open doors of some offices listening to radio reports from Dallas. The uproar gradually subsided and the meeting continued and concluded somehow. I really don’t remember it.

I continued to work on the Euler and Bernoulli research for a while and then turned to another topic on which Carlitz and I worked together. (Later my work on the Euler and Bernoulli polynomials became my thesis [7].) This topic had to do with what Carlitz later called the “Rudin–Shapiro polynomials”. We soon published a joint paper on this topic [8], this paper turning out to be the only paper we published together. After that I finished my degree and got a job at the University of Arizona, where I worked with various other people.

Mathematicians are sometimes seen as problem solvers or system builders. The first type loves problems and finding their solutions while the other type, having an architectural sense, spend their efforts developing and building large or general structures. Certainly Carlitz was the first type; he was amazingly good at seizing a problem and dispatching it.

I recall at one meeting I mentioned a conjecture I had. He immediately started giving the solution since the “world” of the problem was one he was quite familiar with. The impression I got of the emergence of this solution was of a shirt coming continuously and unhesitatingly out of the wringer of an old-fashioned washing machine. Evidently he saw the entire solution and was merely outputting it smoothly in order. Rather remarkable.

I think I should say something about the experience of working on mathematics with Carlitz. By mail one would expect a reply in a few days. (I wonder what would have happened if we had had e-mail at that time?)

For example, Albert Whiteman once told me that three days after he had written to Carlitz about a problem, he received a 15-page manuscript that significantly advanced the mathematical purview of the subject. This should actually come as no surprise considering the huge amount of mathematics he produced in his lifetime.

In 1973 and 1974 his letters became very dark. He was deeply disturbed by two members of the mathematics department who were making an effort to take over the editorship of the Duke Journal by appealing to the president at Duke. Of course, Carlitz and the other editors had managed the journal for some 35 years independent of the Duke administration, and now the professors were putting pressure on the administration to turn over the control of the journal to them, presumably to “improve” the quality of the journal.

They succeeded and this had a devastating effect on Carlitz who immediately resigned as an editor in protest. And so it was that the charming Duke Mathematical Journal, that I and so many other people were fond of, ended its long and successful life. A very different, “improved” research journal appeared in its place.

Carlitz was deeply injured by this treatment of him and became embittered toward Duke University for the rest of his life. It still pains me to think of the university treating this dedicated and remarkably creative man in this way.

In the middle of the 1980’s I wrote to Carlitz raising the question of publishing his collected works. He responded favorably as did his family who were pleased with the prospect of his being busy with an enterprise dear to his heart. I then wrote to him that I thought it was important to get a complete and accurate bibliography before doing anything else. As it happened, this project ended up taking a year to complete, even with the collaboration of the editors. For example, Henry Gould, a remarkable person whom Carlitz referred to as a “philomath”, sent me a copy of a card file he kept of Carlitz’s papers. This file was invaluable in showing that these papers actually existed and where they could be found. Paul Bateman, Joel Brawley, Albert Whiteman, and a few others also sent me reprints and I used them for the same purposes. There was also a great deal of cross-checking with the references in Carlitz’s papers themselves.

Carlitz sent me a collection of reprints as well and a copy of a bibliography that had been kept by others such as his secretary and certain of his graduate students who were in charge of his *reprint room* that was filled with stacks of hundreds of reprints. (The final count on his published papers is now 771 and there is one unpublished, 15 page manuscript “Mock zeta functions” which still needs to be published.) Since this huge number of papers is in more than 100 journals, it actually needed an archivist to maintain

properly. It was incomplete and somewhat in a jumble with duplications. A real challenge to get on top of.

Actually, I enjoyed the challenge of finding all his papers and getting accurate references. It was helpful that he himself always wrote out the complete name of a journal, thus automatically avoiding confusion between journals with very similar names and abbreviations that he published in.

He also sent me an initial set of categories for his papers which gave a framework in which to work. It also reflected how he thought about the topical relationships in his mathematical world and explained why he published so much. Regarding this, in my own mind I envisioned a complicated apparatus consisting of small metal trays hanging from a collection of weighing arms, each tray representing a category. In the middle of this apparatus was Carlitz scattering sand around (the sand being his papers) that fell variously onto the trays, weighing them down.

He had so many ideas in so many directions as he went along, especially as a continuation of some published article or talk, that he just wanted to get them worked out and published. Later he could add to them when he extended a topic in a new direction and the various topics grew in parallel.

Ultimately the bibliography was done and I had collected a complete set of the papers themselves and could check the list directly against them. Carlitz had suggested a certain group of people as associate editors and all of them had been pleased to help in making the bibliography, refining the categories, and deciding what category to put each paper into. This latter decision was not always clear since a paper might reasonably be listed in either or both categories; but we stuck to putting each paper in just one category, leaving any further refinements to possible later work.

It was very helpful to have this final list and be able to answer questions readily about the papers. One such use of the list was made to satisfy a request of Gary Mullen, the Editor-in-Chief of the new journal "Finite Fields and Their Applications" and one of Carlitz's mathematical grandsons. His plan was to have the second and third issues of the new journal dedicated to Carlitz [9], and he asked if we could provide him with a list of his papers on finite fields. This was trivial to do since this was one of the categories that Carlitz had originally suggested [9, no. 2, 145–151].

I should also mention that Dinesh Thakur and David Hayes, one of Leonard's students, played an important part in developing some of the Carlitz material for publication in the new journal [9, no. 2, 152–164]. (Also see the latter's obituary of Carlitz [10], where Carlitz's 45 PhD students and their thesis titles are given.)

This development was in 1995 when Carlitz was still alive, and he very much appreciated the recognition that this publication brought to him and

his work. I also think this helped to reduce some of his isolation and the bitterness he felt towards Duke.

My final thought and hope are that at some time in the future Duke University will organize a celebration of the life and accomplishments of Leonard Carlitz, their late, extraordinary James B. Duke professor of mathematics. I think the mathematical world would heartily applaud this and join into the celebrations of such an event.

References

- [7] J. Brillhart, *On the Euler and Bernoulli polynomials*, J. Reine Angew. Math. 234 (1969), 45–64.
- [8] J. Brillhart and L. Carlitz, *Note on the Shapiro polynomials*, Proc. Amer. Math. Soc. 25 (1970), 114–118.
- [9] Finite Fields and Their Applications 1, nos. 2, 3 (1995).
- [10] D. R. Hayes, *Leonard Carlitz (1907–1999)*, Notices Amer. Math. Soc. 48 (2001), 1322–1324.
- [11] B. Jones and S. Chowla, *Proceedings of the 1963 Number Theory Conference*, University of Colorado, Boulder, Colorado, August 5–24, 1963, with support of the National Science Foundation.

3. Henry W. Gould. Leonard Carlitz was a remarkable man. He was a modest, kind, and gentle man, totally ethical, vastly knowledgeable in the literature of his subject, enormously energetic, and unstintingly generous and helpful to his students. He was amazingly prolific with over 770 publications.

I first began reading journal articles by Leonard Carlitz in 1947 when I was an undergraduate. I had begun to study series and special number sequences in high school in 1945, and was amazed at what Carlitz was doing in these areas. I determined to learn from him and in 1951 or 1952 I sent him a letter with examples of identities and conjectures I had worked out. He responded graciously, somewhat in the manner that G. H. Hardy had responded to Ramanujan, expressing his great pleasure at my interest in mathematics, telling me some of my results were new but that many were already known, and inviting me to visit him at Duke University to discuss these things.

Thus I made a bus trip from Charlottesville, Va. to Duke for a week to meet him. That was how he came to be my mentor for the next many decades.

Over some years I observed Carlitz at work whenever I visited. His office door seemed to be frequently open for students to come and discuss ideas, and he would often roam about the mathematics reading room talking to students about their work. Yet he found time to go to concerts and basketball

games. His desk was piled two feet high with manuscripts, yet he could find one immediately.

Leonard Carlitz had a vast knowledge of the literature in his areas of interest. I recall an occasion when I asked him about a long paper by Gegenbauer published in the 1800's, and he replied that, yes, that was where Gegenbauer gave some 85 formulas for some function or other, and I knew Carlitz was correct because I had read the paper myself. He could lead me to the library, and without checking any book or paper, pull out journals to show me certain papers.

Carlitz and I exchanged many dozens of letters over the years and we talked frequently by telephone about mathematics.

The remarkable ability of Carlitz to write a paper without having to revise needs to be noted. This I think is the principal reason he was able to publish over twenty papers a year for decades. For some years he had the excellent typing service of Jane Culver who would type from his handwritten manuscripts. Leonard sometimes sent me an original manuscript which never differed from the published result. He seemed to be possessed of that rare skill to set down ideas and formulas which were correct the first time. Just after the end of World War II Carlitz had 45 papers in print in one year.

Dr. Carlitz was enormously generous and helpful to students. I remember a student asked him for help with a paper he was writing and Carlitz gave him some hints, and this went on for a couple of weeks until Carlitz indicated that now the student had enough material to make a nice paper. The student wrote the paper with the byline stating "by L. Carlitz and Joe Jones". Carlitz sent the paper to an editor, and in due time the paper was published "by Joe Jones".

I know that I am indebted to Carlitz for many hints, lemmas and simplifications of tedious proofs in my own work.

Leonard was very active physically. Although 20 years my senior he could easily outwalk me. At a conference in Virginia Polytechnic Institute in 1974, Carlitz was the oldest participant but certainly was as alert and keen as anyone there half his age or less.

Carlitz was a man of principle, adamantly refusing to be bullied by any unethical dealings or arrogant incompetence. I remember once when he visited me at West Virginia University we were sitting in the office of a certain administrator. Carlitz was annoyed and whispered in my ear, "Get me out of here; this man is insane." We quietly and graciously made our exit.

The most exasperating event that ever upset Leonard Carlitz was in 1974 when the editor of the *Duke Mathematical Journal* was replaced and a new editor appointed in a way that Carlitz felt was inappropriate. This intrusion from outside the *Journal* was a radical change since, from the founding in 1935 any changes in the management of the *Journal* had been instituted by

the editors themselves. Carlitz, who had been an editor for 35 years, was opposed to this treatment of the Journal and felt that he had been assured that this change would not be made. He was very upset, and resigned as an editor in protest.

Finally, a personal note. When I was married in 1969, Leonard and Clara Carlitz gave us a wedding present which has always had a distinctive and useful function in my home. Such was the friendship of this wonderful man and mentor.

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*Received on 14.4.2011
and in revised form on 16.11.2011*

(6671)

The publications of Leonard Carlitz

Introduction. In preparing for the publication of the “Collected Papers of Leonard Carlitz”, Professor Carlitz suggested the following mathematicians who agreed to help in the editorial work (an asterisk here indicates *deceased*): Waleed Al-Salam*, University of Alberta; Joel V. Brawley, Clemson University; John Brillhart (main editor), University of Arizona; Henry W. Gould, West Virginia University; David Hayes*, University of Massachusetts; Basil Gordon*, UCLA; Theresa P. Vaughan*, University of North Carolina; Albert Leon Whiteman*, University of Southern California.

The first task of the editors was to produce an accurate bibliography from the somewhat disorderly and incomplete publication records that had been kept by graduate assistants and secretarial help. This was a quite pleasant job of collecting reprints and information from various sources that lasted about a year. When it was finished the total count was 771 published papers, and later another publication of a chapter of his class notes (772) which was published and dedicated to Carlitz fortunately during his lifetime, and an unpublished manuscript (773). Each reference was ultimately verified by examining the published paper itself.

It was felt by the editors that it might be a worthwhile, though a somewhat difficult job, to separate the 771 papers into subcollections by topic and Professor Carlitz agreed. He thus gave us an initial collection of categories from which we ultimately came up with the 15 categories listed below.

Although many of the papers could have been listed in more than one category, we decided it would be much simpler to list each paper in just one category, introducing subcategories in some cases. Thus, a capital letter for the assigned category is part of the title of each paper in the bibliography, with a subcategory indicated following the letter. The number of papers in each category or subcategory is indicated by a number in parentheses, while parentheses surrounding several paper numbers within a category indicates the papers are related in some way.

We have carried this process to a certain point, but the results could easily be revised to good effect. We hope these adjuncts to the bibliography will be helpful in using this extraordinary and wonderful collection of work.

The 15 categories:

- A. Algebraic numbers (18).**
- B. Bernoulli, Euler, Stirling numbers and polynomials (80).**
- C. Combinatorics (130).**
- D. Dedekind sums (21).**
- E. Eulerian numbers and polynomials (19).**
- F. Finite fields (92).**
- G. Geometric inequalities (9).**
- I. Rogers–Ramanujan identities (5).**
- K. Kummer’s congruence (18).**

N. Number theory (151).

P. Polynomials and functions over finite fields (32).

R. Arithmetic properties of polynomials and power series (19).

S. Special functions (162).

X. Miscellaneous (7).

Z. Staudt–Clausen over \mathbf{Z} (9).

The category lists

A. Algebraic numbers (18): 2, 3, 13, 64, 79, 87, 105, 116, 122, 140, 153, 162, 168, 291, 325, 334, 462, 509.

B. Bernoulli, Euler, Stirling numbers and polynomials (80): 1, 7, 33, 34, 46, 52, 59, 61, 62, 63, 68, 73, 76, 77, 85, 86, 99, 100, 101, 103, 107, 111, 120, 125, 135, 139, 143, 197, 229, 237, 242, 246, 251, 252, 259, 260, 271, 281, 292, 302, 320, 331, 336, 337, 351, 380, 387, 421, 440, 444, 449, 451, 460, 498, 499, 513, 517, 562, 569, 571, 581, 604, 636, 639, 653, 681, 684, 692, 699, 704, 733, 734, 750, 752, 754, 758, 759, 762, 763, 765.

C. Combinatorics (130): 88, 90, 104, 112, 113, 144, 157, 164, 181, 192, 289, 322, 359, 364, 373, 374, 378, 388, 396, 398, 411, 412, 426, 428, 430, 433, 436, 438, 441, 443, 448, 457, 472, 475, 476, 477, 480, 481, 484, 486, 492, 493, 494, 496, 506, 512, 529, 531, 541, 556, 559, 561, 566, 567, 568, 577, 578, 579, 580, 582, 588, 590, 591, 593, 595, 596, 598, 609, 610, 611, 612, 613, 615, 618, 620, 624, 625, 627, 629, 631, 632, 633, 637, 648, 649, 658, 661, 664, 666, 668, 669, 671, 672, 678, 679, 682, 683, 688, 696, 697, 698, 700, 702, 703, 706, 707, 708, 712, 713, 716, 719, 720, 721, 722, 723, 727, 730, 736, 737, 739, 740, 741, 745, 748, 749, 753, 755, 761, 764, 771.

C1. (a) Simon Newcomb's problem (16): 632 (expository, permutations, and sequences); 610, 620, 625, 631, 666, 679, 707, 748 (permutations); 580, 582, 609, 637, 688 (sequences); 476, 612 (permutations and sequences in one paper); **(b) Compositions (6):** 588, 682, 706, 713, 739, 740 (N.B. 588 and 713 are about partitions with restrictions on the order... which makes them like compositions.).

C2. Partitions (19): 112, 144, 164, 378, 428, 457, 481 (ordinary partitions); 472, 486, 561, 591, 664, 669 (plane partitions); 683 (set partitions); 88, 90, 104, 411, 433 (others).

C3. Permutations (10): 672 (expository); (529, 730), 629, 661, 668, 702, (723, 755, 761).

C4. Sequences (11): (492, 556, 567, 568, 595, 658), (541, 593, 697, 719, 722).

C5. Arrays (12): 181, 374, 531 (graphs); 412, 441, 443, 566, 615 (two-line arrays); 578, 633 (rectangular arrays); 596, 678 (triangular arrays).

C6. Identities, formulas, and recurrences (33): 113, 364, 388, 494, 559, 577, (396, 613) (q -identities); 157, (192, 359, 579, 598), 289, 496, 649, 703, 712, (720, 721), 745, 749, 764 (identities and formulas); (373, 627, 696, 716, 736), 480, 493, 648, 708, 727 (recurrences, etc.).

C7. (a) Brock identity and binomial coefficients (11): 430, 438, 448, 475, 484, 506, 512, 618, 671, 741, 771. **(b) Fibonacci numbers (5):** 590, 611, 698, 700, 753.

C8. Miscellaneous (7): 322, 398, 426, 436, 477, 624, 737.

D. Dedekind sums (21): 81, 93, 94, 124, 141, 179, 422, 434, 447, 502, 630, 644, 651, 667, 670, 673, 676, 726, 732, 747, 766.

E. Eulerian numbers and polynomials (19): 82, 145, 254, 279, 370, 386, 395, 414, 570, 602, 607, 646, 652, 654, 717, 718, 728, 738, 744.

F. Finite fields F (92): 20, 21, 25, 43, 51, 57, 58, 65, 66, 67, 70, 75, 78, 91, 96, 102, 106, 110, 114, 115, 119, 123, 127, 130, 131, 133, 137, 138, 146, 151, 155, 156, 166, 167, 170, 171, 177, 186, 188, 191, 194, 195, 205, 209, 219, 293, 317, 332, 335, 342, 345, 354, 357, 361, 366, 367, 382, 390, 393, 394, 437, 458, 469, 485, 491, 495, 501, 523, 524, 525, 547, 574, 599, 603, 605, 621, 623, 638, 650, 660, 662, 674, 691, 693, 694, 695, 705, 715, 757, 767, 769, 772.

F1. Exponential sums (2): 209, 757.

F2. Permutations (9): 106, 293, 342, 345, 366, 394, 574, 603, 715.

F3. Factorizations (4): 21, 25, 547, 693.

F4. Matrices over F (16): 75, (119, 123), 130, 151, 156, 167, 188, 367, 491, 605, 621, 623, 638, 662, 705.

F5. Polynomials over F (15): 20, 43, 51, 58, 65, 170, 317, 332, 393, 495, 501, 674, 694, 767, 769.

F6. Equations over F (20): 67, 91, 96, 114, 115, 127, 133, 137, 138, 146, 155, 166, 171, 186, 194, 195, 335, 458, 469, 485.

F7. Primitive roots in F (5): 57, (66, 70), 110, 131.

F8. Partitions (2): 78, 102,

F9. Correspondences in F (3): (650, 660), 695.

F10. Surfaces over F (2): 205, 219.

F11. Miscellaneous (14): 177, 191, 354, 357, 361, (382, 437), 390, 523, (524, 525), 599, 691, 772. (N.B. 772 is Chapter 19 from Carlitz's classroom notes.)

G. Geometric inequalities (9): 404, 418, 450, 479, (557, 597, 606), 572, 573.

I. Rogers–Ramanujan identities (5): 230, 238, 442, 510, 516.

K. Kummer's congruence (18): 71, 72, 83, 126, 134, 142, 150, 175, 244, 249, 257, 284, 290, 297, 298, 316, 376, 417.

N. Number theory (151): 5, 8, 9, 11, 12, 15, 16, 23, 24, 53, 55, 84, 92, 95, 97, 98, 109, 117, 118, 129, 136, 147, 152, 154, 159, 160, 169, 172, 178, 184, 187, 189, 190, 193, 199, 201, 203, 207, 215, 216, 218, 235, 236, 247, 248, 250, 255, 258, 261, 262, 264, 266, 267, 268, 269, 270, 274, 275, 276, 278, 282, 283, 286, 294, 295, 299, 300, 303, 319, 321, 327, 333, 338, 356, 368, 369, 381, 383, 397, 400, 401, 402, 403, 405, 407, 415, 420, 423, 427, 429, 431, 432, 435, 439, 445, 446, 453, 454, 461, 463, 467, 468, 470, 471, 474, 478, 483, 487, 488, 490, 503, 518, 519, 521, 527, 528, 530, 534, 540, 542, 543, 544, 549, 552, 584, 585, 586, 587, 592, 594, 600, 614, 616, 619, 626, 634, 640, 641, 642, 647, 655, 677, 701, 711, 714, 724, 731, 735, 742, 746, 768.

P. Polynomials and functions over finite fields (32): 4, 6, 10, 14, 17, 18, 19, 22, 26, 27, 28, 29, 30, 31, 32, 36, 37, 38, 39, 40, 41, 42, 44, 45, 47, 69, 180, 182, 277, 318, 379, 665.

P1. Partition problems for polynomials (11): 14, 18, 26, 29, 41, 42, 44, 45, 182, 379, 665.

P2. Cyclotomic function fields (3): 17, 28, 30.

P3. Staudt–Clausen for $GF(q, x)$ (3): 27, 32, 318.

P4. Arithmetic of polynomials (4): 4, 6, 10, 36.

P5. Miscellaneous (11): 19, 22, 31, (37, 38), 39, 40, 47, 69, 180, 277.

R. Arithmetic properties of polynomials and power series (19): 48, 50, 60, 80, 132, 149, 158, 163, 183, 220, 222, 223, 232, 239, 253, 263, 287, 350, 522.

S. Special functions (162): 54, 74, 89, 121, 148, 161, 165, 173, 176, 196, 202, 204, 206, 208, 210, 211, 212, 213, 214, 217, 221, 224, 225, 226, 227, 228, 231, 233, 234, 240, 241, 243, 245, 256, 265, 272, 273, 280, 288, 296, 301, 304, 305, 306, 307, 308, 309, 310, 311, 312, 313, 314, 315, 323, 324, 326, 328, 329, 330, 339, 340, 341, 343, 344, 346, 347, 348, 349, 352, 353, 355, 358, 360, 362, 363, 365, 371, 372, 375, 377, 384, 385, 389, 391, 392, 399, 406, 408, 409, 410, 413, 416, 424, 425, 452, 455, 456, 459, 464, 465, 466, 473, 482, 489, 497, 500, 504, 505, 511, 514, 515, 520, 526, 533, 535, 536, 537, 538, 539, 545, 546, 548, 550, 551, 553, 554, 555, 558, 560, 563, 564, 565, 575, 583, 589, 601, 608, 617, 622, 628, 643, 645, 656, 657, 659, 663, 675, 680, 685, 686, 687, 689, 690, 709, 710, 725, 729, 743, 751, 756, 760, 770.

X. Miscellaneous (7): 108, 419, 507, 508, 532, 576, 635.

Z. Staudt–Clausen over \mathbf{Z} (9): 35, 49, 56, 128, 174, 185, 198, 200, 285.

The bibliography

1. B *On a class of finite sums*, Amer. Math. Monthly 37 (1930), 472–479. J56,902
2. A *On Galois fields of certain types*, Trans. Amer. Math. Soc. 32 (1930), 451–472.
3. A *On a function connected with a cubic field*, Bull. Amer. Math. Soc. 37 (1931), 73–75. J57,229 Z1,128
4. P4 *The arithmetic of polynomials in a Galois field*, Proc. Nat. Acad. Sci. USA 17 (1931), 120–122. J57,171 Z1,124
5. N *A problem in additive arithmetic*, Quart. J. Math. Oxford 2 (1931), 97–106. J57,214 Z2,14
6. P4 *The arithmetic of polynomials in a Galois field*, Amer. J. Math. 54 (1932), 39–50. J58,150 Z3,195
7. B *On arrays of numbers*, *ibid.* 54 (1932), 739–752. J58,437 Z5,341
8. N *Note on Diophantine automorphisms*, Bull. Amer. Math. Soc. 38 (1932), 246–250. J58,119
9. N *New Diophantine automorphisms*, *ibid.* 38 (1932), 271–276. J58,119 Z4,200
10. P4 *On polynomials in a Galois field*, *ibid.* 38 (1932), 736–744. J58,150 Z5,387
11. N *On a problem in additive arithmetic II*, Quart. J. Math. Oxford 3 (1932), 273–290. J58,185 Z6,104
12. N *On a theorem of higher reciprocity*, Bull. Amer. Math. Soc. 39 (1933), 155–160. J59,166 Z6,292
13. A *On Abelian fields*, Trans. Amer. Math. Soc. 35 (1933), 122–136. J59,188 Z6,102
14. P1 *On the representation of a polynomial in a Galois field as the sum of an even number of squares*, *ibid.* 35 (1933), 397–410. J59,166 Z6,389
15. N *A theorem on higher congruences*, Bull. Amer. Math. Soc. 41 (1935), 844–846. J61,1043 Z13,52
16. N *On certain higher congruences*, *ibid.* 41 (1935), 907–914. J61,1043 Z13,52

17. P2 *On certain functions connected with polynomials in a Galois field*, Duke Math. J. 1 (1935), 137–168. J61,127 Z12,49
18. P1 *On the representation of a polynomial in a Galois field as the sum of an odd number of squares*, *ibid.* 1 (1935), 298–315. J61,126 Z12,193
19. P5 *On polynomials in a Galois field: some formulae involving divisor functions*, Proc. London Math. Soc. (2) 38 (1935), 116–124. J60,112 Z10,53
20. F5 *On certain equations in relative-cyclic fields*, Duke Math. J. 2 (1936), 650–659. J62,1119 Z15,292
21. F3 *On factorable polynomials in several indeterminates*, *ibid.* 2 (1936), 660–670. J62,1118 Z15,293
22. P5 *Criteria for certain higher congruences*, Amer. J. Math. 59 (1937), 618–628. J63,103 Z17,4
23. N *On certain arithmetic functions of several arguments*, Bull. Amer. Math. Soc. 43 (1937), 109–114. J63,109 Z16,154
24. N *An arithmetic function*, *ibid.* 43 (1937), 271–276. J63,102 Z17,53
25. F3 *Some formulas for factorable polynomials in several indeterminates*, *ibid.* 43 (1937), 299–304. J63,102 Z16,148
26. P1 *Sums of squares of polynomials*, Duke Math. J. 3 (1937), 1–7. J63,104 Z16,148
27. P3 *An analogue of the von Staudt–Clausen theorem*, *ibid.* 3 (1937), 503–517. J63,879 Z17,195
28. P2 *A class of polynomials*, Trans. Amer. Math. Soc. 43 (1938), 167–182. J64,93 Z18,198
29. P1 *Some sums involving polynomials in a Galois field*, Duke Math. J. 5 (1939), 941–947. J65,114 MR1,101 Z22,198
30. P2 *A set of polynomials*, *ibid.* 6 (1940), 486–504. J66,55 MR1,324 Z26,53
31. P5 *Linear forms and polynomials in a Galois field*, *ibid.* 6 (1940), 735–749. J66,55 MR2,122 Z24,5
32. P3 *An analogue of the Staudt–Clausen theorem*, *ibid.* 7 (1940), 62–67. J66,56 MR2,146 Z24,244
33. B *An analogue of the Bernoulli polynomials*, *ibid.* 8 (1941), 405–412. J67,60 MR2,342 Z25,98
34. B *Generalized Bernoulli and Euler numbers*, *ibid.* 8 (1941), 585–589. MR3,67
35. Z *The coefficients of the reciprocal of a series*, *ibid.* 8 (1941), 689–700. MR3,147
36. P4 *Some topics in the arithmetic of polynomials*, Bull. Amer. Math. Soc. 48 (1942), 679–691. MR4,35
37. P5 *The reciprocal of certain series*, Duke Math. J. 9 (1942), 234–243. MR3,271
38. P5 *The reciprocal of certain types of Hurwitz series*, *ibid.* 9 (1942), 629–642. MR4,131
39. P5 (with E. Cohen) *Divisor functions of polynomials in a Galois field*, *ibid.* 14 (1947), 13–20. MR8,503 Z30,103
40. P5 (with E. Cohen) *Cauchy products of divisor functions in $GF[p^n, x]$* , *ibid.* 14 (1947), 707–722. MR9,176
41. P1 *The singular series for sums of squares of polynomials*, *ibid.* 14 (1947), 1105–1120. MR9,337 Z32,2
42. P1 *Representations of arithmetic functions in $GF[p^n, x]$* , *ibid.* 14 (1947), 1121–1137. MR9,337 Z32,3
43. F5 *A problem of Dickson's*, *ibid.* 14 (1947), 1139–1140. MR9,337 Z31,105
44. P1 (with E. Cohen) *The number of representations of a polynomial in certain special quadratic forms*, *ibid.* 15 (1948), 219–228. MR9,414 Z30,105
45. P1 *Representations of arithmetic functions in $GF[p^n, x]$. II*, *ibid.* 15 (1948), 795–801. MR10,183 Z32,3

46. B *q*-Bernoulli numbers and polynomials, *ibid.* 15 (1948), 987–1000. MR10,283 Z32,3
47. P5 Finite sums and interpolation formulas over $GF[p^n, x]$, *ibid.* 15 (1948), 1001–1012. MR10,283 Z32,3
48. R Some properties of Hurwitz series, *ibid.* 16 (1949), 285–295. MR10,593 Z41,174
49. Z Congruences for the coefficients of the Jacobi elliptic functions, *ibid.* 16 (1949), 297–302. MR10,593 Z38,179
50. R Hurwitz series: Eisenstein criterion, *ibid.* 16 (1949), 303–308. MR10,594 Z41,174
51. F5 Some applications of a theorem of Chevalley, *ibid.* 18 (1951), 811–819. MR13,538 Z45,13
52. B Note on a paper of Shanks, *Amer. Math. Monthly* 59 (1952), 239–241. MR13,899 Z47,16
53. N Note on an arithmetic function, *ibid.* 59 (1952), 386–387. MR14,22 Z49,163
54. S Note on a paper of Bagchi and Chatterjee, *ibid.* 59 (1952), 683–684. MR14,478
55. N Independence of arithmetic functions, *Duke Math. J.* 19 (1952), 65–70. MR13,725 Z46,270
56. Z Congruences for the coefficients of hyperelliptic and related functions, *ibid.* 19 (1952), 329–337. MR13,913 Z48,30
57. F7 Sums of primitive roots in a finite field, *ibid.* 19 (1952), 459–469. MR14,357 Z49,32
58. F5 A problem of Dickson, *ibid.* 19 (1952), 471–474. MR14,539 Z49,32
59. B Note on irreducibility of the Bernoulli and Euler polynomials, *ibid.* 19 (1952), 475–481. MR14,163 Z47,254
60. R Congruences for the ménage polynomials, *ibid.* 19 (1952), 549–552. MR14,346 Z48,7
61. B Some theorems on Bernoulli numbers of higher order, *Pacific J. Math.* 2 (1952), 127–139. MR14,138 Z46,40
62. B A divisibility property of the Bernoulli polynomials, *Proc. Amer. Math. Soc.* 3 (1952), 604–607. MR14,539 Z49,163
63. B A note on Bernoulli numbers and polynomials of higher order, *ibid.* 3 (1952), 608–613. MR14,539 Z49,163
64. A A note on common index divisors, *ibid.* 3 (1952), 688–692. MR14,357 Z47,273
65. F5 A theorem of Dickson on irreducible polynomials, *ibid.* 3 (1952), 693–700. MR14,250 Z48,27
66. F7 Some problems involving primitive roots in a finite field, *Proc. Nat. Acad. Sci. USA* 38 (1952), 314–318. MR14,250 *Errata*, *ibid.* 38 (1952), 618.
67. F6 The number of solutions of certain equations in a finite field, *ibid.* 38 (1952), 515–519. MR13,915 Z49,32
68. B Note on a formula of Szily, *Scripta Math.* 18 (1952), 249–253. MR14,642 Z50,9
69. P5 Diophantine approximation in fields of characteristic p , *Trans. Amer. Math. Soc.* 72 (1952), 187–208. MR14,23 Z46,48
70. F7 Primitive roots in a finite field, *ibid.* 73 (1952), 373–382. MR14,539 Z48,273
71. K Some congruences for the Bernoulli numbers, *Amer. J. Math.* 75 (1953), 163–172. MR14,539 Z50,39
72. K Kummer congruences and the Schur derivative, *ibid.* 75 (1953), 699–706. MR15,200 Z51,277
73. B Some congruences of Vandiver, *ibid.* 75 (1953), 707–712. MR15,201 Z51,276
74. S Note on a formula of Grosswald, *Amer. Math. Monthly* 60 (1953), 181. MR14,642
75. F4 A note on orthogonal matrices, *ibid.* 60 (1953), 253–255. MR14,716 Z51,9
76. B Some sums containing Bernoulli functions, *ibid.* 60 (1953), 475–476. MR15,104
77. B A theorem of Glaisher, *Canad. J. Math.* 5 (1953), 306–316. MR14,1064 Z52,38

78. F8 *Weighted quadratic partitions over a finite field*, *ibid.* 5 (1953), 317–323.
MR15,508 Z52,38
79. A *The class number of an imaginary quadratic field*, *Comment. Math. Helv.* 27 (1953), 338–345. MR15,404 Z52,34
80. R *Congruences connected with the power series expansions of the Jacobi elliptic functions*, *Duke Math. J.* 20 (1953), 1–12. MR14,621 Z50,39
81. D *Some sums analogous to Dedekind sums*, *ibid.* 20 (1953), 161–171. MR14,847 Z53,359
82. E (with J. Riordan) *Congruences for Eulerian numbers*, *ibid.* 20 (1953), 339–343.
MR15,10 Z51,276
83. K *Some theorems on Kummer's congruences*, *ibid.* 20 (1953), 423–431. MR15,10 Z51,276
84. N *A theorem on congruences*, *J. Indian Math. Soc.* 17 (1953), 43–45. MR14,951 Z50,266
85. B *Note on a theorem of Glaisher*, *J. London Math. Soc.* 28 (1953), 245–246.
MR14,726 Z50,267
86. B *The multiplication formulas for the Bernoulli and Euler polynomials*, *Math. Mag.* 27 (1953), 59–64. MR15,308 Z51,307
87. A *A theorem of Stickelberger*, *Math. Scand.* 1 (1953), 82–84. MR15,13 Z50,267
88. C2 *A reciprocity formula for weighted quadratic partitions*, *ibid.* 1 (1953), 286–288.
MR15,509 Z52,39
89. S *A functional equation for the Weierstrass ζ -function*, *Math. Student* 21 (1953), 43–45. MR15,324 Z51,311
90. C2 *Weighted quadratic partitions (mod p^r)*, *Math. Z.* 59 (1953), 40–46. MR15,777 Z52,39
91. F6 *Some special equations in a finite field*, *Pacific J. Math.* 3 (1953), 13–24.
MR14,848 Z52,37
92. N *Some theorems on the Schur derivative*, *ibid.* 3 (1953), 321–332. MR14,951 Z50,38
93. D *Some theorems on generalized Dedekind sums*, *ibid.* 3 (1953), 513–522. MR15,12 Z57,37
94. D *The reciprocity theorem for Dedekind sums*, *ibid.* 3 (1953), 523–527. MR15,12 Z57,37
95. N *Some hypergeometric congruences*, *Portugal. Math.* 12 (1953), 119–128.
MR15,507 Z52,38.
96. F6 *Note on a conjecture of André Weil*, *Proc. Amer. Math. Soc.* 4 (1953), 5–9.
MR14,848 Z50,265
97. N *Congruences connected with three-line Latin rectangles*, *ibid.* 4 (1953), 9–11.
MR14,726 Z50,38
98. N *Some sums connected with quadratic residues*, *ibid.* 4 (1953), 12–15. MR14,621 Z50,267
99. B *A note on Bernoulli and Euler numbers of order $\pm p$* , *ibid.* 4 (1953), 178–183.
MR14,1064 Z51,276
100. B *A note on the multiplication formulas for the Bernoulli and Euler polynomials*,
ibid. 4 (1953), 184–188. MR14,640 Z51,250
101. B *Remark on a formula for the Bernoulli numbers*, *ibid.* 4 (1953), 400–401.
MR14,973 Z50,9
102. F8 *A note on partitions in $GF[q, x]$* , *ibid.* 4 (1953), 464–469. MR14,952 Z53,219
103. B *Note on some formulas of Rodeja F.*, *ibid.* 4 (1953), 528–529. MR15,3 Z51,7
104. C2 *Note on some partition identities*, *ibid.* 4 (1953), 530–534. MR15,12

105. A *Note on the class number of real quadratic fields*, *ibid.* 4 (1953), 535–537. MR15,104 Z53,219
106. F2 *Permutations in a finite field*, *ibid.* 4 (1953), 538. MR15,3 Z52,37
107. B *A special congruence*, *ibid.* 4 (1953), 933–936. MR15,400 Z52,38
108. X *A note on Abelian groups*, *ibid.* 4 (1953), 937–938. MR15,503 Z52,261
109. N *The Schur derivative of a polynomial*, *Proc. Glasgow Math. Assoc.* 1 (1953), 159–163. MR15,404 Z52,37
110. F7 *Distribution of primitive roots in a finite field*, *Quart. J. Math. Oxford* (2) 4 (1953), 4–10. MR15,13 Z52,38
111. B *Some congruences for Bernoulli numbers of higher order*, *ibid.* 4 (1953), 112–116. MR14,1064 Z50,267
112. C2 *Note on some partition formulae*, *ibid.* 4 (1953), 168–172. MR15,201 Z53,26
113. C6 *Applications of some basic identities*, *ibid.* 4 (1953), 173–177. MR15,289 Z53,25
114. F6 *Invariantive theory of equations in a finite field*, *Trans. Amer. Math. Soc.* 75 (1953), 405–427. MR15,291 Z53,25
115. F6 *Pairs of quadratic equations in a finite field*, *Amer. J. Math.* 76 (1954), 137–154. MR15,404 Z56,37
116. A *Note on the cyclotomic polynomial*, *Amer. Math. Monthly* 61 (1954), 106–108. MR15,508 Z55,35
117. N *A note on Wolstenholme's theorem*, *ibid.* 61 (1954), 174–176. MR15,603
118. N *Congruences for the number of n -gons formed by n lines*, *ibid.* 61 (1954), 407–411. MR15,934 Z56,36
119. F4 *Representations by skew forms in a finite field*, *Arch. Math. (Basel)* 5 (1954), 19–31. MR15,777 Z56,17
120. B *Extension of a theorem of Glaisher and some related results*, *Bull. Calcutta Math. Soc.* 46 (1954), 77–80. MR16,570 Z56,268
121. S *Note on Legendre polynomials*, *ibid.* 46 (1954), 93–95. MR16,694 Z57,54
122. A *The first factor of the class number of a cyclic field*, *Canad. J. Math.* 6 (1954), 23–26. MR15,686 Z55,34
123. F4 *Representations by quadratic forms in a finite field*, *Duke Math. J.* 21 (1954), 123–137. MR15,604 Z55,13
124. D *A note on generalized Dedekind sums*, *ibid.* 21 (1954), 399–403. MR16,14 Z57,38
125. B (with F. R. Olson) *Some theorems on Bernoulli and Euler numbers of higher order*, *ibid.* 21 (1954), 405–421. MR15,934 Z56,36
126. K *Congruences for the solutions of certain difference equations of the second order*, *ibid.* 21 (1954), 669–679. MR16,113 Z56,267
127. F6 *Invariant theory of systems of equations in a finite field*, *J. Anal. Math.* 3 (1954), 382–413. MR16,115 Z56,32
128. Z *The coefficients of singular elliptic functions*, *Math. Ann.* 127 (1954), 162–169. MR15,604 Z55,270
129. N *Some formulas of Oltramare*, *Math. Mag.* 27 (1954), 189–194. MR15,685 Z57,36
130. F4 *A problem involving quadratic forms in a finite field*, *Math. Nachr.* 11 (1954), 135–142. MR15,778 Z56,17
131. F76 *Sums of primitive roots of the first and second kind in a finite field*, *ibid.* 12 (1954), 155–172. MR16,570 Z57,36
132. R *Congruence properties of the polynomials of Hermite, Laguerre and Legendre*, *Math. Z.* 59 (1954), 474–483. MR15,604 Z55,64
133. F6 *Certain special equations in a finite field*, *Monatsh. Math.* 58 (1954), 5–12. MR15,777 Z55,268

134. K *Congruence properties of special elliptic functions*, *ibid.* 58 (1954), 77–90. MR16,14
135. B *A note on Euler numbers and polynomials*, Nagoya Math. J. 7 (1954), 35–43. MR16,220 Z56,268
136. N *A note on modular invariants*, Nieuw Arch. Wisk. (3) 2 (1954), 28–31. MR15,603 Z55,248
137. F6 *The number of solutions of some special equations in a finite field*, Pacific J. Math. 4 (1954), 207–217. MR15,777 Z55,268
138. F6 *The number of solutions of some equations in a finite field*, Portugal. Math. 13 (1954), 25–31. MR16,115 Z56,268
139. B *A theorem of Ljunggren and Jacobsthal on Bernoulli numbers*, Proc. Amer. Math. Soc. 5 (1954), 34–37. MR15,507
140. A *Note on irregular primes*, *ibid.* 5 (1954), 329–331. MR15,778 Z58,37
141. D *Dedekind sums and Lambert series*, *ibid.* 5 (1954), 580–584. MR16,14 Z57,37
142. K *Congruence properties of the ménage polynomials*, Scripta Math. 20 (1954), 51–57. MR16,113 Z55,270
143. B *Hankel determinants and Bernoulli numbers*, Tôhoku Math. J. (2) 5 (1954), 272–276. MR15,777 Z55,270
144. C2 *Some partition formulas*, *ibid.* 6 (1954), 149–154. MR17,238 Z58,34
145. E *q -Bernoulli and Eulerian numbers*, Trans. Amer. Math. Soc. 76 (1954), 332–350. MR15,686 Z58,12
146. F6 *A special symmetric equation in a finite field*, Acta Math. Acad. Sci. Hungar. 6 (1955), 445–450. MR17,947 Z67,22
147. N *A special determinant*, Amer. Math. Monthly 62 (1955), 242–243. MR16,989 Z64,246
148. S *A note on Hermite polynomials*, *ibid.* 62 (1955), 646–647. MR17,363 Z66,52
149. R *The coefficients of the reciprocal of $J_0(x)$* , Arch. Math. (Basel) 6 (1955), 121–127. MR16,570 Z64,65
150. K *Congruences for generalized Bell and Stirling numbers*, Duke Math. J. 22 (1955), 193–205. MR16,999 Z65,272
151. F4 (with J. H. Hodges) *Representations by Hermitian forms in a finite field*, *ibid.* 22 (1955), 393–405. MR17,130 Z65,248
152. N *A note on power residues*, *ibid.* 22 (1955), 583–587. MR17,713 Z66,29
153. A *Note on the class number of quadratic fields*, *ibid.* 22 (1955), 589–593. MR17,713 Z66,27 *Errata*, *ibid.* 27 (1960), 629.
154. N *On the representation of an integer as the sum of twenty-four squares*, Indag. Math. 17 (1955), 504–506. MR17,240 Z68,40
155. F6 *The number of solutions of some equations in a finite field*, J. Math. Soc. Japan 7 (1955), 209–223. MR17,1059 Z66,291
156. F4 (with J. H. Hodges) *Distribution of bordered symmetric, skew, and Hermitian matrices in a finite field*, J. Reine Angew. Math. 195 (1955), 192–201. MR17,828 Z65,248
157. C6 *A kínai matematika történetének egy problémájáról* (On a problem of the history of Chinese mathematics), Mat. Lapok 6 (1955), 219–220. (English and Russian summaries.) MR17,460
158. R *Some arithmetic properties of the Olivier functions*, Math. Ann. 128 (1955), 412–419. MR16,677 Z65,272
159. N *An extension of Bauer's congruence*, Math. Nachr. 14 (1955), 183–191. MR17,1056 Z67,22
160. N (with F. R. Olson) *A problem in factorization of polynomials*, Math. Scand. 3 (1955), 28–30. MR17,120 Z64,250

161. S *Note on a q -identity*, *ibid.* 3 (1955), 281–282. MR17,1083 Z68,248
162. A *Some class number relations*, *Math. Z.* 62 (1955), 167–170. MR17,17 Z64,282
163. R *The coefficients of certain power series*, *Monatsh. Math.* 59 (1955), 188–193. MR17,127 Z68,38
164. C2 *Some partition formulas related to sums of squares*, *Nieuw Arch. Wisk.* (3) 3 (1955), 129–133. MR17,460 Z67,22
165. S *Note on the multiplication formulas for the Jacobi elliptic functions*, *Pacific J. Math.* 5 (1955), 169–176. MR16,1021 Z58,273
166. F6 *The number of solutions of certain types of equations in a finite field*, *ibid.* 5 (1955), 177–181. MR16,1089 Z64,278
167. F4 *The number of solutions of a special quadratic congruence*, *Portugal. Math.* 14 (1955), 9–14. MR17,460 Z65,272
168. A (with F. R. Olson) *Maillet's determinant*, *Proc. Amer. Math. Soc.* 6 (1955), 265–269. MR16,999 Z65,27
169. N *A special determinant*, *ibid.* 6 (1955), 270–272. MR16,999 Z65,27
170. F5 *On the number of distinct values of a polynomial with coefficients in a finite field*, *Proc. Japan Acad.* 31 (1955), 119–120. MR17,130 Z65,249
171. F6 (with H. H. Corson) *Some special equations in a finite field*, *Proc. Nat. Acad. Sci. USA* 41 (1955), 752–754. MR17,463 Z65,272
172. N *Note on a quartic congruence*, *Amer. Math. Monthly* 63 (1956), 569–571. MR18,379 Z71,269
173. S *Some polynomials related to theta functions*, *Ann. Mat. Pura Appl.* (4) 41 (1956), 359–373. MR17,1205 Z71,62
174. Z *A degenerate Staudt–Clausen theorem*, *Arch. Math. (Basel)* 7 (1956), 28–33. MR17,586 Z70,40
175. K *A note on Kummer's congruences*, *ibid.* 7 (1956), 441–445. MR19,120 Z77,51
176. S *On Jacobi polynomials*, *Boll. Un. Mat. Ital.* (3) 11 (1956), 371–381. MR18,477 Z73,288
177. F11 *Resolvents of certain linear groups in a finite field*, *Canad. J. Math.* 8 (1956), 568–579. MR18,377 Z73,10
178. N *Sets of primitive roots*, *Compos. Math.* 13 (1956), 65–70. MR18,642 Z71,269
179. D *A further note on Dedekind sums*, *Duke Math. J.* 23 (1956), 219–223. MR17,946 Z74,35
180. P5 *Class number formulas for quadratic forms over $GF[q, x]$* , *ibid.* 23 (1956), 225–235. MR19,253 Z72,28
181. C5 (with J. Riordan) *The number of labeled two-terminal series-parallel networks*, *ibid.* 23 (1956), 435–445. MR18,3 Z75,11
182. P1 *Weighted quadratic partitions over $GF[q, x]$* , *ibid.* 23 (1956), 493–505. MR18,875 Z72,267
183. R *The coefficients of $\sinh x/\sin x$* , *Math. Mag.* 29 (1956), 193–197. MR17,944 Z70,273
184. N *A special quartic congruence*, *Math. Scand.* 4 (1956), 243–246. MR19,837 Z77,51
185. Z *Arithmetic properties of elliptic functions*, *Math. Z.* 64 (1956), 425–434. MR17,1057 Z72,33
186. F6 (with H. H. Corson) *Some special equations in a finite field*, *Monatsh. Math.* 60 (1956), 114–122. MR18,16 Z70,272
187. N *A sum connected with quadratic residues*, *Nagoya Math. J.* 10 (1956), 1–7. MR18,111 Z73,28
188. F4 (with J. H. Hodges) *Distribution of matrices in a finite field*, *Pacific J. Math.* 6 (1956), 225–230. MR18,554

189. N *A note on Gauss' "Serierum singularium"*, Portugal. Math. 15 (1956), 9–12. MR18,717 Z72,266
190. N *A note on representations of quadratic forms*, *ibid.* 15 (1956), 79–81. MR18,719 Z71,269
191. F11 *A note on nonsingular forms in a finite field*, Proc. Amer. Math. Soc. 7 (1956), 27–29. MR17,712 Z70,17
192. C6 *The expansion of certain products*, *ibid.* 7 (1956), 558–564. MR19,29 Z73,10
193. N *A note on Gauss' sum*, *ibid.* 7 (1956), 910–911. MR18,286 Z72,266
194. F6 *The number of solutions of a particular equation in a finite field*, Publ. Math. Debrecen 4 (1956), 379–383. MR18,20 Z70,40
195. F6 *Solvability of certain equations in a finite field*, Quart. J. Math. Oxford (2) 7 (1956), 3–4. MR18,274 Z72,33
196. S *A special functional equation*, Riv. Mat. Univ. Parma 7 (1956), 211–233. Z74,295
197. B *A note on Bernoulli numbers of higher order*, Scripta Math. 22 (1956), 217–221. MR19,941 Z78,32
198. Z *An application of a theorem of Stickelberger*, Simon Stevin 31 (1956), 27–30. MR18,285 Z72,266
199. N *A formula connected with lattice points in a circle*, Abh. Math. Sem. Univ. Hamburg 21 (1957), 87–89. MR19,731 Z77,51
200. Z *A note on the Staudt–Clausen theorem*, Amer. Math. Monthly 64 (1957), 19–21. MR18,560 Z77,51
201. N *A determinant*, *ibid.* 64 (1957), 186–188. MR19,7 Z77,22
202. S *The product of certain polynomials analogous to the Hermite polynomials*, *ibid.* 64 (1957), 723–725. MR20#4021 Z80,273
203. N *Some theorems on polynomials*, Ark. Mat. 3 (1957), 351–353. MR18,713 Z77,261
204. S *On Laguerre and Jacobi polynomials*, Boll. Un. Mat. Ital. (3) 12 (1957), 34–40. MR19,409 Z78,57
205. F10 *The number of points on certain cubic surfaces over a finite field*, *ibid.* 12 (1957), 19–21. MR19,391 Z77,261
206. S (with W. A. Al-Salam) *A q -analog of a formula of Toscano*, *ibid.* 12 (1957), 414–417. MR19,954 Z79,95
207. N *Some cyclotomic determinants*, Bull. Calcutta Math. Soc. 49 (1957), 49–51. MR20#3812 Z84,15
208. S *Some polynomials of Touchard connected with the Bernoulli numbers*, Canad. J. Math. 9 (1957), 188–190. MR19,27 Z77,281
209. F1 (with S. Uchiyama) *Bounds for exponential sums*, Duke Math. J. 24 (1957), 37–41. MR18,563 Z88,39
210. S *A note on the Bessel polynomials*, *ibid.* 24 (1957), 151–162. MR19,27 Z84,66
211. S *Some polynomials related to theta functions*, *ibid.* 24 (1957), 521–527. MR19,849 Z79,95
212. S *A formula for the product of two Hermite polynomials*, J. London Math. Soc. 32 (1957), 94–97. MR18,730 Z77,72
213. S (with W. A. Al-Salam) *The expansion of certain products containing Bessel functions*, Matematiche (Catania) 12 (1957), 31–34. MR21#5031 Z163,308
214. S *The bilinear generating function for Hermite polynomials in several variables*, Math. Z. 68 (1957), 284–289. MR20#4022 Z82,287
215. N *A note on the irrational modular equation of order seven*, Nieuw Arch. Wisk. (3) 5 (1957), 143–145. MR20#5765 Z79,103

216. N *The singular series for a single square*, Portugal. Math. 16 (1957), 7–10. MR20#3837 Z80,34
217. S (with W. A. Al-Salam) *Generalized Turán expressions for certain hypergeometric series*, *ibid.* 16 (1957), 119–127. MR20#5307 Z89,45
218. N *Note on sums of four and six squares*, Proc. Amer. Math. Soc. 8 (1957), 120–124. MR18,874 Z79,65
219. F10 *A theorem of Dickson on nonvanishing cubic forms in a finite field*, *ibid.* 8 (1957), 975–977. MR19,731 Z80,264
220. R *Some arithmetic properties of the Legendre polynomials*, Proc. Cambridge Philos. Soc. 53 (1957), 265–268. MR19,132 Z87,37
221. S *A formula of Bateman*, Proc. Glasgow Math. Assoc. 3 (1957), 99–101. MR19,849 Z79,95
222. R (with W. A. Al-Salam) *Some finite summation formulas for the classical orthogonal polynomials*, Rend. Mat. Appl. (5) 16 (1957), 74–95. MR19,1171 Z192,152
223. R *Some arithmetic properties of the Legendre polynomials*, Acta Arith. 4 (1958), 99–107. MR20#3310 Z89,29
224. S (with W. A. Al-Salam) *Bessel polynomials and Bernoulli numbers*, Arch. Math. (Basel) 9 (1958), 412–415. MR21#3597 Z82,286
225. S *On some polynomials of Tricomi*, Boll. Un. Mat. Ital. (3) 13 (1958), 58–64. MR21#2078 Z81,66
226. S *Some biorthogonal q -polynomials in two variables*, *ibid.* 13 (1958), 555–557. MR20#7120 Z86,58
227. S1 (with W. A. Al-Salam) *Congruence properties of the classical orthogonal polynomials*, Duke Math. J. 25 (1958), 1–9. MR19,1172 Z89,28
228. S *Some orthogonal functions in several variables related to theta functions*, *ibid.* 25 (1958), 311–319. MR20#3311 Z81,66
229. B *Expansions of q -Bernoulli numbers*, *ibid.* 25 (1958), 355–364. MR20#2480 Z102,32
230. I *A note on the Rogers–Ramanujan identities*, Math. Nachr. 17 (1958), 23–26. MR20#1865 Z84,61
231. S1 (with W. A. Al-Salam) *Finite summation formulas and congruences for Legendre and Jacobi polynomials*, Monatsh. Math. 62 (1958), 108–118. MR19,1172 Z87,37
232. R *Note on a paper of Dieudonné*, Proc. Amer. Math. Soc. 9 (1958), 32–33. MR20#21 Z85,28
233. S *Note on orthogonal polynomials related to theta functions*, Publ. Math. Debrecen 5 (1958), 222–228. MR20#5308 Z80,273
234. S *A note on some special polynomials*, Rev. Mat. Hisp.-Amer. (4) 18 (1958), 140–145. MR24A#1270 Z83,61
235. N *Note on a theorem of S. Uchiyama*, Acta Arith. 5 (1959), 289–292. MR22#694 Z96,261
236. N *Some cyclotomic matrices*, *ibid.* 5 (1959), 293–308. MR22#2578 Z112,271
237. B *A property of the Bernoulli numbers*, Amer. Math. Monthly 66 (1959), 714–715.
238. I *Some formulas related to the Rogers–Ramanujan identities*, Ann. Mat. Pura Appl. (4) 47 (1959), 243–251. MR22#1704 Z117,289
239. R *Congruence properties of Hermite and Laguerre polynomials*, Arch. Math. (Basel) 10 (1959), 460–465. MR22#689 Z91,42
240. S *A generating function for the product of two ultraspherical polynomials*, Boll. Un. Mat. Ital. (3) 14 (1959), 6–9. MR21#6451 Z85,61

241. S *Some integral equations satisfied by theta functions*, *ibid.* 14 (1959), 489–492. MR22#2722 Z94,57
242. B *Some arithmetic properties of generalized Bernoulli numbers*, *Bull. Amer. Math. Soc.* 65 (1959), 68–69. MR21#13383 Z86,32
243. S *Note on a formula of Rainville*, *Bull. Calcutta Math. Soc.* 51 (1959), 132–133. MR22#6904 Z97,56
244. K *Composition of sequences satisfying Kummer's congruences*, *Collect. Math.* 11 (1959), 137–152. MR22#4671 Z96,27
245. S *Bernoulli and Euler numbers and orthogonal polynomials*, *Duke Math. J.* 26 (1959), 1–15. MR21#2761 Z85,287
246. B (with W. A. Al-Salam) *Bernoulli numbers and Bessel polynomials*, *ibid.* 26 (1959), 437–445. MR21#4256 Z92,292
247. N *Some arithmetic properties of a special sequence of polynomials*, *ibid.* 26 (1959), 583–590. MR22#117 Z95,262
248. N *Some congruences involving binomial coefficients*, *Elem. Math.* 14 (1959), 11–13. MR20#6384 Z85,28
249. K *A special case of Kummer's congruence (mod 2^e)*, *Enseign. Math.* (2) 5 (1959), 171–175. MR23A#1587 Z104,267
250. N *A note on integral-valued polynomials*, *Indag. Math.* 21 (1959), 294–299. MR21#7178 Z100,271
251. B *Note on the integral of the product of several Bernoulli polynomials*, *J. London Math. Soc.* 34 (1959), 361–363. MR21#5750 Z86,58
252. B *Arithmetic properties of generalized Bernoulli numbers*, *J. Reine Angew. Math.* 202 (1959), 174–182. MR22#20 Z125,22
253. R *Note on the coefficients of $\cosh x/\cos x$* , *Math. Mag.* 32 (1959), 132, 136. MR21#2754 Z95,262
254. E *Eulerian numbers and polynomials*, *ibid.* 32 (1959), 247–260. MR21#3596 Z92,66
255. N *Note on a formula of Hermite*, *ibid.* 33 (1959), 7–11. MR21#5602 Z92,42
256. S *Some q -polynomials in two variables*, *Math. Nachr.* 17 (1959), 224–238. MR22#788 Z92,66
257. K *Kummer's congruences (mod 2^r)*, *Monatsh. Math.* 63 (1959), 394–400. MR21#6350 Z103,26
258. N *An arithmetic sum connected with the greatest integer function*, *Norske Vid. Selsk. Forh. Trondheim* 32 (1959), 24–30. MR23A#2362 Z112,272
259. B *Multiplication formulas for products of Bernoulli and Euler polynomials*, *Pacific J. Math.* 9 (1959), 661–666. MR21#7317 Z89,280 *Errata*, *ibid.* 10 (1960), 1479.
260. B (with W. A. Al-Salam) *Some determinants of Bernoulli, Euler and related numbers*, *Portugal. Math.* 18 (1959), 91–99. MR23A#848 Z93,15
261. N *Quadratic residues and Tchebycheff polynomials*, *ibid.* 18 (1959), 193–198. MR23A#2366 Z98,37
262. N *A determinant connected with Fermat's last theorem*, *Proc. Amer. Math. Soc.* 10 (1959), 686–690. MR21#7182 Z100,269
263. R *A congruence satisfied by the theta-constant θ_3* , *ibid.* 10 (1959), 912–916. MR22#690 Z95,262
264. N *Some finite summation formulas of arithmetic character*, *Publ. Math. Debrecen* 6 (1959), 262–268. MR22#1549 Z97,264
265. S *A class of symmetric q -polynomials*, *Riv. Mat. Univ. Parma* 10 (1959), 183–200. MR27#4969 Z102,56

266. N *Congruence properties of certain polynomial sequences*, Acta Arith. 6 (1960), 149–158. MR22#7968 Z104,36
267. N *Some finite summation formulas of arithmetic character II*, Acta Math. Acad. Sci. Hungar. 11 (1960), 15–22. MR22#2579 Z103,273
268. N *A note on exponential sums*, Acta Sci. Math. (Szeged) 21 (1960), 135–143. MR23A#2388 Z96,30
269. N (with J. Levine) *An identity of Cayley*, Amer. Math. Monthly 67 (1960), 571–573. MR22#6823 Z104,9
270. N *Congruences for the number of n -gons formed by n lines*, *ibid.* 67 (1960), 961–966. MR23A#813 Z116,34
271. B *A property of the Bernoulli numbers*, *ibid.* 67 (1960), 1011–1012.
272. S *On the complete elliptic integral of the third kind*, Boll. Un. Mat. Ital. (3) 15 (1960), 373–378. MR23A#2368 Z97,29
273. S *On a formula of Kogbetliantz*, *ibid.* 15 (1960), 409–413. MR30#1328 Z102,57
274. N *Arithmetic properties of certain polynomial sequences*, Bull. Amer. Math. Soc. 66 (1960), 202–204. MR22#1547 Z104,37
275. N *An arithmetic property of the complete elliptic integral of the second kind*, Bull. Coll. Sci. (Baghdad) 5 (1960), 10–13. MR25#237
276. N *Some congruences involving sums of binomial coefficients*, Duke Math. J. 27 (1960), 77–79. MR22#6767 Z90,258
277. P5 *Some special functions over $GF(q, x)$* , *ibid.* 27 (1960), 139–158. MR34#6167 Z97,259
278. N *Some formulas of Jensen and Gould*, *ibid.* 27 (1960), 319–321. MR22#7955 Z102,49
279. E *Eulerian numbers and polynomials of higher order*, *ibid.* 27 (1960), 401–423. MR23A#1588 Z104,290
280. S *Some orthogonal polynomials related to elliptic functions*, *ibid.* 27 (1960), 443–459. MR23A#361 Z96,269
281. B *Multiplication formulas for generalized Bernoulli and Euler polynomials*, *ibid.* 27 (1960), 537–545. MR22#9636 Z132,55
282. N *A special higher congruence*, Elem. Math. 15 (1960), 75–76. MR22#5611 Z89,266
283. N *Some matrices related to the greatest integer function*, J. Elisha Mitchell Sci. Soc. 76 (1960), 5–7. MR23A#836 Z105,37
284. K *Congruence properties of the Weierstrass A -functions*, Math. Ann. 140 (1960), 9–21. MR22#3712 Z93,258
285. Z *Some arithmetic properties of the lemniscate coefficients*, Math. Nachr. 22 (1960), 237–249. MR22#12077 Z103,272
286. N *Some arithmetic sums connected with the greatest integer function*, Math. Scand. 8 (1960), 59–64. MR23A#2363 Z217,33
287. R *Congruences (mod 2^r) for the coefficients of the Jacobi elliptic functions*, Math. Z. 72 (1960), 307–318. MR22#4679 Z98,37
288. S *A note on the Laguerre polynomials*, Michigan Math. J. 7 (1960), 219–223. MR22#11159
289. C6 *Note on Alder's polynomials*, Pacific J. Math. 10 (1960), 517–519. MR22#3713 Z101,294
290. K *Kummer's congruence for the Bernoulli numbers*, Portugal. Math. 19 (1960), 203–210. MR23A#2361 Z95,30
291. A *A characterization of algebraic number fields with class number two*, Proc. Amer. Math. Soc. 11 (1960), 391–392. MR22#2603 Z202,331

292. B *Note on Nörlund's polynomial $B_n^{(z)}$* , *ibid.* 11 (1960), 452–455. MR22#5587 Z100,17
293. F2 *A theorem on permutations in a finite field*, *ibid.* 11 (1960), 456–459. MR22#8005 Z95,30 *Erratum*, *ibid.* 22 (1961), 2547.
294. N *A note on Gauss' first proof of the quadratic reciprocity theorem*, *ibid.* 11 (1960), 563–565. MR22#7997 Z99,30
295. N *A determinant connected with Fermat's last theorem*, *ibid.* 11 (1960), 730–733. MR22#7974 Z105,316
296. S *The product of basic Bessel functions*, *Quart. J. Math. Oxford* (2) 11 (1960), 181–186. MR22#11153 Z100,287
297. K (with J. Levine) *Some problems concerning Kummer's congruences for the Euler numbers and polynomials*, *Trans. Amer. Math. Soc.* 96 (1960), 23–37. MR22#6768 Z99,29
298. K *Criteria for Kummer's congruences*, *Acta Arith.* 6 (1961), 375–391. MR27#4786 Z99,28
299. N *A note on the generalized Wilson's theorem*, *Amer. Math. Monthly* 68 (1961), 251–253. MR26#4951 Z101,31
300. N *A divisibility property of the binomial coefficients*, *ibid.* 68 (1961), 560–561. MR25#3888 Z113,266
301. S *Some functional equations*, *ibid.* 68 (1961), 753–756. MR24A#1531 Z105,316
302. B *The sum of the angles in an n -dimensional simplex*, *ibid.* 68 (1961), 901–902. MR24A#477 Z101,376
303. N *Some arithmetic sums connected with the greatest integer function*, *Arch. Math. (Basel)* 12 (1961), 34–42. MR23A#2364 Z118,47
304. S *Some integrals containing products of Legendre polynomials*, *ibid.* 12 (1961), 334–340. MR24A#2066 Z113,278
305. S *Note on bilinear generating functions for the Laguerre polynomials*, *Boll. Un. Mat. Ital.* (3) 16 (1961), 24–30. MR24A#2068 Z99,56
306. S *Some generating functions for the Jacobi polynomials*, *ibid.* 16 (1961), 150–155. MR24A#860 Z113,279
307. S *Some integral equations satisfied by the complete elliptic integrals of the first and second kind*, *ibid.* 16 (1961), 264–268. MR24A#2061 Z102,290
308. S *The relationship of the Hermite to the Laguerre polynomials*, *ibid.* 16 (1961), 386–390. MR25#1312 Z103,293
309. S *Some polynomials related to the ultraspherical polynomials*, *Collect. Math.* 13 (1961), 73–88. MR24A#2686 Z109,297
310. S *Some orthogonal polynomials related to elliptic functions II. Arithmetic properties*, *Duke Math. J.* 28 (1961), 107–124. MR23A#852 Z96,27
311. S *Some operational equations for symmetric polynomials*, *ibid.* 28 (1961), 355–368. MR24A#112 Z112,17
312. S *The inverse of certain formulas involving Bessel functions*, *ibid.* 28 (1961), 431–438. MR24A#853 Z131,303
313. S *Some generating functions of Weisner*, *ibid.* 28 (1961), 523–529. MR29#1367 Z102,58
314. S *A bilinear generating function for the Hermite polynomials*, *ibid.* 28 (1961), 531–535. Z102,56
315. S *On the product of two Laguerre polynomials*, *J. London Math. Soc.* 36 (1961), 399–402. MR25#4139 Z107,56
316. K (with H. Stevens) *Criteria for generalized Kummer's congruences*, *J. Reine Angew. Math.* 207 (1961), 203–220. MR23A#1585 Z99,29

317. F5 (with D. J. Lewis, W. H. Mills, and E. G. Straus) *Polynomials over finite fields with minimal value sets*, *Mathematika* 8 (1961), 121–130. MR25#3038 Z106,11
318. P3 *The Staudt–Clausen theorem*, *Math. Mag.* 34 (1961), 131–146. MR24A#258 Z122,47
319. N *Some congruence properties of the Legendre polynomials*, *ibid.* 34 (1961), 387–390. MR25#2242
320. B *Some binomial coefficient identities*, *Math. Student* 29 (1961), 117–119. MR27#2443
321. N *Some arithmetic properties of the coefficients in a certain expansion*, *Nordisk Mat. Tidskr.* 9 (1961), 117–122. MR25#3000 Z105,264
322. C8 *Some congruences for the Bell polynomials*, *Pacific J. Math.* 11 (1961), 1215–1222. MR24A#3122 Z103,272
323. S *Characterization of certain sequences of orthogonal polynomials*, *Portugal. Math.* 20 (1961), 43–46. MR24A#266 Z99,55
324. S *Some polynomials related to the ultraspherical polynomials*, *ibid.* 20 (1961), 127–136. MR25#2243 Z118,65
325. A *A generalization of Maillet’s determinant and a bound for the first factor of the class number*, *Proc. Amer. Math. Soc.* 12 (1961), 256–261. MR22#12093 Z131,36
326. S *Note on Lebesgue’s constants*, *ibid.* 12 (1961), 932–935. MR24A#2791 Z178,404
327. N *A recurrence formula for $\zeta(2n)$* , *ibid.* 12 (1961), 991–992. MR24A#3140 Z101,39
328. S *Some finite analogues of the Poisson summation formula*, *Proc. Edinburgh Math. Soc.* (2) 12 (1961), 133–138. MR24A#1431 Z98,37
329. S *The product of two ultraspherical polynomials*, *Proc. Glasgow Math. Assoc.* 5 (1961), 76–79. MR26#1508 Z102,56
330. S *Characterizations of the Krawtchouk polynomials*, *Rev. Mat. Hisp.-Amer.* (4) 21 (1961), 79–84. MR26#1515 Z101,293
331. B *A note on Bernoulli and Euler polynomials of the second kind*, *Scripta Math.* 25 (1961), 323–330. MR25#4138 Z118,65
332. F5 *A theorem on “ordered” polynomials in a finite field*, *Acta Arith.* 7 (1962), 167–172. MR25#66 Z100,22
333. N *Congruence properties of certain linear homogeneous difference equations*, *ibid.* 7 (1962), 173–186. MR24A#2155 Z100,270
334. A *Binomial coefficients in an algebraic number field*, *ibid.* 7 (1962), 381–388. MR27#2492 Z109,266 *Correction*, *ibid.* 11 (1966), 489. MR33#5601
335. F6 *Solvability of certain equations in a finite field*, *ibid.* 7 (1962), 389–397. MR26#6153 Z114,252
336. B *A note on sums of powers of integers*, *Amer. Math. Monthly* 69 (1962), 290–291.
337. B *A conjecture concerning the Euler numbers*, *ibid.* 69 (1962), 539–540. Z105,264
338. N (with J. M. Thomas) *Rational tabulated values of trigonometric functions*, *ibid.* 69 (1962), 789–793. MR27#2656
339. S *An integral for the product of two Laguerre polynomials*, *Boll. Un. Mat. Ital.* (3) 17 (1962), 25–28. MR25#1318 Z105,277
340. S *Some q -identities related to the theta functions*, *ibid.* 17 (1962), 172–178. MR29#3426 Z103,302
341. S *An integral formula for the Jacobi polynomial*, *ibid.* 17 (1962), 273–275. MR27#363 Z111,66
342. F2 *Some theorems on permutation polynomials*, *Bull. Amer. Math. Soc.* 68 (1962), 120–122. MR25#5052 Z217,330

343. S *A note on the Jacobi theta formula*, *ibid.* 68 (1962), 591–592. MR27#3561 Z106,261
344. S *Single variable Bell polynomials*, *Collect. Math.* 14 (1962), 13–25. MR26#3623 Z109,29
345. F2 *A note on permutation functions over a finite field*, *Duke Math. J.* 29 (1962), 325–332. MR25#1151 Z196,311
346. S *Generating functions for powers of certain sequences of numbers*, *ibid.* 29 (1962), 521–537. MR25#3896 Z147,21
347. S *Summation of some series of Bessel functions*, *Indag. Math.* 24 (1962), 47–54. MR25#1308 Z102,289
348. S *An interpolation problem*, *ibid.* 24 (1962), 443–450. MR26#1666 Z105,278
349. S *Some expansions in theta functions*, *J. Math. Anal. Appl.* 5 (1962), 316–324. MR25#4140 Z108,68
350. R *The coefficients of the lemniscate function*, *Math. Comp.* 16 (1962), 475–478. MR27#2653 Z106,261
351. B *Some generalized multiplication formulas for the Bernoulli polynomials and related functions*, *Monatsh. Math.* 66 (1962), 1–8. MR25#2244 Z102,55
352. S *A characterization of the Laguerre polynomials*, *ibid.* 66 (1962), 389–392. MR26#1516 Z107,56
353. S *The product of several Hermite or Laguerre polynomials*, *ibid.* 66 (1962), 393–396. MR26#1517 Z107,56
354. F11 *A note on the linear homogeneous group over a finite field*, *Portugal. Math.* 21 (1962), 1–4. MR25#4005 Z103,264
355. S *The product of q -Bessel functions*, *ibid.* 21 (1962), 5–9. MR25#4142 Z105,278
356. N *The generating function for $\max(n_1, \dots, n_k)$* , *ibid.* 21 (1962), 201–207. MR29#5753 Z108,252
357. F11 *A note on finite fields*, *Proc. Amer. Math. Soc.* 13 (1962), 546–549. MR25#2061 Z109,28
358. S *Some integral formulas for the complete elliptic integrals of the first and second kind*, *ibid.* 13 (1962), 913–917. MR25#5196 Z107,59
359. C6 *The coefficients in the expansion of certain products*, *ibid.* 13 (1962), 944–949. MR25#5006 Z278,05006
360. S *Some expansions in products of Bessel functions*, *Quart. J. Math. Oxford* (2) 13 (1962), 134–136. MR25#4141 Z107,58
361. F11 *Some identities over a finite field*, *ibid.* 13 (1962), 299–303. MR26#2431 Z113,16
362. S *Some multiplication formulas*, *Rend. Sem. Mat. Univ. Padova* 32 (1962), 239–242. MR26#366 Z107,56
363. S *A multiple sum*, *Rev. Mat. Hisp.-Amer.* (4) 22 (1962), 167–170. MR27#3960 Z108,68
364. C6 *Note on a q -identity*, *Univ. Beograd. Publ. Elektrotehn. Fak. Ser. Mat. Fiz.* 83 (1962), 19–20. MR29#5776 Z113,37
365. S *Some formulas of E. Feldheim*, *Acta Math. Acad. Sci. Hungar.* 14 (1963), 21–29. MR26#3947 Z118,65
366. F2 *Permutations in finite fields*, *Acta Sci. Math. (Szeged)* 24 (1963), 196–203. MR28#81 Z146,67
367. F4 *Classes of pairs of commuting matrices over a finite field*, *Amer. Math. Monthly* 70 (1963), 192–195. MR26#2449 Z118,258 *Corrigendum*, *ibid.* 71 (1964), 900.
368. N *An extension of the Fermat theorem*, *ibid.* 70 (1963), 247–250. MR26#3647 Z113,267

369. N *The distribution of binomial coefficients (mod p)*, Arch. Math. (Basel) 14 (1963), 297–303. MR27#2444 Z136,324
370. E *A note on the Eulerian numbers*, *ibid.* 14 (1963), 383–390. MR28#3960 Z116,251
371. S *A bilinear generating function for the Jacobi polynomials*, Boll. Un. Mat. Ital. (3) 18 (1963), 87–89. MR27#3841 Z121,59
372. S *Summation of a special ${}_4F_3$* , *ibid.* 18 (1963), 90–93. MR27#3840 Z113,281
373. C6 (with J. Riordan) *The divided central differences of zero*, Canad. J. Math. 15 (1963), 94–100. MR26#48 Z108,251
374. C5 *The number of coloured graphs*, *ibid.* 15 (1963), 304–312. MR26#4346 Z115,174
375. S *Products of Appell polynomials*, Collect. Math. 15 (1963), 245–258. Z163,81
376. K *Some arithmetic properties of a special sequence of polynomials in the Gaussian field*, Duke Math. J. 30 (1963), 15–24. MR31#115 Z113,34
377. S *Some generating functions*, *ibid.* 30 (1963), 191–201. MR26#6063 Z123,1
378. C2 *A problem in partitions*, *ibid.* 30 (1963), 203–213. MR26#6143 Z122,54
379. P1 *Simultaneous representations in quadratic and linear forms over $GF[q, x]$* , *ibid.* 30 (1963), 259–270. MR27#136 Z136,251
380. B *Sums of products of multinomial coefficients*, Elem. Math. 18 (1963), 37–39. MR27#56 Z116,251
381. N *A Fibonacci array*, Fibonacci Quart. 1 (1963), no. 2, 17–27. MR27#1404 Z116,267
382. F11 *The distribution of irreducible polynomials in several indeterminates*, Illinois J. Math. 7 (1963), 371–375. MR27#3627 Z118,260
383. N *A Saalschützian theorem for double series*, J. London Math. Soc. 38 (1963), 415–418. MR28#4153 Z129,287
384. S (with W. A. Al-Salam) *Some functions associated with the Bessel functions*, J. Math. Mech. 12 (1963), 911–933. MR27#4962 Z122,314 *Corrigendum*, *ibid.* 15 (1966), 711–712. MR37#3065
385. S (with W. A. Al-Salam) *The Gegenbauer addition theorem*, J. Math. Phys. 42 (1963), 147–156. MR27#362 Z112,44
386. E *The product of two Eulerian polynomials*, Math. Mag. 36 (1963), 37–41. Z114,34
387. B *Some formulas for the Bernoulli and Euler polynomials*, Math. Nachr. 25 (1963), 223–231. MR27#2663 Z112,45
388. C6 *A q -identity*, Monatsh. Math. 67 (1963), 305–310. MR28#39 Z173,18
389. S *The inverse of the error function*, Pacific J. Math. 13 (1963), 459–470. MR27#3839 Z115,41
390. F11 *A note on the Betti–Mathieu group*, Portugal. Math. 22 (1963), 121–125. Z126,59
391. S (with W. A. Al-Salam) *Some expansions in products of Bessel functions*, *ibid.* 22 (1963), 153–160. Z127,295
392. S *A sequence of integers related to the Bessel functions*, Proc. Amer. Math. Soc. 14 (1963), 1–9. MR29#3425 Z113,34
393. F5 *Note on a problem of Dickson*, *ibid.* 14 (1963), 98–100. MR28#3027 Z115,249
394. F2 *A note on permutations in an arbitrary field*, *ibid.* 14 (1963), 101. MR26#1309 Z109,266
395. E *Bernoulli and Eulerian numbers and other topics*, in: Proc. 1963 Number Theory Conference (Univ. Colorado) (1963), 12, 38, 44, 73, 91.
396. C6 *Some inversion formulas*, Rend. Circ. Mat. Palermo (2) 12 (1963), 183–199. MR29#39 Z122,314
397. N *The Euler–Fermat property in a polynomial domain*, Rev. Mat. Hisp.-Amer. (4) 23 (1963), 194–195. MR28#3028 Z122,254

398. C8 *A basic analog of the multinomial theorem*, Scripta Math. 26 (1963), 317–321. MR29#53 Z116,251 *Errata*, ibid. 32 (1966), 1754.
399. S *A special functional equation*, Univ. Beograd. Publ. Elektrotehn. Fak. Ser. Mat. Fiz. 97 (1963), 1–3. MR26#5317 Z106,315
400. N *Functions and polynomials (mod p^n)*, Acta Arith. 9 (1964), 67–78. MR29#4721 Z134,254
401. N *Summation of certain series*, Amer. Math. Monthly 71 (1964), 41–44. Z129,46
402. N *A note on the generalized Wilson's theorem*, ibid. 71 (1964), 291–293. MR28#3962 Z129,25
403. N *A note on exponents (mod 2^r)*, ibid. 71 (1964), 296–298. Z125,23
404. G *Some inequalities for a triangle*, ibid. 71 (1964), 881–885. MR30#482 Z125,101
405. N *The coefficients of the k -th power of a power series with integral coefficients*, ibid. 71 (1964), 1023–1026. MR30#1089 Z124,25
406. S (with W. A. Al-Salam) *Bateman's expansion for the product of two Bessel functions*, Ann. Mat. Pura Appl. (4) 65 (1964), 97–111. MR29#4926 Z128,297
407. N *A note on power series with integral coefficients*, Boll. Un. Mat. Ital. (3) 19 (1964), 1–3. MR28#5273 Z131,282
408. S *Characterization of certain q -identities*, ibid. 19 (1964), 98–105. MR30#381 Z132,252
409. S *A note on Dougall's theorem*, ibid. 19 (1964), 266–269. MR30#281 Z137,267
410. S *The sum of the first n terms of an ${}_5F_4$* , ibid. 19 (1964), 436–440. MR30#4993 Z137,268
411. C2 *A problem in partitions related to the Stirling numbers*, Bull. Amer. Math. Soc. 70 (1964), 275–278. MR28#1135 Z123,255
412. C5 (with J. Riordan) *Two element lattice permutation numbers and their q -generalization*, Duke Math. J. 31 (1964), 371–388. MR29#5752 Z126,263
413. S *A functional-difference equation*, ibid. 31 (1964), 449–453. MR29#1466 Z195,435
414. E *Extended Bernoulli and Eulerian numbers*, ibid. 31 (1964), 667–689. MR29#5796 Z127,295
415. N *A note on Fibonacci numbers*, Fibonacci Quart. 2 (1964), 15–28. Z147,21
416. S *A partial difference equation related to the Fibonacci numbers*, ibid. 2 (1964), 185–196. MR29#6203 Z125,61
417. K *Recurrences for the Bernoulli and Euler numbers*, J. Reine Angew. Math. 214/215 (1964), 184–191. MR28#3961 Z126,262
418. G *Some inequalities for a triangle*, Math. Gaz. 47 (1964), 181–182. Z129,269
419. X *Comment on the paper "Some probability distributions and their associated structures"*, Math. Mag. 37 (1964), 51–52.
420. N (with H. W. Gould) *Bracket function congruences for binomial coefficients*, ibid. 37 (1964), 91–93. Z128,41
421. B *A note on the Stirling numbers of the first kind*, ibid. 37 (1964), 318–321. Z124,25
422. D *Generalized Dedekind sums*, Math. Z. 85 (1964), 83–90. MR29#3427 Z122,51
423. N *Rings of arithmetic functions*, Pacific J. Math. 14 (1964), 1165–1171. MR30#3048 Z131,286
424. S (with W. A. Al-Salam) *An addition theorem for the confluent hypergeometric series*, Portugal. Math. 23 (1964), 95–101. MR30#3998 Z127,32
425. S *The coefficients of the reciprocal of a Bessel function*, Proc. Amer. Math. Soc. 15 (1964), 318–320. MR28#3182 Z127,295
426. C8 *Some arithmetic properties of the Bell polynomials*, Rend. Circ. Mat. Palermo (2) 13 (1964), 345–368. MR32#7475 Z132,28

427. N *Another Saalschützian theorem for double series*, Rend. Sem. Mat. Univ. Padova 34 (1964), 200–203. MR29#3683 Z133,32
428. C2 *A problem in partitions related to the Stirling numbers*, Riv. Mat. Univ. Parma (2) 5 (1964), 61–75. MR34#158 Z146,267
429. N *An extension of the congruences of Bauer and Lubelski*, Scripta Math. 27 (1964), 213–222. MR31#5824 Z132,28
430. C7a *A binomial identity arising from a sorting problem*, SIAM Rev. 6 (1964), 20–30. MR29#4708 Z128,16
431. N (with A. L. Whiteman) *The number of solutions of some congruences modulo a product of primes*, Trans. Amer. Math. Soc. 112 (1964), 536–552. MR29#1171 Z122,48
432. N *A property of irreducible polynomials related to Mersenne primes*, Univ. Nac. Tucumán Rev. (A) 15 (1964), 43–46. MR30#2000 Z126,31
433. C2 *Some partition problems related to the Stirling numbers of the second kind*, Acta Arith. 10 (1965), 409–422. MR30#3031 Z151,26
434. D *A theorem on generalized Dedekind sums*, *ibid.* 11 (1965), 253–260. MR32#87 Z131,288
435. N *Some arithmetic properties of the Chebyshev polynomials*, Arch. Math. (Basel) 16 (1965), 439–448. MR32#5572 Z132,29
436. C8 *Some arithmetic properties of the Bell polynomials*, Bull. Amer. Math. Soc. 71 (1965), 143–144. MR30#53 Z132,28 *Errata*, Math. Reviews 32 (1966), 1754.
437. F11 *The distribution of irreducible polynomials in several indeterminates II*, Canad. J. Math. 17 (1965), 261–266. MR30#3088 Z135,17
438. C7a *Multiple sums and generating functions*, Collect. Math. 17 (1965), 281–296. MR35#4108 Z161,12
439. N *Note on a paper of L. Bernstein*, Duke Math. J. 32 (1965), 177–180. MR30#3049 Z134,18
440. B *Extended Stirling and exponential numbers*, *ibid.* 32 (1965), 205–224. MR30#4989 Z136,28
441. C5 (with J. Riordan) *Enumeration of certain two-line arrays*, *ibid.* 32 (1965), 529–539. MR32#1130 Z132,251
442. I *Note on some continued fractions of the Rogers–Ramanujan type*, *ibid.* 32 (1965), 713–720. MR32#1478 Z178,335
443. C5 *Weighted two-line arrays*, *ibid.* 32 (1965), 721–739. MR32#55 Z135,12
444. B *Binomial Theorem*, Encyclopedia Britannica 3 (1965), 628–629.
445. N *The characteristic polynomial of a certain matrix of binomial coefficients*, Fibonacci Quart. 3 (1965), 81–89. MR32#5535 Z125,282
446. N *A note on multiple Kloosterman sums*, J. Indian Math. Soc. (N.S.) 29 (1965), 197–200. MR34#2532 Z154,298
447. D *Linear relations among generalized Dedekind sums*, J. Reine Angew. Math. 220 (1965), 154–162. MR32#88 Z148,273
448. C7a *Some multiple sums and binomial identities*, J. SIAM 13 (1965), 469–486. MR31#2160 Z135,11
449. B *The irreducibility of the Bernoulli polynomial $B_{14}(x)$* , Math. Comp. 19 (1965), 667–670. MR33#117 Z135,17
450. G *A note on circumscribable cyclic quadrilaterals*, Math. Mag. 38 (1965), 33–35. Z126,369
451. B *Recurrences for the Bernoulli and Euler numbers II*, Math. Nachr. 29 (1965), 151–160. MR31#5825 Z151,15

452. S (with W. A. Al-Salam) *Some orthogonal q -polynomials*, *ibid.* 30 (1965), 47–61. MR33#5967 Z135,278
453. N *The coefficients of $\cosh x/\cos x$* , *Monatsh. Math.* 69 (1965), 129–135. MR31#1222 Z141,41
454. N *A note on multiple exponential sums*, *Pacific J. Math.* 15 (1965), 757–765. MR32#4092 Z139,269
455. S *The coefficients in an asymptotic expansion*, *Proc. Amer. Math. Soc.* 16 (1965), 248–252. MR30#3032 Z145,301
456. S (with W. A. Al-Salam) *A note on the Hardy–Hille and Mehler formulas*, *Proc. Glasgow Math. Assoc.* 7 (1965), 55–60. MR31#1411 Z127,31
457. C2 *Generating functions and partition problems*, in: *Theory of Numbers*, *Proc. Sympos. Pure Math.* 8, Amer. Math. Soc., 1965, 144–169. MR31#72 Z142,251
458. F6 (with C. Wells) *The number of solutions of a special system of equations in a finite field*, *Acta Arith.* 12 (1966), 77–84. MR34#4259 Z147,40
459. S *A note on self-adjoint operators*, *Amer. Math. Monthly* 73 (1966), 96–98. MR33#2854 Z145,105
460. B *Some limits involving binomial coefficients*, *ibid.* 73 (1966), 168–170. Z134,250
461. N *Arithmetic functions in an unusual setting*, *ibid.* 73 (1966), 582–590. MR33#5546 Z136,333
462. A *The number of terms in the cyclotomic polynomial $F_{pq}(x)$* , *ibid.* 73 (1966), 979–981. MR34#2517 Z146,267
463. N *A remark on cubics*, *ibid.* 73 (1966), 1111–1112. Z178,42
464. S *Combinatorial equivalents of certain theta formulas*, *Boll. Un. Mat. Ital.* (3) 21 (1966), 234–238. MR34#70 Z149,19
465. S *Note on Schur’s expansion of $\sin \pi x$* , *ibid.* 21 (1966), 353–357. Z145,76
466. S *A note on the complete elliptic integrals of the first and second kinds*, *Bull. Calcutta Math. Soc.* 58 (1966), 139–142. MR42#2044 Z201,390
467. N (with L. Moser) *On some special factorizations $(1-x^n)/(1-x)$* , *Canad. Math. Bull.* 9 (1966), 421–426. MR34#4262 Z145,48
468. N *Some difference equations*, *Duke Math. J.* 33 (1966), 27–31. MR32#6088 Z138,320
469. F6 *A note on quadratics over a finite field*, *ibid.* 33 (1966), 453–458. MR33#7323 Z166,38
470. N *A note on the composition of arithmetic functions*, *ibid.* 33 (1966), 629–632. MR34#152 Z154,295
471. N *Some congruences involving binomial coefficients*, *ibid.* 33 (1966), 721–724. MR34#4189 Z146,51
472. C2 *Enumeration of symmetric arrays*, *ibid.* 33 (1966), 771–782. MR34#1216 Z151,16
473. S *Some orthogonal polynomials related to Fibonacci numbers*, *Fibonacci Quart.* 4 (1966), 43–48. MR36#4040 Z137,46
474. N *Some determinants containing powers of Fibonacci numbers*, *ibid.* 4 (1966), 129–134. Z144,274
475. C7a *Some binomial coefficient identities*, *ibid.* 4 (1966), 323–331. MR34#7390 Z145,13 *Erratum*, *Math. Reviews* 36 (1966), 1566.
476. C1a (with D. P. Roselle and R. A. Scoville) *Permutations and sequences with repetitions by number of increases*, *J. Combin. Theory* 1 (1966), 350–374. MR34#77 Z304,05002
477. C8 *Arithmetic properties of the Bell polynomials*, *J. Math. Anal. Appl.* 15 (1966), 33–52. MR33#5502 Z148,19
478. N *A theorem of Schemmel*, *Math. Mag.* 39 (1966), 86–87. MR33#5547 Z139,267

479. G *An inequality for the perimeter of the orthic triangle*, *ibid.* 39 (1966), 289.
480. C6 *Note on a paper of Laksov*, *Math. Scand.* 19 (1966), 38–40. MR35#72 Z243,05010
481. C2 (with D. P. Roselle) *Restricted bipartite partitions*, *Pacific J. Math.* 19 (1966), 221–228. MR34#2549 Z151,14
482. S (with W. A. Al-Salam) *On certain generating functions for the Hermite polynomials*, *Portugal. Math.* 25 (1966), 35–45. MR35#1844 Z146,91
483. N *A short proof of Jacobi's four square theorem*, *Proc. Amer. Math. Soc.* 17 (1966), 768–769. MR33#4002 Z151,38
484. C7a *Note on a formula of Witt*, *Rev. Mat. Hisp.-Amer. (4)* 26 (1966), 111–113. MR34#7435 Z146,12
485. F6 *A conjecture concerning a certain system of equations in a finite field*, *Rev. Roumaine Math. Pures Appl.* 11 (1966), 277–282. MR34#1305 Z163,52
486. C2 *Rectangular arrays and plane partitions*, *Acta Arith.* 13 (1967), 29–47. MR36#2512 Z168,15
487. N *The sum of the squares of the coefficients of the cyclotomic polynomial*, *Acta Math. Acad. Sci. Hungar.* 18 (1967), 297–304. MR36#139 Z155,83
488. N *The highest power of a prime dividing certain quotients*, *Arch. Math. (Basel)* 18 (1967), 153–159. MR35#1537 Z163,38
489. S *Recurrences for the Rayleigh functions*, *Duke Math. J.* 34 (1967), 581–590. MR35#5670 Z166,75
490. N *Arithmetic functions in an unusual setting II*, *ibid.* 34 (1967), 757–759. MR36#1382 Z161,45
491. F4 *Restricted product of the characteristic polynomials of matrices over a finite field*, *Illinois J. Math.* 11 (1967), 128–133. MR34#4278 Z166,34
492. C4 *Enumeration of sequences by length and spread*, *J. Combin. Theory* 2 (1967), 523–545. MR36#6303 Z203,14
493. C6 *Some functional equations related to binomial coefficient summations*, *ibid.* 3 (1967), 93–97. MR35#4109 Z153,326
494. C6 *Some determinants of q -binomial coefficients*, *J. Reine Angew. Math.* 226 (1967), 216–220. MR37#2773 Z162,30
495. F5 *Some theorems on irreducible reciprocal polynomials over a finite field*, *ibid.* 227 (1967), 212–220. MR35#6650 Z155,98
496. C6 *Remarks on some algebraic identities*, *Mat. Časopis Sloven. Akad. Vied* 17 (1967), 81–84. MR37#1260 Z166,7
497. S *Summation of a double hypergeometric series*, *Matematiche (Catania)* 22 (1967), 138–142. MR35#5665 Z152,262
498. B *Some properties of the Nörlund polynomial $B_n^{(x)}$* , *Math. Nachr.* 33 (1967), 297–311. MR36#129 Z154,293
499. B *Note on a paper of Götze*, *ibid.* 35 (1967), 289–293. MR37#2708 Z163,294
500. S *A transformation formula for multiple hypergeometric series*, *Monatsh. Math.* 71 (1967), 1–6. MR34#6162 Z162,91
501. F5 *A note on irreducible cubics (mod p)*, *Norske Vid. Selsk. Forh. (Trondheim)* 40 (1967), 25–30. MR36#6387 Z162,70
502. D *A three-term relation for the Dedekind–Rademacher sums*, *Publ. Math. Debrecen* 14 (1967), 119–124. MR36#3708 Z167,314
503. N *The number of binomial coefficients divisible by a fixed power of a prime*, *Rend. Circ. Mat. Palermo (2)* 16 (1967), 299–320. MR40#2554 Z177,67
504. S *The generating function for the Jacobi polynomial*, *Rend. Sem. Mat. Univ. Padova* 38 (1967), 86–88. MR36#5409 Z163,82

505. S *A summation theorem for double hypergeometric series*, *ibid.* 38 (1967), 230–233. MR35#4474 Z145,297
506. C7a *A binomial identity*, *SIAM Rev.* 9 (1967), 229–231. MR35#2753 Z166,8.
507. X *Combinational problems (3 lectures)*, Washington State Univ., Dept. of Math., 1967, 1–26.
508. X *Bernoulli numbers*, Washington State Univ., Dept. of Math., 1967, 27–40.
509. A *A congruence for the second factor of the class number of a cyclotomic field*, *Acta Arith.* 14 (1968), 27–34. MR36#6381 Z177,75 *Corrigendum*, *ibid.* 16 (1970), 437. MR42#226 Z199,374
510. I *A note on products of sequences*, *Boll. Un. Mat. Ital.* (4) 1 (1968), 362–365. MR38#2113 Z157,86
511. S *The coefficients in an asymptotic expansion and certain related numbers*, *Duke Math. J.* 35 (1968), 83–90. MR36#1893 Z157,126
512. C7a *Some generating functions and a binomial identity*, *ibid.* 35 (1968), 541–548. MR37#5105 Z169,86
513. B *Some unusual congruences for the Bernoulli and Genocchi numbers*, *ibid.* 35 (1968), 563–566. MR37#2672 Z169,368
514. S *The generalized hypergeometric differential equation*, *ibid.* 35 (1968), 753–759. MR37#6494 Z169,107
515. S *Some generating functions for Laguerre polynomials*, *ibid.* 35 (1968), 825–827. MR39#1700 Z167,352
516. I *A note on the Rogers–Ramanujan identities*, *ibid.* 35 (1968), 839–842. MR38#4438 Z169,59
517. B *Bernoulli numbers*, *Fibonacci Quart.* 6 (1968), no. 3, Special Issue, 71–85. MR38#1071 Z159,56
518. N *Fibonacci representations*, *ibid.* 6 (1968), 193–220. MR38#4392 Z167,39
519. N *A note on Gauss's sum*, *Matematiche (Catania)* 23 (1968), 147–150. MR39#1398 Z167,40
520. S *A note on certain biorthogonal polynomials*, *Pacific J. Math.* 24 (1968), 425–430. MR37#5439 Z157,119
521. N *Some formulas related to Gauss's sum*, *Rend. Sem. Mat. Univ. Padova* 41 (1968), 222–226. MR39#5490 Z186,362
522. R *A theorem on multiple power series with integral coefficients*, *Rev. Mat. Hisp.-Amer.* (4) 28 (1968), 184–187. MR38#5695 Z162,343
523. F11 *Gauss sums over finite fields of order 2^n* , *Acta Arith.* 15 (1969), 247–265. MR40#2649 Z177,76
524. F11 *A theorem on sets of polynomials over a finite field*, *ibid.* 15 (1969), 267–268. MR39#2729 Z177,77
525. F11 *Kloosterman sums and finite field extensions*, *ibid.* 16 (1969), 179–193. MR40#4213 Z194,79
526. S *A q -identity*, *Boll. Un. Mat. Ital.* (4) 2 (1969), 100–101. MR39#4020 Z169,319
527. N *Sums of arithmetic functions*, *Collect. Math.* 20 (1969), 107–126. MR40#4192 Z185,107
528. N *The greatest integer function*, *Delta* 1 (1969), no. 2, 1–12. MR40#1325
529. C3 *Generating functions*, *Fibonacci Quart.* 7 (1969), Special Issue, 359–393. MR41#8254 Z194,7
530. N (with J. A. H. Hunter) *Sums of powers of Fibonacci and Lucas numbers*, *ibid.* 7 (1969), 467–473. MR41#1635 Z194,73
531. C5 *A note on the enumeration of line chromatic trees*, *J. Combin. Theory* 6 (1969), 99–101. MR38#4363 Z174,266
532. X *Particije*, *Mathematička Biblioteka* 39 (1969), 5–14.

533. S *Some formulas of F. H. Jackson*, Monatsh. Math. 73 (1969), 193–198.
MR40#1290 Z177,311
534. N *A note on exponential sums*, Pacific J. Math. 30 (1969), 35–37. MR39#6839
Z179,70
535. S *A transformation formula for an ${}_4F_3$* , Quart. J. Math. Oxford (2) 20 (1969),
117–120. MR39#488 Z167,348
536. S *Solution of certain recurrences*, SIAM J. Appl. Math. 17 (1969), 251–259.
MR39#6760 Z177,21
537. S *Transformation of certain bilinear generating functions*, Ann. Mat. Pura Appl.
(4) 86 (1970), 155–168. MR42#4794 Z201,71
538. S *An extension of Mehler's formula*, Boll. Un. Mat. Ital. (4) 3 (1970), 43–46.
MR41#3846 Z187,319
539. S *Some extensions of the Mehler formula*, Collect. Math. 21 (1970), 117–130.
MR43#5076 Z203,365
540. N *Reduction formulas for certain multiple exponential sums*, Czechoslovak Math.
J. 20 (95) (1970), 616–627. MR42#3059 Z212,74
541. C4 *Sequences and inversions*, Duke Math. J. 37 (1970), 193–198. MR40#5458
Z206,23
542. N (with H. H. Ferns) *Some Fibonacci and Lucas identities*, Fibonacci Quart. 8
(1970), 61–73. MR41#8333 Z207,52
543. N *Fibonacci representations II*, *ibid.* 8 (1970), Special Issue, 113–134. MR41#3418
Z211,72
544. N *Some generalized Fibonacci identities*, *ibid.* 8 (1970), 249–254. MR41#3377
Z208,55
545. S *Some operational formulas*, Math. Nachr. 45 (1970), 379–389. MR42#2951
Z198,454
546. S *A note on Saalschützian double series*, Monatsh. Math. 74 (1970), 385–388.
MR44#7003 Z201,389
547. F3 *Factorization of a special polynomial over a finite field*, Pacific J. Math. 32
(1970), 603–614. MR41#1693 Z195,329
548. S *Remark on a formula of F. H. Jackson*, Portugal. Math. 29 (1970), 157–160.
MR45#3216 Z213,350
549. N (with J. Brillhart) *Note on the Shapiro polynomials*, Proc. Amer. Math. Soc.
25 (1970), 114–118. MR41#5575 Z191,351
550. S *Bilinear generating functions for Laguerre and Lauricella polynomials in several
variables*, Rend. Sem. Mat. Univ. Padova 43 (1970), 269–276. MR43#583
Z235,33014
551. S *Some applications of Saalschütz's theorem*, *ibid.* 44 (1970), 91–95. MR45#7116
Z235,33001
552. N *Distribution of binomial coefficients*, Riv. Mat. Univ. Parma (2) 11 (1970),
45–64. MR47#45 Z234,10013
553. S *Some reduction formulas for generalized hypergeometric functions*, SIAM J.
Math. Anal. 1 (1970), 243–245. MR41#3820 Z199,108
554. S *Note on certain triangular arrays*, *ibid.* 1 (1970), 328–332. MR42#89 Z209,316
555. S *Some formulas of Hermite*, Univ. Beograd. Publ. Elektrotehn. Fak. Ser. Mat.
Fiz. 303 (1970), 9–13. MR45#614 Z198,398
556. C4 *Enumeration of certain sequences*, Acta Arith. 18 (1971), 221–232. MR45#3352
Z217,307
557. G *An inequality involving the area of two triangles*, Amer. Math. Monthly 78
(1971), 772. MR44#7433 Z222,50007

558. S *A note on the Lagrange expansion formula*, Bul. Inst. Politehn. Iași (New Ser.) 17 (21) (1971), 39–44. MR46#2014 Z329,40001
559. C6 *Some identities in combinatorial analysis*, Duke Math. J. 38 (1971), 51–56. MR42#5813 Z213,26
560. S *A sorting function*, *ibid.* 38 (1971), 561–568. MR43#6107 Z221,05018
561. C2 *Enumeration of symmetric arrays II*, *ibid.* 38 (1971), 717–731. MR44#2623 Z228,05004
562. B *Note on the numbers of Jordan and Ward*, *ibid.* 38 (1971), 783–790. MR45#1776 Z228,05005
563. S *Some summation formulas*, Fibonacci Quart. 9 (1971), 28–34. MR43#3132 Z214,78
564. S *Reduction formulas for Fibonacci summations*, *ibid.* 9 (1971), 449–466, 510–511. MR45#3308 Z226,10013
565. S *A note on the Hardy–Hille formula*, Glasnik Mat. (3) 6 (26) (1971), 55–58. MR46#419 Z216,363
566. C5 (with J. Riordan) *Enumeration of some two-line arrays by extent*, J. Combin. Theory (A) 10 (1971), 271–283. MR43#66 Z216,17
567. C4 (with D. P. Roselle and R. A. Scoville) *Some remarks on ballot-type sequences of positive integers*, *ibid.* 11 (1971), 258–271. MR43#7351 Z227,05007
568. C4 *Enumeration of certain types of sequences*, Math. Nachr. 49 (1971), 125–147. MR46#8960 Z237,05003
569. B *A conjecture concerning Genocchi numbers*, Norske Vid. Selsk. Skr. (Trondheim) 1971, no. 9, 1–4. MR45#6749 Z245,05004
570. E *Eulerian numbers and operators*, in: Proc. Conf. on Theory of Arithmetic Functions (W. Michigan Univ.) (1971), Lecture Notes in Math. 251, Springer, 1972, 65–70. MR48#10827
571. B (with V. E. Hoggatt, Jr. and R. Scoville) *Some functions related to Fibonacci and Lucas representations*, *ibid.*, 71–102. MR49#4923 Z229,05012
572. G *Some inequalities related to Euler's theorem $R \geq 2r$* , Publ. Inst. Math. (Beograd) 12 (26) (1971), 11–17. MR46#4363 Z228,50011
573. G *Some inequalities for the triangle*, Univ. Beograd. Publ. Elektrotehn. Fak. Ser. Mat. Fiz. 360 (1971), 7–10. MR46#2536 Z233,50006
574. F2 (with D. R. Hayes) *Permutations with coefficients in a subfield*, Acta Arith. 21 (1972), 131–135. MR46#3490 Z207,51
575. S *Generating functions for certain q -orthogonal polynomials*, Collect. Math. 23 (1972), 91–104. MR47#5321 Z273,33012
576. X *Permutations*, Delta 3 (1972), no. 1, 7–21. MR47#6499 Z247,05001
577. C6 *Some identities in combinatorial analysis*, Duke Math. J. 39 (1972), 31–37. MR44#6639 Z243,05013
578. C5 *Rectangular arrays of zeros and ones*, *ibid.* 39 (1972), 153–164. MR44#5233 Z243,05012
579. C6 (with M. V. Subbarao) *On a combinatorial identity of Winqvist and its generalization*, *ibid.* 39 (1972), 165–172. MR45#1775 Z243,05014
580. C1a *Enumeration of sequences by rises and falls: a refinement of the Simon Newcomb problem*, *ibid.* 39 (1972), 267–280. MR45#1778 Z243,05008
581. B (with R. Scoville) *Tangent numbers and operators*, *ibid.* 39 (1972), 413–429. MR46#1968 Z243,05009
582. C1a (with R. Scoville) *Up-down sequences*, *ibid.* 39 (1972), 583–598. MR47#1627 Z257,05009
583. S *Some continued fraction formulas*, *ibid.* 39 (1972), 793–799. Z253,10019

584. N (with R. Scoville and V. E. Hoggatt, Jr.) *Fibonacci representations*, *Fibonacci Quart.* 10 (1972), 1–28. MR46#3427 Z229,10005 *Addendum*, *ibid.* 10 (1972), 527–530. MR48#3857 Z255,10013
585. N (with R. Scoville and V. E. Hoggatt, Jr.) *Lucas representations*, *ibid.* 10 (1972), 29–42, 70, 112. MR46#3429 Z236,05004
586. N (with R. Scoville and V. E. Hoggatt, Jr.) *Fibonacci representations of higher order*, *ibid.* 10 (1972), 43–69, 94. Z236,05002
587. N (with R. Scoville and V. E. Hoggatt, Jr.) *Fibonacci representations of higher order II*, *ibid.* 10 (1972), 71–80, 94. MR46#3428 Z236,05003
588. C1b *A generating function for partly ordered partitions*, *ibid.* 10 (1972), 157–162. MR46#7047 Z231,05013
589. S *Note on some summation formulas*, *ibid.* 10 (1972), 281–282, 291. MR46#1600 Z233,40002
590. C7b (with R. Scoville and V. E. Hoggatt, Jr.) *Pellian representations*, *ibid.* 10 (1972), 449–488. MR47#8420 Z249,05005
591. C2 *Enumeration of 3×3 arrays*, *ibid.* 10 (1972), 489–498. MR46#8847 Z252,05004
592. N (with R. Scoville and V. E. Hoggatt, Jr.) *Representations for a special sequence*, *ibid.* 10 (1972), 499–518, 550. MR47#8421 Z255,05001
593. C4 *Concavity properties of certain sequences of numbers*, *ibid.* 10 (1972), 523–525, 530. MR46#8854 Z255,05002
594. N *A conjecture concerning Lucas numbers*, *ibid.* 10 (1972), 526, 550. MR46#7142 Z249,10008
595. C4 *Sequences, paths, ballot numbers*, *ibid.* 10 (1972), 531–549. MR47#6498 Z257,05001
596. C5 (with D. P. Roselle) *Triangular arrays subject to MacMahon's conditions*, *ibid.* 10 (1972), 591–597, 658. MR47#1645 Z254,05007
597. G *Some inequalities for two triangles*, *Math. Mag.* 45 (1972), 43–44. MR45#9249 Z229,50007
598. C6 (with M. V. Subbarao) *A simple proof of the quintuple product identity*, *Proc. Amer. Math. Soc.* 32 (1972), 42–44. MR44#6507 Z234,05005
599. F11 *Correspondences in a finite field*, in: *Proc. Number Theory Conf. (Univ. Colorado) (1972)*, 25–35. MR52#10690 Z336,12011
600. N *A polynomial related to the cyclotomic polynomial*, *Rend. Sem. Mat. Univ. Padova* 47 (1972), 57–63. MR47#4979 Z245,10007
601. S *Explicit evaluation of certain polynomials*, *SIAM J. Math. Anal.* 3 (1972), 352–357. MR46#7150 Z232,40002
602. E (with D. C. Kurtz, R. Scoville, and O. P. Stackelberg) *Asymptotic properties of Eulerian numbers*, *Z. Wahrsch. Verw. Gebiete* 23 (1972), 47–54. MR46#8961 Z226,60049
603. F2 (with J. V. Brawley and T. Vaughan) *Linear permutation polynomials with coefficients in a subfield*, *Acta Arith.* 24 (1973), 193–199. MR49#2678 Z244,12016
604. B (with R. Scoville) *The sign of the Bernoulli and Euler numbers*, *Amer. Math. Monthly* 80 (1973), 548–549. MR47#4917 Z273,10012
605. F4 (with J. V. Brawley) *A characterization of the $n \times n$ matrices over a finite field*, *ibid.* 80 (1973), 670–672. MR47#5046 Z276,15021 *Addendum*, *ibid.* 80 (1973), 1041–1043. MR49#355 Z279,12008
606. G *Inequalities for the area of two triangles*, *ibid.* 80 (1973), 910–911. MR48#1043 Z282,50005
607. E *Eulerian numbers and operators*, *Collect. Math.* 24 (1973), 175–200. MR51#2929 Z279,10010

608. S *Some expansion formulas*, Delta 3 (1973), no. 4, Supplement, 1–12. MR51#2928 Z276,05013
609. C1a *Enumeration of up-down sequences*, Discrete Math. 4 (1973), 273–286. MR47#1625 Z255,05003 *Addendum*, *ibid.* 5 (1973), 291. MR48#3749
610. C1a (with R. Scoville) *Enumeration of rises and falls by position*, Discrete Math. 5 (1973), 45–59. MR47#1626 Z259,05008
611. C7b (with R. Scoville) *Partially ordered sets associated with Fibonacci representations*, Duke Math. J. 40 (1973), 511–524. MR47#6600 Z272,05005
612. C1a (with R. Scoville and T. Vaughan) *Enumeration of permutations and sequences with restrictions*, *ibid.* 40 (1973), 723–741. MR48#8253 Z276,05007
613. C6 *Some inverse relations*, *ibid.* 40 (1973), 893–901. MR49#2420 Z276,05012
614. N (with M. V. Subbarao) *Transformation of arithmetic functions*, *ibid.* 40 (1973), 949–958. MR48#8361 Z277,10007
615. C5 *Enumeration of two-line arrays*, Fibonacci Quart. 11 (1973), 113–130. MR48#111 *Corrigendum* (with M. Hodel), *ibid.* 12 (1974), 266. MR50#4320
616. N (with R. Scoville and T. Vaughan) *Some arithmetic functions related to Fibonacci numbers*, *ibid.* 11 (1973), 337–386. MR48#10969 Z274,10020
617. S *Some q -expansion formulas*, Glasnik Mat. (3) 8 (28) (1973), 205–214. MR48#9179 Z267,33010
618. C7a *A binomial identity related to ballots and trees*, J. Combin. Theory (A) 14 (1973), 261–263. MR46#7042 Z252,05007
619. N *Bulygin's method for sums of squares*, J. Number Theory 5 (1973), 405–412. MR48#6001 Z267,10067
620. C1a *Enumeration of permutations by rises and cycle structure*, J. Reine Angew. Math. 262/263 (1973), 220–233. MR48#3750 Z268,05009
621. F4 (with J. V. Brawley) *Enumeration of matrices with prescribed row and column sums*, Linear Algebra Appl. 6 (1973), 165–174. MR47#3418 Z247,15012
622. S *A note on the Jacobi theta formula*, Makedon. Akad. Nauk. Umet. Oddel. Prirod.-Mat. Nauk. Prilozi 5 (1973), no. 2, 5–10. MR58#27720
623. F4 *The number of solutions of certain matrix equations over a finite field*, Math. Nachr. 56 (1973), 105–109. MR48#3992 Z224,15009
624. C8 *Permutations with prescribed pattern*, *ibid.* 58 (1973), 31–53. MR48#8252 Z229,05015
625. C1a *Enumeration of up-down permutations by number of rises*, Pacific J. Math. 45 (1973), 49–58. MR47#8323 Z222,05002
626. N *Saalschützian transforms*, Rend. Sem. Mat. Univ. Padova 50 (1973), 95–118. MR52#251 Z281,33007
627. C6 *Some q -analogues of certain combinatorial numbers*, SIAM J. Math. Anal. 4 (1973), 433–446. MR48#1940 Z232,10009
628. S *A finite analog of the reciprocal of a theta function*, Univ. Beograd. Publ. Elektrotehn. Fak. Ser. Mat. Fiz. 429 (1973), 97–99. MR48#10961 Z268,33002
629. C3 *Enumeration of a special class of permutations by rises*, *ibid.* 451 (1973), 189–196. MR48#3751 Z273,05005
630. D *Inversions and generalized Dedekind sums*, Abh. Math. Sem. Univ. Hamburg 42 (1974), 41–52. MR50#6999 Z292,10007
631. C1a (with R. Scoville) *Enumeration of permutations by rises, falls, rising maxima and falling maxima*, Acta Math. Acad. Sci. Hungar. 25 (1974), 269–277. MR52#2909 Z298,05007
632. C1a *Permutations and sequences*, Adv. Math. 14 (1974), 92–120. MR51#7889 Z285,05011

633. C5 *Enumeration of rectangular arrays by length and coincidences*, Ann. Mat. Pura Appl. (4) 99 (1974), 155–182. MR50#126 Z279,05010
634. N *Note on a binomial identity*, Boll. Un. Mat. Ital. (4) 9 (1974), 644–646. MR51#178 Z309,05010
635. X (with R. Scoville and T. Vaughan) *Enumeration of pairs of permutations and sequences*, Bull. Amer. Math. Soc. 80 (1974), 881–884. MR51#180 Z291,05007
636. B (with M. S. Klamkin) *Stirling operators*, Collect. Math. 25 (1974), 185–212. MR54#2491 Z292,05002
637. C1a (with T. Vaughan) *Enumeration of sequences of given specification according to rises, falls and maxima*, Discrete Math. 8 (1974), 147–167. MR49#4794 Z278,05008
638. F4 (with J. V. Brawley and J. Levine) *Power sums of matrices over a finite field*, Duke Math. J. 41 (1974), 9–24. MR49#7279 Z282,15009
639. B *A note on Bernoulli numbers and polynomials*, Elem. Math. 29 (1974), 90–92. MR50#4604 Z283,10003
640. N *Fibonacci notes I. Zero-one sequences and Fibonacci numbers of higher order*, Fibonacci Quart. 12 (1974), 1–10. MR51#332 Z279,05006
641. N *Fibonacci notes II. Multiple generating functions*, *ibid.* 12 (1974), 179–185. MR51#333 Z279,05007
642. N *Fibonacci notes III. q -Fibonacci numbers*, *ibid.* 12 (1974), 317–322. MR51#334 Z292,10010
643. S *A q -identity*, *ibid.* 12 (1974), 369–372. MR50#7605 Z296,33001
644. D *A reciprocity and four-term relation for generalized Dedekind sums*, Indag. Math. 36 (1974), 413–422. MR50#7051 Z291,10005
645. S *Remark on a combinatorial identity*, J. Combin. Theory (A) 17 (1974), 256–257. MR52#2914 Z287,05015
646. E (with R. Scoville) *Generalized Eulerian numbers: combinatorial applications*, J. Reine Angew. Math. 265 (1974), 110–137. MR55#2587 Z276,05006 *Corrigendum*, *ibid.* 288 (1976), 218–219. MR55#2588
647. N *A note on the greatest integer function*, Math. Mag. 47 (1974), 274–277. MR50#4461 Z292,10006
648. C6 *An application of MacMahon's master theorem*, SIAM J. Appl. Math. 26 (1974), 431–436. MR49#2411 Z282,05008
649. C6 *Some combinatorial identities*, Univ. Beograd. Publ. Elektrotehn. Fak. Ser. Mat. Fiz. 473 (1974), 87–90. MR53#5321 Z298,05012
650. F9 *Correspondences in a finite field I*, Acta Arith. 27 (1975), 101–123. MR51#8083 Z254,12009
651. D *Some polynomials associated with Dedekind sums*, Acta Math. Acad. Sci. Hungar. 26 (1975), 311–319. MR52#5540 Z317,10017
652. E *A combinatorial property of q -Eulerian numbers*, Amer. Math. Monthly 82 (1975), 51–54. MR51#2930 Z296,05007
653. B *Some sums involving fractional parts*, *ibid.* 82 (1975), 264–269. MR51#5465 Z302,10007
654. E (with R. Scoville) *Eulerian numbers and operators*, Fibonacci Quart. 13 (1975), 71–83. MR51#12546 Z302,05006
655. N *Fibonacci notes IV. q -Fibonacci polynomials*, *ibid.* 13 (1975), 97–102. MR52#249 Z298,10010
656. S *Some identities of Bruckman*, *ibid.* 13 (1975), 121–126. MR50#10379 Z303,05012
657. S *Note on some generating functions*, *ibid.* 13 (1975), 129–133. MR50#12744 Z304,05001

658. C4 (with R. Scoville) *A note on weighted sequences*, *ibid.* 13 (1975), 303–306. MR52#8019 Z319,05003
659. S *Summation of some double series*, *Glasnik Mat.* (3) 10 (30) (1975), 73–81. MR51#13304 Z304,33007
660. F9 *Correspondences in a finite field II*, *Indiana Univ. Math. J.* 24 (1975), 785–811. MR51#8084 Z281,12017
661. C3 (with R. Scoville) *Generating functions for certain types of permutations*, *J. Combin. Theory (A)* 18 (1975), 262–275. MR51#7890 Z303,05007
662. F4 (with J. V. Brawley and J. Levine) *Scalar polynomial functions on the $n \times n$ matrices over a finite field*, *Linear Algebra Appl.* 10 (1975), 199–217. MR51#12800 Z307,15004
663. S *A note on the left factorial function*, *Math. Balkanica* 5 (1975), 37–42. MR58#10470 Z389,05004
664. C2 (with R. Scoville) *A generating function for triangular partitions*, *Math. Comp.* 29 (1975), 67–77. MR51#3049 Z297,05012
665. P1 *A note on sums of three squares in $GF[q, x]$* , *Math. Mag.* 48 (1975), 109–110. MR50#12987 Z313,10046 *Corrigenda*, *ibid.* 48 (1975), 292.
666. C1a (with R. Scoville) *Enumeration of up-down permutations by upper records*, *Monatsh. Math.* 79 (1975), 3–12. MR50#12748 Z315,05004
667. D *A three-term relation for some sums related to Dedekind sums*, *Pacific J. Math.* 57 (1975), 339–348. MR52#245 Z311,10006
668. C3 *Generating functions for a special class of permutations*, *Proc. Amer. Math. Soc.* 47 (1975), 251–256. MR50#1900 Z297,05011
669. C2 (with R. P. Stanley) *Branchings and partitions*, *ibid.* 53 (1975), 246–249. MR52#2913 Z279,05012
670. D *Some sums containing the greatest integer function*, *Rev. Roumaine Math. Pures Appl.* 20 (1975), 521–530. MR51#12668 Z307,10003
671. C7a *Note on a binomial identity*, *SIAM J. Math. Anal.* 6 (1975), 901–905. MR51#12552 Z311,05005
672. C3 *Permutations, sequences and special functions*, *SIAM Rev.* 17 (1975), 298–322. MR51#7891 Z301,05001
673. D *The reciprocity theorem for Dedekind–Rademacher sums*, *Acta Arith.* 29 (1976), 309–313. MR53#5445 Z282,10016
674. F5 *A theorem on lacunary polynomials in a finite field*, *Amer. Math. Monthly* 83 (1976), 37–38. MR52#13756 Z334,12031
675. S *A theorem on differential operators*, *ibid.* 83 (1976), 351–354. MR55#3695 Z331,44007
676. D *Simultaneous inversions*, *Arch. Math. (Basel)* 27 (1976), 282–289. MR53#13108 Z326,10008
677. N *Some arithmetic properties of a special sequence of integers*, *Canad. Math. Bull.* 19 (1976), 425–429. MR56#239 Z358,10007
678. C5 *A special class of triangular arrays*, *Collect. Math.* 27 (1976), 23–58. MR53#7794 Z339,05011
679. C1a (with R. Scoville and T. Vaughan) *Enumeration of pairs of permutations*, *Discrete Math.* 14 (1976), 215–239. MR53#156 Z322,05008
680. S *The Saalschützian theorems*, *Fibonacci Quart.* 14 (1976), 55–63. MR55#10284 Z366,33001
681. B *Some binomial sums*, *ibid.* 14 (1976), 249–253. MR54#7271 Z339,05006
682. C1b *Restricted compositions*, *ibid.* 14 (1976), 254–264. MR54#2580 Z338,05005
683. C2 *Set partitions*, *ibid.* 14 (1976), 327–342. MR55#123 Z362,05024

684. B *Some sums of multinomial coefficients*, *ibid.* 14 (1976), 427–438. MR58#21656 Z361,05002
685. S *Summation of some double series II*, *Glasnik Mat.* (3) 11 (31) (1976), 199–203. MR55#918 Z339,33006
686. S *Polynomial representations and compositions I*, *Houston J. Math.* 2 (1976), 23–48. MR53#265 Z328,05005
687. S *Polynomial representations and compositions II. q -analogs*, *ibid.* 2 (1976), 345–372. MR54#4997 Z332,05009
688. C1a (with R. Scoville and T. Vaughan) *Enumeration of pairs of sequences by rises, falls and levels*, *Manuscripta Math.* 19 (1976), 211–243. MR55#5460 Z348,05006
689. S (with H. M. Srivastava) *Some hypergeometric polynomials associated with the Lauricella function F_D of several variables I*, *Mat. Vesnik (N.S.)* 13 (28) (1976), 41–47. MR53#11111 Z313,33008
690. S (with H. M. Srivastava) *Some hypergeometric polynomials associated with the Lauricella function F_D of several variables. II*, *ibid.* 13 (28) (1976), 143–152. MR54#7911 Z335,33001 (= Z325,33003)
691. F11 (with J. L. Brenner) *Covering theorems for finite nonabelian simple groups. III. Solutions of the equation $\alpha x^2 + \beta t^2 + \gamma t^{-2}a$ in a finite field*, *Rend. Sem. Mat. Univ. Padova* 55 (1976), 81–90. MR56#15754 Z238,20020
692. B *Some numbers related to the Stirling numbers of the first and second kind*, *Univ. Beograd. Publ. Elektrotehn. Fak. Ser. Mat. Fiz.* 553 (1976), 49–55. MR56#2836 Z362,05010
693. F3 (with A. F. Long, Jr.) *The factorization of $Q(L(x_1), \dots, L(x_k))$ over a finite field where $Q(x_1, \dots, x_k)$ is of first degree and $L(x)$ is linear*, *Acta Arith.* 32 (1977), 407–420. MR55#5595 Z401,12018
694. F5 *Some theorems on polynomials over a finite field*, *Amer. Math. Monthly* 84 (1977), 29–32. MR55#311 Z362,12016
695. F9 *Functions and correspondences in a finite field*, *Bull. Amer. Math. Soc.* 83 (1977), 139–165. MR54#12723 Z353,12007
696. C6 *Combinatorial property of a special polynomial sequence*, *Canad. Math. Bull.* 20 (1977), 183–188. MR56#15441 Z362,05025
697. C4 *Alternating sequences*, *Discrete Math.* 17 (1977), 133–138. MR55#10277 Z361,05003
698. C7b *Fibonacci notes V. Zero-one sequences again*, *Fibonacci Quart.* 15 (1977), 49–56. MR57#9556 Z362,05021
699. B *Some sums containing the greatest integer function*, *ibid.* 15 (1977), 78–84. MR54#12612 Z362,10004
700. C7b (with R. Scoville) *Zero-one sequences and Fibonacci numbers*, *ibid.* 15 (1977), 246–254. MR57#5888 Z363,05008
701. N *Fibonacci notes VI. A generating function for Halsey's Fibonacci function*, *ibid.* 15 (1977), 276–280. MR57#9557 Z365,10010
702. C3 (with R. Scoville) *Some permutation problems*, *J. Combin. Theory (A)* 22 (1977), 129–145. MR55#120 Z351,05003
703. C6 *Some combinatorial identities of Sarmanov, Sevast'yanov, and Tarakanov*, *ibid.* 22 (1977), 235–240. MR55#125 Z351,05005
704. B *Some sums containing the greatest integer function*, *J. Natur. Sci. Math.* 17 (1977), 49–60. MR82b,10007 Z444,10005
705. F4 (with J. H. Hodges) *Enumeration of matrices of given rank with submatrices of given rank*, *Linear Algebra Appl.* 16 (1977), 285–291. MR57#5774 Z403,15014

706. C1b *Enumeration of compositions by rises, falls, and levels*, Math. Nachr. 77 (1977), 361–371. MR56#8377 Z361,05004
707. C1a *Enumeration of doubly up-down permutations*, Pacific J. Math. 70 (1977), 105–116. MR58#21643 Z375,05003
708. C6 *Some expansions and convolution formulas related to MacMahon's master theorem*, SIAM J. Math. Anal. 8 (1977), 320–336. MR58#21640 Z359,05003
709. S *A class of generating functions*, *ibid.* 8 (1977), 518–532. MR55#8434 Z357,33004
710. S *Note on some convolved power sums*, *ibid.* 8 (1977), 701–709. MR56#3384 Z363,10008
711. N *A theorem on linear exponential sums*, Univ. Beograd. Publ. Elektrotehn. Fak. Ser. Mat. Fiz. 588 (1977), 55–56. MR56#11973 Z369,10023
712. C6 *A combinatorial identity of L. N. Dordević*, *ibid.* 595 (1977), 86–88. MR58#10479 Z422,05009
713. C1b *Up-down and down-up partitions*, Adv. Math. Suppl. Stud. 1 (1978), 101–129. MR80d,05005 Z434,05008
714. N *Some product-sum identities*, Amer. Math. Monthly 85 (1978), 570–572. MR80a,05019 Z403,05009
715. F2 (with J. A. Lutz) *A characterization of permutation polynomials over a finite field*, *ibid.* 85 (1978), 746–748. MR80a,12022 Z406,12011
716. C6 *Recurrences of the third order and related combinatorial identities*, Fibonacci Quart. 16 (1978), 11–18. MR58#16329 Z374,05006
717. E (with V. E. Hoggatt, Jr.) *Generalized Eulerian numbers and polynomials*, *ibid.* 16 (1978), 138–146. MR58#490 Z379,10008
718. E *Some polynomials related to Fibonacci and Eulerian numbers*, *ibid.* 16 (1978), 216–226. MR80c,10013 Z402,10012
719. C4 *A recurrence suggested by a combinatorial problem*, *ibid.* 16 (1978), 227–242. MR80c,05018 Z402,05004
720. C6 *Some remarks on a combinatorial identity*, *ibid.* 16 (1978), 243–248. MR58#21657 Z392,10014
721. C6 *Enumeration of certain weighted sequences*, *ibid.* 16 (1978), 249–254. MR80a,05010 Z403,05007
722. C4 *The number of derangements of a sequence with given specification*, *ibid.* 16 (1978), 255–258. MR80a,05011 Z403,05008
723. C3 *Enumeration of permutations by sequences*, *ibid.* 16 (1978), 259–268. MR81j,05009 Z412,05005
724. N *Some classes of Fibonacci sums*, *ibid.* 16 (1978), 411–426. MR80a,10015 Z401,10013
725. S *A set of polynomials in three variables*, Houston J. Math. 4 (1978), 11–33. MR58#17254 Z381,33010
726. D *Many-term relations for multiple Dedekind sums*, Indian J. Math. 20 (1978), 77–89. MR82c,10003 Z418,10013
727. C6 *Specialized Möbius inversion*, J. Combin. Theory (A) 24 (1978), 261–277. MR80c,10004 Z386,05002
728. E *A note on q -Eulerian numbers*, *ibid.* 25 (1978), 90–94. MR80k,05007 Z386,05003
729. S *Expansion of a special operator*, J. Math. Anal. Appl. 62 (1978), 581–599. MR57#9555 Z377,05002
730. C3 *Permutations with prescribed pattern II. Applications*, Math. Nachr. 83 (1978), 101–126. MR80a,05009 Z312,05012
731. N *A note on exponential sums*, Math. Scand. 42 (1978), 39–48. MR80d,12017 Z388,12007

732. D *Some theorems on generalized Dedekind–Rademacher sums*, Pacific J. Math. 75 (1978), 347–358. MR80f,10005 Z341,10011
733. B *Stirling pairs*, Rend. Sem. Mat. Univ. Padova 59 (1978), 19–44. MR80m,05010 Z427,05002
734. B *Generalized Stirling and related numbers*, Riv. Mat. Univ. Parma (4) 4 (1978), 79–99. MR80h,10017 Z402,10011
735. N *Polynomial characteristic functions for $GF(p)$ and irregular primes*, Rocky Mountain J. Math. 8 (1978), 583–587. MR80a,12023 Z398,12011
736. C6 *Some combinatorial identities of Bernstein*, SIAM J. Math. Anal. 9 (1978), 65–75. MR57#12245 Z374,05005
737. C8 *Solution of certain recurrences II*, *ibid.* 9 (1978), 781–786. MR82a,05005 Z409,05011
738. E *Some remarks on the Eulerian function*, Univ. Beograd. Publ. Elektrotehn. Fak. Ser. Mat. Fiz. 611 (1978), 79–91. MR82e,33013 Z439,10005
739. C1b *Restricted multipartite compositions*, Fibonacci Quart. 17 (1979), 220–228. MR81a,10021 Z418,10016
740. C1b *Restricted compositions II*, *ibid.* 17 (1979), 321–328. MR80i,10020 Z418,10017
741. C7a *Further note on a binomial identity*, Glasnik Mat. (3) 14 (34) (1979), 3–9. MR80m,05006 Z412,05011
742. N *Explicit evaluation of certain exponential sums*, Math. Scand. 44 (1979), 5–16. MR80j,10042 Z396,12017
743. S *Some multiple power series with zero-one coefficients*, SIAM J. Math. Anal. 10 (1979), 1022–1040. MR81c,05009 Z433,12012
744. E *Degenerate Stirling, Bernoulli and Eulerian numbers*, Utilitas Math. 15 (1979), 51–88. MR80i,05014 Z404,05004
745. C6 *A combinatorial identity and some generalizations*, *ibid.* 16 (1979), 295–301. MR81e,05023 Z427,05012
746. N *A note on some polynomial identities*, Acta Arith. 36 (1980), 87–89. MR81k,10024 Z425,10012
747. D *A reciprocity theorem and a three-term relation for generalized Dedekind–Rademacher sums*, *ibid.* 37 (1980), 117–132. MR82a,10015 Z369,10007
748. C1a *Up-down permutations of higher order*, Collect. Math. 31 (1980), 243–258. MR82m,05007 Z464,05002
749. C6 *Explicit formulas for the Dumont–Foata polynomial*, Discrete Math. 30 (1980), 211–225. MR81f,05007 Z445,05009
750. B *Some restricted multiple sums*, Fibonacci Quart. 18 (1980), 58–65. MR84c,05012 Z426,10014
751. S *Some remarks on the Bell numbers*, *ibid.* 18 (1980), 66–73. MR81f,10020 Z426,10013
752. B *Weighted Stirling numbers of the first and second kind I*, *ibid.* 18 (1980), 147–162. MR81g,10026 Z428,05003
753. C7b *Fibonacci notes VI. (Should be VII; see 701) Zero-one sequences once more*, *ibid.* 18 (1980), 177–185. MR81h,05008 Z427,05003
754. B *Weighted Stirling numbers of the first and second kind II*, *ibid.* 18 (1980), 242–257. MR82c,05010 Z441,05003
755. C3 *The number of permutations with a given number of sequences*, *ibid.* 18 (1980), 347–352. MR82h,05003 Z451,05005
756. S *Multiple binomial and power sums*, Houston J. Math. 6 (1980), 331–354. MR82h,05008 Z457,05006
757. F1 *Evaluation of some exponential sums over a finite field*, Math. Nachr. 96 (1980), 319–339. MR82e,12023 Z456,12011

758. B *A characterization of the Bernoulli and Euler polynomials*, Rend. Sem. Mat. Univ. Padova 62 (1980), 309–318. MR81k,10020 Z443,33020
759. B *Some remarks on the Stirling numbers*, Univ. Beograd. Publ. Elektrotehn. Fak. Ser. Mat. Fiz. 679 (1980), 10–14. MR83b,05002 Z471,10010
760. S *Some generalizations of a binomial identity conjectured by Hoggatt*, Fibonacci Quart. 19 (1981), 200–208. MR82j,05020 Z467,05004
761. C3 *Enumeration of permutations by sequences II*, *ibid.* 19 (1981), 398–406, 465. MR83e,05014 Z499,05007
762. B *Some remarks on the multiplication theorems for the Bernoulli and Euler polynomials*, Glasnik Mat. (3) 16 (36) (1981), 3–23. MR83b,10009 Z474,10013
763. B *Some polynomials related to the Bernoulli and Euler polynomials*, Utilitas Math. 19 (1981), 81–127. MR82j,10023 Z474,10012
764. C6 (with J. Kaucký and J. Vosmanský) *On two combinatorial identities*, Math. Slovaca 32 (1982), 297–300. MR83j,05008 Z499,05008
765. B *Some inversion theorems*, Utilitas Math. 21 C (1982), 301–313. MR84f,10015 Z513,33010
766. D *An application of the reciprocity theorem for Dedekind sums*, Fibonacci Quart. 22 (1984), 266–270. MR86e,11004 Z546,10010
767. F5 (with J. V. Brawley) *Irreducibles and the composed product for polynomials over a finite field*, Discrete Math. 65 (1987), 115–139. MR89g,11118 Z615,05007
768. N *On the power series expansion of a certain function over a field of characteristic p* , Indian J. Math. 29 (1987), 159–163. MR89g,11122 Z646,12006
769. F5 (with J. V. Brawley) *A test for additive decomposability of irreducibles over a finite field*, Discrete Math. 76 (1989), 61–65. MR90g,11165 Z615,05007
770. S (with H. M. Srivastava) *Some new generating functions for the Hermite polynomials*, J. Math. Anal. Appl. 149 (1990), 513–520. MR91j,33006 Z687,33009
771. C7a (with H. W. Gould) *Remarks on MacMahon's Identity for sums of cubes of binomial coefficients*, Ars Combin. 85 (2007), 221–224.
772. F11 *Chapter 19 of "The Arithmetic of Polynomials"*, Finite Fields Appl. 1 (1995), 157–164. MR96d,11068&11069 Z824,11039
773. *Mock zeta functions*, unpublished manuscript, 15 pp.

