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Education Information

Doctorate, İstanbul Teknik Üniversitesi, Gemi İnşaatı Ve Deniz Bilimleri Fakültesi, Gemi İnşaatı Ve Gemi Makineleri Mühendisliği Bölümü, Turkey 1983 - 1987

Dissertations

Doctorate, Stokes Akımlarında Viskoz Direncin Teorik olarak Hesaplanması ve Direnci Minimum olan Formların belirlenmesi, İstanbul Teknik Üniversitesi, Gemi İnşaatı Ve Deniz Bilimleri Fakültesi, Gemi İnşaatı Ve Gemi Makineleri Mühendisliği Bölümü, 1987

Academic Titles / Tasks

Professor, Middle East Technical University, Faculty of Arts and Sciences, Department of Mathematics, 1991 - Continues

Academic and Administrative Experience

Middle East Technical University, Faculty of Arts and Sciences, Department of Mathematics, 1995 - 2000

Advising Theses

TAŞELİ H., An Application of the rayleigh-ritz method to the integral-equation representation of the one-dimensional schrödinger equation, Post Graduate, R.Kaya(Student), 2019

TAŞELİ H., Calculations of the roots of classical orthogonal polynomials: An application to Gaussian quadrature, Post Graduate, G.SHAIDOLDA(Student), 2019

TAŞELİ H., A general pseudospectral formulation of a class of Sturm-Liouville Systems, Doctorate, H.Alıcı(Student), 2010

TAŞELİ H., On the q-analysis of q-hypergeometric difference equation, Doctorate, R.Sevindik(Student), 2010

TAŞELİ H., Inverse Sturm-Liouville Systems over the whole Real Line, Doctorate, H.Altundağ(Student), 2010

TAŞELİ H., Studies on the generalized and reverse generalized bessel polynomials, Post Graduate, Z.Sonay(Student), 2004

TAŞELİ H., Studies on the perturbation problems in quantum mechanics, Post Graduate, B.Koca(Student), 2004

TAŞELİ H., On the WKB asymptotic solution of differential equations of the hypergeometric type, Post Graduate, B.Aksoy(Student), 2004

TAŞELİ H., Quantum mechanical computation of billiard systems with arbitrary shapes, Doctorate, İ.Erhan(Student), 2003

TAŞELİ H., Pseudospectral methods for differential equations : application to the Schrödinger type eigenvalue problems, Post Graduate, H.Alıcı(Student), 2003

TAŞELİ H., Effect of basis functions in numerical solutions of eigenvalue problems, Post Graduate, G.Alp(Student), 2000

TAŞELİ H., Applications of the scaled Hermite-Weber basis for solving the Schrödinger equation, Post Graduate, M.Bahar(Student), 1998

TAŞELİ H., Hypervirial analysis of enclosed quantum mechanical systems., Post Graduate, Ö.Uğur(Student), 1998

TAŞELİ H., Series solutions of two simultaneous vector differential equations originated from classical stokes flow problem, Doctorate, R.Eid(Student), 1994

Articles Published in Journals That Entered SCI, SSCI and AHCI Indexes

- I. **Unification of Stieltjes-Calogero type relations for the zeros of classical orthogonal polynomials**
ALICI H., TAŞELİ H.
MATHEMATICAL METHODS IN THE APPLIED SCIENCES, vol.38, no.14, pp.3118-3129, 2015 (Journal Indexed in SCI)
- II. **Inverse Sturm-Liouville problems with pseudospectral methods**
Altundag H., Boeckmann C., TAŞELİ H.
INTERNATIONAL JOURNAL OF COMPUTER MATHEMATICS, vol.92, no.7, pp.1373-1384, 2015 (Journal Indexed in SCI)
- III. **The Laguerre pseudospectral method for the radial Schrodinger equation**
ALICI H., TAŞELİ H.
APPLIED NUMERICAL MATHEMATICS, vol.87, pp.87-99, 2015 (Journal Indexed in SCI)
- IV. **On the Orthogonality of q-Classical Polynomials of the Hahn Class**
Alvarez-Nodarse R., Adiguzel R. S. , TAŞELİ H.
SYMMETRY INTEGRABILITY AND GEOMETRY-METHODS AND APPLICATIONS, vol.8, 2012 (Journal Indexed in SCI)
- V. **Pseudospectral methods for solving an equation of hypergeometric type with a perturbation**
Alici H., TAŞELİ H.
JOURNAL OF COMPUTATIONAL AND APPLIED MATHEMATICS, vol.234, no.4, pp.1140-1152, 2010 (Journal Indexed in SCI)
- VI. **On the special values of monic polynomials of hypergeometric type**
TAŞELİ H.
JOURNAL OF MATHEMATICAL CHEMISTRY, vol.43, no.1, pp.237-251, 2008 (Journal Indexed in SCI)
- VII. **The Laguerre pseudospectral method for the reflection symmetric Hamiltonians on the real line**
Taseli H., Alici H.
JOURNAL OF MATHEMATICAL CHEMISTRY, vol.41, no.4, pp.407-416, 2007 (Journal Indexed in SCI)
- VIII. **A model for the computation of quantum billiards with arbitrary shapes**
Erhan I. M. , Taseli H.
JOURNAL OF COMPUTATIONAL AND APPLIED MATHEMATICS, vol.194, no.2, pp.227-244, 2006 (Journal Indexed in SCI)
- IX. **The scaled Hermite-Weber basis in the spectral and pseudospectral pictures**
Taseli H., Alici H.
JOURNAL OF MATHEMATICAL CHEMISTRY, vol.38, no.3, pp.367-378, 2005 (Journal Indexed in SCI)
- X. **A class of orthogonal polynomials suggested by a trigonometric Hamiltonian: Antisymmetric states**
Taseli H.
JOURNAL OF MATHEMATICAL CHEMISTRY, vol.37, no.4, pp.377-388, 2005 (Journal Indexed in SCI)
- XI. **A class of orthogonal polynomials suggested by a trigonometric Hamiltonian : Symmetric states**
Taseli H.
JOURNAL OF MATHEMATICAL CHEMISTRY, vol.36, no.1, pp.1-12, 2004 (Journal Indexed in SCI)
- XII. **Accurate numerical bounds for the spectral points of singular Sturm-Liouville problems over $0 < x < \infty$**
Taseli H.
JOURNAL OF COMPUTATIONAL AND APPLIED MATHEMATICS, vol.164, pp.707-722, 2004 (Journal Indexed in SCI)
- XIII. **The scaled Hermite-Weber basis still highly competitive**

- Taseli H., Ersecen M.
JOURNAL OF MATHEMATICAL CHEMISTRY, vol.34, pp.177-187, 2003 (Journal Indexed in SCI)
- XIV. **Exact analytical solutions of the Hamiltonian with a squared tangent potential**
Taseli H.
JOURNAL OF MATHEMATICAL CHEMISTRY, vol.34, pp.243-251, 2003 (Journal Indexed in SCI)
- XV. **An eigenfunction expansion for the Schrodinger equation with arbitrary non-central potentials**
TASELI H., Erhan I., Ugur O.
JOURNAL OF MATHEMATICAL CHEMISTRY, vol.32, no.4, pp.323-338, 2002 (Journal Indexed in SCI)
- XVI. **Accurate numerical bounds for the spectral points of singular Sturm-Liouville problems over -infinity < x <infinity**
Taseli H.
JOURNAL OF COMPUTATIONAL AND APPLIED MATHEMATICS, vol.115, pp.535-546, 2000 (Journal Indexed in SCI)
- XVII. **Two-sided eigenvalue bounds for the spherically symmetric states of the Schrodinger equation**
Zafer A., Taseli H.
JOURNAL OF COMPUTATIONAL AND APPLIED MATHEMATICS, vol.95, pp.83-100, 1998 (Journal Indexed in SCI)
- XVIII. **Exact solutions for vibrational levels of the Morse potential**
Taseli H.
JOURNAL OF PHYSICS A-MATHEMATICAL AND GENERAL, vol.31, no.2, pp.779-788, 1998 (Journal Indexed in SCI)
- XIX. **Modified Laguerre basis for hydrogen-like systems**
Taseli H.
INTERNATIONAL JOURNAL OF QUANTUM CHEMISTRY, vol.63, no.5, pp.949-959, 1997 (Journal Indexed in SCI)
- XX. **Bessel basis with applications: N-dimensional isotropic polynomial oscillators**
Taseli H., Zafer A.
INTERNATIONAL JOURNAL OF QUANTUM CHEMISTRY, vol.63, no.5, pp.935-947, 1997 (Journal Indexed in SCI)
- XXI. **A new approach to the classical Stokes flow problem .2. Series solutions and higher-order applications**
Taseli H., Eid R.
JOURNAL OF COMPUTATIONAL AND APPLIED MATHEMATICS, vol.78, no.2, pp.233-254, 1997 (Journal Indexed in SCI)
- XXII. **A new approach to the classical Stokes flow problem .1. Methodology and first-order analytical results**
Taseli H., Demiralp M.
JOURNAL OF COMPUTATIONAL AND APPLIED MATHEMATICS, vol.78, no.2, pp.213-232, 1997 (Journal Indexed in SCI)
- XXIII. **A Fourier-Bessel expansion for solving radial Schrodinger equation in two dimensions**
Taseli H., Zafer A.
INTERNATIONAL JOURNAL OF QUANTUM CHEMISTRY, vol.61, no.5, pp.759-768, 1997 (Journal Indexed in SCI)
- XXIV. **Eigenvalues of the two-dimensional Schrodinger equation with nonseparable potentials**
Taseli H., Eid R.
INTERNATIONAL JOURNAL OF QUANTUM CHEMISTRY, vol.59, no.3, pp.183-201, 1996 (Journal Indexed in SCI)
- XXV. **On the exact solution of the Schrodinger equation with a quartic anharmonicity**
Taseli H.
INTERNATIONAL JOURNAL OF QUANTUM CHEMISTRY, vol.57, no.1, pp.63-71, 1996 (Journal Indexed in SCI)
- XXVI. **An alternative series solution to the isotropic quartic oscillator in N dimensions**
Taseli H.
JOURNAL OF MATHEMATICAL CHEMISTRY, vol.20, pp.235-245, 1996 (Journal Indexed in SCI)
- XXVII. **ACCURATE COMPUTATION OF THE ENERGY-SPECTRUM FOR POTENTIALS WITH MULTIMINIMA**
TASELI H.
INTERNATIONAL JOURNAL OF QUANTUM CHEMISTRY, vol.46, no.2, pp.319-334, 1993 (Journal Indexed in SCI)

Articles Published in Other Journals

I. **On the numerical solution of the Schrödinger equation**

TASELI H.

Bulletin of the Technical University of Istanbul, vol.48, pp.159-163, 1995 (Other Refereed National Journals)

II. **A note on the trial function structure for the Wronskian approach**

TASELI H.

Bulletin of the Technical University of Istanbul, vol.42, pp.365-369, 1989 (Other Refereed National Journals)

Citations

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