

Acknowledgment

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Dedication

To all those devote their work to Allah
To my mother and father, my sisters and brothers
 To my all family and friends
 To colleagues and my students
 To all researchers and scientists
To all those who helped me and all those
 Who asked Allah for me

Abstract

In this work the concept of energy and energy conservations in special relativity and generalized special relativity is discussed. The aim of the work is to incorporate potential energy in the energy relation. Some expressions conserves energy and other resembles Newtonian one, while other expressions combines Newtonian beside relativistic rest mass energy term. New special relativistic energy relation is obtained by using the formal definition of force. This expression includes mass energy beside potential energy, with energy conserved. The effect of friction on energy lost is found by using uncertainty relation. The special relativistic energy in the presence of friction is found. This relation is used to find new special relativistic quantum equation. Treating particles as vibrating string the mass is quantized.

ملخص

في هذه البحث تمت مناقشة مفهوم الطاقة وحفظها في النظرية النسبية الخاصة والعامة. يهدف هذا البحث لتضمين طاقة الوضع في صيغة الطاقة. يصف هذه الصيغ تحقق حفظ الطاقة وبعضها تشابه صيغة نيوتن وبعضها يدمج صيغة نيوتن مع صيغة طاقة الكتلة السكونية .

وقد تم الحصول علي صيغة جديدة لطاقة النسبية الخاصة بأستخدام تعريف القوة. هذه الصيغة تحوي طاقة الكتلة بجانب طاقة الوضع في ظل حفظ الطاقة. تم الحصول علي صيغة لطاقة الأحتكاك المفقودة بأستخدام مبدأ عدم التيقن وتم الحصول علي صيغة نسبية للطاقة في هذه الحالة. هذه الصيغة استخدمت للحصول علي معادلة كمية نسبية جديدة وكمت الكتلة علي ضوء نموذج الأوتار المتذبذبة.

Contents

No	DISCREBTION	page
	Acknowledgment	i
	Dedication	ii
	Abstract	iii
	Abstract (Arabic)	iv
	Chapter 1	
	introduction	
1.1	Quantum mechanics and matter	1
1.2	Research Problem	2
1.3	literature review	3
1.4	Aim of the work	5
1.5	Thesis Layout	6
	Chapter 2	
2.1	introduction	7
2.2	Relativistic time and length	7
2.3	Relativity of length	9
2.4	Relativity of mass	10
2.5	Relativistic Energy	12
2.6	Energy - momentum Relation	14
2.7	Wave Particle Duality	15
2.8	Uncertainty Relation	15
2.9	Relativistic Energy Relation	17
2.10	Klein-Gordon Equation	18
2.11	Dirac Equation	19
	Chapter3	
	Literature Review	
3.1	Introduction:	20
3.2	Schrodinger Equation in Presence of Thermal and Resistive Energy	20
3.3	Using the tight binding approximation in deriving the quantum critical temperature superconductivity equation	31
3.3.1	Schrodinger Temperature Dependent Equation	32
3.3.2	Quantum Resistance	34
3.3.4	Calculation HTSC by Electric Susceptibility	36
3.3.5	Tight Binding Critical Temperature and Energy Gap	39
3.4	Derivation of Klein – Gordon equation for Maxwell s electric wave equation	42
3.4.1	Derivation of Klein-Gordon Equation	46
3.5	Tight-binding and Energy Relation	47
3.5.1	Theoretical Relations for Intensity and Nanoparticle Size	48
3.5.2	Materials and Methods	51

3.5.3	Results and Discussion	61
3.6	The Quantum Expression of the Role of Effective Mass in the Classical Electromagnetic Theory Form & in Absence of Binding Energy	62
3.6.1	Effective Mass Quantum Expectation Value:	65
3.6.2	Effective (EGSR) Mass	67
3.6.3	Harmonic Oscillator	69
3.6.4	Discussion	71
3.7	quantum explanation of conductivity at resonance	72
3.7.4	Theoretical Interpretation	75
3,7,5	Discussion	79
	Chapter4	
	Introduction	
4.1	Quantum Relativistic Frictional Model and String Theory	81
4.2	Energy Conservation	81
4.3	Energy Conservation on GSR on the Basis of Ordinary Relating which is the for Generalized Special Relativistic (GSR	83
4.4	Energy Conservation in GSR on the Basis of New Relation between Force and Kinetic Energy	85
4.5	Energy Conservation in GSR Based on new Force and Potential Energy Relation	88
4.6	Special Energy Frictional Equation	90
4.7	Special Relativistic Quantum Frictional Equation	94
4.8	Harmonic Oscillator solution	96
4.9	Discussion	98
4.10	Conclusion	100
4.11	Recommendation	100
	References	
	References	
	References	
	References	