

Banana in General

Natural fibres are categorised into three types based on their origin: seed hair, bast fibres, and leaf fibres. Cotton (seed hairs), ramie, jute, and flax (bast fibres), as well as sisal and banana, are more examples (leaf fibres) Numerous fibrous plants flourish in tropical regions, and some, such as the banana, are important agricultural commodities. As a byproduct of the banana business, banana bast fibre is produced. It is a lingo-cellulosic fibre with remarkable mechanical properties that can be extracted from the banana plant's pseudo-stem. Fibrous plants abound in tropical climes, and some, such as the banana, are major agricultural crops. Banana fibre is unmatched in terms of strength, rivalling that of other materials such as glass fibre. [1] Banana plants are year-round tropical trees. Banana trees were formerly farmed in Asian countries only for their fruit, with little attention paid to the banana tree's other components. Natural fibres are expected to improve the mechanical properties of the composite, namely its tensile and flexural strength. [2] Over the past decade, researchers from a range of professions and applications have attempted to replace natural fibres in polymer composites with synthetic fibres. This is because natural fibres are biodegradable, affordable, lightweight, and abundant in contrast to synthetic fibres. As a consequence, the composites sector has sought to substitute natural fibre reinforcements such as flax, hemp, jute, sisal, kenaf, and banana for synthetic fibre reinforcements. Natural fibre reinforced polymer composites have been used in a range of sectors due to their advantageous properties, including automotive components, aircraft components, recreational products, and the construction industry. Polypropylene is a thermoplastic polymer formed when molecules polymerize [1]. Natural Fiber Reinforcement Due to their availability, simplicity of access, and eco-friendliness, composites are employed in a wide range of applications. Fiber reinforced composites are utilised in a wide number of industries, including aerospace and aviation, automotive and marine, furniture, packaging assembly boards and panels, sporting goods, and fences. Numerous studies have shown the use of cellulose fibres as reinforcements, including banana, pineapple, sisal, hemp, abaca, flax, coir, jute, and hemp. Banana fibres are gaining popularity as a potential reinforcing material for a range of construction applications. Banana fibres are gaining popularity as a potential reinforcing material for a range of construction applications. Additionally to recent study indicating banana fibres' favourable properties in building materials [3],

Banana Trunk has the ability to become a blast protective wall against any danger. This book mixes study on bananas with research on explosives. There are 95 references in this category.

4. Traction separation law

The traction-separation rule may be derived directly using a special formulation of the normal separation displacement in the sticky layer. Numerous analytical techniques, including the Winkler elastic foundation theory, have been published in the literature for finding the expression of the normal separation displacement in the adhesive layer. However, these mathematical techniques are often applicable only under elastic conditions or when the traction-separation rule is expressed in the Cohesive Zone Model (CZM) form. Degradation process characterization The damage evolution of the traction-separation law is critical for developing the cohesive zone model (CZM). Numerous damage evolution models, including bi- or tri-linear trapezoidal polynomials and exponential models, have been employed in engineering applications. Experimental characterisation of the traction-separation law (TSL) is considered crucial for the CZM to be used effectively, since adhesively bonded joint strength prediction is strongly dependent on the cohesive-zone model parameters. In the context of liner-elastic fracture mechanics, ASTM and ISO standards may be utilised to estimate fracture toughness (LEFM). However, these established methodologies allow for the extraction of the critical energy release rate (ERR) but not for the assessment of the traction-separation law's true evolution; as a consequence, much effort has been devoted defining its differentiating qualities. In this instance, Using the integrated digital image correlation (IDIC) method, we perform a parametric identification of mixed-mode CZM in metallic joints, demonstrating the technology's applicability for detecting CZM characteristics. However, the bulk of the papers listed above dealt with simple-shaped traction-separation laws, such as linear and bilinear functions; and typically, the form of the traction-separation law must be established in advance, which may be inadequate for complicated damage development processes. When a material point completely deteriorates, the global response reaches the stage of fracture propagation. Obviously, the global load is proportional to the traction-separation rule's phases. The rule for traction separation is developed in this work by analysing the several components of the provided global traction loading data. [11]

Preview from Notesale.co.uk
Page 10 of 129

7. Thin Walled metal tubes and its relation to Energy Absorption (EA)

Straight tubes were more responsive to loading angle than tapered tubes in terms of EA performance. To increase EA capacity, inventive and geometrically altered shapes are provided Euler's buckling is clearly seen in thin-walled metal tubes. Increases in EA may be obtained by increasing the wall thickness, but at the expense of a significant weight increase. It is undesirable to establish any EA connections after densification has begun in order to prevent a structure getting a significant amount of force. The strain point at which the energy absorption efficiency versus strain curve achieves its global maximum value is used to determine the hardening or softening onset strain [4].

8. Blast wave in porous media

When shock waves collided directly with a porous material, we observed that the transmitted pressure rose significantly as the foam thickness increased. This pressure rise was attributed to the momentum transfer of the shock wave loading to the foam and the shape of the loading wave. In contrast, foam revealed that it attenuated rather than amplified blast waves in a field test employing explosives. When a modified shock tube was used to generate a loading wave in the shape of a free-field blast wave, the initial amplification of the blast pressure was replaced by attenuation as the foam thickness rose. When structurally deficient materials are subjected to explosive loads, they vaporise or scatter into the surrounding environment. While secondary hazards are insignificant in comparison to the fundamental dangers of dense materials, they may have unforeseen effects for the surrounding biosphere. As a consequence, a methodology for assessing the effect must be developed. By and large, the shock wave travels faster than the material debris created by the barrier breaking in the immediate vicinity. [15]

Preview from Notesale.co.uk
Page 12 of 129

BEHAVIOR

No	Name	Count
1	Structures Dynamic Behavior	12
2	Key Lab Structures Dynamic Behavior	12
3	Behavior Concrete Structures	4
4	Electron Microscope Failure Mechanisms Behavior	2
5	Behavior Energy Absorption	3
6	Energy Absorption Behavior	2
7	Behavior Materials Blast	2
8	Blast Assessing Behavior	2
9	Composite Layers Behavior	2
10	Behavior Soil Blast	2
11	Behavior Structure Blast	2
12	Behavior Structures Blast	2
13	Damage Behavior Composite	2
14	Materials Behavior Modeled	2
15	Mechanical Behaviors Materials	2
16	Mechanical Behaviors Materials Structures Practice	2
17	Rate Behavior Materials	2
18	Physical Behavior Materials	2
19	Behavior Concrete Materials	2
20	Behavior Concrete Materials Multiaxial Stress	2
21	Behavior Orthotropic Materials	2
22	Behavior Orthotropic Materials Unidirectional Composite	2
23	Modeling Damage Behaviors	2
24	Modeling Crushing Behavior	2
25	Models Elastic Behavior	2
26	Multi-Scale Structure Modeling Damage Behaviors	2
27	Model Behavior Structures	2
28	Finite Element Modeling Crushing Behavior	2
29	Simulation Fracture Behavior	2
30	Measurement Numerical Simulation Fracture Behavior	2
31	Structures Flexure Behavior	2
32	Dynamic Behavior Structures	2
33	Behavior Concrete Structures Constitutive Models	2
34	Assessing Behavior Structure	2
35	Behavior Frame Structures	2
36	Behavior Honeycomb Structures	2
37	Behavior Honeycomb Structures Cell Specifications-Numerical	2
38	Behavior Non-Cracked Structures	2
39	Blast Behavior Structures	2
40	Behaviors Materials Structures	2
41	Behavior Uncracked Structures Czm Finite	2

437	Blast Mitigation Fluid	2
438	Synergetic Effect Blast Fragment Loadings	2
439	Synergistic Effect Blast	2
440	Blast Load Variability	2
441	Laminate Coupled Blast	2
442	Frame Structures Blast	2
443	Laminate Loadings Blast	2
444	Threats Bomb Blasts	2
445	Threats Bomb Blasts Prominent Buildings	2
446	Explosive Air Blast	2
447	Blast Wave Profile	2
448	Foam Cladding Blast	2
449	Blast Simple Blast	2
450	Blast Wave Propagates	2
451	Blast Load Scenarios	2
452	Blast Response Arch	2
453	Sdk Foldcore Blast	2
454	Peak Pressure Blast	2
455	Sacrificial Claddings Blast	2
456	Underwater Contact Blast	2
457	Sandwich Panels Blast	2
458	Validation Compute Blast Pressure Time	2
459	Ade Systems Blast	2
460	Foams Thicknesses Blast	2
461	Joint Load Blast	2
462	Attenuation Spent Blast Foam Barriers	2
463	Blast Resistance Dams	2
464	Connectors Dissipating Blast Impact Energy	2
465	Blast Resistance Dam	2
466	Response Dams Blast Loads Numerical	2
467	Blast Loaded Steel	2
468	Water Barrier Blast	2
469	Blast Waves Shock	2
470	Blast Peak Reflected	2
471	Fragility Curves Blast	2
472	Dam Air Blast	2
473	Blast Resistance Parametric	2
474	Thicknesses Blast	2
475	Blast Fluid-Structure Interaction	2
476	Blast Resistance Protection High Dams	2
477	Blast Load Mitigation	2
478	Cladding Blast Alleviation	2
479	Connectors Manufacturing Installation Dissipating Blast	2
480	Blast-Wave Impact Mitigation	2

41	Defines Maximum Force	2
42	Peak Transmitted Force Protected Structure	2
43	Retarded Peak Force	2
44	Retarded Peak Force Compressive Force	2
45	Drawn Peak Force	2
46	Drawn Peak Force Forcedisplacement Curve	2
47	Elastic Stage Force	2
48	Fewer Fluctuations Force	2
49	Mean Crushing Force	2
50	Force Compressive Force	2
51	Slight Increment Force Stage Geometric	2
52	Force Declined Long	2
53	Force Distribution Force	2
54	Force Forcedisplacement Curve	2
55	Force Linear Variable	2
56	Forces Densification Puf	2
57	Force Rises Rapidly	2
58	Force Rose Steep	2
59	Force Vibrations Transferred	2
60	Force Specimen Actuator	2
61	Force Spike Sharply	2
62	Force Stage Geometric	2
63	Slight Increment Force	2
64	Force Peak Contact	2
65	Unit Displacement Force	2
66	Cell Record Force Linear Variable	2
67	Uniform Plate Force	2
68	Armed Plate Force Role Steep	2
69	Uniform Axial Force	2
70	Board Task Force	2
71	Absorb Loads Force	2
72	Cell Record Force	2
73	Tubes Crushing Force	2
74	Cfe Crushing Force	2
75	Value Peaks Force	2
76	Value Peaks Force Vibrations Transferred	2
77	Fibre Reinforcement Mechanical	2
78	Fibre Reinforcement Mechanical Properties Composite	2
79	Mechanical Strength Unreinforced	2
80	Banana Fibre Mechanical Strength Unreinforced	2
81	BEHAVIOR REINFORCED CONCRETE (RC)	2
82	CRUSHING FORCE (CFE)	2
83	MEAN CRUSHING FORCE (MCF)	2
84	ENERGY INSTANTANEOUS FORCE (FI)	2

85	Model Behavior Structures Impact Blast	2
86	Blast Impact Resistance	2
87	Brittleness Impact Resistance	2
88	Experimentation Impact Resistance	2
89	Natural Fibre Composites Ballistic Impact	2
90	Tubes Impact Energy	2
91	Impacted Shock Wave	2
92	Composites Ballistic Impact Fragment Simulating	2
93	Normality Distribution Impact	2
94	Prominent Social Impact	2
95	Impact Underwater Contact	2
96	Impact Velocity Impact	2
97	Columns Oblique Impact	2
98	Peak Value Impact	2
99	Impact Test Concrete	2
100	Impact Explosions Embankment	2
101	Metamaterials Blast-Wave Impact	2
102	Impact Upstream Reservoir	2
103	Impact Test Impact	2
104	Impact Test Aci	2
105	Metal Tubes Impact	2
106	Impact Resistance Test	2
107	Layer First Impact	2
108	Tubes Axial Impact	2
109	Thin-Walled Structures Impact	2
110	Element Method Impact	2
111	Impact Resistance Plain	2
112	Impact Response Honeycomb	2
113	Foam Impact Pressure	2
114	Hypervelocity Impact Response Honeycomb Sandwich	2
115	Hypervelocity Impact Response	2
116	Value Impact Stress	2
117	Impact Resistance Blast Mitigation Material	2
118	Connectors Dissipating Blast Impact Energy	2
119	Blast-Wave Impact Mitigation	2
120	Puf-Filled Connectors Dissipating Blast Impact	2
121	Mean Impact Resistance	2
122	Ultimate Impact Resistance	2

217	Multistable Architected Materials	2
218	Multistable Architected Materials Trapping Elastic	2
219	Produces Eco-Friendly Materials	2
220	Porous Soft Materials	2
221	Porous Soft Materials Perlite Materials	2
222	Properties Fiber Material	2
223	Properties Porous Materials	2
224	Properties Porous Materials Polymeric Foam	2
225	Quantitatively Barriers Materials	2
226	Physical Behavior Materials	2
227	Parameters Cellular Materials	2
228	Parameters Cellular Materials Simultaneous Snap-Through	2
229	Edible Coating Materials	2
230	Edible Coating Materials Quality Fresh	2
231	Effect Composites Materials	2
232	Effect Composites Materials Absorbing Energy	2
233	Elements Solid Materials	2
234	Elements Solid Materials Eulerian Meshes	2
235	Energy Absorbing Materials	2
236	Energy Absorbing Materials Long Plateau	2
237	Experiments Barriers Materials	2
238	Damage Rigid Materials	2
239	Deformation Cellular Material	2
240	Deformation Ranges Material	2
241	Delaminated Exactly Materials	2
242	Design Level Materials	2
243	Dynamic Characterization Materials	2
244	Dynamic Characterization Materials Monitoring Engineering	2
245	Distribution Barriers Material	2
246	Fibers Construction Materials	2
247	Foam-Specimens Filler Materials	2
248	Ideally Biosimulant Materials	2
249	Ideally Biosimulant Materials Sensitive Discern	2
250	Insensitive Barriers Materials	2
251	Intention Discretize Materials	2
252	Intention Discretize Materials Atomic Molecular	2
253	Interests Concrete Materials	2
254	Interface Tracking Materials	2
255	Hammer Aci Materials	2
256	Hydrogen Individual Materials Blend Opposite	2
257	Helmets Ballistic-Resistant Materials	2
258	Hydrogen Individual Materials	2
259	Damage Direction Materials	2
260	Damage Composite Materials	2

MECHANICAL

No	Name	Count
1	Configuration Mechanical Properties	14
2	Mechanical Properties Composite	8
3	Mechanical Energy Absorption	8
4	Mechanical Physical Properties	8
5	Mechanical Threshold Stress	8
6	Mechanical Departments Strength	8
7	Mechanical Properties Manufacturing	8
8	Fibre Configuration Mechanical	6
9	Banana Fibre Mechanical	4
10	Mechanical Properties Tensile	4
11	Materials Mechanical Energy	4
12	Mechanical Thermal Properties	4
13	Mechanical Metamaterials Trapping	4
14	Mechanical Properties Banana	3
15	Mechanical Property Banana	3
16	Fibres Matrix Mechanical	3
17	Mechanical Engineer Apl	3
18	Processing Mechanical Property	3
19	Materials Blast Mechanical	2
20	Mechanical Behaviors Materials	2
21	Mechanical Behaviors Materials Structures Practice	2
22	Mechanical Properties Materials	2
23	Mechanical Properties Materials Deep-Weight Impact	2
24	Material Mechanical Properties	2
25	Mechanical Properties Deciding	2
26	Mechanical Properties Filling	2
27	Mechanical Properties Matching	2
28	Protection Civil Mechanical	2
29	Reinforcing Material Mechanical	2
30	Structure Bear Mechanical	2
31	Dissemination Fibre Mechanical	2
32	Detection Technology Mechanical	2
33	Delamination Fibre Mechanical	2
34	Characterization Multistable Mechanical	2
35	Coupling Agents Mechanical	2
36	Deformation Copper Mechanical	2
37	Deformation Ultra-High Mechanical	2
38	Mechanical Fracture Properties	2
39	Mechanical Impact Properties	2
40	Mechanical Metamaterials Buckling	2

41	Simulation Method Fragility	2
42	Simulation Method Probability	2
43	Monte Carlo Simulation Method Equivalent	2
44	Monte Carlo Simulation Method Fragility	2
45	Monte Carlo Simulation Method Probability	2
46	Structure Method Weakening	2
47	Method Activation Energy	2
48	Element Method Impact	2
49	Finite Difference Method	2
50	Kas Fwo Method	2
51	Method Traction-Separation Law	2
52	Method Omits Global	2
53	Methods Mode I	2
54	Kissinger Method Method	2
55	Method Conditionally Stable	2
56	Factor Kissinger Method	2
57	Methods Blast Loaded	2
58	Method Method Pre-Exponential	2
59	Method Failure Modes	2
60	Methods Structural Dynamics	2
61	Utilising Explicit Method Omits Global	2
62	FINITE ELEMENT METHOD (FEM)	2
63	Experimental Method Traction	2
64	Explicit Method Conditionally Stable	2
65	Computational Methods	2
66	Employing Method Optimisation	2
67	Method Hardening Softening Force-displacement Curves	2
68	Folding Method Stamping	2
69	Pre-Exponential Factor Kissinger Method	2

Preview from Notesale.co.uk
Page 82 of 129

41	Single-Resonator Model	6
42	Progressive Damage Model	5
43	Models Geometric Material	4
44	Computational Human Models	4
45	Models AI Multi-Cell	4
46	Models Absorbed Energydisplacement	4
47	Folding Elements Model	4
48	Models Computing Progressive	4
49	Models Empty Connectors	4
50	Models Experiment In-Depth	4
51	Models Puffilled Computational	4
52	Modeling Failure Naturally	4
53	Modeling Concrete Gravity	4
54	Numerical Analytical Models Armed Plate	4
55	Model Analyze Response	4
56	Rate Effect Model	3
57	Semi-Empirical Analytical Model	3
58	Finite Element Modeling	3
59	Failure Model Composite	2
60	Failure Model Damage	2
61	Model Ballistic Impact	2
62	Compaction Model Impact	2
63	Impact Methods Model	2
64	Materials Material Model	2
65	Materials Physics-Based Model	2
66	Materials Beh Mod Modeled	2
67	Rate Modeling Materials Material Model	2
68	Rate Modeling Materials	2
69	Model Feasibly Material	2
70	Model Foam Material	2
71	Model Relate Material	2
72	Model Userdefined Materials	2
73	Model Concrete Material	2
74	Model Aluminum Material	2
75	Metallic Nonmetallic Materials Physics-Based Model	2
76	Mechanical Fe Model	2
77	Method Kinetic Model	2
78	Modeling Damage Behaviors	2
79	Modeling Damage Composite	2
80	Modeling Deformations Soil	2
81	Modeling Fabrication Dynamic	2
82	Modeling Crushing Behavior	2
83	Modeling Concrete Masonry	2
84	Modeling Control Manufacturing	2

261	Instrumentation Computational Model	2
262	Interaction Continuum Model	2
263	Isotropic Constitutive Models	2
264	Jwl Parameters Modeling	2
265	Zone Fe Models Linear Cubic	2
266	Model Interface Processing Slab Damage	2
267	Simulation Models Viscous	2
268	Cavitating Model Simulation Acoustic Cavitation	2
269	Cavitating Model Simulation	2
270	Numerical Modeling Simulation	2
271	Model Stable Simulation Dcb Specimen	2
272	Behavior Concrete Structures Constitutive Models	2
273	Model Behavior Structures Impact Blast	2
274	Damage Model Laminated	2
275	Damage Model Linear	2
276	Models Delivered Experimental Assist Exhaustive	2
277	Fiber Model Failures	2
278	Matrix Model Failures	2
279	Microstructural Modeling Failure	2
280	Microstructural Modeling Failure Naturally Porous	2
281	Material Properties Material Model Metal	2
282	Material Models Mat	2
283	Models Geometric Material Parameters Identification	2
284	Properties Material Model Metal Pans	2
285	Model Sdk Foldcore	2
286	Cell Explicitly Modeled	2
287	Concrete Material Model	2
288	Cell Explicitly Modeled Springs Undeformable	2
289	Polynomial Damage Model	2
290	Progressive Damage Model Laminated Composites	2
291	Cohesive Zone Model Parameters Identification	2
292	Folding Elements Model Progressive Crushing	2
293	Finite Element Model Fe Models	2
294	Modeling Numerical Model	2
295	Damage Constitutive Model High Strain	2
296	Dynamic Response Model	2
297	Double-Layered Single-Resonator Model	2
298	Modeled Springs Undeformable	2
299	Model High Strain	2
300	Sophisticated Numerical Model	2
301	Analytical Analytical Model Eadisplacement Curves	2
302	Analytical Analytical Model	2
303	Model Double Cantilever	2
304	Model Experimental Data	2

PRESSURE

No	Name	Count
1	Blast Wave Pressure	14
2	Peak Reflected Pressure	11
3	Shock Wave Pressure	10
4	Blast Pressure Strengths	10
5	Pressure Wave Propagation	8
6	Experimental Numerical Pressure	8
7	Pressure Shock Impact	8
8	Computation Blast Pressure	8
9	Pore Water Pressure	7
10	Blast Pressure Time	7
11	Pressure Mitigation Scaled	5
12	Peak Overpressure Mitigation	5
13	Peak Incident Pressure	4
14	Pressure Blast Wave	4
15	Continuous Pressure Detonation	4
16	Computing Blast Pressure	4
17	Blast Pressure Structure	4
18	Dissipating Blast Pressure	3
19	Pressure Tributary Area	3
20	Compute Blast Pressure	3
21	Pressure Pressure Gauge	3
22	Foams Blast Pressure	3
23	Reflected Blast Pressure	3
24	Laminate Continuous Pressure	3
25	Peak Overpressure Pressure	3
26	Pressure Single Barrier	3
27	Blast Pressure Profile	3
28	Analysis Pressure Characteristics	2
29	Pressure Foam Impact	2
30	Impact Peak Pressure	2
31	Material Exerts Pressure	2
32	Modeled Hydrostatic Pressure	2
33	Pressure Dam Model	2
34	Pressure Shear Strength	2
35	Pressure Plotted Function	2
36	Pressure Plate Blast	2
37	Pressure Radial Distance	2
38	Pressure Profiles Blast	2
39	Pressure Gauge Position	2
40	Pressure Hard Surface	2

Preview from Notesale.co.uk
 Page 92 of 129

SIMULATION

No	Name	Count
1	Simulation Energy Absorption	38
2	Numerical Simulation Blast	8
3	Monte Carlo Simulation	8
4	Experimental Numerical Simulations	8
5	Simulation Blast Dams	8
6	Stress Numerical Simulation	8
7	Dynamic Computer Simulation	8
8	Computer Simulation Energy	4
9	Carlo Simulation Method	4
10	Simulation Energy Absorption Tapered Thin-Walled	4
11	Simulations Probability	4
12	Displacement Numerical Simulations	4
13	Curves Experiments Simulations Empty Connectors	4
14	Curves Experiments Simulations	4
15	Displacement Numerical Simulations Exploited Analyse	4
16	Simulations Empty Connectors	4
17	Simulations Ls-Dyna Specimens	4
18	Dynamic Computer Simulation Energy Absorption	4
19	Numerical Numerical Simulations	4
20	Simulations Exploited Analyse	4
21	Simulation Results Simulation	4
22	Simulation Blast Wave	3
23	Experimental Numerical Simulation	3
24	Experimental Numerical Simulation	3
25	Simulations Hypervelocity Impacts	2
26	Simulations Ballistic Impact	2
27	Simulation Helicopter Impact	2
28	Simulation Fluid-Structure Impact	2
29	Simulation Fast Impacts	2
30	Simulation Blast Impact	2
31	Simulation Algorithms Material	2
32	Method Contacts Simulation	2
33	Modeling Numerical Simulations	2
34	Model Stable Simulation	2
35	Simulation In-House Model	2
36	Simulation Methods Models	2
37	Simulation Methods Models Physical Tests	2
38	Taylor Cfd Models Simulations Blast-Wave	2
39	Models Simulations Blast-Wave	2
40	Simulations Blast Pressure	2

41	Strengthening Effect Rc	2
42	Strength Transmitted Inducing	2
43	Strength Times Blast	2
44	Deterioration Mechanical Strength	2
45	Hybrid Cfrp-Pu Strengthening Effect Rc	2
46	Hybrid Cfrp-Pu Strengthening	2
47	Hazard Mitigation Strengthening Unreinforced Masonry	2
48	Hazard Mitigation Strengthening	2
49	Blast Wave Strengths	2
50	Blast Wave Strength	2
51	Blast Pressure Strength	2
52	Protection Tensile Strength	2
53	Mitigation Blast Strengths	2
54	Blast Strengths Exploding	2
55	Blast Strengths Thickness	2
56	Flexural Strength Composites Function Fibre	2
57	Banana Mat Composite Flexural Strength	2
58	Tensile Strength Composite Rule Mixtures	2
59	Density Low-Strength Puf	2
60	Mechanical Strength Unreinforced	2
61	Banana Fibre Mechanical Strength Unreinforced	2
62	BENDING STRENGTH (MPA)	2
63	MATRIX TENSILE STRENGTH (MPA)	2
64	Fibre Strength Properties	2
65	Strength Sandwich Plate	2
66	Strength Banana Fibre	2
67	Sample Tensile Strength	2
68	Strength Polyurethane Foam	2
69	Bonds Linkage Strength	2
70	Strength Blast Wave	2
71	Strength Properties Conventional	2
72	Strength Puf Grooved	2
73	Works Tensile Strengths Jute- Banana	2
74	Strength Composite Rule	2
75	Tensile Shear Strength	2
76	Morphology Tensile Strength	2
77	Fibre Tensile Strength	2
78	Possessed Tensile Strength Flexural Strength	2
79	Possessed Tensile Strength	2
80	Fibre Mechanical Strength	2
81	Mpa Flexural Strength	2
82	Strength Voids Transfer	2
83	Strength Value Pp	2
84	Strengths Jute- Banana	2

85	Sample Flexural Strength	2
86	Works Tensile Strengths	2
87	Value Tensile Strength Voids Transfer	2
88	Value Tensile Strength	2
89	Matrix Tensile Strength	2
90	Strength Flexural Strength Banana Fibre	2
91	Theoretical Tensile Strength Composite Rule	2
92	Banana Yarn Strength	2
93	Banana Fibre Strength Properties Conventional	2
94	Banana Fibre Strength	2
95	Strength Natural Fibre	2
96	Interlaminar Shear Strength	2
97	Strength Natural Fibers	2
98	Linkage Strength Stiffness	2
99	Strength Composites Function	2

Preview from Notesale.co.uk
Page 108 of 129

41	Behavior Structure Blast	2
42	Behavior Structures Blast	2
43	Failure Structure Blast	2
44	Design Structures Blast	2
45	Simulation Fluid-Structure Impact	2
46	Response Structures Impact	2
47	Impact Load Structure	2
48	Impact Laminate Structure	2
49	Materials Structures Practice	2
50	Wave Propagation Materials Damage Structures	2
51	Materials Damage Structures	2
52	Mechanical Behaviors Materials Structures Practice	2
53	Structure Cellular Materials	2
54	Structure Bear Mechanical	2
55	Structures Constitutive Models	2
56	Multi-Scale Structure Modeling	2
57	Multi-Scale Structure Modeling Damage Behaviors	2
58	Model Behavior Structures	2
59	Model Fluid-Structure Interaction	2
60	Structures Blast Pressure	2
61	Pressure Transferred Structure	2
62	Pressure Distribution Structure	2
63	Pressure Destroy Structures	2
64	Processing Microstructure Blast	2
65	Properties Concrete Structures	2
66	Properties Composite Structures	2
67	Response Large-Scale Structures	2
68	Response Structure Blast	2
69	Response Composite Structures	2
70	Structure Analyzed Simulations	2
71	Coupled Techniques Simulation Fluid-Structure Impact	2
72	Strengthening Structures Extreme	2
73	Stress Full-Scale Structures	2
74	Structures Structural Stress	2
75	Structure Plateau Stress	2
76	Structure Metamaterial Attenuating	2
77	Structure Method Weakening	2
78	Structure Load Resistance	2
79	Stress Full-Scale Structures Weight Concrete	2
80	Stiffness Lattice Structure	2
81	Steel Sandwich Structures	2
82	Steel Frame Structures	2
83	Sdk Foldcore Structures	2
84	Role Composites Structures	2

THEORY

No	Name	Count
1	Theoretical Absorbed Energy	4
2	Theoretical Tensile Strength	4
3	Structures Theoretically Experimentally	2
4	Closed Cell Structures Theoretically Experimentally	2
5	Theoretical Absorbed Energy Empty Foam-Filled	2
6	Theoretical Tensile Strength Composite Rule	2
7	Theoretical Mass Loss	2
8	Theoretical Expression Axial	2

Preview from Notesale.co.uk
Page 122 of 129

20. Singh, R. K., Patil, T., Pandey, D., Tekade, S. P., & Sawarkar, A. N. (2022). Co-pyrolysis of petroleum coke and banana leaves biomass: Kinetics, reaction mechanism, and thermodynamic analysis. *Journal of Environmental Management*, 301, 113854.
21. Rose-Pehrsson, S. L., Shaffer, R. E., McDonald, J. R., Nelson, H. H., Grimm, R. E., & Sprott, T. A. (1999, February). UXO target detection using magnetometry and EM survey data. In *Environmental Monitoring and Remediation Technologies* (Vol. 3534, pp. 496-507). SPIE.
22. Pechac, J. E., & Frazier, M. J. (2022). Metamaterial design strategy for mechanical energy absorption under general loading. *Extreme Mechanics Letters*, 51, 101580.
23. Buku, A., & Sahari, G. A. (2006). ANALYSIS OF MORPHOLOGY AND TENSILE STRENGTH OF BANANA KEPOK FIBRES USING A SCANNING ELECTRON MICROGRAPH (SEM) AND PULL TEST EQUIPMENT.
24. Institute of Medicine (US). Committee on Gulf War and Health: Long-Term Effects of Blast Exposures. (2014). *Gulf War and Health: Long-term Effects of Blast Exposures*. National Academies Press.
25. Wilcox, D. R., & Mersereau, R. M. (2003, September). Radon-transform-based landmine signatures extracted from ground penetrating radar imagery. In *Detection and Remediation Technologies for Mines and Minelike Targets VIII* (Vol. 5089, pp. 1095-1104). International Society for Optics and Photonics.
26. Rangappa, S. M., & Siengchin, S. (2018). Natural fibers as perspective materials. *Applied Science and Engineering Progress*, 11(4).
27. Nelson, C. V., & Arabian, A. K. (2002, August). Low-cost backpack-portable robot system for mine and UXO detection and identification. In *Detection and Remediation Technologies for Mines and Minelike Targets VII* (Vol. 4742, pp. 574-582). SPIE.
28. Merkle, A. C., Carneal, C. M., Wing, I. D., Wickwire, A. C., Paulson, J. M., Ott, K. A., & Taylor, T. M. (2013). Biomechanics and injury mitigation systems program: An overview of human models for assessing injury risk in blast, ballistic, and transportation impact scenarios. *Johns Hopkins APL Technical Digest (Applied Physics Laboratory)*, 31(4), 286-295.
29. Tarokh, A. B., Miller, E. L., Won, I. J., & Huang, H. (2004). Statistical classification of buried objects from spatially sampled time or frequency domain electromagnetic induction data. *Radio Science*, 39(4), 1-11.
30. Myers, J. V., & Winsley, M. (2013). Impact resistance of blast mitigation material using modified ACI drop-weight impact test. *ACI Materials Journal*, 110(3), 339.
31. Rahman, M., Das, S., & Hasan, M. (2018). Mechanical properties of chemically treated banana and pineapple leaf fiber reinforced hybrid polypropylene composites. *Advances in Materials and Processing Technologies*, 4(4), 527-537.
32. Zheng, Z., Yu, J., Wei, F., & Wu, J. (2020). Numerical study of blast performance of concrete filled double-steel-plate composite walls. *International Journal of Protective Structures*, 11(1), 23-40.
33. Grujicic, M., Yavari, R., Snipes, J. S., & Ramaswami, S. (2018). Use of aluminum foam core sandwich structures to improve the blast-mitigation performance of light tactical vehicle side-vent-channel solution. *Proceedings of the Institution of Mechanical Engineers, Part L: Journal of Materials: Design and Applications*, 232(12), 993-1011.
34. Mondal, P. D., Ghosh, A. D., & Chakraborty, S. (2014). Performance of NZ systems in the mitigation of underground blast induced vibration of structures. *Journal of Vibration and Control*, 20(13), 2019-2031.
35. Farfan-Cabrera, L. I., & Pascual-Francisco, J. B. (2021). An Experimental Methodological Approach for Obtaining Viscoelastic Poisson's Ratio of Elastomers from Creep Strain DIC-Based Measurements. *Experimental Mechanics*, 1-11.
36. Heinzl, A., Schartel, M., Burr, R., Bähnemann, R., Schreiber, E., Peichl, M., & Waldschmidt, C. (2019, May). A comparison of ground-based and airborne SAR systems for the detection of landmines, UXO, and IEDs. In *Radar Sensor Technology XXIII* (Vol. 11003, p. 1100304). International Society for Optics and Photonics.

37. Ngofa, O. N., Liakos, E. V., Papadopoulos, A. N., & Kyzas, G. Z. (2021). Activated Carbon from Bamboo and Banana Wood Fibers as Adsorbent Materials for the Removal of Oil Samples.
38. Brünig, M., Koirala, S., & Gerke, S. (2022). Analysis of Damage and Failure in Anisotropic Ductile Metals Based on Biaxial Experiments with the H-Specimen. *Experimental Mechanics*, 62(2), 183-197.
39. Codina, R., Ambrosini, D., & de Borbon, F. (2017). Alternatives to prevent progressive collapse protecting reinforced concrete columns subjected to near field blast loading. *Procedia engineering*, 199, 2445-2450.
40. Ye, X., & Zhao, J. (2021). Adaptive Rotated Gaussian Weighted Digital Image Correlation (RGW-DIC) for Heterogeneous Deformation Measurement. *Experimental Mechanics*, 1-16.
41. Ai, B., Zheng, L., Li, W., Zheng, X., Yang, Y., Xiao, D., ... & Sheng, Z. (2021). Biodegradable cellulose film prepared from banana pseudo-stem using an ionic liquid for mango preservation. *Frontiers in plant science*, 12, 234.
42. Achuthan, K., Muthupalani, S., Kolil, V. K., Bist, A., Sreesuthan, K., & Sreedevi, A. (2021). A novel banana fiber pad for menstrual hygiene in India: a feasibility and acceptability study. *BMC Women's Health*, 21(1), 1-14.
43. Neto, J., Queiroz, H., Aguiar, R., Lima, R., Cavalcanti, D., & Banea, M. D. (2022). A Review of Recent Advances in Hybrid Natural Fiber Reinforced Polymer Composites. *Journal of Renewable Materials*, 10(3), 561.
44. Triantafyllou, T. (2016). Strengthening of existing concrete structures: Concepts and structural behavior. In *Textile fibre composites in civil engineering* (pp. 303-322). Woodhead Publishing.
45. Nokhodchi, A., Momin, M., Iqbal, A., & Nokhodchi, A. (2011). An Investigation into Alternative Sugars as Potential Carriers for a Dry Powder Formulation of Budesonide and Formoterol. *Biomedicine International*, 43-54.
46. Nunes, L., Cintura, E., Parracha, J. L., Fernandes, B., Silva, V., & Paria, A. (2021). Cement-bonded particleboards with banana pseudostem waste: physical performance and bio-susceptibility. *Infrastructures*, 6(6), 86.
47. Arathi, T., Rahna, K. P., Sebastian, V. P., & George, S. (2021). Assessment of Heavy Metal and Pesticide Contamination in Banana Fields and Development of Phytoremediation System in Kozhikode District, Kerala, India. *Nature Environment and Pollution Technology*, 20(3), 1251-1256.
48. Kurniati, E. J., Mondragón, M. R., & Manalip, H. (2018). Basic behaviour of natural banana stem fiber reinforced concrete under
49. Nuseir, A., Albalas, H., Nuseir, A., Alali, M., Zoubi, F., Al-Ayyoub, M., ... & Omari, A. A. (2022). Computed tomography scans image processing for nasal symptoms severity prediction. *International Journal of Electrical & Computer Engineering* (2088-8708), 12(2).
50. Periyasamy, S., Karthik, V., Senthil Kumar, P., Isabel, J. B., Temesgen, T., Hunegnaw, B. M., ... & Vo, D. V. N. (2022). Chemical, physical and biological methods to convert lignocellulosic waste into value-added products. A review. *Environmental Chemistry Letters*, 1-24.
51. Fan, J., Lu, R., Yang, X., Gao, F., Li, Q., & Zeng, J. (2021). Design and Implementation of Intelligent EOD System Based on Six-Rotor UAV. *Drones*, 5(4), 146.
52. Ward, C. M., Harguess, J., Hilton, C., Mediavilla, C., Sullivan, K., & Watkins, R. (2019, May). Deep learning for automatic ordnance recognition. In *Geospatial Informatics IX* (Vol. 10992, p. 109920H). International Society for Optics and Photonics.
53. Escudero, C. A., Calvo, A. F., Martinez, A. B., López, A. M., & Molina, A. (2021). Development of a digital image classification system to support technical assistance for Black Sigatoka detection. *Revista Brasileira de Fruticultura*, 43.
54. Borah, T., Washmin, N., Bora, N. J., Saikia, J., Bomzon, P. S., Ahmed, T. H., ... & Banik, D. (2021). Effect of drying techniques on yield, nutritional, minerals of wild banana pulp (*Musa balbisiana* Colla): physicochemical and morphological characterization thereof. *British Food Journal*.
55. Barrowes, B. E., Shubitidze, F., Grzegorzczak, T. M., Fernandez, P., & O'Neill, K. (2012). *Electromagnetic Induction Sensing of Unexploded Ordnance with Pedemis*.

74. Pydah, A., & Batra, R. C. (2017). Crush dynamics and transient deformations of elastic-plastic Miura-ori core sandwich plates. *Thin-Walled Structures*, 115, 311-322.
75. Morikawa, M. (1998). Legacy of the Secret War: Medical Needs in the UXO-Contaminated Areas in Laos. *The Journal of the American Board of Family Practice*, 11(6), 485-486.
76. Manoj, A., & Sathyan, D. (2021, November). Strengthening of concrete square column using FRP composites. In *Journal of Physics: Conference Series* (Vol. 2070, No. 1, p. 012206). IOP Publishing.
77. Niu, Y., Wang, J., Shao, S., Wang, H., Lee, H., & Park, S. B. (2018). A comprehensive solution for electronic packages' reliability assessment with digital image correlation (DIC) method. *Microelectronics Reliability*, 87, 81-88.
78. Roni, R. A., Sani, M., Hossain, N., Munira, S., Wazed, M., & Siddiquee, S. (2021). Nutritional Composition and Sensory Evaluation of Cake Fortified with Moringa oleifera Leaf Powder and Ripe Banana Flour. *Applied Sciences*, 11(18), 8474.
79. Rao, P. D., Rao, D. V., Naidu, A. L., & Bahubalendruni, M. R. (2017). Mechanical properties of banana fiber reinforced composites and manufacturing techniques: a review. *International Journal For Research & Development In Technology*, 8(5).
80. Tai, N. V., Linh, M. N., & Thuy, N. M. (2021). Modeling of thin layer drying characteristics of "Xiem" banana peel cultivated at U Minh district, Ca Mau province, Vietnam. *Food Research*, 5(5), 244-249.
81. Doan, N. V., Le, V. T., Park, H. C., & Goo, N. S. (2021). Modal Analysis Using a Virtual Speckle Pattern Based Digital Image Correlation Method: An Application for an Artificial Flapping Wing. *Experimental Mechanics*, 1-18.
82. Smith, R. (2015). Banana Production in Greenhouses.
83. Lazarević, M., Nedić, B., & Đurić, S. (2021). PYROTECHNICAL SAFETY IN THE PROCESS OF DESTRUCTION OF MINES AND EXPLOSIVE EQUIPMENT (MER) AND UNEXPLODED ORDNANCE (UXO). *International Journal for Quality Research*, 15(3), 299.
84. Tan, L. B., Tse, K. M., Tan, Y. H., Saplingi, M. A. B., Tan, Y. B. C., & Lee, H. P. (2017). Face shield design against blast-induced head injuries. *International journal for numerical methods in biomedical engineering*, 33(12), e2634.
85. Laathanachareon, T., Buntornisok, B., & Champoon, V. (2022). Profiling multi-enzyme activities of *Aspergillus niger* strains growing on various agro-industrial residues. *3 Biotech*, 12(1), 1-16.
86. EL-Soudhy, S. F., And El-Hamman, A. S., Islam, K. R., & Zewail, R. M. (2021). Growth, yield and fruit quality of specialty banana in response to yeast extract and potassium amendments. *Journal of Plant Nutrition*, 1-13.
87. Arias-Córdova, Y., Ble-Castillo, J. L., García-Vázquez, C., Olvera-Hernández, V., Ramos-García, M., Navarrete-Cortes, A., ... & Méndez, J. D. (2021). Resistant Starch Consumption Effects on Glycemic Control and Glycemic Variability in Patients with Type 2 Diabetes: A Randomized Crossover Study. *Nutrients*, 13(11), 4052.
88. Gupta, U. S., Dhamarika, M., Dharkar, A., Tiwari, S., & Namdeo, R. (2020). Study on the effects of fibre volume percentage on banana-reinforced epoxy composite by finite element method. *Advanced Composites and Hybrid Materials*, 3(4), 530-540.
89. Homae, T., Wakabayashi, K., Matsumura, T., & Nakayama, Y. (2007, December). Reduction of explosion damage using sand or water layer. In *AIP Conference Proceedings* (Vol. 955, No. 1, pp. 1289-1292). American Institute of Physics.
90. Manoj, A., & Sathyan, D. (2021, November). Strengthening of concrete square column using FRP composites. In *Journal of Physics: Conference Series* (Vol. 2070, No. 1, p. 012206). IOP Publishing.
91. EKAFITRI, R., KURNIAWAN, Y. R., DESNILASARI, D., SURAHMAN, D. N., & INDRIATI, A. (2020). Shelf-life assessment of energy banana bar using acceleration method with critical moisture content approach. *Food Science and Technology*, 41, 163-168.
92. Jakkula, P., Ganzenmüller, G. C., Beisel, S., Rühnick, P., & Hiermaier, S. (2022). The Symmpact: A Direct-Impact Hopkinson Bar Setup Suitable for Investigating Dynamic Equilibrium in Low-Impedance Materials. *Experimental Mechanics*, 62(2), 213-222.