Vassilios Kostopoulos

List of Publications by Year in descending order

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127	2.417	147801	168389
137	3,417	31	53
papers	citations	h-index	g-index
139	139	139	3016
all docs	docs citations	times ranked	citing authors

#	Article	IF	CITATIONS
1	Impact and after-impact properties of carbon fibre reinforced composites enhanced with multi-wall carbon nanotubes. Composites Science and Technology, 2010, 70, 553-563.	7.8	225
2	Enhanced Fracture Properties of Carbon Reinforced Composites by the Addition of Multi-Wall Carbon Nanotubes. Journal of Composite Materials, 2009, 43, 977-985.	2.4	191
3	The combined use of vibration, acoustic emission and oil debris on-line monitoring towards a more effective condition monitoring of rotating machinery. Mechanical Systems and Signal Processing, 2011, 25, 1339-1352.	8.0	167
4	Condition monitoring of a single-stage gearbox with artificially induced gear cracks utilizing on-line vibration and acoustic emission measurements. Applied Acoustics, 2009, 70, 1148-1159.	3.3	123
5	On the fatigue life prediction of CFRP laminates using the Electrical Resistance Change method. Composites Science and Technology, 2011, 71, 630-642.	7.8	107
6	On the identification of the failure mechanisms in oxide/oxide composites using acoustic emission. NDT and E International, 2003, 36, 571-580.	3.7	90
7	Damage evolution in center-holed glass/polyester composites under quasi-static loading using time/frequency analysis of acoustic emission monitored waveforms. Composites Science and Technology, 2006, 66, 1366-1375.	7.8	87
8	Intelligent health monitoring of aerospace composite structures based on dynamic strain measurements. Expert Systems With Applications, 2012, 39, 8412-8422.	7.6	84
9	Damage Monitoring of Carbon Fiber Reinforced Laminates Using Resistance Measurements. Improving Sensitivity Using Carbon Nanotube Doped Epoxy Matrix System. Journal of Intelligent Material Systems and Structures, 2009, 20, 1025-1034.	2.5	77
10	Dynamic fiber Bragg gratings based health monitoring system of composite aerospace structures. Acta Astronautica, 2011, 69, 445-457.	3.2	77
11	Electrical conductivity of polyurethane/MWCNT nanocomposite foams. Polymer Composites, 2012, 33, 1302-1312.	4.6	75
12	On the interlaminar fracture toughness of carbon fiber composites enhanced with graphene nano-species. Composites Science and Technology, 2015, 118, 217-225.	7.8	74
13	Synergy effect of carbon nano-fillers on the fracture toughness of structural composites. Composites Part B: Engineering, 2017, 129, 18-25.	12.0	70
14	Damage identification in carbon fiber reinforced polymer plates using electrical resistance tomography mapping. Journal of Composite Materials, 2013, 47, 3285-3301.	2.4	65
15	On the improvement of toughness of CFRPs with resin doped with CNF and PZT particles. Composites Part A: Applied Science and Manufacturing, 2007, 38, 1159-1162.	7.6	63
16	Exploiting carbon nanotube networks for damage assessment of fiber reinforced composites. Composites Part B: Engineering, 2015, 76, 149-158.	12.0	62
17	Failure mechanisms analysis of 2D carbon/carbon using acoustic emission monitoring. NDT and E International, 1998, 31, 157-163.	3.7	58
18	Mode I interlaminar fracture of CNF or/and PZT doped CFRPs via acoustic emission monitoring. Composites Science and Technology, 2007, 67, 822-828.	7.8	57

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19	DC and AC conductivity in epoxy resin/multiwall carbon nanotubes percolative system. Polymer Composites, 2010, 31, 1874-1880.	4.6	53
20	Prediction and experimental validation of the electrical conductivity of dry carbon fiber unidirectional layers. Composites Part B: Engineering, 2011, 42, 1578-1587.	12.0	51
21	Enhancement of the mechanical performance of an epoxy resin and fiber reinforced epoxy resin composites by the introduction of CNF and PZT particles at the microscale. Composites Part A: Applied Science and Manufacturing, 2007, 38, 1076-1081.	7.6	48
22	Nanocrystalline Mg–MAX composites: Mechanical behavior characterization via acoustic emission monitoring. Acta Materialia, 2011, 59, 5716-5727.	7.9	46
23	Resistive heating of multidirectional and unidirectional dry carbon fibre preforms. Composites Science and Technology, 2012, 72, 1273-1282.	7.8	45
24	Sensing strain and damage in polyurethane/MWCNT nano-composite foams using electrical measurements. EXPRESS Polymer Letters, 2013, 7, 40-54.	2.1	43
25	Toughening and healing of continuous fibre reinforced composites by supramolecular polymers. Composites Science and Technology, 2016, 128, 84-93.	7.8	43
26	Fracture behavior and damage mechanisms identification of SiC/glass ceramic composites using AE monitoring. Composites Science and Technology, 2007, 67, 1740-1746.	7.8	40
27	Environmental degradation of carbon nanotube-modified composite laminates: a study of electrical resistivity. Mechanics of Composite Materials, 2009, 45, 21-32.	1.4	38
28	Multistage fatigue life monitoring on carbon fibre reinforced polymers enhanced with multiwall carbon nanotubes. Plastics, Rubber and Composites, 2009, 38, 124-130.	2.0	36
29	Temperature uniformity analysis and development of open lightweight composite molds using carbon fibers as heating elements. Composites Part B: Engineering, 2013, 50, 279-289.	12.0	36
30	Thermal Conductivity of Carbon Nanoreinforced Epoxy Composites. Journal of Nanomaterials, 2016, 2016, 1-12.	2.7	36
31	A critical review of nanotechnologies for composite aerospace structures. CEAS Space Journal, 2017, 9, 35-57.	2.3	36
32	Toughness characterization and acoustic emission monitoring of a 2-D carbon/carbon composite. Engineering Fracture Mechanics, 2001, 68, 1557-1573.	4.3	32
33	Reliability of strain monitoring of composite structures via the use of optical fiber ribbon tapes for structural health monitoring purposes. Composite Structures, 2015, 134, 762-771.	5.8	32
34	Degradation behavior of glass fiber reinforced cyanate ester composites under hydrothermal ageing. Polymer Degradation and Stability, 2015, 121, 200-207.	5.8	31
35	Mode II fracture toughening and healing of composites using supramolecular polymer interlayers. EXPRESS Polymer Letters, 2016, 10, 914-926.	2.1	29
36	Fatigue behaviour of open-hole carbon fibre/epoxy composites containing bis-maleimide based polymer blend interleaves as self-healing agent. Composites Science and Technology, 2019, 171, 86-93.	7.8	28

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37	A new method for the determination of viscoelastic properties of composite laminates: a mixed analytical–experimental approach. Composites Science and Technology, 2003, 63, 1441-1452.	7.8	27
38	Low- and high-fidelity modeling of sandwich-structured composite response to bird strike, as tools for a digital-twin-assisted damage diagnosis. International Journal of Impact Engineering, 2022, 160, 104058.	5.0	26
39	Design, Analysis, Optimization, Manufacturing, and Testing of a 2U Cubesat. International Journal of Aerospace Engineering, 2018, 2018, 1-15.	0.9	25
40	Hypervelocity impact response of CFRP laminates using smoothed particle hydrodynamics method: Implementation and validation. International Journal of Impact Engineering, 2019, 123, 56-69.	5.0	25
41	Numerical investigation and experimental verification of the Joule heating effect of polyacrylonitrile-based carbon fiber tows under high vacuum conditions. Journal of Composite Materials, 2012, 46, 2153-2165.	2.4	24
42	Health Monitoring of Aerospace Structures Using Fibre Bragg Gratings Combined with Advanced Signal Processing and Pattern Recognition Techniques. Strain, 2012, 48, 267-277.	2.4	24
43	Microwave curing of epoxy polymers reinforced with carbon nanotubes. Journal of Applied Polymer Science, 2013, 129, 2754-2764.	2.6	24
44	On fabric materials response subjected to ballistic impact using meso-scale modeling. Numerical simulation and experimental validation. Composite Structures, 2018, 204, 745-754.	5.8	24
45	Review of Through-the-Thickness Reinforced z-Pinned Composites. Journal of Composites Science, 2020, 4, 31.	3.0	23
46	<i>In situ</i> damage monitoring of cross-ply laminates using acoustic emission. Plastics, Rubber and Composites, 2009, 38, 229-234.	2.0	22
47	Evaluating experimentally and numerically different scarf-repair methodologies of composite structures. International Journal of Adhesion and Adhesives, 2020, 97, 102495.	2.9	22
48	Interlaminar Fracture Toughness of Carbon Fibreâ€Reinforced Polymer Laminates With Nano―and Microâ€Fillers. Strain, 2011, 47, e269.	2.4	21
49	Toughening and healing of continuous fibre reinforced composites with bis-maleimide based pre-pregs. Smart Materials and Structures, 2016, 25, 084011.	3.5	20
50	Intrinsic parameters in the fracture of carbon/carbon composites. Composites Science and Technology, 2005, 65, 883-897.	7.8	19
51	Hybrid graphene nanoplatelet/manganese oxide electrodes for solid-state supercapacitors and application to carbon fiber composite multifunctional materials. Journal of Energy Storage, 2019, 23, 515-525.	8.1	19
52	Effects of graphene geometrical characteristics to the interlaminar fracture toughness of CFRP laminates. Engineering Fracture Mechanics, 2021, 245, 107584.	4.3	19
53	Fatigue behaviour of 3-d SiC/SiC Composites. Journal of Materials Science, 1997, 32, 215-220.	3.7	18
54	3-D Modeling of nanoindentation experiment on a coating-substrate system. Computational Mechanics, 2001, 27, 138-144.	4.0	18

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55	Low velocity impact response and post impact assessment of carbon fiber/epoxy composites modified with Diels-Alder based healing agent. A novel approach. Composites Part A: Applied Science and Manufacturing, 2021, 140, 106151.	7.6	18
56	Prediction of the effective thermal conductivity of carbon nanotubeâ€reinforced polymer systems. Polymer Composites, 2014, 35, 1997-2009.	4.6	17
57	Damage detection via Joule effect for multidirectional carbon fiber reinforced composites. Applied Physics Letters, 2012, 101, .	3.3	16
58	Fire Burnthrough Response of CFRP Aerostructures. Numerical Investigation and Experimental Verification. Applied Composite Materials, 2012, 19, 141-159.	2.5	16
59	A comprehensive study on the equivalent electrical conductivity tensor validity for thin multidirectional carbon fibre reinforced plastics. Composites Part B: Engineering, 2014, 67, 244-255.	12.0	16
60	A three-dimensional progressive damage FE model for GFRP composites under monotonic loading. Composites Science and Technology, 2016, 123, 79-91.	7.8	16
61	Healing of carbon fiber reinforced plastics by Diels–Alder based polymers: Effects of healing agent concentration and curing cycle. Journal of Applied Polymer Science, 2019, 136, 47478.	2.6	16
62	Health monitoring of carbon/carbon, woven reinforced composites: Damage assessment by using advanced signal processing techniques. Part II: Acousto–ultrasonics monitoring of damage development. Composites Science and Technology, 2009, 69, 273-283.	7.8	15
63	The effect of thermo-oxidative aging on carbon fiber reinforced cyanate ester composites. Journal of Composite Materials, 2015, 49, 3241-3250.	2.4	15
64	Viscoelastic properties of cartilage-subchondral bone complex in osteoarthritis. Journal of Medical Engineering and Technology, 2004, 28, 223-226.	1.4	14
65	A simple model for the prediction of the fatigue delamination growth of impacted composite panels. Fatigue and Fracture of Engineering Materials and Structures, 2004, 27, 911-922.	3.4	14
66	Manufacturing, characterization and thermal conductivity of epoxy and benzoxazine multi-walled carbon nanotube buckypaper composites. Journal of Composite Materials, 2013, 47, 1705-1715.	2.4	14
67	On the dynamic characteristics of the human skull. International Journal of Engineering Science, 1996, 34, 1339-1348.	5.0	13
68	On the fracture toughness of ceramic matrix composites. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 1998, 250, 303-312.	5.6	13
69	Toughening and healing of composites by CNTs reinforced copolymer nylon micro-particles. Materials Research Express, 2018, 5, 025305.	1.6	13
70	Effect of water aging on the mechanical properties of flax fiber/bioâ€based resin composites. Journal of Applied Polymer Science, 2020, 137, 48787.	2.6	13
71	Fabrication and Characterization of Polyetherimide Electrospun Scaffolds Modified with Graphene Nano-Platelets and Hydroxyapatite Nano-Particles. International Journal of Molecular Sciences, 2020, 21, 583.	4.1	13
72	Multi-Wall Carbon Nanotubes Chemically Grafted and Physically Adsorpted on Reinforcing Carbon Fibres. Advanced Composites Letters, 2008, 17, 096369350801700.	1.3	12

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7 3	Implementation and calibration of meso-scale modeling technique for simulation of tensile behavior of fabric materials. Composites Part B: Engineering, 2017, 119, 1-9.	12.0	12
74	Assessing the Damage Tolerance of Out of Autoclave Manufactured Carbon Fibre Reinforced Polymers Modified with Multi-Walled Carbon Nanotubes. Materials, 2019, 12, 1080.	2.9	12
75	Gradient 3D Printed PLA Scaffolds on Biomedical Titanium: Mechanical Evaluation and Biocompatibility. Polymers, 2021, 13, 682.	4.5	12
76	A comparative study between epoxy/Titania micro―and nanoparticulate composites thermal and mechanical behavior by means of particle–matrix interphase considerations. Polymer Engineering and Science, 2018, 58, 1146-1154.	3.1	11
77	Fabrication and Characterization of Polylactic Acid Electrospun Scaffolds Modified with Multi-Walled Carbon Nanotubes and Hydroxyapatite Nanoparticles. Biomimetics, 2020, 5, 43.	3.3	11
78	A Preliminary Study of the Influence of Graphene Nanoplatelet Specific Surface Area on the Interlaminar Fracture Properties of Carbon Fiber/Epoxy Composites. Polymers, 2020, 12, 3060.	4.5	10
79	EuroDRONE, a European Unmanned Traffic Management Testbed for U-Space. Drones, 2022, 6, 53.	4.9	10
80	A Novel Approach for Continuous Acoustic Emission Monitoring on Rotating Machinery Without the Use of Slip Ring. Journal of Vibration and Acoustics, Transactions of the ASME, 2008, 130, .	1.6	9
81	Experimental modal analysis and dynamic strain fiber Bragg gratings for structural health monitoring of composite antenna sub-reflector. CEAS Space Journal, 2013, 5, 57-73.	2.3	9
82	On the Use of Infrared Thermography and Acoustoâ€"Ultrasonics NDT Techniques for Ceramic-Coated Sandwich Structures. Energies, 2019, 12, 2537.	3.1	9
83	Graphene Nanoplatelet- and Hydroxyapatite-Doped Supramolecular Electrospun Fibers as Potential Materials for Tissue Engineering and Cell Culture. International Journal of Molecular Sciences, 2019, 20, 1674.	4.1	9
84	Combined Optimized Effect of a Highly Self-Organized Nanosubstrate and an Electric Field on Osteoblast Bone Cells Activity. BioMed Research International, 2019, 2019, 1-8.	1.9	9
85	Mechanical Properties Assessment of Low-Content Capsule-Based Self-Healing Structural Composites. Applied Sciences (Switzerland), 2020, 10, 5739.	2.5	9
86	On the Viscoelastic Response of Composite Laminates. Mechanics of Time-Dependent Materials, 2000, 4, 381-405.	4.4	8
87	Damage Detection during Fatigue Loading of CNF Doped CFRPs via Resistance Measurements and AE. Solid State Phenomena, 2007, 121-123, 1399-1402.	0.3	8
88	Electrical resistivity prediction of dry carbon fiber media as a function of thickness and fiber volume fraction combining empirical and analytical formulas. Composites Part B: Engineering, 2015, 81, 26-34.	12.0	8
89	Brain eigenfrequency shifting as a sensitive index of cerebral compliance in an experimental model of epidural hematoma in the rabbit. Critical Care Medicine, 1999, 27, 978-984.	0.9	8
90	On the sensitivity of the vibrational response of the human head. Computational Mechanics, 1998, 21, 382-388.	4.0	7

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91	On the Use of Electrical Conductivity for the Assessment of Damage in Carbon Nanotubes Enhanced Aerospace Composites. Solid Mechanics and Its Applications, 2013, , 21-55.	0.2	7
92	Design of a Low-Cost Air Bearing Testbed for Nano CMG Maneuvers. Aerospace, 2022, 9, 95.	2.2	7
93	Primary MSCs for Personalized Medicine: Ethical Challenges, Isolation and Biocompatibility Evaluation of 3D Electrospun and Printed Scaffolds. Biomedicines, 2022, 10, 1563.	3.2	7
94	A statistical optimization of a green laserâ€assisted ablation process towards automatic bonded repairs of CFRP composites. Polymer Composites, 2019, 40, 3084-3100.	4.6	6
95	Multi-Fidelity Optimization of a Composite Airliner Wing Subject to Structural and Aeroelastic Constraints. Aerospace, 2021, 8, 398.	2.2	6
96	Anisotropic damage of alumina/alumina CFCCs under long term high temperature exposure: Investigations by ultrasonic stiffness measurements and quasi-static tests. Composites Science and Technology, 2006, 66, 3221-3229.	7.8	5
97	Wavelet Analysis of Head Acceleration Response Under Dirac Excitation for Early Oedema Detection. Journal of Biomechanical Engineering, 2008, 130, 021017.	1.3	5
98	Investigation of blast response of GLARE laminates: comparison against experimental results. Plastics, Rubber and Composites, 2011, 40, 349-355.	2.0	5
99	Behavior of photopolymer fiber structures in microgravity. SN Applied Sciences, 2019, 1, 1.	2.9	5
100	Toughening and Healing of CFRPs by Electrospun Diels–Alder Based Polymers Modified with Carbon Nano-Fillers. Journal of Composites Science, 2021, 5, 242.	3.0	5
101	Carbon Nanotubes for Novel Hybrid Structural Composites with Enhanced Damage Tolerance and Self-Sensing/Actuating Abilities. Solid Mechanics and Its Applications, 2013, , 1-20.	0.2	4
102	Effect of CNT modified matrix of epoxy CFRPs on hydrothermal behaviour of material. Evaluation of water uptake using electrical resistance measurements. Plastics, Rubber and Composites, 2014, 43, 122-129.	2.0	4
103	Strategies on implementing a potential self-healing functionality in a composite structure. Ciência & Tecnologia Dos Materiais, 2016, 28, 147-154.	0.5	4
104	A multi-stage material model calibration procedure for enhancing numerical solution fidelity in the case of impact loading of composites. Journal of Composite Materials, 2021, 55, 39-56.	2.4	4
105	A Machine Learning Approach for Global Steering Control Moment Gyroscope Clusters. Aerospace, 2022, 9, 164.	2.2	4
106	Comparative study of callus performance achieved by rigid and sliding plate osteosynthesis based upon dynamic mechanical analysis. Journal of Medical Engineering and Technology, 1994, 18, 61-66.	1.4	3
107	A new method for the early diagnosis of brain edema/brain swelling. An experimental study in rabbits. Journal of Biomechanics, 2006, 39, 2958-2965.	2.1	3
108	Condition Monitoring of Gears and Advanced Signal Processing Techniques towards More Effective Diagnostic Schemes. Noise and Vibration Worldwide, 2010, 41, 10-18.	1.0	3

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109	Multifunctional carbon nanotube-based nano-composites for aerospace applications., 2015,, 448-490.		3
110	Fire response of polymers and polymer composites. Part A: multistage degradation kinetics. Journal of Composite Materials, 2015, 49, 251-257.	2.4	3
111	Thermal Ageing of Carbon Fiberâ€Reinforced Cyanate Ester Composites Under Inert and Oxidative Environment. Polymer Composites, 2019, 40, E1388.	4.6	3
112	Self-healing of structural composites containing common thermoplastics enabled or not by nanotechnology as healing agent., 2020,, 327-374.		3
113	Valorization of FGD and Bauxite Residue in Sulfobelite Cement Production. Waste and Biomass Valorization, 2020, 11, 5445-5456.	3.4	3
114	A Gimballed Control Moment Gyroscope Cluster Design for Spacecraft Attitude Control. Aerospace, 2021, 8, 273.	2.2	3
115	Design by analysis of a multi-layer fabric reinforcement of jet engine containment for fragments mitigation. Composite Structures, 2021, 275, 114390.	5.8	3
116	On the Multi-Functional Behavior of Graphene-Based Nano-Reinforced Polymers. Materials, 2021, 14, 5828.	2.9	3
117	On the Low Velocity Impact Response of Laminated Composite Plates using the P-Version Ritz Method. Advanced Composites Letters, 2003, 12, 096369350301200.	1.3	2
118	Multifunctional properties of multi-wall carbon nanotubes/cyanate-ester nanocomposites and CFRPs. Proceedings of SPIE, 2009, , .	0.8	2
119	On the Bearing Failure of Laminated Composite Pin‣oaded Joints: Exploitation of Semiâ€Analytical Solutions for the Determination of the Stress State. Strain, 2011, 47, 320-332.	2.4	2
120	Toughening and Healing of CFRPs by Diels–Alder-Based Nano-Modified Resin through Melt Electro-Writing Process Technique. International Journal of Molecular Sciences, 2022, 23, 3663.	4.1	2
121	On the Young's Modulus Measurements of Ceramic and Carbon Fibres using Elastic Wave Propagation Techniques. Comparison against Quasi-Static Tensile Tests. Advanced Composites Letters, 2004, 13, 096369350401300.	1.3	1
122	Damage mode analysis of MCrAlY overlay coatings subjected to isothermal stepwise tensile testing by usingin situvideo imaging and acoustic emission monitoring. Fatigue and Fracture of Engineering Materials and Structures, 2004, 27, 219-230.	3.4	1
123	Nano-modified CFRPs as a novel material for the manufacturing of high efficient antennas. , 2007, , .		1
124	Fatigue damage monitoring in carbon fiber reinforced polymers using the acousto-ultrasonics technique. Polymer Composites, 2009, 31, NA-NA.	4.6	1
125	Self-healing of Structural Composites Containing Dendrimers as Healing Agent. , 2018, , .		1
126	An Encapsulated Energy Harvesting Platform for On-road Low Power Sensing Systems. , 2019, , .		1

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127	A New Design Methodology for High Temperature Structural Components Made of Continuous Fibre Ceramic Composites Exhibiting Thermally Induced Anisotropic Damage. Advanced Composites Letters, 2002, 11, 096369350201100.	1.3	0
128	Damage Modelling and Simulation of Composite Materials using Ultrasonic Measurements. Advanced Composites Letters, 2005, 14, 096369350501400.	1.3	0
129	Lowâ€frequency scattering by a penetrable body with an eccentric soft or hard core. Mathematical Methods in the Applied Sciences, 2009, 32, 1844-1877.	2.3	0
130	Scalar Scattering by Two Small, Non-Concentric Penetrable Spheres. Mechanics of Advanced Materials and Structures, 2012, 19, 309-322.	2.6	0
131	Electrical methods for structural health monitoring of composite (Aero) structures., 2014,, 289-296.		O
132	The Effect of <scp>CNT</scp> â€modified matrix of cyanate ester <scp>CFRP</scp> s on the hydrothermal behavior of the material. Evaluation of the water uptake using electrical resistance measurements. Polymer Composites, 2016, 37, 1072-1077.	4.6	0
133	Multi-scale-Reinforced Prepregs for the Improvement of Damage Tolerance and Electrical Properties of Aeronautical Structures., 2016,, 791-801.		0
134	Structural Analysis of ESA Young Engineers Satelli, 2005, , .		0
135	A DETAILED MATHEMATICAL MODEL OF DIFFUSED BRAIN EDEMA EARLY DETECTION. , 2006, , .		0
136	REFLECTION OF THERMOELASTIC PLANE WAVES IN ANISOTROPIC THERMOELASTIC MEDIUM. , 2010, , .		0
137	LOW FREQUENCY SCATTERING BY A SOFT ACOUSTIC SPHERE EMBEDDED INTO AN ACOUSTICALLY LOSSLESS HALF SPACE. , 2010, , .		0