

Vistasp M Karbhari

List of Publications by Year in descending order

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150
times ranked

2771
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#	ARTICLE	IF	CITATIONS
1	Durability Gap Analysis for Fiber-Reinforced Polymer Composites in Civil Infrastructure. Journal of Composites for Construction, 2003, 7, 238-247.	3.2	376
2	Composite Jacketed Concrete under Uniaxial Compression—Verification of Simple Design Equations. Journal of Materials in Civil Engineering, 1997, 9, 185-193.	2.9	306
3	Hygrothermal effects on high VF pultruded unidirectional carbon/epoxy composites: Moisture uptake. Composites Part B: Engineering, 2009, 40, 41-49.	12.0	128
4	Durability characterization of wet layup graphite/epoxy composites used in external strengthening. Composites Part B: Engineering, 2005, 37, 200-212.	12.0	113
5	Design factors, reliability, and durability prediction of wet layup carbon/epoxy used in external strengthening. Composites Part B: Engineering, 2007, 38, 10-23.	12.0	98
6	Durability evaluation of moderate temperature cured E-glass/vinylester systems. Composite Structures, 2004, 66, 367-376.	5.8	96
7	Use of composites for 21st century civil infrastructure. Computer Methods in Applied Mechanics and Engineering, 2000, 185, 433-454.	6.6	95
8	New bridge systems using FRP composites and concrete: a state-of-the-art review. Structural Control and Health Monitoring, 2006, 8, 143-154.	0.7	85
9	Use of Composites for Rehabilitation of Steel Structures—Determination of Bond Durability. Journal of Materials in Civil Engineering, 1995, 7, 239-245.	2.9	83
10	Comparative durability evaluation of ambient temperature cured externally bonded CFRP and GFRP composite systems for repair of bridges. Composites Part A: Applied Science and Manufacturing, 2009, 40, 1353-1363.	7.6	79
11	Fiber Reinforced Composites — Advanced Materials for the Renewal of Civil Infrastructure. Applied Composite Materials, 2000, 7, 95-124.	2.5	78
12	DMTA based investigation of hygrothermal ageing of an epoxy system used in rehabilitation. Journal of Applied Polymer Science, 2007, 104, 1084-1094.	2.6	77
13	Investigation of Bond between Concrete and Composites: Use of a Peel Test. Journal of Reinforced Plastics and Composites, 1996, 15, 208-227.	3.1	76
14	Calibration of resistance factors for reliability based design of externally-bonded FRP composites. Composites Part B: Engineering, 2008, 39, 665-679.	12.0	75
15	Hygrothermal ageing of an epoxy adhesive used in FRP strengthening of concrete. Journal of Applied Polymer Science, 2008, 107, 2607-2617.	2.6	73
16	Improved damage detection method based on Element Modal Strain Damage Index using sparse measurement. Journal of Sound and Vibration, 2008, 309, 465-494.	3.9	73
17	Structural health monitoring of civil infrastructure systems. , 2009, , .		68
18	Consideration of material variability in reliability analysis of FRP strengthened bridge decks. Composite Structures, 2005, 70, 430-443.	5.8	67

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19	Effect of Short-Term Freeze-Thaw Cycling on Composite Confined Concrete. <i>Journal of Composites for Construction</i> , 2000, 4, 191-197.	3.2	65
20	Materials Considerations in FRP Rehabilitation of Concrete Structures. <i>Journal of Materials in Civil Engineering</i> , 2001, 13, 90-97.	2.9	61
21	External FRP Poststrengthening of Scaled Concrete Slabs. <i>Journal of Composites for Construction</i> , 2001, 5, 67-75.	3.2	60
22	E-Glass/Vinylester Composites in Aqueous Environments – I: Experimental Results. <i>Applied Composite Materials</i> , 2003, 10, 19-48.	2.5	60
23	Low-temperature hygrothermal degradation of ambient cured E-glass/vinylester composites. <i>Journal of Applied Polymer Science</i> , 2002, 86, 2255-2260.	2.6	59
24	Effect of Environmental Exposure on the External Strengthening of Concrete with Composites-Short Term Bond Durability. <i>Journal of Reinforced Plastics and Composites</i> , 1996, 15, 1194-1216.	3.1	58
25	Experimental dynamic characterization of an FRP composite bridge superstructure assembly. <i>Composite Structures</i> , 2001, 54, 427-444.	5.8	58
26	Interlaminar and intralaminar durability characterization of wet layup carbon/epoxy used in external strengthening. <i>Composites Part B: Engineering</i> , 2006, 37, 650-661.	12.0	58
27	Multi-frequency dynamic mechanical thermal analysis of moisture uptake in E-glass/vinylester composites. <i>Composites Part B: Engineering</i> , 2004, 35, 299-304.	12.0	57
28	Segmental relaxation of water-aged ambient cured epoxy. <i>Polymer Degradation and Stability</i> , 2007, 92, 1650-1659.	5.8	57
29	Effect of fiber architecture on flexural characteristics and fracture of fiber-reinforced dental composites. <i>Dental Materials</i> , 2007, 23, 960-968.	3.5	57
30	Monoblocks in root canals: a finite elemental stress analysis study. <i>International Endodontic Journal</i> , 2011, 44, 817-826.	5.0	57
31	Issues of variability and durability under synergistic exposure conditions related to advanced polymer composites in the civil infrastructure. <i>Composites Part A: Applied Science and Manufacturing</i> , 2006, 37, 1102-1110.	7.6	55
32	Structural Characterization of Fiber-Reinforced Composite Short- and Medium-Span Bridge Systems. <i>Applied Composite Materials</i> , 2000, 7, 151-182.	2.5	52
33	Notes on the Modeling of Preform Compaction: I-Micromechanics at the Fiber Bundle Level. <i>Journal of Reinforced Plastics and Composites</i> , 1996, 15, 86-122.	3.1	51
34	Response of Fiber Reinforced Polymer Confined Concrete Exposed to Freeze and Freeze-Thaw Regimes. <i>Journal of Composites for Construction</i> , 2002, 6, 35-40.	3.2	47
35	E-Glass/Vinylester Composites in Aqueous Environments: Effects on Short-Beam Shear Strength. <i>Journal of Composites for Construction</i> , 2004, 8, 148-156.	3.2	46
36	Kings Stormwater Channel and I-5/Gilman Bridges, USA. <i>Structural Engineering International: Journal of the International Association for Bridge and Structural Engineering (IABSE)</i> , 1999, 9, 250-253.	0.8	44

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37	Assessment of a Steel-Free Fiber Reinforced Polymer-Composite Modular Bridge System. Journal of Structural Engineering, 2005, 131, 498-506.	3.4	44
38	The effect of fiber insertion on fracture resistance of endodontically treated molars with MOD cavity and reattached fractured lingual cusps. Journal of Biomedical Materials Research - Part B Applied Biomaterials, 2006, 79B, 35-41.	3.4	44
39	Diagonal macro-crack induced debonding mechanisms in FRP rehabilitated concrete. Composites Part B: Engineering, 2006, 37, 627-641.	12.0	42
40	Effect of Water Sorption on Performance of Pultruded E-Glass/Vinylester Composites. Journal of Materials in Civil Engineering, 2005, 17, 63-71.	2.9	41
41	Generalized Fluid Flow Model for Ceramic Tape Casting. Journal of the American Ceramic Society, 1995, 78, 2497-2503.	3.8	39
42	Cold-temperature and simultaneous aqueous environment related degradation of carbon/vinylester composites. Composites Part B: Engineering, 2002, 33, 17-24.	12.0	38
43	Short-term effects of sea water on E-glass/vinylester composites. Journal of Applied Polymer Science, 2002, 84, 2760-2767.	2.6	37
44	An approach to determine long-term behavior of concrete members prestressed with FRP tendons. Construction and Building Materials, 2007, 21, 1052-1060.	7.2	37
45	Influence of triaxial braid denier on ribbon-based fiber reinforced dental composites. Dental Materials, 2007, 23, 969-976.	3.5	37
46	Energy Absorption Characteristics of Hybrid Braided Composite Tubes. Journal of Composite Materials, 1997, 31, 1164-1186.	2.4	36
47	Investigation of the Sorption and Tensile Response of Pultruded E-Glass/Vinylester Composites Subjected to Hygrothermal Exposure and Sustained Strain. Journal of Reinforced Plastics and Composites, 2008, 27, 613-638.	3.1	35
48	Non-destructive evaluation (NDE) of polymer matrix composites. , 2013, , .		34
49	Effect of Tow Sheet Composite Wrap Architecture on Strengthening of Concrete Due to Confinement: lâ€”Experimental Studies. Journal of Reinforced Plastics and Composites, 1995, 14, 1008-1030.	3.1	33
50	Tensile response of steel/CFRP adhesive bonds for the rehabilitation of civil structures. Structural Engineering and Mechanics, 2005, 20, 589-608.	1.0	33
51	Dielectric and mechanical characterization of processing and moisture uptake effects in E-glass/epoxy composites. Composites Part B: Engineering, 2003, 34, 383-390.	12.0	32
52	Review and Comparison of Fracture Mechanics-based Bond Strength Models for FRP-strengthened Structures. Journal of Reinforced Plastics and Composites, 2006, 25, 1757-1794.	3.1	32
53	Effect of Concrete Based Alkali Solutions on Short-Term Durability of E-Glass/Vinylester Composites. Journal of Composite Materials, 2002, 36, 2101-2121.	2.4	31
54	Durability of FRP Composites for Civil Infrastructure â€” Myth, Mystery or Reality. Advances in Structural Engineering, 2003, 6, 243-255.	2.4	31

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55	Non-destructive testing techniques for FRP rehabilitated concrete. I: a critical review. International Journal of Materials and Product Technology, 2004, 21, 349.	0.2	30
56	Long-term Structural Health Monitoring System for a FRP Composite Highway Bridge Structure. Journal of Intelligent Material Systems and Structures, 2007, 18, 809-823.	2.5	29
57	Use of infrared thermography for quantitative non-destructive evaluation in FRP strengthened bridge systems. Materials and Structures/Materiaux Et Constructions, 2011, 44, 169-185.	3.1	29
58	Fiber reinforced composite bridge systemsâ€œtransition from the laboratory to the field. Composite Structures, 2004, 66, 5-16.	5.8	28
59	Microleakage in Overflared Root Canals Restored with Different Fiber Reinforced Dowels. Operative Dentistry, 2008, 33, 96-105.	1.2	27
60	Sources of uncertainty and design values for field-manufactured FRP. Composite Structures, 2009, 89, 83-93.	5.8	27
61	Fatigue performance of reinforced concrete beams with externally bonded CFRP reinforcement. Structure and Infrastructure Engineering, 2011, 7, 229-241.	3.7	25
62	Web-Based Structural Health Monitoring of an FRP Composite Bridge. Computer-Aided Civil and Infrastructure Engineering, 2006, 21, 39-56.	9.8	24
63	A critical review of infrared thermography as a method for non-destructive evaluation of FRP rehabilitated structures. International Journal of Materials and Product Technology, 2006, 25, 241.	0.2	24
64	Conversion of mechanical work to interfacial tension in a nanoporous silica gel. Applied Physics Letters, 2008, 92, .	3.3	24
65	Dynamic Mechanical Analysis of the Effect of Water on E-glass-Vinylester Composites. Journal of Reinforced Plastics and Composites, 2006, 25, 631-644.	3.1	23
66	Fatigue Behavior of a Steel-Free FRPâ€œConcrete Modular Bridge Deck System. Journal of Bridge Engineering, 2006, 11, 474-488.	2.9	23
67	Effects of Compaction on the Stiffness and Strength of Plain Weave Fabric RTM Composites. Journal of Composite Materials, 1996, 30, 1210-1247.	2.4	22
68	Acoustic Emission Damage Assessment of Steel/CFRP Bonds for Rehabilitation. Journal of Composites for Construction, 2006, 10, 265-274.	3.2	22
69	Investigation of durability and surface preparation associated defect criticality of composites bonded to concrete. Composites Part A: Applied Science and Manufacturing, 2008, 39, 997-1006.	7.6	22
70	Impact and Flexure Properties of Glass/Vinyl Ester Composites in Cold Regions. Journal of Cold Regions Engineering - ASCE, 1994, 8, 1-20.	1.1	21
71	Notes on the Modeling of Preform Compaction: II-Effect of Sizing on Bundle Level Micromechanics. Journal of Reinforced Plastics and Composites, 1996, 15, 837-861.	3.1	21
72	Evaluation of strengthening through laboratory testing of FRP rehabilitated bridge decks after in-service loading. Composite Structures, 2007, 77, 206-222.	5.8	20

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73	Energy absorbing characteristics of circular frustra. International Journal of Crashworthiness, 2003, 8, 471-479.	1.9	19
74	Identification of potential defects in the rehabilitation of concrete structures with FRP composites. International Journal of Materials and Product Technology, 2003, 19, 498.	0.2	19
75	Durability based design of FRP jackets for seismic retrofit. Composite Structures, 2007, 80, 553-568.	5.8	19
76	Moisture absorption and desorption in a UV cured urethane acrylate adhesive based on radiation source. Journal of Applied Polymer Science, 2008, 107, 3654-3662.	2.6	19
77	Peel Test for Characterization of Polymer Composite/Concrete Interface. Journal of Composite Materials, 1998, 32, 1894-1913.	2.4	18
78	Rehabilitation of Large Diameter Prestressed Cylinder Concrete Pipe (PCCP) with FRP Composites – Experimental Investigation. Advances in Structural Engineering, 2005, 8, 31-44.	2.4	18
79	Protection of our bridge infrastructure against man-made and natural hazards. Structure and Infrastructure Engineering, 2008, 4, 415-429.	3.7	18
80	Durability of composites for civil structural applications. , 2007, , .		18
81	Non-destructive testing techniques for FRP rehabilitated concrete. II: an assessment. International Journal of Materials and Product Technology, 2004, 21, 385.	0.2	17
82	Peel Test for Characterization of Polymer Composite/Concrete Interface. Journal of Composite Materials, 1997, 31, 1806-1825.	2.4	16
83	Title is missing!. Journal of Materials Science, 1999, 34, 5641-5648.	3.7	16
84	Effect of material configuration on strengthening of concrete slabs by CFRP composites. Composites Part B: Engineering, 2005, 37, 213-226.	12.0	16
85	Cathodic disbondment resistance with reactive ethylene terpolymer blends. Progress in Organic Coatings, 2007, 60, 287-296.	3.9	16
86	Evaluation of Property Retention in E-Glass/Vinylester Composites after Exposure to Salt Solution and Natural Weathering. Journal of Reinforced Plastics and Composites, 2000, 19, 704-731.	3.1	15
87	Field exposure based durability assessment of FRP column wrap systems. Composites Part B: Engineering, 2003, 34, 41-50.	12.0	15
88	Durability of Pultruded E-Glass/Vinylester under Combined Hygrothermal Exposure and Sustained Bending. Journal of Materials in Civil Engineering, 2007, 19, 665-673.	2.9	15
89	NOL-ring based evaluation of freeze and freeze-thaw exposure effects on FRP composite column wrap systems. Composites Part B: Engineering, 2001, 32, 589-598.	12.0	14
90	Vibration-based damage detection techniques for structural health monitoring of civil infrastructure systems. , 2009, , 177-212.		14

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91	Numerical simulation on seismic retrofitting performance of reinforced concrete columns strengthened with fibre reinforced polymer sheets. <i>Structure and Infrastructure Engineering</i> , 2010, 6, 481-496.	3.7	14
92	Prediction of Long-Term Prestress Losses. <i>PCI Journal</i> , 2007, 52, 116-130.	0.6	14
93	Effect of Composite Wrap Architecture on Strengthening of Concrete Due to Confinement: II-Strain and Damage Effects. <i>Journal of Reinforced Plastics and Composites</i> , 1997, 16, 1039-1063.	3.1	13
94	Processing and performance of bridge deck subcomponents using two schemes of resin infusion. <i>Composite Structures</i> , 2001, 51, 257-271.	5.8	12
95	Investigation of Bond Behavior Between Glass Fiber Composite Reinforcements and Concrete. <i>Polymer-Plastics Technology and Engineering</i> , 1994, 33, 733-753.	1.9	10
96	Long-term hydrothermal aging of Carbon-Epoxy materials for rehabilitation of civil infrastructure. <i>Composites Part A: Applied Science and Manufacturing</i> , 2022, 153, 106705.	7.6	10
97	Poststrengthening of Concrete Slabs: Full-Scale Testing and Design Recommendations. <i>Journal of Structural Engineering</i> , 2003, 129, 743-752.	3.4	9
98	Connection of concrete barrier rails to FRP bridge decks. <i>Composites Part B: Engineering</i> , 2004, 35, 269-278.	12.0	9
99	Comparative degradation of pultruded E-glass/vinylester in deionized water, alkaline solution, and concrete leachate solution. <i>Journal of Applied Polymer Science</i> , 2006, 99, 1405-1414.	2.6	9
100	FE Investigation of Material and Preload Parameters on FRP Strengthening Performance of RC Beams, I: Model Development. <i>Journal of Reinforced Plastics and Composites</i> , 2008, 27, 507-522.	3.1	9
101	Effect of thermal exposure on carbon fiber reinforced composites used in civil infrastructure rehabilitation. <i>Composites Part A: Applied Science and Manufacturing</i> , 2021, 149, 106570.	7.6	9
102	Progressive Crush of Resin Transfer Molded Square Tube Stiffened Beam Elements. <i>Journal of Composite Materials</i> , 1997, 31, 981-1001.	2.4	8
103	Structural Health Monitoring of CFRP Strengthened Bridge Decks Using Ambient Vibrations. <i>Structural Health Monitoring</i> , 2007, 6, 199-214.	7.5	8
104	Introduction: the use of composites in civil structural applications. , 2007, , 1-10.		8
105	New Canadian Highway Bridge Design Code design provisions for fibre-reinforced structures. <i>Canadian Journal of Civil Engineering</i> , 2007, 34, 267-283.	1.3	8
106	Thermal, mechanical, and adhesive properties of HDPE/reactive ethylene terpolymer blends. <i>Journal of Applied Polymer Science</i> , 2007, 104, 331-338.	2.6	8
107	Operational modal analysis for vibration-based structural health monitoring of civil structures. , 2009, , 213-259.		8
108	Health Monitoring, Damage Prognosis and Service-Life Prediction " Issues Related to Implementation. , 2005, , 301-310.		8

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109	Progressive Crush Response of Hybrid Felt/Fabric Composite Structures. Journal of Reinforced Plastics and Composites, 1997, 16, 243-269.	3.1	7
110	Effects of preform structure on progressive crush characteristics of flange-stiffened tubular elements. Composite Structures, 1997, 37, 81-96.	5.8	7
111	On the Effect of E-Glass Fiber on the Cure Behavior of Vinylester Composites. Journal of Reinforced Plastics and Composites, 2002, 21, 901-918.	3.1	7
112	Fuzzy logic based approach to FRP retrofit of columns. Composites Part B: Engineering, 2007, 38, 651-673.	12.0	7
113	Evaluation of Property Retention in E-Glass/Vinylester Composites after Exposure to Salt Solution and Natural Weathering. Journal of Reinforced Plastics and Composites, 2000, 19, 704-731.	3.1	7
114	Fabrication, quality and service-life issues for composites in civil engineering. , 2007, , 13-30.		7
115	Fiber-Sizing-Based Enhancement of Materials Durability for Seismic Retrofit. Journal of Composites for Construction, 2003, 7, 194-199.	3.2	6
116	Effect of fiber architecture on manufacturability and crush performance of a stiffened plate type RTM structure. Composite Structures, 1993, 26, 83-93.	5.8	5
117	Building materials for the renewal of civil infrastructure. Reinforced Plastics, 2005, 49, 14-25.	0.1	5
118	Remaining Life of FRP Rehabilitated Bridge Structures. , 2004, , 1012-1017.		5
119	Nondestructive Load Predictions of Concrete Shell Buckling. Journal of Structural Engineering, 1989, 115, 1191-1211.	3.4	4
120	Effect of Resin System Parameters on Resin Transfer Molding of Vinyl Ester Based Compositesâ€”A Statistically Designed Study. Polymer-Plastics Technology and Engineering, 1995, 34, 599-620.	1.9	4
121	An approach for failure analysis of composite bridge deck systems with openings. Structural Engineering and Mechanics, 2005, 20, 123-141.	1.0	4
122	Design approach for a FRP structural formwork based steel-free modular bridge system. Structural Engineering and Mechanics, 2006, 24, 561-584.	1.0	4
123	Service life estimation and extension of civil engineering structures. , 2011, , .		4
124	Water, saltwater, and concrete leachate solution effects on durability of ambientâ€”temperature cure carbonâ€”epoxy composites. Journal of Applied Polymer Science, 2022, 139, .	2.6	4
125	Structural health monitoring of composite repair patches in bridge rehabilitation. , 2006, , .		3
126	Modal testing as a means of quantitative monitoring of damage progression in a model FRP rehabilitated bridge deck system. Structure and Infrastructure Engineering, 2012, 8, 227-250.	3.7	3

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127	Durability of composites in aqueous environments. , 2007, , 31-71.		3
128	Response of Multi-Element Foam-Filled Preform RTM Structures, II: Low-Velocity Impact and Post-Impact Crush Response. Journal of Composite Materials, 1995, 29, 1437-1457.	2.4	2
129	<title>Measuring bridge performance using a structural health monitoring system</title>. , 2001, , .		2
130	Performance and design of fibre-reinforced polymer composites at cold temperatures current status and future needs. International Journal of Materials and Product Technology, 2007, 28, 1.	0.2	2
131	Filled reactive ethylene terpolymer primers for cathodic disbondment mitigation. Journal of Applied Polymer Science, 2008, 110, 1531-1544.	2.6	2
132	FE Investigation of Material and Preload Parameters on FRP Strengthening Performance of RC Beams II: Results. Journal of Reinforced Plastics and Composites, 2008, 27, 1245-1267.	3.1	2
133	"Gap Analysis" for Durability of Composites in Civil Infrastructure. , 2001, , 35.		1
134	FRP composite jackets and corrosion of steel reinforcement - a critical review. International Journal of Materials and Product Technology, 2004, 21, 455.	0.2	1
135	Knowledge-based system for use of FRP materials in cold regions. International Journal of Materials and Product Technology, 2007, 28, 217.	0.2	1
136	Durability of composites in sub-zero and freeze-thaw conditions. , 2007, , 72-79.		1
137	Seismic performance of a FRP encased concrete bridge pylon connection. Composites Part B: Engineering, 2007, 38, 685-702.	12.0	1
138	Advances in Seismic Performance Assessment and Improvement of Structures. Advances in Civil Engineering, 2019, 2019, 1-2.	0.7	1
139	Rehabilitation of concrete structures using fibre-reinforced polymer composites: identifying potential defects. , 2007, , 284-323.		1
140	Discussion of "Active Earth Pressure Behind Retaining Walls" by Sangchul Bang (March, 1985, Vol. 111,) Tj ETQq0 0 0 rgBT /Overl	0.4	0
141	Rehabilitation of a Multi-Span Bridge Using FRP Composite Materials. , 2003, , 374.		0
142	Rehabilitation of civil structures using advanced polymer composites. , 2006, , 203-234.		0
143	Reply to the discussion by A.K. El-Sayed on "New Canadian Highway Bridge Design Code" design provisions for fibre-reinforced structures. Canadian Journal of Civil Engineering, 2007, 34, 1378.	1.3	0
144	Processing of nanotube-based nanocomposites. , 2012, , 3-32.		0